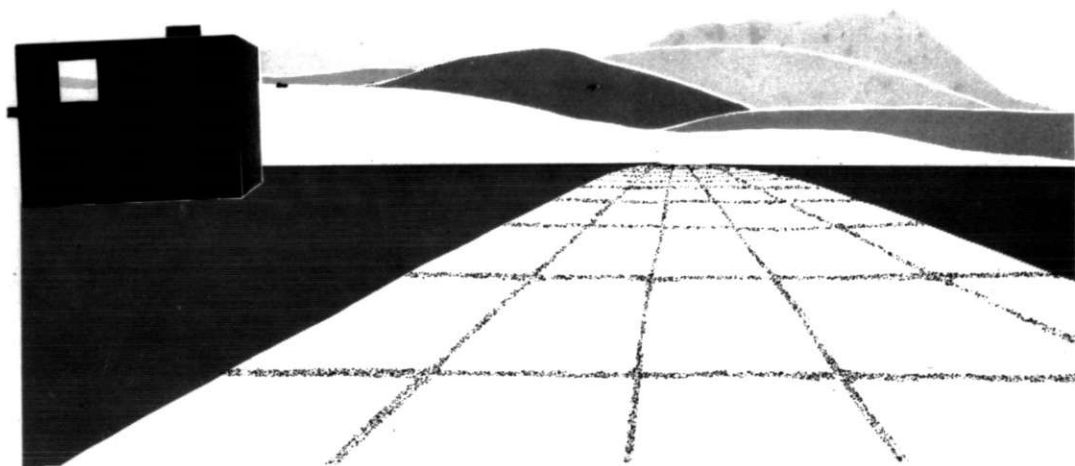


CORNISH ARCHAEOLOGY

No. 27 1988



HENDHYSCANS KERNOW

COVER: *Artist's impression of Davidstow airfield, with Brown Willy and Roughtor in the background*
Drawing by Ann Preston-Jones

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CORNISH ARCHAEOLOGY

No. 27 1988

EDITOR

DAPHNE HARRIS

ASSISTANT EDITORS

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Editorial

This volume ranges widely in subject matter, from possible palaeolithic flints to early medieval crosses. It describes, too, work done over an extended period, not in this case measured in thousands of years, but in nearly five decades, from the second world war to the present day.

Croft Andrew's excavations in 1941-2 covered many sites, mostly barrows, and have too long remained unpublished. Dr Christie undertook the formidable task of examining and assessing his excavation notes, and producing a report. She has already published accounts of the excavated barrows on the north Cornish coast, and of the medieval sites on Davidstow Moor. She now concludes the work with a detailed report on the barrow excavations at Davidstow, together with the single barrow at Fore Down St Cleer, which produced a bronze dagger.

Tintagel is probably the best known Cornish archaeological site to people outside Cornwall, perhaps even to a few within the county. It has been thought of as most things, from the seat of King Arthur to a Celtic monastery. Recently some small scale excavation has taken place, and much detailed examination of artifacts, here and elsewhere. The result has been a new theory as to the nature of the site and a new explanation of the presence of so much imported Mediterranean pottery of the fifth or sixth century. In his presidential address in January 1989 Professor Thomas expounded the new model. That lecture is published here, and must surely remain the accepted view of Tintagel, at least until further excavation indicates anything different.

The most recent excavation reported here is that of the cliff castle at Penhale Point. This promontory fort, already seriously eroded, was due to disappear under MOD constructions. The excavations by the Central Excavation Unit, with the participation of CAS members, was able to uncover and plan the bivallate fortifications and an Iron Age round house within the defences, and to locate the earlier mesolithic and neolithic flintworking sites so dear to the excavator's heart.

Members of the Society continue to keep a watchful eye open for any new knowledge, whether documentary or on the ground. German air photographs of the Isles of Scilly (another wartime bonus) are likely to provide valuable information. Early crosses are appearing in unexpected numbers when seen by an experienced eye; and field walking produces an abundance of flints, even suggesting a palaeolithic presence in Cornwall. The Cornwall Archaeological Unit keeps a watching brief on all new discoveries and threats to known sites, as evidenced by the many notes on excavation and survey in this volume. The role of the Cornwall Archaeological Society as the instigator of regular full-scale research excavations may be passing, but the zeal of members to gather and disseminate information remains.

The Context of Tintagel

A New Model for the Diffusion of Post-Roman Mediterranean Imports

CHARLES THOMAS

Reports and publications concerned with the new-look Tintagel, issued during 1988, occupy about half a table-top. The practical support given by the Duchy of Cornwall, English Heritage, the Royal Commission on the Historical Monuments of England, the Royal Institution of Cornwall, the Institute of Cornish Studies (University of Exeter) and Cornwall Archaeological Unit (Cornwall County Council) made this work possible. Credit for a communal achievement – and it *is* creditable, within less than a year, to have created a total archive of thousands of finds and to have published the post-1938 accumulation of minor excavations and discoveries – I most warmly share with all those who worked alongside me or under my general editorship in the venture. Happily, it makes it quite unnecessary here to rehearse at any length the present perception of Tintagel as a site complex, since virtually all that we know is accessible in print. This paper, distilled and elaborated from its parent ex-Presidential Address, examines the next step in our thinking. Are we now in a position to say what these discoveries mean?

Moving backwards in time and for the moment ignoring all stages in Tintagel's history later than the age of the Black Prince, Duke of Cornwall from 1337 to 1376, one begins by stressing that the visible remains of the masonry Castle are assignable to 1230–36 (O'Mahoney, 1989a, 1989b; Padel, 1989). The foundation ushers in 'Period IV' (Thomas, 1988) and the date arises, independently, from an historical assessment and from analysis of a significantly large body of medieval pottery. The Castle was the creation of Richard Earl of Cornwall. Insofar as it may have been continuously occupied, it was not fully manned for much more than a century.

Reaching backwards from Period IV to the apparent end of the post-Roman occupation (or Period II – Thomas, 1988, 428) there is a gap of some six centuries. Into its latter part must be fitted an uncertain Period III, on Tintagel Island manifested in the appearance of St Julitta's Chapel. This localised event, possibly not before the 11th century and also indicated only by a handful of, pre-Castle, chert-tempered sherds (O'Mahoney, 1989a, 5–6), remains to be defined. The previous occupation of the Island and of the tip of the mainland contained by the great ditch (Period II) was followed by prolonged desertion. Somewhere, a corresponding turf-line may be identifiable through environmental archaeology. Since historical and documented guidance is totally lacking we are cast back on the archaeological record.

Among the thousands of finds proper to Period II, the only items suggesting an independent and externally-derived date are the categories of imported Mediterranean pottery. They fall within broad brackets of c. 450 and c. 600. On the mainland side this is in accord with an archaeomagnetic measurement (AJC-34) from the lowest of three hearths stratified outside the Castle's Lower Ward, part of a sequence excavated in 1986 (Hartgroves & Walker, 1989, 28). The measurement gave a date of (cal.) AD 450–500 at the 68% confidence level. Among the imported pottery the class most susceptible to finer dating would be that of up to twenty African Red Slip Ware bowls and dishes (Thomas & Thorpe, 1988,

box list 07(A) and type list ARSW). On 1988–89 thinking, the forms range in date between 475 and 550 – the late 5th to mid-6th century – though this itself is once more a topic for debate (Hayes, 1988). Some of the categories of East Mediterranean amphora – Peacock & Williams, 1986, classes 43, 44 and 45 = British B i, B ii and B iv – extend into the second half of the sixth century, but it would be difficult to assert that any of the imports at Tintagel are later than 600. As for the commencement of the Period II occupation, there is the puzzle (here, of slightly less moment than wider considerations) of a potential continuity from whatever constituted Phase I, an episode marked by the presence of Roman or of superficially Romano-British finds. There are other reasons to suppose a 3rd–4th centuries involvement at Tintagel (Thomas, 1988, 427–9). There is also a suspicion that the pots represented by a hundred or more pieces of native ‘Romano-British’ wares were still being used, if not indeed made, after 400. If there was really a gap between Periods I and II, it may have been a span of years instead of decades and it may also be archaeologically undetectable.

The productive first phase in all the re-evaluation of Tintagel ended neatly on 20 January 1989, on a day that saw both the public lecture behind this paper and the publication of the Institute of Cornish Studies contributions to the task; *Cornish Studies* 16 (for 1988), and *Special Report No.8*, Cathy O’Mahoney’s detailed report of the medieval pottery. The next phase will begin, or so we hope and have been given to understand, when fresh excavation on the Island is launched. To that happy future the workers engaged in all the preparatory tasks bequeath two outstanding problems, both arising from the collated data and both of interpretation.

The first involves the physical, purely archaeological, disentanglement of the site. The position was aired in 1985, in a joint paper (Thomas & Fowler, 1985) to accompany the now classic RCHM England revised site plan. All over Tintagel Island, on its plateau top and along the lateral terraces, stand or lurk more than a hundred detectable and rectilinear foundations. Those explored in the period 1933–38 by Dr Radford – his Sites A, B, C, etc. – and then repaired for display by HM Office of Works and its successor agencies, are merely selected clusters prominent among their undug and unreconstructed fellows. It has to be assumed, for want of better evidence, that some of these huts or cells are proper to Period II and some to Period IV. The examination in 1984–85–86 of the south-west quarter of the Island’s plateau, the tract laid bare by the fire of 1983, tells us that in this sector the Period II huts (so ascribed because the surface finds among them were uniformly post-Roman) were relatively small, stubby in plan, and probably a blend of flat slate wall-footings and turf walls. Against this, analogies drawn from the corpus of plans of 13th–14th century domestic and agricultural buildings in south-west Britain hint that larger and more elongated instances, with all-stone walls up to a metre high, are medieval and belong to Period IV. The choicest examples are to be seen on the natural southern terrace of the Island, due west of the Inner Ward.

The bare identification is something that could be and no doubt will be resolved by digging. To establish the point is one thing. To explain so many structures in social and historical terms is quite another matter. For Period IV, where a fair number of huts or rooms on the Island, mostly contiguous, have to be envisaged – all extra-mural in that they stand beyond the Inner Ward – one solution that is gaining ground would be that these were contractor’s hutments; the camp of the builders of Earl Richard’s castle. The idea was in fact offered, though not singled out for special preference, in 1985 (Thomas & Fowler, 1985, 22). Analysis of the Inner Ward’s building sequence (Thomas, 1989b, 52–4) would suggest an on-and-off occupation of several decades. This is the least improbable explanation within a range of answers, none directly favoured by the scanty history.

As for the structures that may be proper to Period II, we know from the sections left by J. Wright, the pre-war Office of Works draughtsman, that a long trench was dug during the 1930s from Site A (besides the Chapel) across towards the Garden and medieval wall. The trench intersected a number of what were then described as pillow-mounds, artificial linear banks to encourage rabbits bred for food. The banks could just as well have been the collapsed, compacted, walls of insubstantial buildings and diagnostic Period II pottery was found associated with them. Here the elucidation is still anyone's guess. I would continue to argue (cf Thomas, 1988, 429) that these, like the remains exposed in the burnt area of 1983, are Period II bivouacs rather than homes. They were never intended for continuous use, nor should it be supposed that they were used during all the years between, say, AD 450 and AD 600. What none of them could represent is the focus, or nucleus, of Period II. All the clues point to some such focus hidden — but technically still accessible — deep below the medieval Inner Ward (Thomas, 1988, Fig 7; 1989b). By today's exacting standards of rural hygiene and retrospective notions of royal living, this sixth-century nest on its remote crag may have presented a scene of unredeemed squalor. What we may suspect is that, unlike the turf-walled lodgings of the warband or retinue, the nucleus of the Island citadel could have been stone-walled, roomier, internally of a complex plan and also spreading over two or three built terraces. The spade may be left to prove or to disprove this.

The other problem bequeathed by the workers and re-casters of 1988 to those of 1989 and later is far-ranging and will take us a thousand miles from Tintagel. The remainder of this paper will be an attempt to delineate it, if not exactly to resolve it. We open with the contention already sketched (Thomas, 1986: 1988) that Tintagel, in late Roman times a seat of local officialdom, was in the post-400 era seized by unspecified grandees and potentates, and for the better part of two centuries functioned as their occasional citadel. Those of a romantic outlook are free to inject the idea of early kings of Cornwall (or, more accurately, of post-Roman *Dumnonia*). It is likely that by the 11th century, if not before, Cornish romanticists personified such beings as King Mark, with Tristan and Isolde, the only certainty being that there was no connection of any kind with 'King Arthur' until Geoffrey of Monmouth chose to introduce one (Padel, 1981b: 1984). The actual place-name Tintagel 'fortress of the construction' (*din* + **tagell*; Padel, 1985, 214) is the Period IV, or Period III, label. A pre-desertion Period II name, conceivably containing a personal name, has been lost, though it remains to be shown that it has been irretrievably lost.

We stand at Tintagel in the year AD 500; what do we see before us? Neither a flat promontory leading to the expanded terminus now the Island, nor the present deep and crumbling neck. I am grateful to geologist colleagues from the University of Exeter for a shared visit to the place, and for an informed but necessarily still informal opinion that there would have been a grassy saddle some few yards wide, curving gently down and up again. A glance at Barras Nose, the next headland eastward, offers a model for that bygone state. Further to the east the separated pyramid of The Sisters lying just off Willapark presents a likely depiction of what Tintagel and its Island will be two millennia from now.

The natural isolation of Tintagel Island was enhanced by a man-made landward defence; the huge ditch running down the flank of the valley, and protecting the medieval Lower Ward. This ditch we now observe from Wright's 1938 section drawing and from the 1988 analysis of certain finds to have been constructed in Period II. It may be one of the very few genuine post-Roman defence works of that time. On its inside lip there was a contemporary bank, at least one metre high and still available for examination. The 13th century outer wall of the Lower Ward does not descend into bedrock, but is simply footed into the higher part of this compressed bank.

The whole fortress, if one can picture it either in its 5th century prime or as it would have looked, brand-new, in the 1240s, was impressive anyhow through its remarkable natural setting, and lent itself twice to military improvement in a rather brutal and large-scale fashion. It seems to cry out, as Jonathan Raban remarked of the Great Pyramid, that 'Mr Big Was Here'. In what capacity, however, it is a little more difficult to suggest. A new catalogue of enclosed places in Celtic Britain AD 500–800 by Elizabeth Alcock, appended to her husband's discussion of the contemporary potentates (Alcock, 1988), invites only one gentle criticism. The uninformed reader may not realise that the list contains a sub-group of distinctive obvious and often large 'centres of power' – Dumbarton Rock, Bamburgh and Dunadd are just some of them – standing well apart from lesser sites. In the list, for Cornwall for example, Goldherring, Grambla and Trethurgy are at the utmost the corrals of substantial farmers or wealthy specialists. Chun Castle implies occupants a notch up the scale; persons like the *Rialobranus* named on the Men Scryfys (from **ri(g)al-os* 'kingly'). Tintagel is a Centre of Power, in capital letters.

My earlier scenario would paint Tintagel in Period II as a local or regional royal citadel. The grandiose and man-improved setting, the chance to own and to hold fast to the headland, will have invited occupation *en masse*, by a ruler and a retinue; but only at those times appropriate to all the effort of moving into residence and coping with arrangements for feeding, for water, shelter, entertainment and outward display. Commonsense (no less than the experience of winter days) favours the summer months only. A proper reading of the surviving finds from excavations forces us to the view that occupation was periodic, not unbroken. I have suggested that the strange feature called 'King Arthur's Footprint' (Thomas, 1989a, Fig 17 and 40 ff), overlooked since the 1920s, could given its parallels in the Celtic realms point to the ritual of inauguration ceremonies as one such reason for an extended visit. The fabric of peripatetic Celtic monarchy to be derived, with caution, from Old and Middle Irish literature and similar sources would suggest other occasions. The corollary is that other such centres of power within Cornwall and Devon existed and were also visited in irregular rotation (for example, where are the winter-months citadels inland?). Castle Dore has faded from view as a candidate. In one or two cases, like Castle-an-Dinas at St Columb, excavation (Wailes, 1963) drew a blank; other potential sites (like Castle Pencair) are unexplored and still others (the Mount, and Lydford Castle) may have been obliterated by medieval use.

What, in 5th–6th century Cornwall, constituted such a centre? How was a ruler's status and wealth manifested? Since Tintagel has produced this unrivalled collection of exotica, thousands of pieces of Mediterranean pottery (let alone some glass), what was it doing there? What light can a discussion of these matters throw on all the other contemporary sites in Britain and Ireland with similar though far fewer imports?

Explanations must begin in socio-economic terms and may have to be couched entirely in that direction. It is now thirty years since I ventured to pull together some of these strands in a national perspective (Thomas, 1959). For years I misled myself, and presumably others, into seeing the Mediterranean connection as an aspect of Early Christian archaeology. The imports, which remain the heart of the problem now being addressed, were Church-directed, if not Church-protected, and the principal customers were portrayed as the first Insular monasteries (until 1981, Tintagel among them). Some self-abasement and healthy auto-criticism will not come amiss. I was wrong. The ecclesiastical element (at the receiving end) existed, but was specialised and incidental and thus marginal. Only after facing the, at first glance overwhelming, array of imports from Tintagel was a different explanation forced upon me.

There are two considerations and it is necessary to keep them separated. The argument that several centuries of *Romanitas* imbued the collective race-instinct of the native British with a taste for unfamiliar luxuries, a taste that could not be met after the economic collapse postulated for the early 5th century, is not only a trifle naive but implies both a penetration of Roman manners and a degree of everyday continuity far beyond the evidence. We might rather consider the social status that can arise from the possession, and display, of what for most fellow-citizens remains the unattainable. As one who drives a large Swedish car (and would not be seen dead in a Maestro), smokes or used to smoke only pipes from Carlsen's shop in Copenhagen, buys obscure books from Bouvier's of Bonn, favours Italian shoes, prefers the replicas sold in the shop at the Louvre to those from the British Museum, and uses two Japanese cameras, I admit instantly that some gratification ensues from the exotic. Readers may total up their own holdings of non-British imports and consider their preferences accordingly. The wine brought all the way from Rhodes or Chios to Cornwall's ancient shores may not have been very nice, but it was wine; if you happened to know secular Latin sources this was genuinely . . . *Chia vina aut Lesbia* (Horace, *Epodes*, ix.34) and if you were devout it could be a token of the marriage-feast at Cana.

But who was in a position to import such material and how was it arranged, and at what price? In this second consideration I turn to a most useful new model, drawn from the case of Dunadd in Argyll, historically the prime centre of power (and royal seat) of the Dalriadic kingdom, the post-Roman Irish settlement in western Scotland. Dunadd's participation in external trade was 7th century and Gaulish (Class E pottery and some Merovingian objects) and not, as at Tintagel, 6th century and Mediterranean. In their recent analysis Margaret Nieke and Holly Duncan (1988) depict Dunadd and by extension some other Dalriadic citadels as *centres of tribute* (*ibid*, 11 ff). 'The primary function of such sites was as a centre at which tribute owed to the king by the surrounding population could be taken for royal collection or consumption.' The theme is expanded to embrace a larger area, and also what is known or inferred about early historic kingship. The nature of such a centre, expressing a social network in which tribute was the corollary of granting fiefs or dependencies 'which usually took the form of (live)stock, as well as physical protection', may in Dalriada have involved the levy or payment of agricultural produce. If so, then more than one collection-point would be suitable. 'One answer . . . would have been the establishment of a series of royal centres between which the king could progress', citing the example of Anglo-Saxon Northumbria, depicted in part through Bede's writings and discussed by Leslie Alcock (1982). At such periodically inhabited places 'we should then envisage the occurrence of feasting and other social activities. The former was of importance as a means whereby the leader could display his largesse to the local population, and hence impress his status upon them.' At Dunadd, the presence of the (mainly 7th century, west European) imported material 'should be seen as the product of external contact which was deliberately instigated and controlled by the kings.' Sites of such status should be envisaged, not as normal ports of trade, but as socially and economically specialised inlets, where 'these imported artefacts were presumably the product of some form of trade or gift exchange system with the continent'.

The circumstances sketched in these extracts, which hardly do justice to a chapter that should read *in toto*, suggest that some at least of the Dunadd model's features could apply to Period II Tintagel. To begin, it is impossible that Tintagel Island ever had enough open space to produce food for a hundred or more persons. If there was occupation for longer than a day or so, a mechanism ensuring an inflow of meat and cereals existed. This is now clear from finds, whereas the failure to keep animal bones in the 1933-38 excavations had

previously shed some doubts. The butchered, dog-gnawed remnants of cow, sheep and pig survive in Period II deposits (Thomas, 1989b, 58–60), and a large granite rotary quern (60 cms dia.) of post-Roman type means that cereals were ground *in situ*. One aspect of Dunadd as a tribute centre, stressed by Nieke and Duncan and long apparent from excavated finds there, was as a home for skilled craftsmen, notably metal-workers. At Tintagel there are at least hints. A recent examination of certain finds (Bayley, 1988) identified enough to permit the view that they 'give a tantalising suggestion that there may have been metal working of some sort carried out at or near Tintagel at some time, possibly in the 5th–6th centuries'. The evidence is still inconclusive.

It takes two to trade, and it is clearly vital to establish the source of material arriving at Tintagel in this respect. The last full catalogue of Mediterranean and Gaulish pottery in post-Roman Britain and Ireland (Thomas, 1981b) needs slight up-dating. If one extracts the entries for south-west Britain we find pottery from the Mediterranean under two main headings. The one-time 'A' wares are red slipped table wares in the Late Roman tradition; African Red Slip Ware (ARSW) from Carthage, and Phocaean Red Slip Ware (PRSW) on the Aegean coast of Turkey. The 'B' wares are the amphorae. They include B i, unlocated within the Aegean area (or from more than one source); B ii, now assigned to the coast of Cilicia, south-eastern Turkey (Empereur and Picon, 1988); B iv, probably from around Sardis (Sardes) in western Turkey; and, added in 1981 after inspection of the Tintagel pottery, a British B v, provisionally seen as a late form of Africana II 'Grande' (Peacock and Williams, 1986, class 34), large oil-containing amphorae from Roman Byzacena, now the Sahel region of central Tunisia. A miscellaneous group of amphorae, in the past labelled 'B iii' and 'B misc', I would now prefer to call 'un-typed'; the group includes vessels in both North African and eastern Mediterranean fabrics. Finally we can add, after the work in 1988, a range of coarse wares, on grounds of fabric also attributable to North Africa and the East Mediterranean.

The provisional totals of vessels represented by the Tintagel sherds are as follows: ARSW, about 18 bowls or dishes, various forms; PRSW, some 30 dishes, all of Form 3 (Hayes, 1972); B i, about 40 amphorae; B ii, about 35; B iv, not more than five; B v, probably not less than 27; untyped and coarse ware vessels, probably four North African and at least 30 of East Mediterranean origin. The fraction of the likely Period II deposits at Tintagel so far excavated may be as small as five to ten per cent, and this could be borne in mind when remembering that the 7th century Byzantine wreck found at Yassi Ada, Turkey, contained a cargo of about 850 to 900 amphorae.

From this brief summary we see that the percentages by origin of the vessels at Tintagel are: East Mediterranean, 88 per cent, and North African, 12 per cent. The corresponding figures for about 72 vessels of these sorts, from all the other south-west British sites (from Scilly to Glamorgan), are: East Mediterranean 74 per cent, North African 26 per cent. The overall totals, adding Tintagel, imply some 260 vessels inferred from nearly four thousand sherds, and result in a ratio of East Mediterranean, 78 per cent; North African, 22 per cent.

Conclusions emerge. The close similarity in the vessels, notably among the B amphorae, found at all these sites suggest that they may have formed a single cargo. If so, it was a mixed bag, put together for potential customers to whom the absence of a homogeneous batch or order was not a point of any relevance. This far, at any rate, I can find agreement with Leslie Alcock's estimate (1987, 90–92 and Fig 4.1) that 'cargoes comparable with that in the Yassi Ada wreck' (which held amphorae of only two regular forms) 'were not reaching these islands'. But why should it follow, as he claims (*ibid*, 92), that 'it is very unlikely that pottery of Classes A and B was ever brought to Britain or Ireland in a vessel which had sailed from North Africa or the eastern Mediterranean'? On the contrary, the composition of this putative

cargo points to an eastern Mediterranean starting-point, adding material *en route*, presumably at Carthage. It is true that amphorae of types B i, B ii and (rarely) B iv reached Carthage in the 5th–6th centuries (Fulford & Peacock, 1984) and could in theory have been re-filled there and re-exported; but this is too improbable in an area that produced its own pottery in bulk. Nor would a ship from Carthage sail east to the Aegean and the coast of Turkey before making through the Straits to Britain; and the presence of what appear to be East Mediterranean coarse wares, highly unlikely ever to have been current in Carthage, is conclusive.

A fairly convincing model, one that would help to explain the British finds, has been sketched by Dr Paul Arthur, following on from his analysis of mid-fifth to mid or late-seventh century dumps in Naples, and from consideration of other groups of transported amphorae of the period (Arthur, 1986). He believes that the decline of large-scale Tunisian oil exploration in the sixth century (cf here Mattingley, 1988) also witnessed the disappearance of large single-cargo vessels. A sixth century wreck from western Sicily, also with a highly mixed late amphora assemblage, raised the possibility 'that the vessel tramped the Mediterranean coasts, perhaps buying and selling from port to port'. The material from Britain and Ireland, though geographically far removed from its mercantile (and archaeological) origins, could reflect one aspect of the 'dark age' phase in the Mediterranean. However, a coastal progression around the shores of the Mediterranean is one thing; a deliberate excursion into the Atlantic, and beyond, is another, and if Arthur's model goes far to explain the assortment recovered at Tintagel some further explanation is needed.

The whole episode, which from now onwards (for convenience) I can call Voyage no. 1, was a commercial trip. It had nothing at all to do, in the primary sense, with early Christianity. It is inconceivable that a merchantman came so far, had invested in a cargo, and took all the risks – even granted that it would have been a summer sailing – out of pure, blind, speculation. Voyage no. 1 was planned and intentional. It follows that there will have been others such, also centred in time around the late 5th and early 6th centuries, and the likely patterns of several of these are sketched out later, below. But these need be no more than voyages for which we happen to have found sufficient archaeological evidence; and therefore, if the journey was feasible and the sailing details (difficult to maintain in secrecy) were known in Late Classical maritime circles, there may have been other such voyages whose existence we can neither demonstrate nor infer directly. There may have been many of them, over several hundred years. There may also be independent evidence for contact between Britain and what was in effect the Byzantine world, to which attention could be renewed in this particular light. And should we choose to see the archaeologically-evidenced voyages solely as for the purpose of trade, it is implicit that those who came were after something desirable and not readily or cheaply to be obtained in their own home area, to which end they were shipping goods that would have the same appeal in post-Roman Britain. These points will be emphasised again, below.

The interpretation, arising as it does out of a reconsideration of the problems posed by a full catalogue of the Tintagel finds, strikes me as the most acceptable of any so far put forward. The most likely aim, of Voyage no. 1 at any rate, was to trade for tin; streamed tin in ingot form.

A progression of distribution maps will help to demonstrate the notion. With a good deal of justice, it has been contended that the main purpose of mapping in amphora studies is to reveal economic, and not archaeological, patterns. Amphorae 'provide us not with an index of the transportation of goods, but with direct witness of the movement of certain foodstuffs which were of considerable economic importance, and which were an essential part of Roman culture' (Peacock & Williams, 1986, 2). The content rather than the container is the proper

object of study. 'Although, in theory, distribution maps should be of some value in determining provenance, in practice they are almost valueless in a majority of cases' (*ibid*, 16). This disheartening if valid opinion — ceramic petrology is the only secure method of provenancing amphora types — is not at issue; the task is to expound the pattern of amphorae as indicators of discharged cargo.

Map 1 (Fig 1) is a simple unweighted distribution corrected to 1988, of all recorded finds of Mediterranean imported pottery, red slip wares or amphorae, in Cornwall and Scilly. It reveals, in a banal way, the profound message that objects that were by definition introduced from ships are now more likely to be recovered nearer to Cornwall's coastline than from its central spine. Map 2 (Fig 2) tests the idea that streambed tin was the commercial target. Another class of data is added. Besides the main granite masses, housing the parent lodes or ore-bodies from which alluvial tin was, aeons ago, derived through erosion, we now see from R.D. Penhallurick's exhaustive investigation (1986) certain tin-streams, singled out from the hundreds of recorded tin-streaming works, where there is evidence that they were worked in antiquity. In this case 'antiquity', as indicated by Penhallurick's long catalogue, means from the pre-Roman Iron Age to the early medieval period.

The third map, Fig 3, can show limited assumptions and more data, so that order may be derived from chaos. One can plot, against the tin streams, the position of those finds actually from the post-Roman period (Penhallurick, 1986, chaps. 25–27); and, looking for guidance



Fig 1

Cornwall: unweighted distribution of all finds of imported post-Roman Mediterranean sherds, to 1989. Inset, Isles of Scilly at enlarged scale

from the immediately-preceding centuries, insert the find spots of all coin hoards dated to between 253 and 423 AD. This assumes that the hoards were payments for streamed tin, were probably cached as hoards (of bronze and/or silver) within a largely non-monetary economy, and were in general kept at or near the points of production. The symbols for imported pottery are now weighted, so that we can contrast the huge assemblage from Tintagel with smaller collections at places like Gwithian, site GM/1, and at other sites where a few sherds can only represent a single vessel (or less).

Tintagel's geographical situation makes it obvious that Voyage no. 1, wherever it began and finished, traversed the north coast of Cornwall. Sailing-ships of antiquity could not have covered the whole coast in a day, and overnight beachings or anchorages are to be supposed. Without prejudice to the archaeology involved, and if (as the map seems to hint) the first landfall of any kind was in the Isles of Scilly, one such stop-over is likely to have been the mouth of the river Hayle in West Cornwall. The last before Tintagel may have been the estuary of the river Camel. It is another assumption, already explored, that Tintagel was a principal 'centre of tribute'. The pattern of finds of pottery leads us to insert, tentatively, another such centre somewhere on the Hayle estuary. Finally, making a quite arbitrary estimate that the limit of a day's travel (on foot or with a pack-animal) was then about 15 miles (24 kms), and in two days 30 miles, circles with these radii are included.

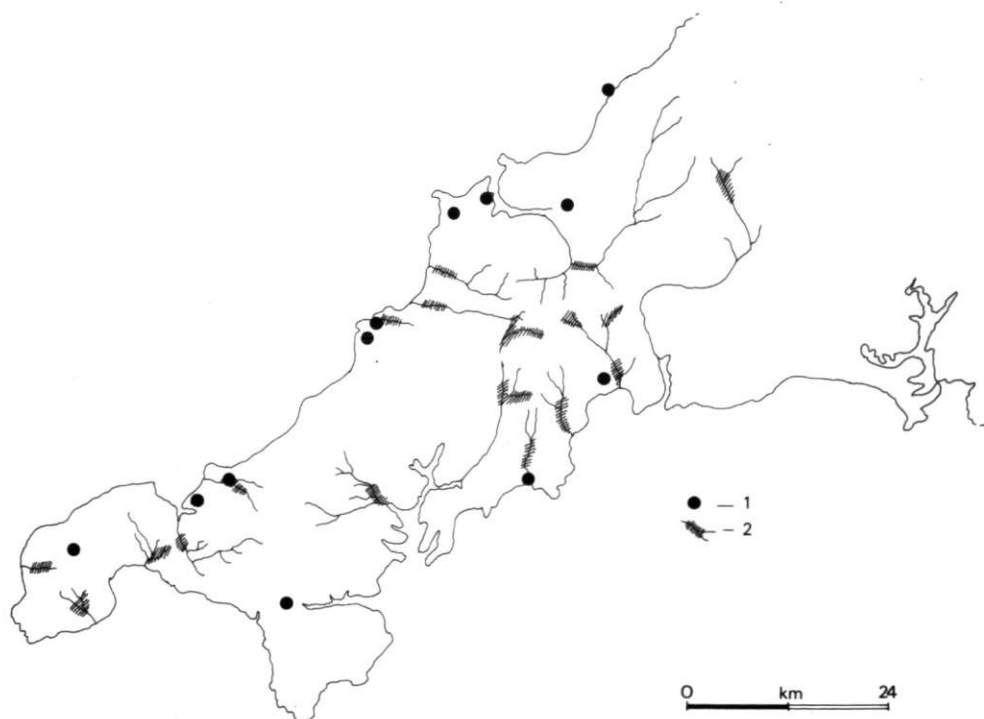


Fig 2

Cornwall: distribution of imported post-Roman Mediterranean pottery (symbol 1), against specific areas of streams (symbol 2, from R.D. Penhallurick) known to have been worked in antiquity for alluvial tin

Fig 3 now outlines the picture of a potential system of reciprocity. It ignores any notion of tribute in the form of foodstuffs, or in any form except the (possibly, not very common nor regular) bringing of tribute in the shape of tin. The scatter marked by the finds of imported pottery symbolises largesse; the diffusion of filled vessels to the more important people in a network of clientship, and the primary or secondary diffusion of empty vessels or fragments in the manner of souvenirs and trinkets. Whether there was a genuine centre on the Camel estuary is unclear. The lost late Roman site opposite Padstow, in the St Enodoc sand-dunes, may have been a small port in the 4th century and have marked the conclusion of a trackway on the lines of the Tintagel and Trethevy Roman milestones, RIB 2230, 2231 (Thomas, 1988, 428).

In the Hayle area a minor tribute centre or centre of power is rather more likely. Medieval Cornish tradition believed that the lost 'palace' of a legendary king Teudar lay among the Phillack sand-dunes (Jenner, 1928). The small coastal fort of Carnsew commanding the Hayle inlet, unexplored, hardly recorded (Thomas J.I., 1948, 59) but suggestively placed, is a better candidate. Diffusion from here would explain the imported vessels at Gwithian (not socially higher than the farm of a tin-stream contractor) and the B i sherds at Chun Castle, presumably the re-occupied hillfort of a minor lord.

Using the same approach one can expand the depiction to encompass a longer stretch, possibly the whole British portion of Voyage no. 1 (Fig 4). Supposing that the first landfall lay in Scilly, there would be little to offer a trader beyond fresh water and a sheep or two. The minimal pattern of Mediterranean sherds (Fig 1) is consistent with a brief landing at the Roman-period natural harbour among the present Eastern Isles (Thomas, 1985, Fig 71). We can trace the handing-over of one B iv amphora used as a water-carrier, and two or three B ii amphorae, but no fine red dishes or B i; does this tell us anything about the contents of the various containers, those of B i (for example) being reserved only for favoured customers?

The gap up-coast from Tintagel may be a result of paucity in fieldwork; the coastline all around to North Devon is remote, difficult to cover in detail on foot, and badly placed in regard to archaeological effort long centred at Truro, Exeter and Plymouth. The next detectable landfall is in Somerset at the mouth of the now-silted Yeo. There is an entry, and short upstream passage, to the hillfort settlement known as 'Cadcong' (Cadbury, Congresbury). Numerous open-ended models have been offered in respect of Cadcong, following its partial excavation (the last, Rahtz, 1982, Figs 7–8), and in Fig 4 it functions as another centre of power, a minor Tintagel, historically still within post-Roman Dumnonia. Diffusion inland over the whole area of reciprocity, again marked with radii of 15 and 30 miles, could be used to explain Mediterranean imports as shown on the map. There are fragments of B amphorae atop Glastonbury Tor ('a Celtic chieftain's eyrie-like stronghold, dominating the Glastonbury "Island" *territorium*' – Rahtz, 1982, 191), and a small range of both fine red wares and amphorae was found in the excavation of South Cadbury Castle, 'Camelot' (most recently, Alcock, 1987, chaps. 12–13). In whatever light the latter is interpreted, and its excavator would now interpret it as a place where the building of the post-Roman defences and of the hall took place within brackets of 470 to 530, the presence of Mediterranean imports here can only be explained as diffusion from a coastal centre.

In outlining the whole model of Voyage no. 1, I am conscious that the reconstruction may be open to criticism on the grounds that the evidence is very slender. In fact there is a great deal of evidence, particularly from Cornwall, but most of the details are omitted because their full recital would double the length of this paper. If we glance back at west Cornwall, with the hypothesis of a centre somewhere at Hayle, the sherds of B i found at Chun Castle can

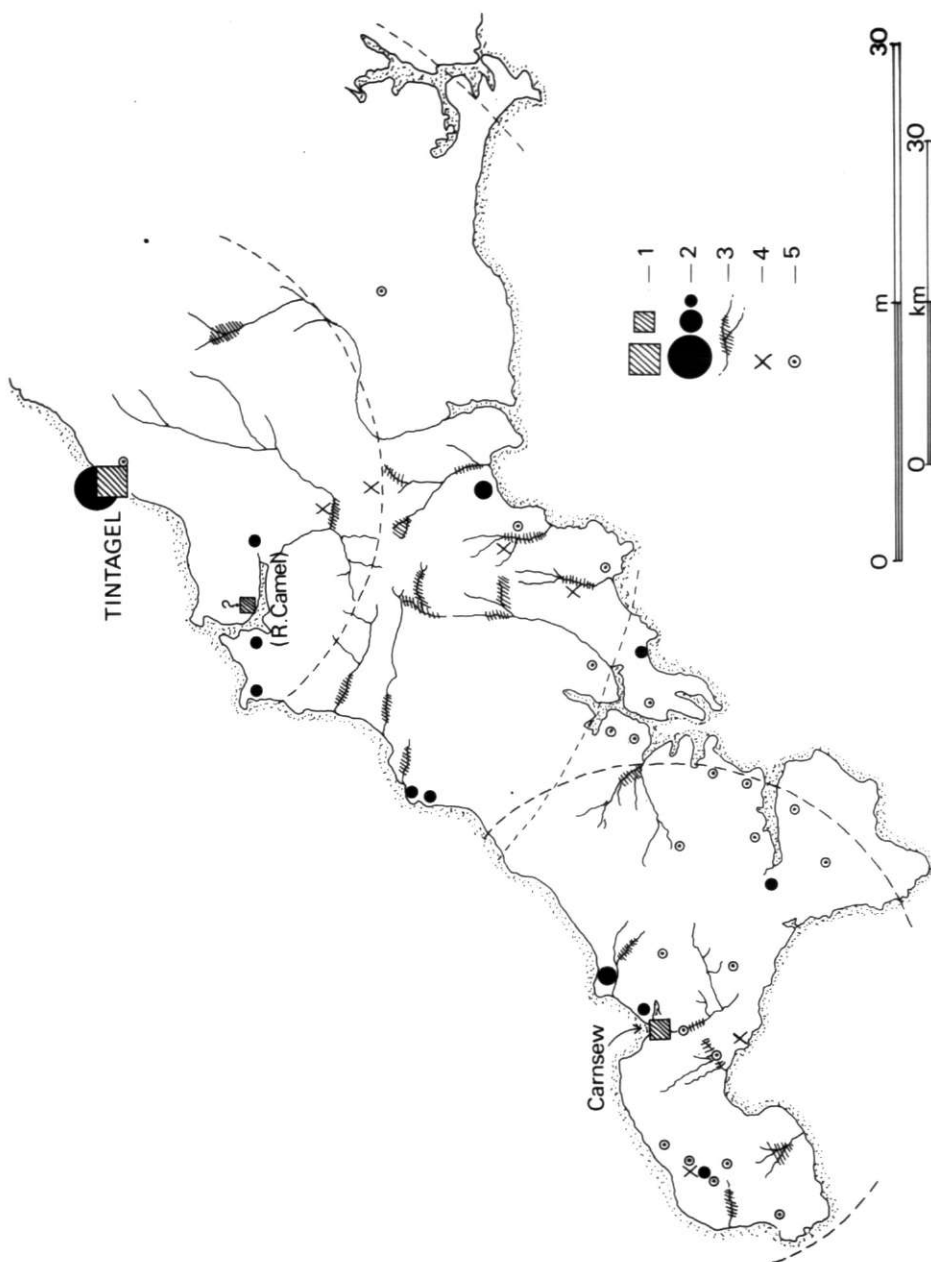


Fig 3

Cornwall: patterns of reciprocity, tribute or exchange, in the 5th and 6th centuries AD? Symbols: 1, 'centres of tribute or power'; 2, imported post-Roman Mediterranean pottery, weighted; 3, tin streams worked in antiquity, and 4, post-Roman finds from tin streams (both from R.D. Penhallurick); 5, coin hoards with dates of depositions between AD 253 and 423. Radiating arcs at 15 and 30 miles (24 and 48 kms)

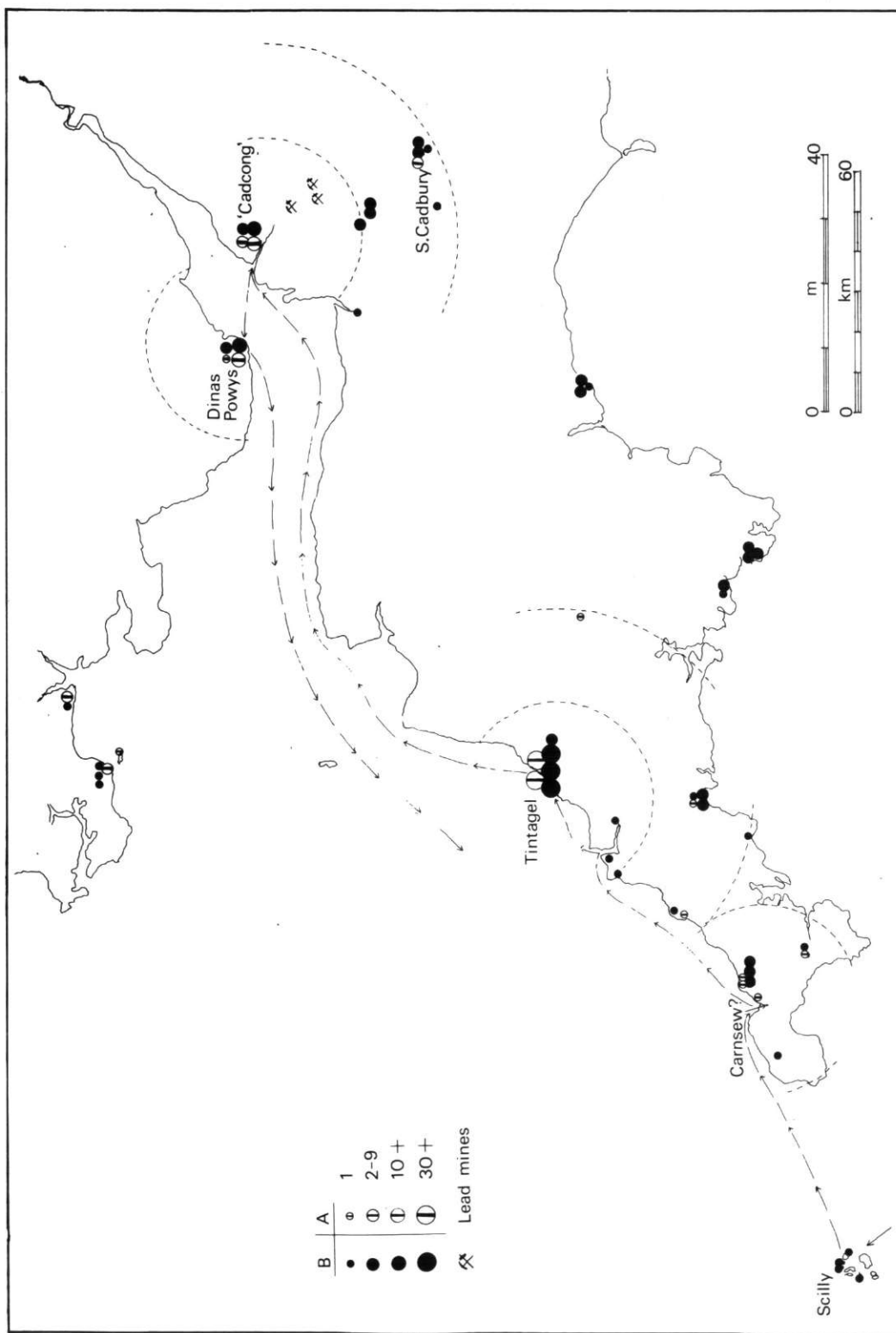


Fig 4
Model for an early 6th century trading voyage ('Voyage No. 1'). Symbols show minimum totals of vessels of Classes B (all typed and untyped amphorae) and A (ARSW and PRSW), from single vessel or sherd up to 30 or more. Radiating arcs at 15 and 30 miles (24 and 48 kms)

be associated with the crude furnace, apparently proper to the post-Roman re-occupation, and an actual oval block of smelted tin. The settlement at Gwithian, superficially agricultural, is sited at the mouth of a conjoined river (Red River and Dour Conor) both of whose elements were noted tin-streams from which apparent evidence for working goes back to Roman times (Thomas, 1972). In east Cornwall, nearly on the south coast but within the 30-mile radius from Tintagel, the enclosed settlement at Trethurgy (Miles & Miles, 1973) yielded another tin ingot not unlike that from Chun, and another (undated) ingot was found at Penwithick, 2.3 km north-west (Penhallurick, 1986, 229). There are also excavated sites where there must be a suspicion, from the presence of 4th century pottery or even coins, that occupation extended into the 5th and 6th centuries, and in west Cornwall this could be indicated by grass-marked pottery in the absence of any imported Mediterranean sherds. The settlements are not mapped, but (for example) Goldherring in Sancreed, where the pottery includes some probably 5th century platters (Guthrie, 1969, 36), yielded at various dates a tin ingot, pebbles of stream tin, and a possible smelting hearth (Penhallurick, 1986, 235).

For the Somerset area, though the finds from Cadcong so far published give no specific guidance, it is tempting to suppose that a parallel system of tribute and of goods amassed at an appropriate centre might have involved either Mendip lead, or finished objects in pewter (using Mendip lead, and tin from further westwards). The pewterers of Camerton, to name the best-known of the centres of this cottage industry, were operating at the end of the Roman period (Wedlake, 1958, 97; 'it does . . . appear likely that parts of the settlement continued to be used under somewhat squalid conditions well into the fifth century A.D.'). We are ill-informed as to the end of pewter-making in Mendip and area; a pewterer required little plant or room for his hearth and moulds. Unless re-cycling scrap or broken vessels, he would need to obtain tin from outside the Charterhouse lead-mining district. 'There are special difficulties in dating the usage of pewter' (Salway, 1981, 636), but it is generally agreed that the late 3rd and 4th centuries formed the *floruit* of the trade. As for links between Mendip pewter-work and far Cornwall, we recall the late Roman pewter mould found at St Just (Brown, 1970). Rahtz's suggestion (1982, 186) that the classic Cheddar cheese may have been an 'invisible export' is worth noting; but, without prejudice as to the antiquity of the product, would a cheese travel well through a Mediterranean summer?

At this point on the voyage, there can have been little remaining from the original cargo, the bulk of which would have already been exchanged at Tintagel. Across the Severn estuary lay the Glamorgan shore, and hard by it the settlement at Dinas Powys (now in Alcock, 1987, Part I). Here, where there is again a relatively small amount of Mediterranean vessels, no immediate category of trade goods suggests itself. One might suppose that on the last stop, with the trade-counter near depletion, chandlery and provisions for the long return sailing were the priorities. In this light the most recent discussion (Alcock, *op.cit*; Gilchrist, 1988) of the faunal remains from Dinas Powys is bound to be suggestive. The analysis leads (*ibid*, 82) to an interpretation of the site as 'a princely stronghold receiving tribute in the form of food renders, rather than as the centre of a working farm'.

The whole of this reconstruction, from Scilly to the Severn mouth and homewards again, is bound to leave many loose ends. It gives rise to a host of further questions (obvious, by this stage, to the specialist in the period) few of which would it be proper to discuss now at any length. A progression up the Severn shore must have been aided by local information. Persons at Hayle will not have been ignorant of the status of Tintagel. Since mutually intelligible conversation can hardly have been effected in Late British or demotic Greek, still less in any of the Asia Minor languages, spoken Vulgar Latin is indicated. It is not a valid objection that Hayle lies on the very fringe of Britannia. This is one of the few points in the

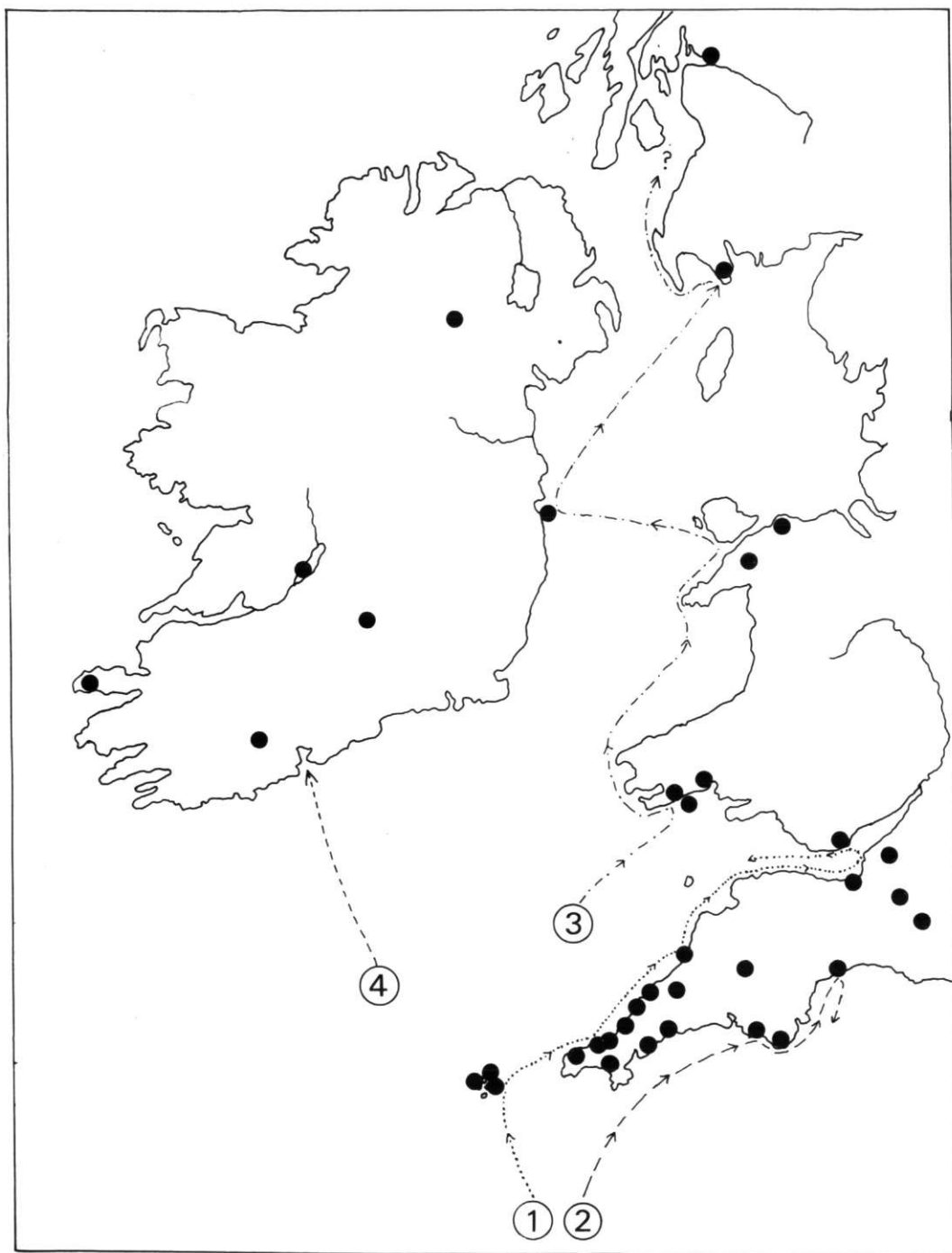


Fig 5

Mediterranean or Byzantine sea-trade with Britain and Ireland in the 5th and 6th centuries AD; the pattern of likely voyages, on a strictly minimalist view. Distribution (unweighted) of imported post-Roman Mediterranean pottery, all types, correct to 1989

south-west with a hint of Late Roman Christianity, and if a locally prominent family laid claim to a putative centre at Carnsew, at least one (Christian) member of it was commemorated on the mid- to late-5th century stone found there (CIIC.i, no. 479) with its prolonged Latin inscription. By 500, rulers at Tintagel can hardly *not* have been Christian (cf Thomas, 1989c, 89).

The point is not central to the argument, but we remain ignorant about the contents of the various classes of imported amphorae. Olive oil, a virtually certain commodity from pre-Islamic Tunisia (now Mattingly, 1988), could as a start be associated with the surprising group of B v containers, each about a metre in height, found at Tintagel. Wine is a little too readily supposed in the case of B i and B ii containers. Techniques exist to determine, from the absorption of certain residues into the clay body, what were the materials last contained (for a general account, Condamin *et al*, 1976). A preliminary look at some small sherds of B amphorae from Period II deposits outside the Lower Ward at Tintagel (Hartgroves & Walker, 1989, 26) failed to detect the fatty acids associated with olive oil, a negative result slightly favouring the carriage of wine or some other substance. A much larger programme at Tintagel using major sherds in quantity, and there are hundreds available, would hold out a hope of clearer information.

But, such second-stage laboratory investigations apart, there is much potential information to be gained macroscopically from looking closely at collections of these imported wares, and the larger the collection the more the information. Amphorae were no more than mass-produced containers. In post-Roman Britain, as everywhere, they had limited appeal once emptied. Broken amphorae became at best a source of souvenirs. Sherds could be chipped and ground into discs for pottery gaming-counters or the like or, if smaller, turned into spindle-whorls. This treatment is found at Carthage itself, just as at Tintagel or Gwithian, or Bantham Ham in Devon. When all the recognisable types have been taken out, the untyped residue is important. Going through the Tintagel material in 1988, Carl Thorpe and the writer isolated numerous sherds of untyped amphorae, and also some that – from the forms of the rim, or the presence of particular handles – may represent such coarse wares as bowls. Some of the untyped material could be matched, by courtesy of Professor Fulford, with North African fabrics as represented at Carthage. The majority however appears to be Byzantine or East Mediterranean, and on (macroscopic) petrological grounds must be assigned to that area, not to North Africa. Clearly this observation lends some support to Dr Arthur's model of the 'tramp vessel' whose 6th-century cargo had been acquired at a variety of sources and, by the time Britain was reached, was not necessarily carrying the same cargo with which the voyage began. It is just conceivable that, if coarse wares are present in the Tintagel assemblage, they come from a ship's galley and represent some minor and specific exchange.

Somewhat similar circumstances may attach to some of the red slip wares. The African Red Slip bowls and dishes, very handsome objects, could have graced a lord's table and could be seen as a make-weight added to the main commercial cargo. If, as would be argued at the moment, the ARSW items from Tintagel suggest an early 6th century date, the Phocaean Red Slip dishes are not only all of the same basic kind – Form 3, very like a modern soup-plate with an upstanding thickened rim – but belong to a standard form that accounted for about half the total output of PRSW and (with minor variations) was in production for a century and a half. Now on the assumption of unity, or participation in a single cargo, among the finds at the sites already named as making up the course of Voyage no. 1 some at least of the PRSW Form 3 dishes ought to be late 5th century. An example from Dinas Powys with basal stamps is regarded by Hayes (1972, 333 and 337) as having 'a date around 460–490 . . . making it the earliest of the series of Mediterranean imports found on Celtic

sites in Britain'. One could ask whether 'earliest' might be replaced by 'oldest', and whether in fact all the forty or so Form 3 dishes here attributable to Voyage no. 1 were not also part of the ship's furniture. If so, none was handed over in Scilly; two can be traced to the landing at Hayle (a foot-ring sherd from Phillack churchyard, a rim from Gwithian); and about thirty were traded in at Tintagel. It was our impression, and anyone is free to check this observation within the archive collection at Truro, that the PRSW Form 3 dishes were on the whole more worn, perhaps more eroded already through use at the time of breakage and deposition at Tintagel, than the bulk of the ARSW vessels, some of which were in very good condition with glossy surfaces and sharp fractures. One could also add, for good measure, that some of the Form 3 dishes bore such central basal stamps as outline crosses (cf Thomas, 1981b, 6) and that, in putting them forward for purposes of trade or exchange, any Byzantine merchant would have been less than human had he failed to exploit whatever reaction these Christian symbols aroused among British Christian would-be customers.

The title of this paper included the phrase 'a new model'. The concept of trade, the primary economic model, is not in fact new and others have obviously embraced it among their own conclusions. The notion of identifiable voyages, units of trading history, with diffusion inland from a limited string of centres (of power and/or tribute) takes the argument a stage or so further. In isolating here a putative Voyage no. 1, one can explain only a part of the general picture. The final map (Fig 5), reduced to bare outline but corrected with finds made up to the end of 1988, sketches minimally some other likely trading trips. One, for instance, that may or may not have touched Cornwall's southern coast must be adduced to account for small importations on the Channel coast of Devon, and conceivably *en retour* a recently-noted find of B ii in Brittany (Giot, 1985). Another voyage apparently went as far north as the Clyde, since sherds of both B i and B ii amphoras were found in trial excavations at Dumbarton Rock (references to all these sites in Thomas, 1981b). Mediterranean material from Whithorn, north-west and south-west coastal Wales, and the Irish east coast (where Dalkey Island figures as some sort of entrepot) would be best explained as part of the same venture. A fourth voyage should be considered in relation to south-west Ireland, where the Cork coast or Cork harbour is a not unlikely point. Generally speaking, from the pottery, all these voyages would have been broadly contemporary in the sense of all falling within the first half of the sixth century AD.

I must close by looking at two last, disparate, themes, briefly treated. Where now does this leave Early Christian studies, in that links with the Mediterranean and with East Mediterranean and Egyptian monasticism have long been claimed, if not very satisfactorily expounded? It leaves them much where they stood already (immediate summary: Thomas, 1981a, 349 and Fig 60), except to relegate the connection to the side-lines and to regard it as a by-product of commercial motivation. Over and above the traders and their shiploads, men and ideas – pilgrims with exciting notions and even literature – could have been ferried across the long distances. It is still the most economical and most probable way to explain the transmission of minor aspects of Mediterranean Christian art to British and Irish shores, without the intermediacy of mainland western Europe or, perhaps, even of Iberia (Thomas, 1987). The most challenging of all the implications is that the sea-route to Britain's shores was known, or had been preserved in knowledge from late Roman times; it was known what could be obtained in Britain; and perhaps the market had been researched. If so, then contact was sufficiently elaborate to permit the basic arrangements; to send a message that 'So-and-

so's ship will arrive next midsummer with wine and oil and so forth, and expects to trade for tin, etc'. But once more this suggests that, if voyages marked by archaeological finds can now be detected and sketched out, many more remain to be implied or inferred. Not all need have been on the scale depicted in Fig 4. Here, we should enlist the aid of clues from history, hagiography and epigraphy (cf Fulford, 1989, forthcoming).

Finally, let it be clear that everything said above impinges only in part on the occupation, or sequence of occupations, making up Tintagel's Period II. It is still necessary to contend that Period II embraces the fifth and sixth centuries, and that the arrival of a single boat — albeit carrying archaeologically dateable items — would have been the event of a single year, even of a single week. The exclusion of the 7th century can be argued mainly on ceramic grounds (the absence of Class E ware, or grass-marked native pottery) and at the moment it is also not easy to single out evidence for the period 400–450. Knowledge will be gained from further excavation, in particular from the environmental side of the work. Indeed one could support the principle that environmental data is the first desideratum. The claim that the pattern of domestic debris is consistent only with sporadic occupation is one that might be tested. Work on collapsed turf walls could yield ideas of the durability and life-spans of the postulated Period II huts on the Island plateau. Much of an ideal programme would be based on recovering details about 'the centre of the centre of power', if one can use so clumsy a phrase; the heart of the post-Roman citadel, almost certainly deep below the medieval Inner Ward and its hall.

We have to contain our impatience and await with interest the next phase of investigations. Meanwhile, intellectual development of the model proposed in this paper, in relation to all of post-Roman Britain and Ireland — and beyond that, to the expression of a separate but corresponding model of Gaulish trade and contact, for which there is a separate and ample corpus of 7th century evidence — stands waiting, as only one of many challenges arising out of the various and successful Tintagel 1988 projects.

Acknowledgements

I am grateful to all those who have worked with me on the various problems of Tintagel during the past few years, and whose names appear either in the text of this paper or in the references. For the benefit of discussion of specific aspects of what is written above (though without committing anyone to my views) I must record special thanks to Professors Leslie Alcock (Glasgow), Peter Fowler (Newcastle) and Michael Fulford (Reading), and Dr John Hayes (R.O.M. Toronto). Mr Richard Warner (Belfast) and Mr Ragnall Ó Floinn (Dublin) very kindly brought me up to date on finds from Ireland. Perhaps I can emphasise once more — since not all of these colleagues would support the interpretations offered here! — that this paper quite deliberately sets out a 'minimalist' model based on what evidence we possess; my 'Voyage no. 1' could just as well stand for several such ventures and the four trips implied in the final map, Fig 5, could conceivably represent forty. But in opening this debate I have chosen to present a constricted hypothesis, since it is not easy to define trading voyages for which no material evidence exists.

Bibliography

- Alcock, L.A., 1982. 'Forteviot: a Pictish and Scottish royal church and palace', in Pearce, S. (ed). *The Early Church in Western Britain and Ireland*, B.A.R. Brit. ser. 102, Oxford.
- Alcock, L.A., 1987. *Economy, Society and Warfare among the Britons and Saxons*, Cardiff.
- Alcock, L.A., 1988. 'The activities of potentates in Celtic Britain, AD 500–800: a positivist approach', in Driscoll & Niekke, 1988, 22–46.
- Arthur, P., 1986. 'Amphorae and the Byzantine World', in Empereur, J–Y, and Garlan, Y. (eds). *Recherches sur les amphores grecques (= Supplement XIII, Bulletin de Correspondence Hellénique)*, Athens, 655–60.

- Bayley, J., 1988. *Technological Finds from Tintagel, Cornwall (Anct Monts Lab Report, 195/88)*, London.
- Brown, P.D.S., 1970. 'A Roman pewter mould from St Just in Penwith', *Cornish Archaeol* **9**, 107–10.
- Candamin, J., and Formenti, F., 1976. 'Recherche de traces d'huile d'olive et de vin dans les amphores antiques', *Figlina* **1**, (Lyon), 143–58.
- Driscoll, S.T., and Nieke, M.R. (eds), 1988. *Power and Politics in Early Medieval Britain and Ireland*, Edinburgh.
- Empereur, J.-Y., and Picton, M., 1988. 'The production of Aegean amphorae: field and laboratory studies', in Jones, R.E. and Catling, H.W. (eds). *New Aspects of Archaeological Science in Greece (= Occas Paper 3, Fitch Laboratory)*, 33–38, Athens.
- Fulford, M.G. and Peacock, D.P.S., 1984. *Excavations at Carthage: the British Mission, vol. 1.2. The Avenue du Président Habib Bourguiba, Salammbô. The Pottery and Other Ceramic Objects from the Site*, Sheffield.
- Fulford, M.G., 1989. (Note in press). *Medieval Archaeol* **33**.
- Giot, P.-R., and Querre, G., 1985. 'Le tesson d'amphore B 2 de L'Île Lavret (Brehat, C. – du – N.) et le problème des importations', *Revue archéol de l'Ouest*, **2**.
- Guthrie, A., 1969. 'Excavation of a settlement of Goldherring, Sancreed, 1958–61', *Cornish Archaeol* **8**, 5–39.
- Gilchrist, R., 1988. 'A reappraisal of Dinas Powys; local exchange and specialised livestock in 5th – to 7th century Wales', *Medieval Archaeol* **32**, 50–62.
- Hartgroves, S., and Walker, R., 1989. 'Excavations in the Lower Ward, Tintagel Castle, 1986', *Cornish Studies* **16**, 9–30.
- Hayes, J.W., 1972. *Late Roman Pottery*, London.
- Hayes, J.W., 1988. 'Postscript: the presentation of pottery evidence in this book' (review note), *Journ Roman Archaeol* **1** (Michigan), 220–2.
- Jenner, H., 1928. 'King Teudar', *Tre Pol and Pen, The Cornish Annual* (London), 29–34.
- Mattingly, D.J., 1988. 'Olea mediterranea?', *Journ Roman Archaeol* **1** (Michigan), 153–61.
- Miles, H. & T., 1973. 'Excavations at Trethurgy, St Austell, Interim Report', *Cornish Archaeol* **12**, 25–9.
- Nieke, M.R. and Duncan, H.B., 1988. 'Dalriada; the establishment and maintenance of an Early Historic kingdom in northern Britain', in Driscoll & Nieke, 1988, 6–21.
- O'Mahoney, C., 1989a. 'Medieval Pottery from Tintagel: a summary', *Cornish Studies* **16**, 67–8.
- O'Mahoney, C., 1989b. *Medieval Pottery from Tintagel Castle (Institute of Cornish Studies Special Report No. 8)*, Redruth.
- Padel, O.J., 1981. 'Appendix II: Tintagel – an alternative view', in Thomas, C., *A Provisional List of Imported Pottery in Post-Roman Western Britain and Ireland (Institute of Cornish Studies Special Report No. 7)*, 28–9, Redruth.
- Padel, O.J., 1984. 'Geoffrey of Monmouth and Cornwall', *Cambridge Medieval Celtic Studies* **8**, 1–28.
- Padel, O.J., 1985. *Cornish Place-Name Elements*, Nottingham.
- Padel, O.J., 1989. 'Tintagel in the Twelfth and Thirteenth Centuries', *Cornish Studies* **16**, 61–6.
- Peacock, D.P.S. and Williams, D.F., 1986. *Amphorae and the Roman Economy. An Introductory Guide*, London and New York.
- Penhallurick, R.D., 1986. *Tin In Antiquity*, London.
- Rahtz, P.A., 1982. 'Celtic Society in Somerset AD 400–700', *Bulletin Board Celtic Studies* **30**, 176–200.
- Salway, P., 1981. *Roman Britain*, Oxford.
- Thomas, C., 1959. 'Imported pottery in dark-age western Britain', *Medieval Archaeology* **3**, 89–111.
- Thomas, C., 1972. 'Roman Objects from the Gwithian Area', *Cornish Archaeol* **11**, 53–5.
- Thomas, C., 1981a. *Christianity in Roman Britain to AD 500*, London.
- Thomas, C., 1981b. *A Provisional List of Imported Pottery in post-Roman Western Britain and Ireland (Institute of Cornish Studies Special Report No. 7)*, Redruth.

- Thomas, C., 1985. *Exploration of a Drowned Landscape*, London.
- Thomas, C., 1987. 'The Earliest Christian Art in Ireland and Britain', in Ryan, M., ed., *Ireland and Insular Art AD 500-1200*, 7-11, Dublin.
- Thomas, C., 1988. 'Tintagel Castle', *Antiquity* **62**, 421-34.
- Thomas, C., 1989a. 'Minor Sites at Tintagel Island', *Cornish Studies* **16**, 31-48.
- Thomas, C., 1989b. 'CAU Excavations at Tintagel Island, 1988: The Discoveries and Their Implications', *Cornish Studies* **16**, 49-60.
- Thomas, C., 1989c. 'The Archaeology of Tintagel Parish Churchyard', *Cornish Studies* **16**, 79-92.
- Thomas, C. and Fowler, P.J., 1985. 'Tintagel: a new survey of the "Island"', *Annual Review 1984-85, Roy Commission Hist Monuments England*, 16-21.
- Thomas, C. and Thorpe, C., 1988. *Catalogue of Finds from Tintagel Castle, I: All finds, excavated and surface, other than medieval pottery* (Royal Institution of Cornwall, Truro).
- Thomas, J.I., 1948. *Isthmus of Penwith. A Study in Prehistoric Geography*, Camborne.
- Wailles, B., 1963. 'Excavations at Castle-an-Dinas, St Columb Major: Interim Report', *Cornish Archaeol* **2**, 51-5.
- Wedlake, W.J., 1958. *Excavations at Camerton, Somerset*, Camerton.

Recent Work: Survey

Kit Hill

To allow proper archaeological management of this important block of surviving moor on Hingston Down, the Cornwall Archaeological Unit undertook a total survey of the 162 hectares recently acquired by Cornwall County Council. This included detailed recording of known sites, mainly industrial complexes (Kit Hill Great Consols, Cornwall Great Consols and part of East Holmbush tin mines; a possibly medieval tin streamworks; and the several 19th and 20th century granite quarries), but also the recently discovered long-barrow (Walford 1986), five round barrows and areas of medieval outfield cultivation.

Among the features newly revealed were, from the prehistoric period, twelve more round barrows and part of a co-axial field system, similar to that on East Moor, Bodmin Moor, and possibly of Bronze Age date. Industrial remains, however, formed the bulk of the new material, in particular the thousands of pits and heaps produced by surface tin prospecting and extraction and the small-scale splitting of granite moorstones. Ancillary industrial features surveyed included adits, reservoirs, leats, hollow-ways and tramways.

Peter Herring

Reference

- Walford, G.F., 1987. 'Possible Neolithic Long Barrow on Kit Hill' *Cornish Archaeol* **26**, 102.

Tintagel

In advance of repointing work on the Great Hall and Chapel on the Island, Cornwall Archaeological Unit was asked by English Heritage to produce a detailed record of the affected walls. A team of three undertook the work in January and February 1988, producing 1:20 scale elevations and 1:50 scale plans. Phasing and reconstruction details were also noted. This is the first attempt at such works at Tintagel and it is hoped eventually to record all upstanding walls.

The opportunity was also taken to investigate archaeologically areas disturbed by drainage works in 1987. These included a rock-cut feature immediately north of the 'Two-roomed lodging', and the soakaway between the Great Hall and the North Range. The former proved to be a pit 1.5m deep and 2.0m in diameter, probably originally dug as a cistern for a water supply within the curtain wall; it was back-filled with mortared blocks, possibly by Kinsman in 1852. The area of the soakaway was investigated to a depth of 3.0m. The top 2.5m consisted of make-up material contemporary with the construction of the Great Hall, overlying at least 0.5m of earlier occupation material. It is here perhaps that the answer to Tintagel's dating problem lies.

Nic Appleton

Gunwalloe

Expanding an undergraduate thesis (Peters 1986) which investigated the existing archaeological evidence, with some preliminary environmental studies, a new dissertation (Peters 1987), in part fulfilment of an MA at Bradford University, examined the past environments of Gunwalloe. The site includes deposits of blown sand, in which the Late Dark Age settlement occurs (Hogg 1930; Jope and Threlfall 1956) and alluvium in the valley behind.

Surveying and augering defined the topography and extent of the deposits. Unanalysed samples from pit GIa in the dunes (Peters 1986) were analysed for molluscs. A new pit, GIII, was dug in the alluvium, near the dune edge. Lenses of blown sand preserved mollusc shells and ostracod carapaces which were analysed. Modern samples were taken from the dunes, marsh and reedswamp for comparison with the ancient samples. Particle-size analysis was performed on samples from GIII and GMS8, a modern sample.

The Dark Age site provided useful dating for some species of Mollusca. The absence of *Pomatias elegans* and the presence of *Candidula intersecta* may indicate that the blown sand sequence is relatively late compared with other Cornish sites. Although there are some hints of connections between the two sequences, in GIa and GIII, it proved impossible to connect them securely.

GIa revealed a succession from possible plough-soil to rapid sand accumulation at the level of the archaeology to the present day stable dune pasture. GIII produced a succession from marsh, tending to swamp, to drier carr to sparsely vegetated swamp to desiccated marsh to the present renewed paludification.

Mulfra Hill Survey

A survey of Mulfra Hill was carried out, with English Heritage funding, to take advantage of accidental fires which had cleared dense gorse from the west side of the hill. In addition to the well-known Mulfra Quoit the remains recorded were characteristic of the range to be expected in West Penwith heathland: mining remains and minor quarrying; medieval and post-medieval fields and strip fields; a large number of Bronze Age cairns; and a near-complete prehistoric field system with hut circle and associated structures. This site is particularly important as such field systems are now rare in West Penwith.

Peter Rose

Overgrazing and human settlement may have caused the second phase of sand accumulation. The site may have been chosen because of its infertility in order to avoid using up valuable productive land. Also, the marsh, shore and sea may have yielded necessary additional resources. The sand movement may have caused settlement-shift in to the area of the present farm.

Copies of both dissertation are available for study at the library of the Royal Institution of Cornwall and the offices of the Cornwall Archaeological Unit in Truro.

I am grateful to the National Trust and to my supervisors, Dr J.G. Evans of University College, Cardiff, and S.E. Waren of Bradford University.

Caradoc Peters

References

- Hogg, A.H.A., 1930. 'Kitchen Midden, Gunwalloe', *J Roy Inst Cornwall* 23, 325-6.
- Jope, E.M. and Threlfall, R.I., 1956. 'A late Dark Age Site at Gunwalloe, *Proc West Cornwall F C* 1.4, 136-140.
- Peters, C., 1986. *Gunwalloe: A Site and its Environment*. Unpublished BA thesis, University of Wales.
- Peters, C., 1987. *The Past Environments of Gunwalloe, Cornwall*. Unpublished dissertation in part fulfilment of MA degree, University of Bradford.

Minions Area Survey

The survey of a large and complex landscape by an untrained MSC workforce working to a deadline has determined the overall strategy of the project. Knowing that it would be impossible to undertake the detailed survey of the total landscape, sites which are representative of the range encountered within the Minions area: engine-houses, processing works, transport systems, quarries and industrial structures are being sampled, and landscape blocks containing tin-streaming, surface working and prospecting are being similarly examined. Field work has brought to light new sites: survey is currently in progress on a medieval strip field system lying within an area of Caradon Hill formerly thought to contain only 19th century industrial remains. It is hoped that the analysis of documentary sources will help to explain the dynamics of the settlement and economic changes that took place within the area during the last century.

Adam Sharpe
Cornwall Archaeological Unit

A Barrow Cemetery on Davidstow Moor, Cornwall Wartime Excavations by C.K. Croft Andrew

PATRICIA M. CHRISTIE

With contributions by FRANCES HEALY and CAROLINE CARTWRIGHT,
BRIAN OLDHAM, SHEELAGH STEAD and DAVID WILLIAMS

During 1941 and 1942, the late C.K. Croft Andrew, working on behalf of the Ministry of Works Ancient Monuments Inspectorate, identified and examined some 28 potential barrow sites on Davidstow Moor, ahead of airfield construction. Of these, 23 sites proved to be of archaeological interest. The results of the eight-month campaign are now published from the surviving notes and finds, and have yielded important information on the structural and artefactual diversity within the group, as well as providing material for radiocarbon dating. Together with the report on Croft Andrew's excavation of the nine coastal barrows, 1939-1944, already published, this completes an account of a remarkable wartime excavation campaign, the material from which has been until now inaccessible.

GENERAL INTRODUCTION

The excavation campaign conducted by C.K. Croft Andrew on Davidstow Moor lasted from October 1941 to June 1942. Before excavation only three sites were noted on the OS maps as antiquities, but as a result of detailed exploration of the airfield site and its environs some 28 potential barrows were identified by Croft Andrew. He examined them all and 23 proved to be of archaeological interest though 11 were of post-prehistoric date. A synopsis of the 8-month campaign was sent to the Chief Inspector in September 1942, with a preface quoted in full below:

It is earnestly hoped that the following pages may be read, not as a condensation of the Report which is yet to be prepared, but as a preliminary outline of the different sites examined and the features they disclosed, written almost entirely from memory, with occasional reference to field-notebooks for dimensions. The finds and samples obtained from these Excavations are so bulky, the body of memoranda so formidable, and the drawings to be made so numerous, that it would have been uneconomic, and was in fact quite impracticable, to attempt a collation of those materials for the present purpose: consequently many facts and finds whose significance will emerge from the Report have doubtless been over-looked here.

To the excavator the Davidstow campaign appears to have more than justified itself; both by its immediate results, notably the detailed examination of structures new to the South-Western Counties and in part new to Britain, whose preservation could not have been anticipated anywhere but on virgin moorland; and also by the cumulative value of these with other recent excavations of the Ministry of Works in providing, as cultural salvage from the ravages of war, the first application of modern archaeological methods to the Bronze Age mounds of Cornwall, the first glimpses of Bronze Age ritual obtained hereabouts for seventy years, and — if one may venture to say it — a widening and more reliable view of Cornwall's relation to neighbouring regions in that remote period.

The report was never written. An attempt is made to present it here. It is hoped that not too much has been lost with the passage of time and that the findings, which can now be assessed in the light of work done since Croft Andrew wrote this synopsis, may fully vindicate these last remarks.

Topography and Environment

The site chosen for the wartime airfield lies on an area of flat ground immediately north and north-east of Crowdy Marsh (now Crowdy Reservoir) on the north side of Bodmin Moor (Fig 1). The moor itself has been described in some detail by Axford; and more recently, in her report on the archaeological investigations at Colliford Reservoir, Griffiths has summarised the archaeological work on the moor itself (1984, 50). Off the moor, the area is rich in prehistoric remains, with numerous barrow groups to the north, east and particularly west and north-west, leading across to the coast via sites which have been examined since Croft Andrew's time, namely Tichbarrow (Trudgian, 1976) and Otterham (Dudley, 1961) as well as to his own sites on the coast (Lousey Barrow and Treligga) which have recently been published (Christie, 1985).

The concrete runways of the airfield are now being removed; the area is reverting to grass, grazed by sheep, while trees grow round Crowdy Reservoir, in contrast to the bleak, treeless landscape which existed half a century ago. Apart from superficial turf-cutting for fuel, Croft Andrew found that the moor had lain undisturbed for centuries. All the earthworks he examined were low, and he makes the point that they would easily have been obliterated by agriculture.

The sites all lie on the Upper Devonian killas at the edge of the intrusive granite mass which includes Roughtor and Brown Willy to the south. The soils today belong to the Denbigh 2, Hafren and Crowdy Associations (Soil Survey 1983), typical brown podzols. No

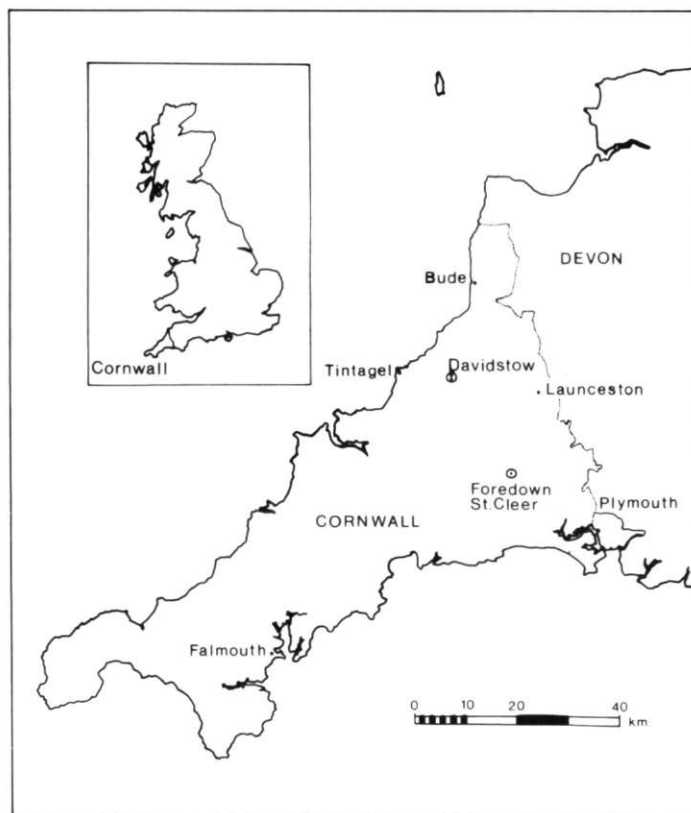


Fig 1A
Location of Davidstow

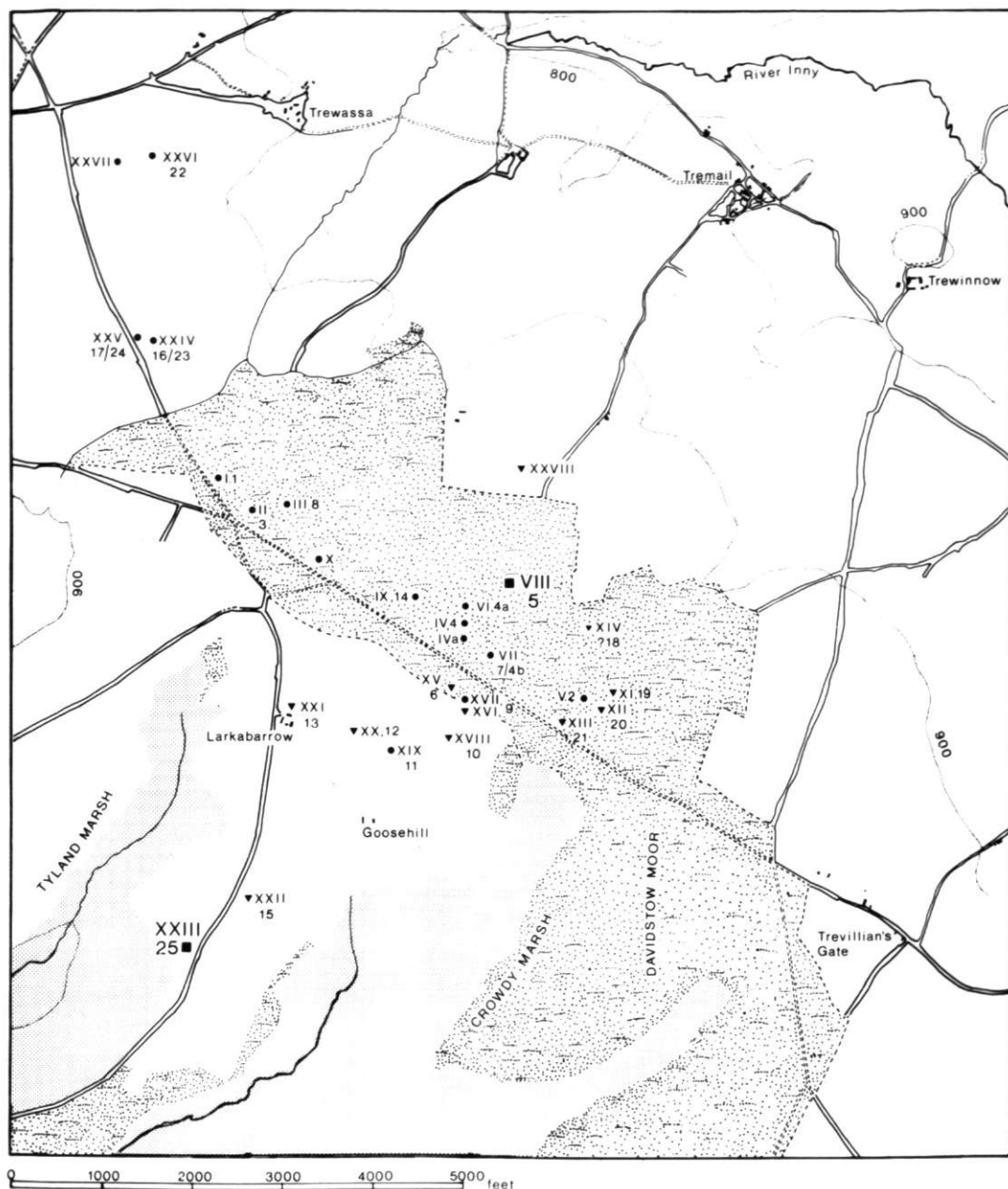


Fig 1B
Location map of sites

soil samples were taken and only the excavator's description of the surfaces beneath the barrows provide evidence of the possible composition and character of the Bronze Age soils. Today's soils of the Hafren Association (group 654a), described as 'wet peaty surface horizon and bleached subsurface horizon often with thin iron pan' coincides well with the excavator's description of the surfaces under most sites. Some may, however, compare with

the iron stagnopodzols described in connection with Colliford (Griffith, 1984) and Goonhilly Downs (Smith, 1984), despite the different bedrock at those sites.

Post Excavation Work

The report which follows forms the second part of C.K. Croft Andrew's wartime barrow excavations. The first part has already been published (Christie, 1985) and the circumstances of the writer's involvement and the condition of the material are described therein. Some additional problems were encountered with Davidstow, not least being the weather at the time of excavation, which caused sites to be abandoned for weeks while others were started elsewhere. This resulted in the records being spread between four notebooks, with details of a single site sometimes appearing in all four books. The numeration of sites was changed from Arabic to Roman for the purpose of the synopsis sent to the Chief Inspector. Except for Site I and Site IV however, the Arabic and Roman numerals do not coincide. The excavator's habit of using triangulation over large distances, and then giving the measurements to the least half-inch, has made for laborious and sometimes near impossible plotting, especially when the position of recording pegs is obscure or missing altogether. Except for Sites I and III(8), no plans or sections had been drawn out. The hot-cross-bun method of excavation meant that the centre of many sites was not properly sectioned. The finds themselves had become muddled – envelopes often empty, or with loose flints etc unmarked; but an excellent job has been done on them by Frances Healy. On the credit side, however, Croft Andrew's writing was clear and legible, despite being in pencil, and most of the essential details were recorded.

The preparation of the report was carried out by the present writer as follows:

Samples of bone, charcoal and pottery, together with the small finds, were allocated to specialists whose results, and where appropriate reports, are included here –

All plans, sections and features have been drawn out from measurements in the notebooks –

Each site has been given both Arabic and Roman numerals and is prefaced by the excavator's original summary, sometimes in a shortened version –

Individual sites include specialist reports, where relevant, and a discussion, though identification of charcoal samples is mostly incorporated in the text –

A discussion of the pottery and lithic material by Frances Healy follows at the end of the report, before the general discussion –

Dates are expressed in radiocarbon years B.P. Calibrated dates expressed in approximate solar years B.C. are derived from Pearson and Stuiver, 1986.

Note In descriptions of lithic material 'blade' is used in the visual sense of a relatively narrow, parallel-sided flake, rather than in any metrical sense.

Flints from Sites XX(12) and XXII(5) are illustrated and included in Table i, but the sites themselves have been described elsewhere (Christie and Rose, 1987, 193).

The sites on Davidstow Moor fall into two groups: the first include the barrows and other sites deemed by the excavator to be prehistoric, which form the subject of this report. The second group comprises the post-prehistoric sites, and these have already been published in a previous number of this journal (Christie and Rose, 1987). The report on a damaged barrow on the south side of the moor, at Fore Down St. Cleer, is included with the prehistoric sites here, since the rescue of the finds was carried out by Croft Andrew during the Davidstow campaign.

The finds from all the sites have been, or will be, deposited in the County Museum, Truro, together with the paper archive relating to Croft Andrew's excavations.

The contents of this paper are as follows:

- Site I(1) with report on Charcoal by C. Cartwright
- Site II(3) and IIA(3a)
- Site III(8) with report on Cremation by S. Stead
- Site IV(4) and IVA
- Site VI(4a)
- Site VII(4b/7)
- Site IX(14)
- Site V(2)
- Site XIX(11) with report on Cremation by S. Stead
- Sites XXIV(16/23), XXV(17/24) with report on Cremation by S. Stead
- Sites XXVI(22)
- Barrow on Fore Down St. Cleer with report on dagger by B. Oldham
- Discussion of Pottery and Lithic Material by F. Healy
- General Discussion
- Appendix 1 – Petrological Examination of the Pottery by D.F. Williams
- Appendix 2 – Report on the Charcoal by C. Cartwright
- Appendix 3 – Radiocarbon dates from Cornish Barrows

SITE I

Introduction and Summary

The mound known as Trevassaborough was the first to be excavated in Croft Andrew's campaign on Davidstow moor and the results are here summarised in the excavator's own words:

An unditched, circular platform-mound or 'ritual barrow' approximately 86 feet in diameter and 3 feet high, of clay and turf construction, was fully excavated . . . No trace of a burial was found in or under the mound, but on the floor at the geometrical centre was a small deposit of organic matter covered by a laminated dome of white clay and turves. The floor as a whole disclosed considerable evidence of a ritual in which fire and wooden objects played prominent parts.

For the first time in Cornwall there was demonstrated here a ring of stakes . . . within which . . . were the remains of several fires and a large heap of charcoal . . . On the outer surface of the mound a light wooden fence at the shoulder enclosed the flat crown. On this platform were found traces of further fires and parts of a pot . . . Some groups of quartz stones imply that this platform originally bore a central cairn . . .

The site yielded upwards of eighty small finds.

1941 Excavations

The N/S and E/W axes of the mound were laid out through the assumed centre; cuttings 5 or 6 ft (1.5–1.8m) wide and of differing lengths were then opened up radically. Two cross-sections were obtained, from NE/SW and NW/SE (Figs 4, 5 and 6). An OS Trig slab was found buried c. 1 ft below turf near the centre on the NE. The site was entirely stripped, over a two-month period, under the worst possible weather conditions; the notebook is full of references to 'violent gales, heavy rain . . . trenches full of water . . .' and the site becoming a quagmire. Despite this, the results were rewarding at the time, and have proved even more so 45 years later.

Post-Excavation work has been greatly aided by a diagram (Fig 3) showing the site layout with the position of all trenches and the extent of excavations. A plan and simplified cross-

Davidstow Moor I

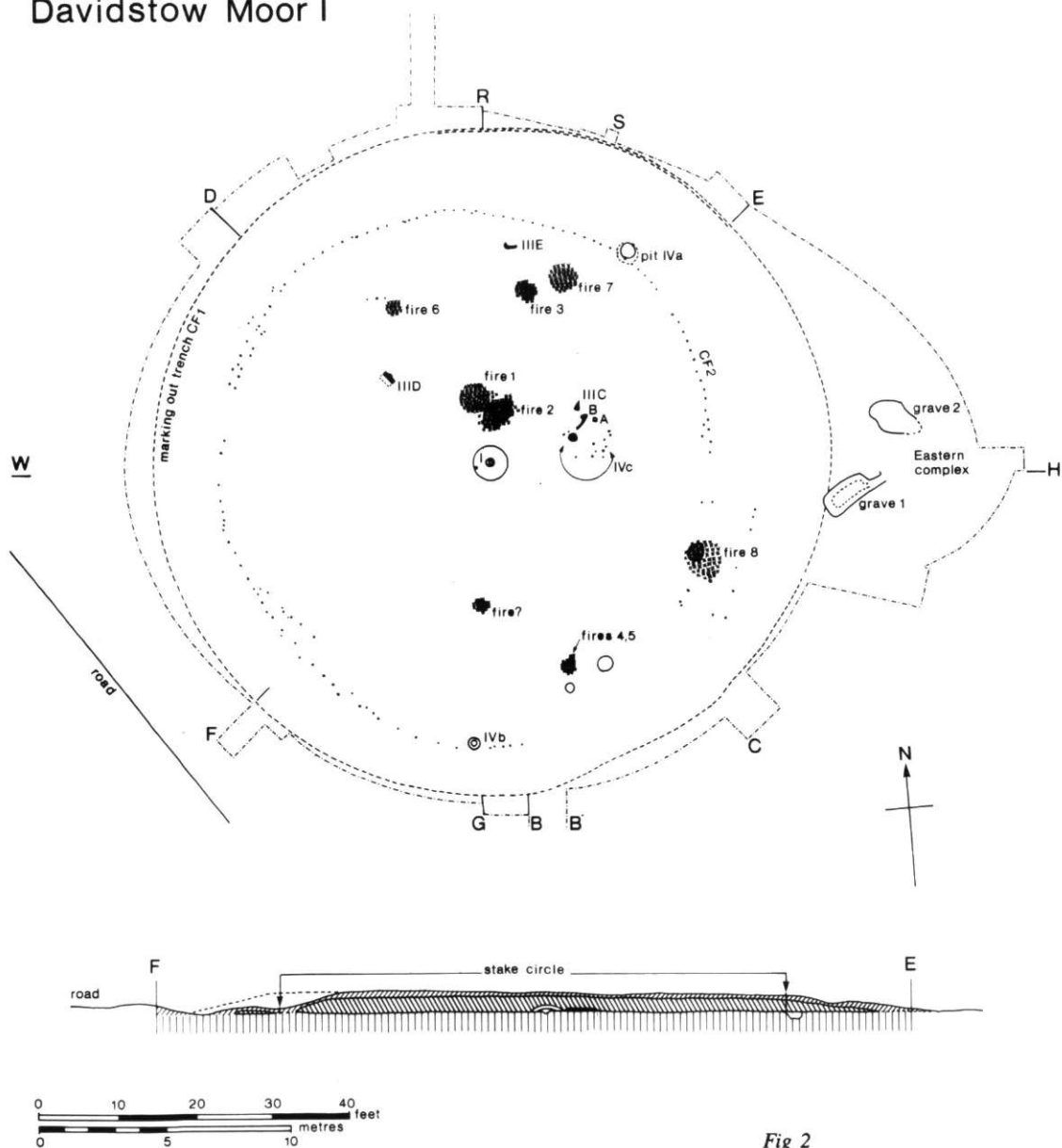


Fig 2
Site I Plan of barrow showing features at ground level

section had been drawn by the excavator, but otherwise no sections or features had been drawn out from the measurements. All radial sections have now been drawn out, with the exception of D¹ (west baulk of Trench D), A (part section only) and Tb/Tc, an uninformative section across F. Measurements for a contour plan exist, but since the mound was only 3 ft (0.9m) high and a number of radial sections have been drawn, it is not deemed necessary to draw this. Structural and artifical features have been numbered for clarity; the original excavation plan has been redrawn with feature numbers added, and the following evidence from the barrow can be presented.

Barrow Construction

The barrow appears to have been laid out from a central point, and a *marking out trench* (CF 1) was traced in several places round the mound. Within the marked out area a *circle of stakes* (CF 2) 70 ft (21.34 m) diameter was set. The *old land surface* (OLS) was preserved beneath the mound as a thin dark layer (layer 3) described as 'old turf' beneath which an extensive layer of pan had formed over the orange/yellow subsoil. The 'old turf' is also described as 'grey clay' and this is now seen as the leached horizon of the buried soil. The irregular outer limit of the old turf (organic soil) was traced both in the radial sections and in a number of trial trenches, 4 ft (1.22 m) wide, dug round the periphery, and was found to end between 30 (9 m) and 40 (12 m) feet from the centre. Beyond this point the turf appears to have been stripped, to build the mound.

The excavator noted considerable pan formation both on the clay mound (layer 2) and particularly on and under the organic soil (layer 3). In places this was found to be thick and hard (Section C — Fig 5).

The construction of the *mound* began with the building of a small central mound (I) which was then covered by a flat-topped turf stack rising slightly over this central mound; sods are noted as measuring 15 x 15 in (0.38 x 0.38 m) in places. The excavator's original description

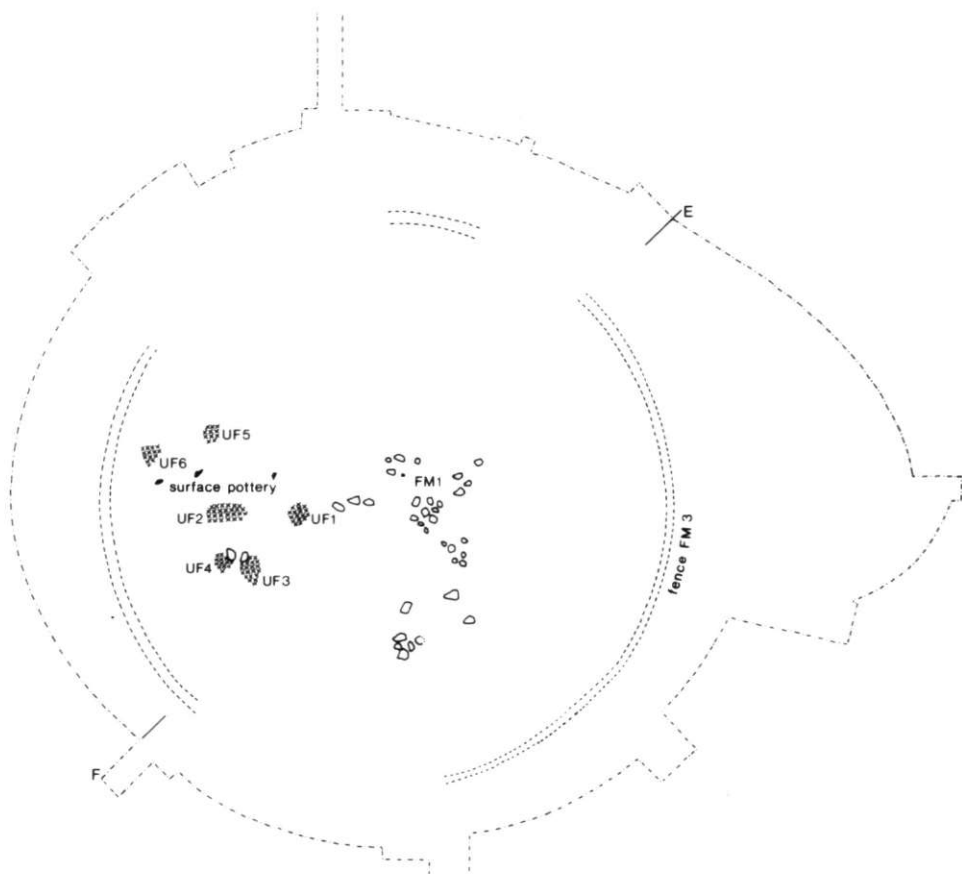


Fig 2A
Site I Plan of features on mound

Davidstow Moor I

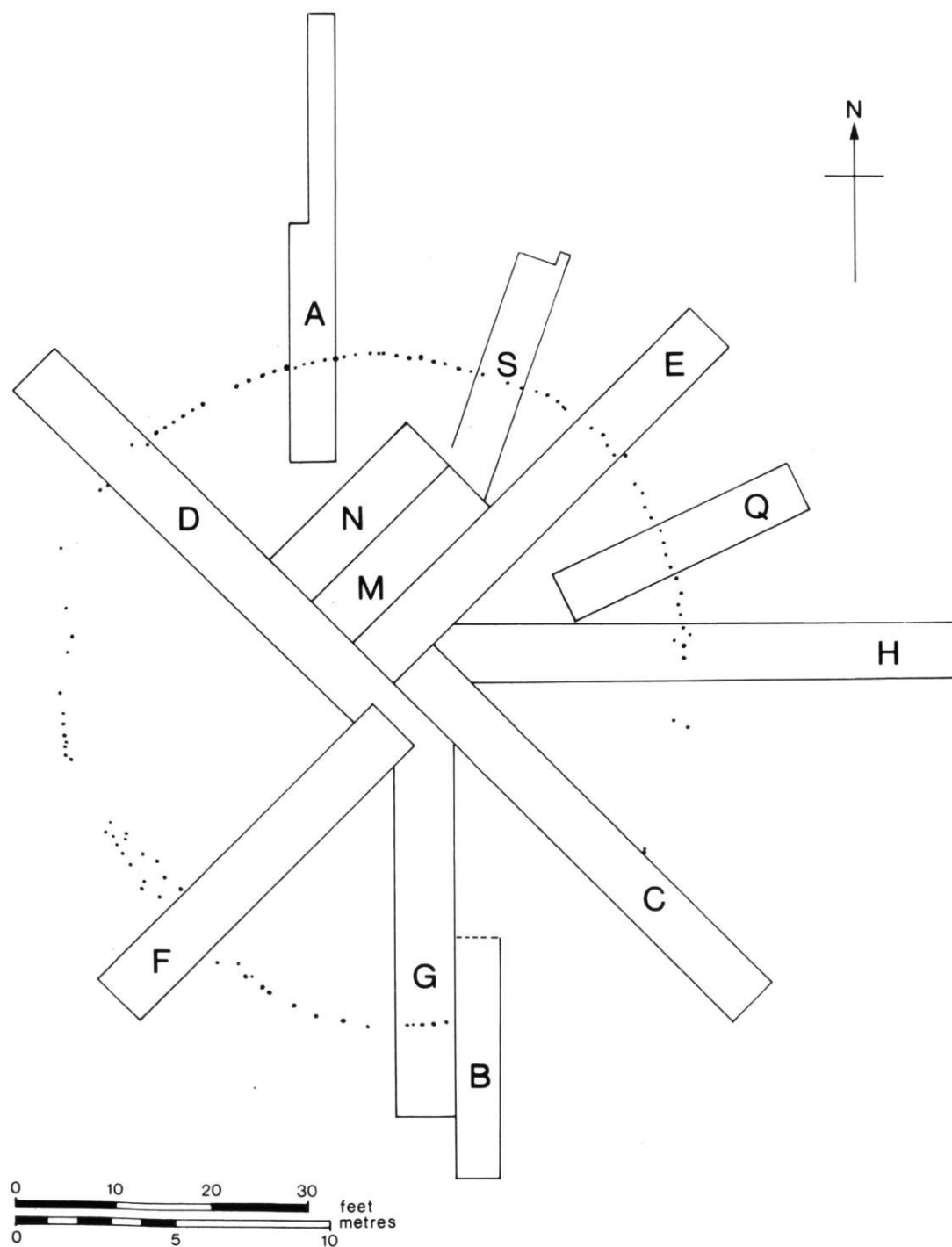
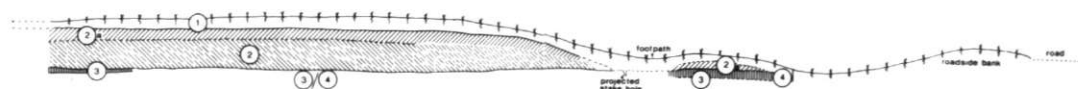


Fig 3
Site I Plan showing layout of trenches

of the mound was as follows:— “Black layering, nearly vertical and very narrow, is assumed to represent organic matter washed down from the overlying peaty earth with crevices left between the clods of mixed clay”. A sketch in the notebook illustrates his observations. This turf structure resulted in a ‘mottled clay’ mound (layer 2 in all sections Figs 4–8) approximately 28–30 ft (8.5–9 m) diameter. The mound had been disturbed by rabbits, but not excessively so on the west at least. In all sections the clay mound ended 10–12 ft (3–3.7 m) before the upper layer of more homogenous earth which covered the whole mound. In one section (Fig 4 Section F) a distinction is clearly made at the centre between ‘mottled clay top of mound’ (i.e. compacted turf) and a thin layer of ‘mound’ above (layer 2a).

Davidstow Moor I

Section F



Section E

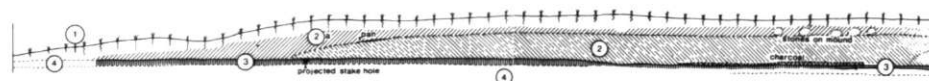
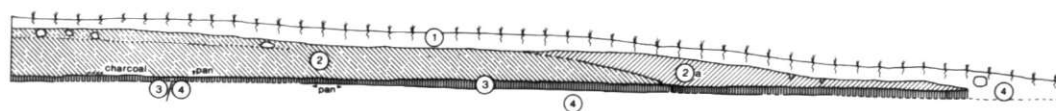


Fig 4

Site I Section F–E: (1) Turf and topsoil; (1a) disturbed soil over E complex; (2) mottled yellow and grey clay of turf stack; (2a) yellow-brown homogenous earch; (3) ‘old turf’; (4) yellow subsoil

Davidstow Moor I

Section C



Section D

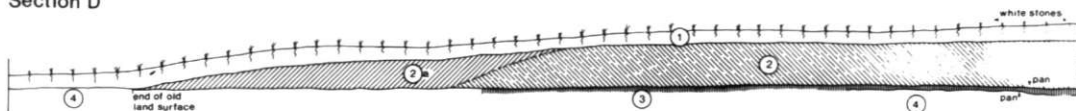
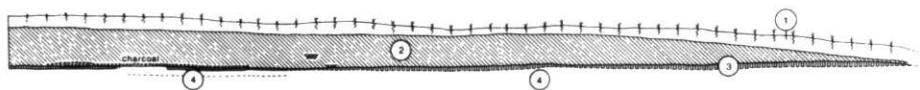


Fig 5

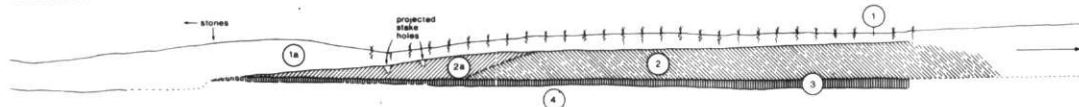
Site I Section D–C (layers as Fig 4)

Davidstow Moor I

Section E



Section H



Section W

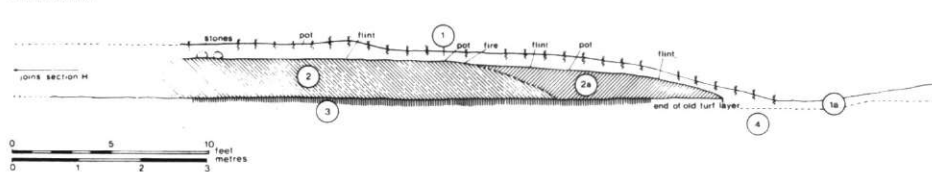
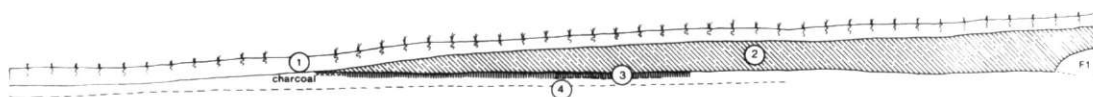


Fig 6
Site I Sections E¹, H and W (layers as Fig 4)

Davidstow Moor I

Section B



Section B¹

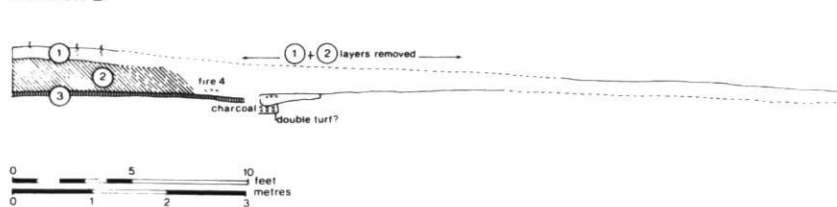


Fig 7
Site I Part sections B and B¹ (layers as Fig 4)

Construction features (CF)

CF1 *Marking-out trench.*

A shallow slot 4½–5 in. (114–127 mm) wide at surface, tapering to 2 in (50 mm) at base, and 4½ in. (114 mm) deep, was picked up in 4 foot-wide trial trenches dug round the periphery of the mound at a radius of 44–45 ft (13.4–13.7 m) from the centre and also in radial sections S and R (Fig 2). This slot was interpreted by the excavator as a marking-out trench. The final plan of the barrow marks the geometrical centre as though a post- or stake-hole was found there, and indeed a small 'stake-hole' mark was found under the centre peg of the excavation when this was dug away on 23 December 1941.

CF2 *Stake circle.*

Stake holes were first discovered on the NW and the 70 ft diameter circle was subsequently traced round the barrow in a week of appalling weather conditions (Fig 17). Stake holes 2–3 in. (50–75 mm) diameter were visible in the OLS at c. 18 in. (0.46 m) intervals. Many of the holes were sectioned (Fig 18) and were found to penetrate 6–8 in. (150–203 mm) through the dark 'turf' (layer 3) into the yellow subsoil (layer 4). Many of those on the west had their conical tips pointing eastward, suggesting that the top of the stake lent outward from the centre. The filling of stake holes discovered on the NW is recorded as fine, granular black/brown earth. The circle was continuous except on the SE where there may have been an entrance. Equally, it may have been destroyed or rendered unidentifiable by a (presumably) natural feature beneath Fire 4 (below) consisting of tunnels in the subsoil interpreted first as 'burrows' then as 'tree-roots', on the assumed line of the circle.

Note: The lack of stake circle on the SE and SW may also have been due to the natural slate outcropping in this area of the site. Other stake holes on the SE shown on the plan (Fig 2) do not appear to relate to the main stake circle.

Features on mound (M) (Fig 2a)

The site was stripped in all sections to the top of the clay mound. On this surface the following were uncovered:

FM1 *Stones* were noted on the flat-topped mound in several places near the centre, especially on the south and east. These were mainly of white quartz — one described as 'baby's head' sized, but slabs of slate were also present. The stones do not appear to have covered the actual centre of the barrow, immediately above the primary mound (I below), though this could be due to later disturbance.

FM2 *Fires*

The remains of 6 fires (UF 1–6) were found on the surface of layer 2 on the west side. No details are given, apart from being described as 'fires' and the positions being plotted; it is not known whether they burned in situ or were just deposits of charcoal. Pottery, flint and stone was also found on the mound in this sector, associated with these fires.

FM3 *'Fence'*

A double setting of stake holes was noted in places, penetrating the mound at its lower edge. These holes average 2 in. (50mm) in diameter, c. 6 in. (150mm) deep and were set at intervals of 18 in. (0.46m) — 2 ft (0.6m). The concentric rings appear to have been approximately 12–18 in. (0.3–0.46m) apart. The overall diameter of this double ring roughly coincided with the lower stake circle, but appears to have been slightly wider on the

north and east. It was interpreted as a fence surrounding the flat crown of the barrow, within which were found the various features described above. (The possibility of its being a later fence was also considered).

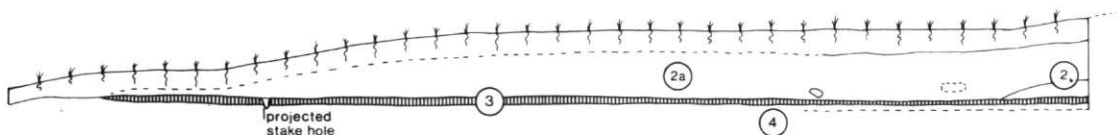
Features on barrow 'floor' (Fig 2)

The entire area within the marking-out trench was excavated to the original land surface and a number of buried features were revealed:

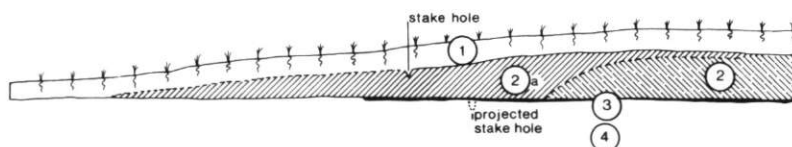
- I. *Central area.* Only one brief mention of this exists in the notebook and in a letter to O'Neil dated 16 October, which describes practically at the centre 'An 8-inch hollow in the subsoil (which had become lined with pan) contained a layer of grey clay indistinguishable from the old turf and displaying nothing more exciting than 3 bits of white

Davidstow Moor I

Section G



Section S



Section R

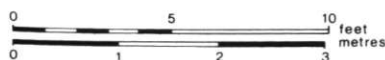
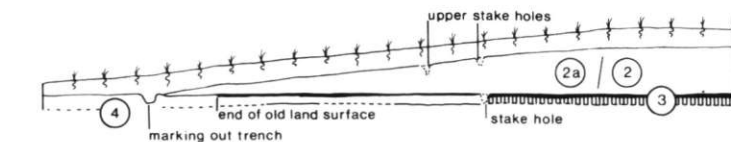


Fig 8

Site I Section G, S and R (layers as Fig 4)

quartz, normal on the site. The little hole had been over-filled with white clay which was covered with turf forming a grey dome. Over this was a layer of white and another of grey. The whole thing was small and unconvincing'.

This dome of white clay 'speckled with iron' and turves was 4ft 6 in. (1.37 m) diameter and 1 ft (0.30 m) high, according to a sketch, and resulted in a slight rise in the centre of the barrow mound. Apart from the measurements given in sections G and B (Figs 8 and 7) the central mound is otherwise nowhere else mentioned.

Immediately west and south of the central mound a layer of pan was noted *over* the old turf Sections C and D – Fig 6). The extent of this is not known, nor the reason for its formation, though trampling could be a possibility.

- II. *Fires and charcoal deposits.* A number of 'fires' were noted on the old turf. Few appear to represent true fires (i.e. burning in situ), but in the absence of appropriate samples it is not possible to be sure, with only the excavator's observations to rely upon.

Fires 1 and 2. Two deposits of charcoal were found close to the centre on the north and are assumed to be associated. The first to be discovered (Fire 2) was 6 ft (1.6 m) out from the centre and consisted of a spread of charcoal with some red and white (unburnt) clay. A few days later, when the centre was cleared, a far more extensive mound of charcoal was found (fire 1), piled in a steep-sided mound up to 4 in. (100 mm) thick over the grey (?unburnt) old turf. This fire (Fire 1) is described as follows: 'Calcination, if present, is slight, yellow soil and turf having been used to dampen the fire and being hardly discoloured. The only change of colour in fact might be due to formation of pan'. In addition to the 'fires' themselves, large pieces of charcoal were scattered over the surrounding area. This charcoal deposit is referred to as the 'ceremonial fire'. Five tiny fragments of calcined bone, including 2 tooth fragments, have been retrieved from a sample of this charcoal; Sheelagh Stead reports that they are probably human. Two charcoal samples (samples 4 and 7) from the fire(s) were submitted for C¹⁴ determination and have given a date of 3520[±] 70 B.P. (HAR-6634).

Fire 3. Charcoal deposit 1–1½ in. (25–40 mm) thick on NE, consisted of a mass of charcoal and ash 18 in. x 2 ft 6 in. (0.46–0.76 m), lying on the OLS which appeared unburnt. The overlying soil was reddened over the central part of the deposit, suggesting more heat was being generated than in the case of Fire 1 above.

Fire 4. A patch of red clay with charcoal (Sample 6), c. 2 ft (0.6 m) diameter, lying on a patch of yellow just above the old turf on the south, was described as a 'fire'. Two small *pits* (possibly stake holes) 16–17 in. (0.4–0.43 m) apart and filled with charcoal, were noted in the fire area. A further *pit* c. 1 ft (0.6 m) diameter, 8 in. (203 mm) deep with conical base, was also associated with this fire and contained oak charcoal (Sample 1). After removal of the fire a complex of irregular depressions and a further small pit, all filled with 'fine charcoal and carbonaceous matter' showed in the yellow subsoil. Further on in the notebook a complex in apparently the same spot on the SE is described as 'burrows' well down in the subsoil, filled with orange/fawn soft sandy soil, with no mention of charcoal; this was later amended to read 'tree roots'. It is not clear whether Fire 4 lay in this case over a natural phenomenon; the excavator states in his summary that 'fire was used to seal the stump of a felled tree'.

Fire 5. A red (?burnt) patch with charcoal, east of Fire 4, is described as a 'high fire' *above* the old turf and it would appear from notebook measurements to have been 4–6 in. (100–150 mm) above the old turf.

Fire 6. A deposit of charcoal described as 'not a true fire' was noted measuring 7 x 12 in. (254 x 304 mm) on the NW, lying on the old turf clay which here was very thick, covering a depression in the pan. (Charcoal Sample 3).

Fire 7. On the NE, a few feet east of Fire 3, another fire was noted, with charcoal and burnt clay only ½ in. (12.7 mm) thick (Charcoal Sample 14).

Fire 8. A patch of charcoal extending for 2–3 ft (0.6–0.9 m) on the east was noted in and on the old turf. No further details are given. On the southern side of this 'fire' a larger than usual stake hole, 4–5 in. (100–125 mm) diam. penetrated c. 1 ft (0.3 m) into the yellow subsoil and was filled with brown/black soil containing charcoal.

III. *Wooden objects*

Three deposits of carbon (A, B and C on Fig 10), lying in and on the whitish clay on the old land surface on the NE, near the centre, are described as 'wooden objects . . . thrust through the old turf into the yellow' (subsoil): —

- A — half moon shaped, measuring 6 x 4 in. (150 x 100 mm), splayed away from the centre with sharply pointed base 5 in. (125 mm) into the yellow subsoil; described as 'certainly a socket with charcoal in it, though . . . too much disturbed to show the form of the object'.
- B — club-shaped, measuring 26 in. long, 9½ in. wide at its broad end and 2 in. thick.
- C — an equilateral triangle, with sides measuring 7 x 7 x 6 in. (178 x 178 x 150 mm).

Oak charcoal from the OLS nearby (Sample 20) may relate to the above. Other patches of broken charcoal nearby were thought to have been 'trodden or hand-packed into little holes under the turf'.

Two further deposits were recorded:

- D — a black film of fine charcoal 20 x 5 in. wide (508 x 125 mm) in section and not more than ⅛ in. thick (3 mm) was noted on the grey clay of the old turf on the NW and was interpreted as a wooden plank or implement. It would appear that either there was no more of this object under the section, or that it had been dug away without being noticed.

Davidstow Moor I

Grave 1 and associated features

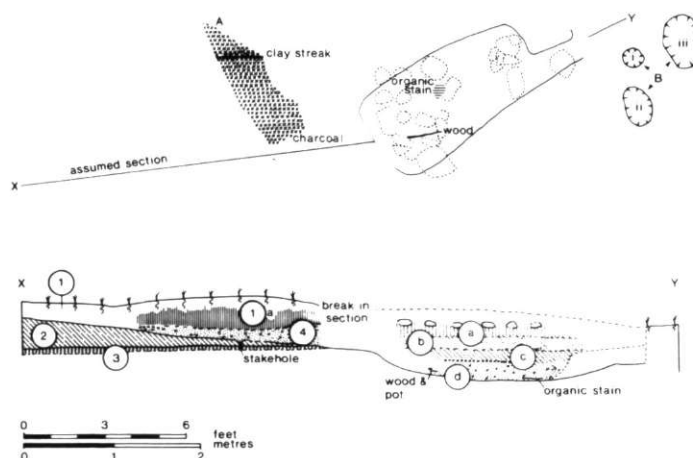


Fig 9

Site I Eastern Complex: Grave I and associated features. Section x—y through Grave 1: *layers west of grave:* (1) turf and topsoil on barrow; (1a) black peaty soil (?turf); (2) yellow mound material; (3) buried turf (OLS); (4) blue clay and charcoal: *layers in Grave 1:* (a) brown earth in and under stones; (b) clayey brown earth; (c) stiff clay; (d) clay and charcoal

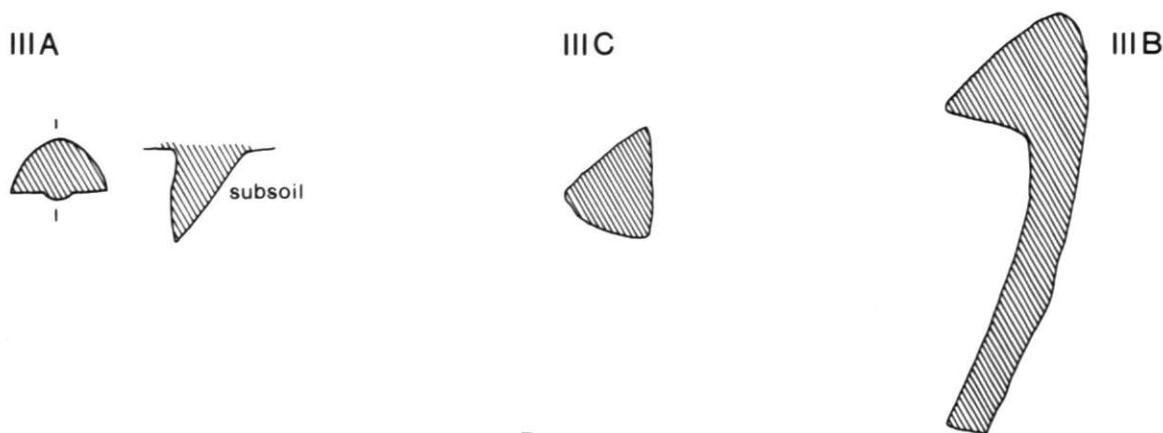


Fig 10
Site I Wooden objects

E — Wooden object on N. 'A piece of timber lying on the blue clay of the old turf' was found on the north side, 30 ft (9 m) from the centre and c. 4 ft (1.2 m) in from the stake circle. No description is given, but from the sketch in the notebook and on the plan it had a curved, expanded end, giving it a club or hockey-stick shape, not unlike B above.

IV. Pits

Apart from the pits/postholes mentioned in connection with Fires 4 and 8, the following were excavated:

- a — On the line of the lower stake circle on the NE was a pit (or posthole) 14 in. (0.35 m) diameter and c. 18 in. (9.46 m) deep, with rounded base. The upper fill of black earth gave way to grey clay then dirty yellow as the pit was dug out.
- b — A small pit is marked on the plan on the south, on the line of the stake circle. The only mention in the notes is of a 'shallow bowl' 18 x 19 in. (0.46 x 0.48 m) diameter and not more than 3 in. (75 mm) deep.
- c — A small pit in the pan c. 12 x 10 in. (304 x 254 mm) and 6 in. (150 mm) deep, filled with grey/white turf/clay with charcoal, was associated with a number of holes (described at first as rabbit holes) on the east. These were marked on the excavator's plan, presumably after the discovery in the adjacent sector to the north of the carbonized wooden objects (III A, B, C).

Eastern complex

Before excavation two irregular low mounds were noted on the eastern edge of the barrow which were found to consist of black, peaty material (Fig 6, section H). This in turn covered two depressions described as 'graves':

Grave 1. This was overlain by a pile of stones (Fig 9). The hollow measured 6 ft 6 in. x c. 3 ft (1.98 x 0.9 m) with a shallow channel at the NE end. The hollow was filled with brown earth (layer a—b) becoming stiff and clayey (layer c—d) towards the base. Near the bottom was a 'bed of carbonized vegetation and small charcoal' and on the bottom an 'organic stain' and a piece of timber c. 2 ft (0.6 m) long. The notes also

describe a 'spear impression' (which may be the organic stain) about 1 in. thick at its thickest part. The evidence suggested to the excavator that the hollow was an inhumation grave and that the corpse had been 'wrapped in matting' or placed in a wooden coffin. A soil sample taken from the bottom of the 'grave' was submitted for analysis to John Evans (Dept. Chemistry, N-E London Polytechnic) and found to contain traces of the degenerate fat system, adipocere.

Close to this hollow were the following:

- A — A 'patch of carbon' c. 4 ft (1.2 m) long x 2 ft (0.6 m) wide with a streak of burnt clay across it, lying on the OLS west of the grave.
- B — Three holes described as being in 'hut floor', to the east of the grave:—
 - (i) 7 in. (177 mm) diameter, c. 3 in. (75 mm) deep
 - (ii) ? posthole 17 in. (431 mm) x 13 in. (330 mm), c. 8 in. (250 mm) deep
 - (iii) 25 in. (635 mm) x 16 in. (406 mm), described as 'shallow'.

Grave 2 was an irregular hollow, c. 6 ft 6 in. (1.98 m) long and 8–10 in. (250–254 mm) deep, filled with homogeneous stiff brown clay with scraps of pan and charcoal. This was less convincing as a grave and the excavator later considered it to be a 'quarry hole' of the barrow builders.

It is clear that this whole complex was a great puzzle, and CKCA considered that it needed more study, stating that the Bronze Age features had been disturbed and overlain by a turf-walled hut of medieval date. The known late medieval activity on Davidstow Moor (Christie & Rose, 1987) and the presence of Stuffle-type pottery in the mound over Grave 1 would bear this out.

The Small Finds by Frances Healy

Pottery (Fig 11, Table h)

P1, from the surface of the mound, is placed early in the Trevisker series by its cord-impressed decoration (ApSimon and Greenfield, 1972, 326). A second pot is represented by two plain body sherds of a different, grog-tempered fabric, which are bagged with the sherds of P1.

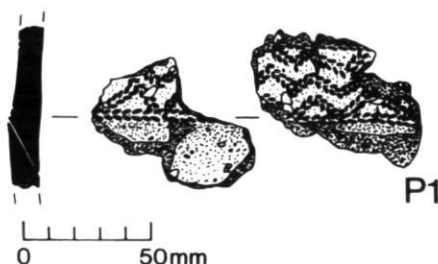


Fig 11
Sherds from the mound (1/3). Particulars in Table h

Lithic material (Figs 12–15, Tables a and i)

Lithic material is summarised below. L1, from the 'grave', is a slate fragment distinctly smoothed at its oblique end and less distinctly so along one edge. It is unclear whether this is the result of use or of its having split from a water-worn pebble.

Post-prehistoric pottery

Sherds of uncertain date, but probably post-prehistoric, were found in the Eastern complex. C. O'Mahoney reports that the sherds, from a small globular pot, are heavy and unlike any of the other medieval material from Davidstow Moor. They are blackened and were possibly once burnished externally.

Table a Davidstow 1(I): worked and modified lithic material

Categories	'Grave'	Beneath mound	Mound	Mound surface	Other and unstrat.	Totals	Drawings
Cores					3	3	L11, L12
Irregular waste					2	2	
Split pebbles			2		2	4	L4
Flakes	1	1		3	13	18	L9
Blades	2	1		2	2	7	L2, L3, L10, L13
Scrapers			1		2	3	L5, L14
Straight-edged			1		1	2	L6, L15
Flake knives							
Backed knife					1		L16
Notch			1			1	L7
Truncated piece					1	1	L17
Misc. retouched pieces					2	2	L18
Chopping tool			1			1	L8
Pebble tool					1	1	L19
Slate disc					1	1	L20
Oblique-ended 1						1	L1
Slate							
Cupped stone					1	1	L21
Hone or hone					2	2	
Frag. (recent)							
Totals	1	3	8	5	34	51	
Drawings	L1	L2–3	L4–8	L9–10	L11–21		
Flint 'pot-boiler'					1	1	
Burnt flint fragments					3	3	

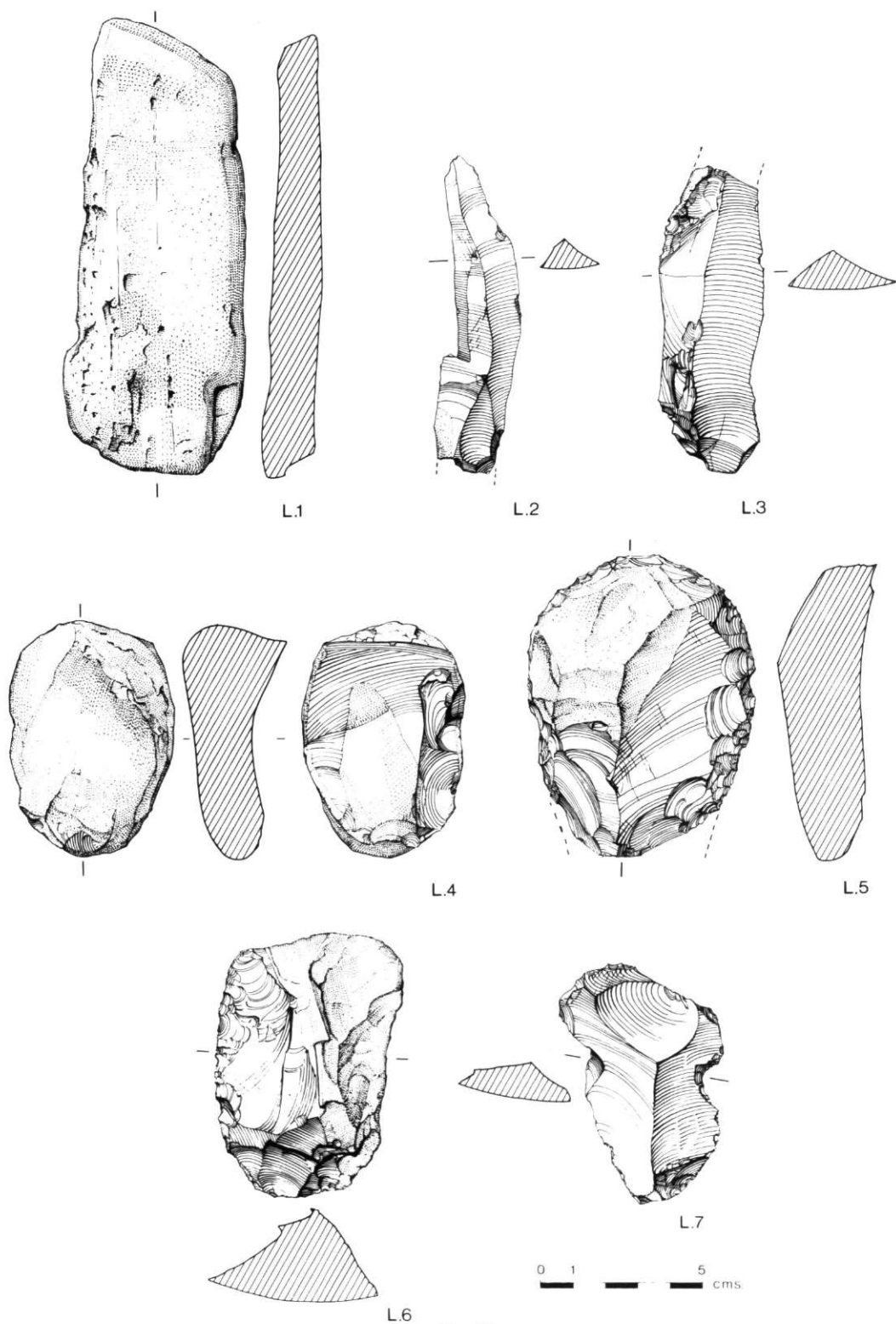


Fig 12

Site I Lithic material: L1 from the 'grave', L2-3 from beneath the mound, L4-7 from the mound (1/1).
Particulars in Table i

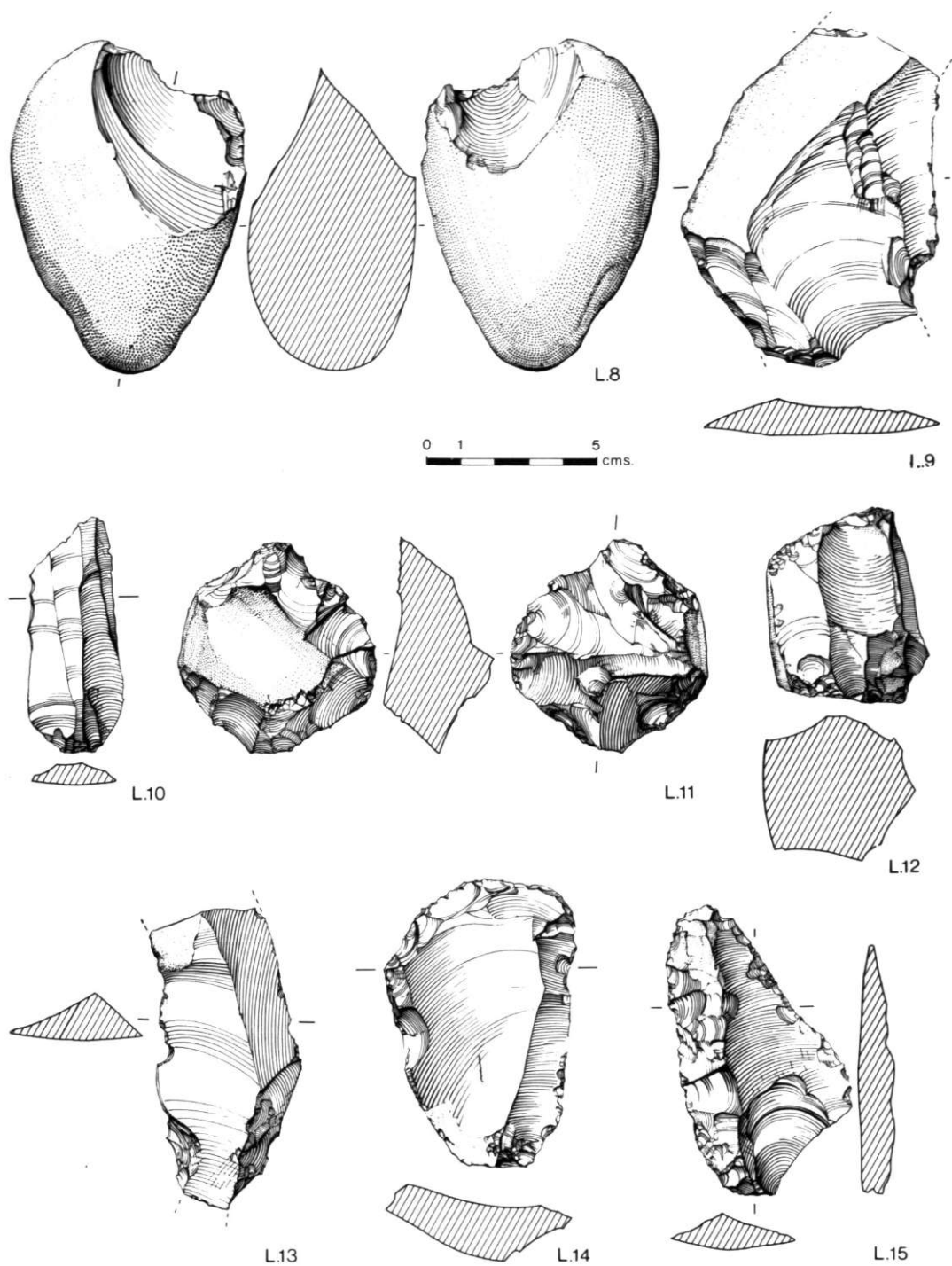


Fig 13

Site I Lithic material: L8 from the mound, L9–10 from the mound surface, L11–15 from other contexts (1/1).
Particulars in Table i

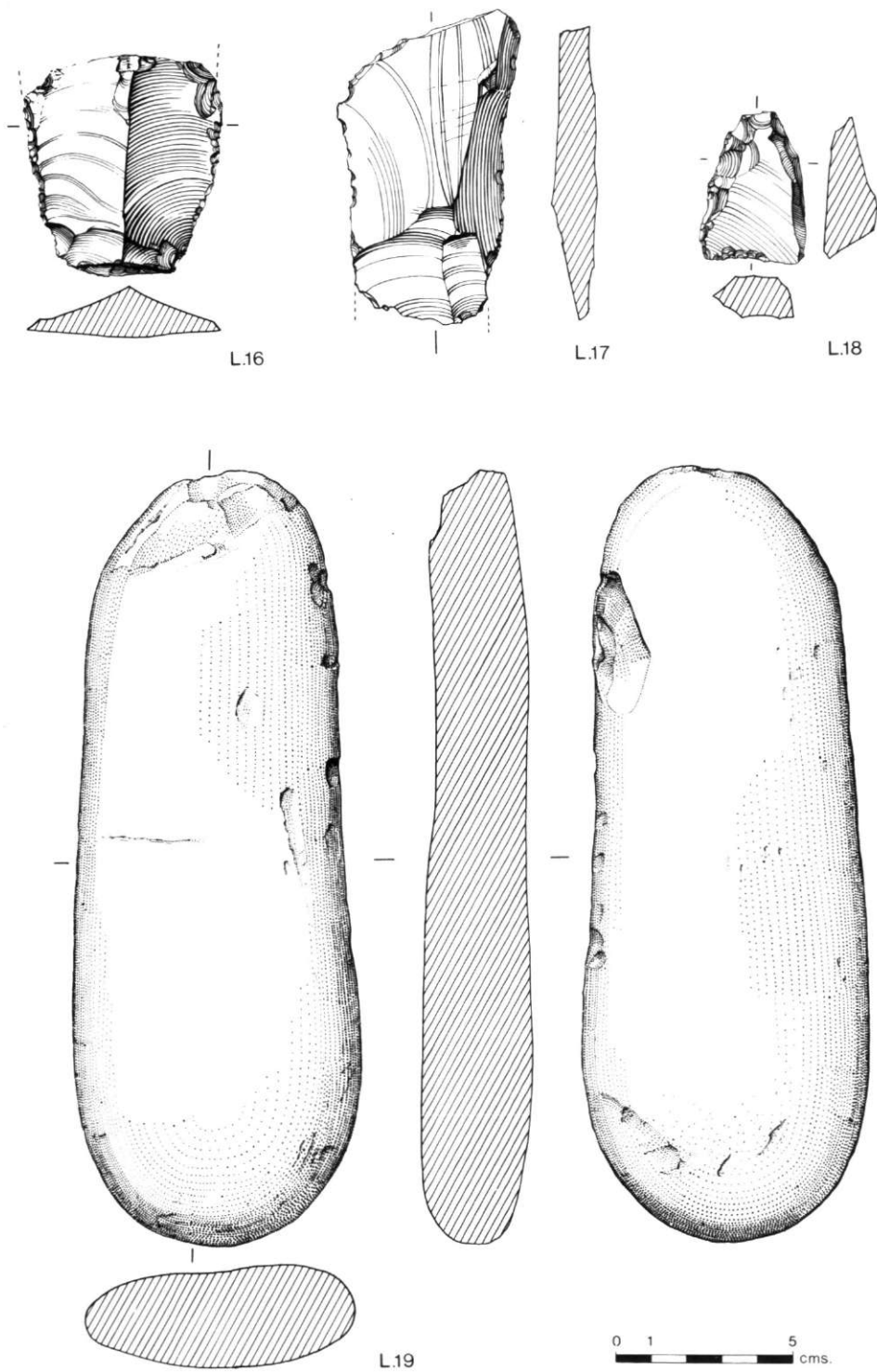


Fig 14
 Site I Lithic material, L16–19, from various contexts and unstratified (1/1). Particulars in Table i

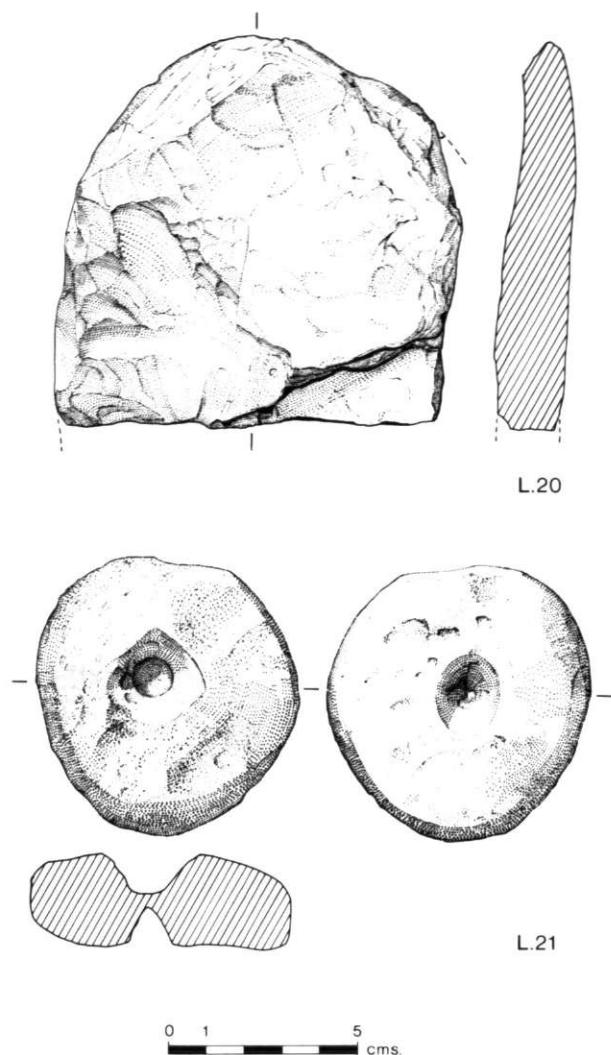


Fig 15
Site I Lithic material, L20–21, from various contexts (2/1). Particulars in Table i

Report on the charcoal by Caroline Cartwright

- Sample 1 — from pit associated with Fire 4:
2 grams *Quercus* sp. (oak) charcoal
- Sample 2 — probably associated with Grave 1, Eastern Complex:
The sample (250 g.) consists almost entirely of carbonized bark (possibly oak); there are also 3 grams of *Quercus* sp. (oak) charcoal.
- Sample 3 — from Fire 6: Total sample weight = 9 grams; 7 grams *Quercus* sp. charcoal fragments, 2 grams Leguminosae charcoal fragments.
- Samples 4 and 7 — from Fires 1 and 2. (Submitted for radiocarbon dating, see HAR-6634 below). Total sample weight = 95 grams; *Corylus* sp. (hazel), *Calluna* sp. (heather), *Quercus* sp., ?*Carpinus betulus* (hornbeam) and Leguminosae sp.

- Sample 5 — from 'burrows' beneath Fire 4:
6 grams *Quercus* sp. charcoal.
- Sample 6 — from Fire 4:
4 grams Leguminosae charcoal.
- Sample 9 — from bottom of 'grave' (? grave 1) in Eastern Complex:
0.5 grams Leguminosae charcoal.
- Sample 14 — from Fire 7:
1 gram *Quercus* sp. charcoal
1.5 grams *Corylus* sp. (hazel) charcoal.
- Sample 16 — from hole in iron pan near centre:
1 gram *Quercus* sp. charcoal.
- Sample 17 — from bottom of 'grave' (probably Grave 1, as sample 9):
3 grams Leguminosae charcoal.
- Sample 18 — from mound (layer 2) in Trench B on south:
5 grams *Quercus* sp. charcoal.
- Sample 19 — from mound (layer 2) in Trench G on south:
1.5 grams *Quercus* sp. charcoal.
- Sample 20 — from OLS in Trench H, possibly associated with wooden objects (Feature III):
3.8 grams *Quercus* sp.



Fig 16
Site I Section D, from south west. (Photo C.K. Croft Andrew)



Fig 17

Site I Stake holes of 70 ft circle in Sector U. (Photo C.K. Croft Andrew)

Report on the bone

Possible bone fragments found on the surface of the clay mound in the SW (Section F) were identified as non-human by Sheelagh Stead and passed to Kevin Rielly (Institute of Archaeology, London) for examination. He has identified a small burnt fragment of a crustacean, possibly a crab, crayfish or lobster carapace (?).

Discussion

The fact that this site was excavated first no doubt accounts for the amount of detailed evidence recovered. Later, Croft Andrew was to become inundated with evidence from the growing number of sites he discovered on the moor and felt bound to examine before their destruction. The flat-topped barrow belongs to the class of large platform mounds recently identified on the moor (RCHME forthcoming). The stake circles were the first to be discovered under a Cornish barrow and are of the closely set type (A2) described by Ashbee

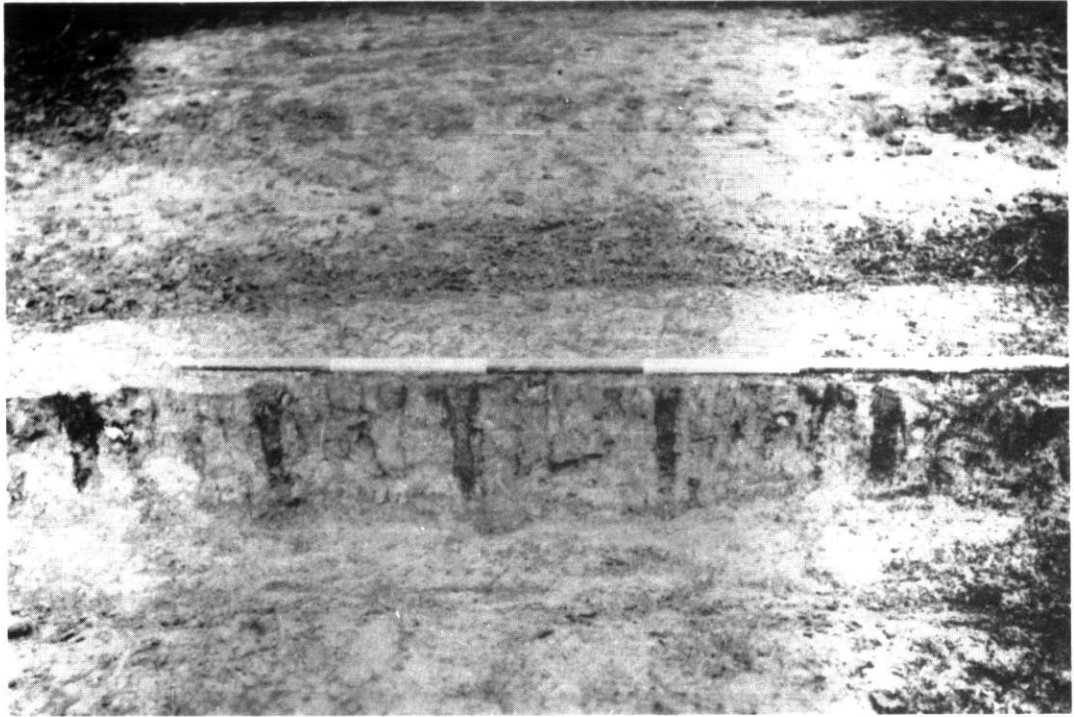


Fig 18
Site I Stake holes in section. (Photo C.K. Croft Andrew)

(1960, 60–65) and known from other sites since then. In Cornwall barrows with stakes were listed by Henrietta Quinnell (Miles, 1975, 77) and totalled six sites. Since then George Smith's excavations at Trelan 2, Goonhilly Down (1984), have revealed a closely set stake circle comparable to the single stake circle at Davidstow I, and raised the total number in the county to seven .

Three main constructional phases can be distinguished at this site:

(1) The single stake circle, set into the old ground surface, was presumably the primary enclosure fence within which the fires were lit and the rituals performed. There may have been an entrance on the SE. The objects, FIII, probably of oak, are tantalisingly enigmatic, though enough of their shapes survived for them to be recorded. Wooden objects accompanying burials are known (Christie, 1967, 343) but the discovery of an unaccompanied group such as this beneath a barrow is unusual. Could they represent agricultural tools of some kind? The rituals performed within the enclosure need not have been primarily sepulchral, though the fragments of (probably) human bone suggest at least a token funerary deposit.

It is not known whether the small central mound was built in this or at the beginning of the succeeding phase. Nor is it made clear what it covered; the excavator mentions 'a small deposit of organic matter' in his summary, but nowhere in the notes. This first phase of the monument can be dated to the 16th century BC (uncal).

(2) A carefully constructed mound of turf was laid over the central area on the surface of which fires were lit and broken pottery deposited. Access would still have been through the presumed entrance in the primary fence. This inner turf mound had apparently not diminished substantially since its construction, in view of the fires and pot on its surface, though any stone structure there had been dispersed.

(3) An upper layer of homogeneous earth covered the turf mound and extended out to the primary stake circle. Whether this originally consisted of turf also, subsequently broken down and homogenised by plant and animal activity over the millennia, is not clear. A comparable difference between upper and lower mounds, though admittedly much higher, was seen at Amesbury G71 (Christie, 1967, 346) where various activities such as the deposition of pottery and flints on the surface of the lower mound were also noted.

The double stake circle (FM3) was set into the outer edge of this final mound, forming a palisade round the monument. The excavator was not sure whether the upper fence was contemporary with the barrow or was a later feature and this doubt was not surprising in the 1940s. However, many stake circles have been discovered since then, including secondary ones set into the tops of mounds.

Later activity on the site is attested by pottery associated with the low mounds on the east, but it is possible that Grave 1 at least may be prehistoric and could have contained an inhumation burial which the excavator believed could have been wrapped or laid on some organic material. The presence of leguminosae (Sample 9) from the bottom of Grave 1 could indicate that some kind of matting had been made from a plant such as broom, while the traces of adipocere from the (presumably) associated soil sample endorse the possibility of an inhumation.

The date in the 16th century BC (uncal) for the primary phase accords with dates from Colliford (Griffith, 1984) and Crig-a-Mennis (Christie, 1960; 1976), the latter associated with an early Trevisker-style urn. The pottery strewn on the turf mound belongs to the early Trevisker series and supports the view that the mound was built soon after the primary phase from which the date was obtained. The scattering of broken pot over barrow mounds finds analogies in Cornwall at Cataclews (Christie, 1985, 97) where the sherds also belonged to the early Trevisker style.

SITE II (3)

Introduction and Summary

This site lay SE of Barrow I and was dug over 3 months – December, January and February. It is described by CKCA as:

A ring or disc barrow of unfamiliar type: about eighty feet in diameter, with low concentric banks both *inside and outside* a ditch more than 3 feet deep below original surface level. Over the enclosed area a single layer of turves was laid, and on this, at the centre, was raised a small cairn, mainly composed of white quartz. Below original surface . . . was a central stake hole . . . Upon analogy with Site III it is suggested that a parcel of cremated bones may formerly have rested in, or on top of, the cairn. The finds included some utility stones of imported granite.

1941/2 Excavations and Post-excavation work

A central point was selected and two 6 ft (1.8 m) wide cuttings laid out at right angles roughly E/W and N/S (Fig 19). These were fully excavated up to the central cairn and the sections measured. The rest of the enclosure was then stripped and the ditch cleared to the bottom in most sectors. Stones in the centre were plotted and then cleared, but sections through the centre were not completed.

It should be noted that since details of this site are spread between three field notebooks, and measurements recorded piecemeal, it is not certain that the plan (Fig 19) drawn from these is accurate. Sections have been drawn out from the notebook (Fig 20) and the following information can be presented:

Construction

1. Original land surface and barrow floor

The original land surface was preserved beneath the banks around the ditch, and possibly within the enclosure as well. It consisted of the dark organic surface layer (the excavator's 'old turf') 3–4 in. (75–100 mm) thick, over a leached horizon varying from grey/fawn to white. In contrast to Site I, where it was such a feature, no mention is made by the excavator of pan on this site, and the leached horizon lay directly on the clean yellow/orange subsoil. The old turf was hardly distinguishable from subsequent growth within the

DAVIDSTOW MOOR

Site II(3)

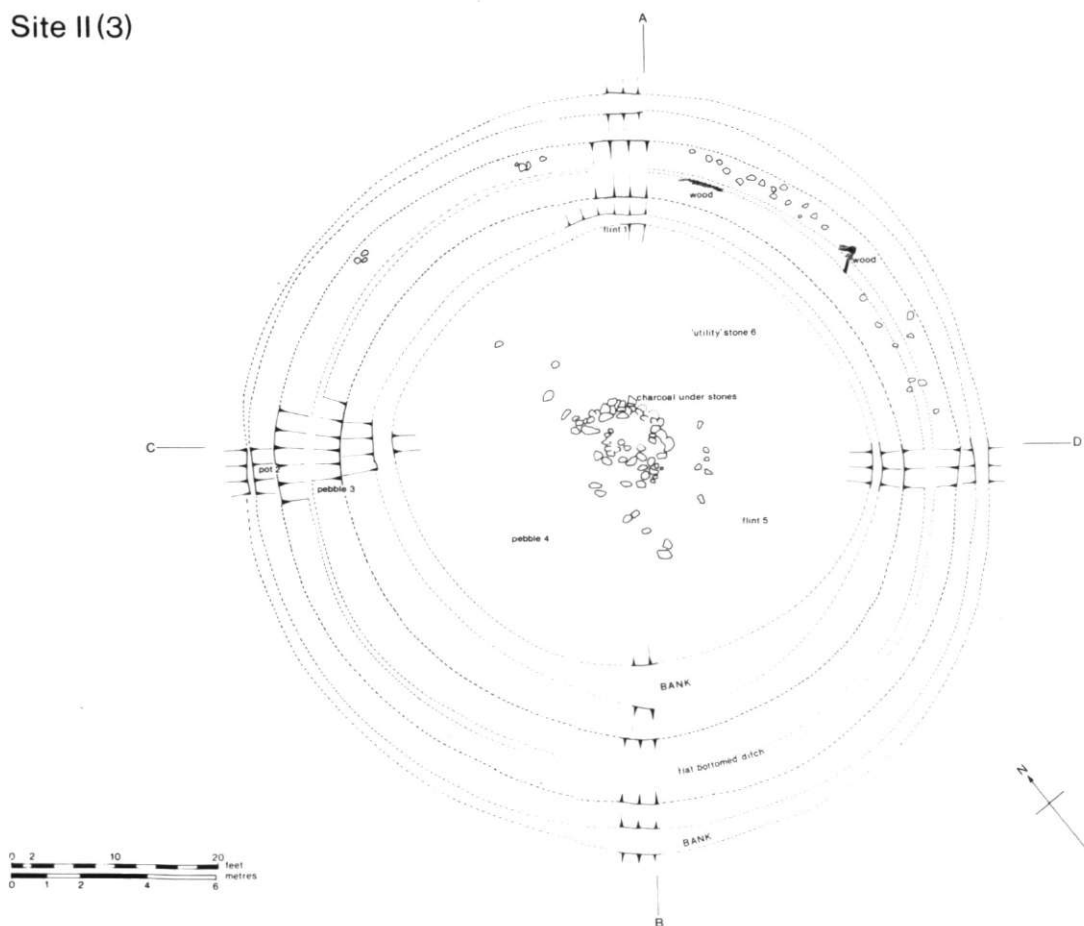
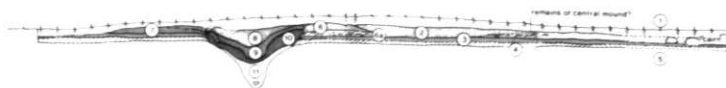


Fig 19
Site II(3) Plan of barrow

DAVIDSTOW MOOR, Site II(3)

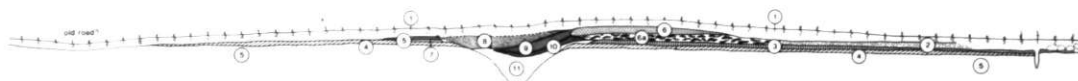
Section A



Section B



Section C



Section D

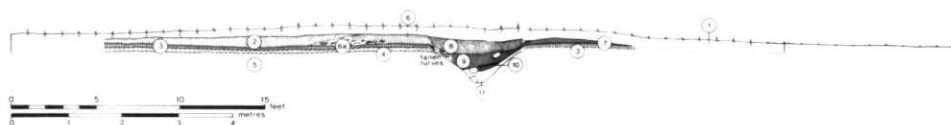


Fig 20

Site II(3) Sections A, B, C, D: (1) turf and topsoil; (2) stiff, dark clay; (3) 'old turf'; (4) fawn/grey/white clay; (5) yellow subsoil; (6) inner bank; (6a) turves; (7) outer bank; (8) stiff brown clay with gravel; (9) dark, yellow-flecked clay; (10) black peaty; (11) dirty yellow fill with quartz; (8-11 = ditch layers)

enclosure and, despite the statements in the summary above, it is not certain that the stiff clay of layer (2) in Fig 20 really represents a layer of turves over the barrow floor.

On stripping off the organic layer in Cutting A, the underlying grey clay was strewn with white quartz gravel, from fine 'sharps' to 1 in. (25 mm) pieces, but since no further mention is made of this, it was presumably recognised as a natural feature.

Beneath the central stones the 'old turf' was compacted to a total thickness of 2 in. (50 mm), the lower $\frac{3}{4}$ in. (19 mm) being fawn, similar to the 'fawn clay of the subsoil'.

Scraps of charcoal were noted, and plotted, on the subsoil near the centre (Fig 19). These (samples DM3/1 and 2) were identified as oak (*Quercus* sp.).

A stake hole was found near the centre: 3½ in. (88 mm) diameter penetrating 13 in. (330 mm) deep into the subsoil, with conical base. The fill consisted of 'black clayey peat with small live roots'. The excavator also noted that the surrounding yellow subsoil had been 'bleached to a whitey grey colour for c. $\frac{1}{2}$ in. (9 mm) by water seepage down the hole'.

2. Ditch

This was continuous with no causeway; it was 2-3 ft deep below the original surface and the base varied between V-shaped (only 2-3 in. (50-75 mm) wide) on the N and E to flat-bottomed (c. 12 in. (0.3 m)) on the west. The erosion of the ditch sides resulted in its being up to 6 ft (1.8 m) wide at the top, though when first cut it would have been 3-4 ft (0.9-1.2 m) wide.

Beneath the contemporary turf (layer 1) the filling consisted of an upper dark zone (layers 8 and 9) with gravel or yellow flecked material over the lower fill of dirty yellow silt. Between the two was a 'black peat band' (layer 10). This was particularly noted in the east where 'a complex of tree stems, roots etc.' and some stones were described and sketched lying on the primary silt. Over 100 pieces of quartz and some shale were recorded from the ditch also in the east quadrant.

3. Banks

Two concentric banks, one inside, the other outside the ditch, had been denuded to little more than 6 in. (150 mm) of yellow gritty core (layer 6: inner, layer 7: outer), though they were probably never very high. As a result of erosion of the ditch sides, the inner sides of these banks had subsided into the ditch and presumably formed the main component of the fill. Both banks appear to have been built on the very edge of the ditch and to have been c. 6 ft (1.8 m) wide, though the inner bank may have been rather wider and have had a turf core; well preserved remains of this were recorded in Section B (Fig 20) layer 6a, though this may be the 'platform' of turf over all the enclosure (?pre-dating the construction of the banks) which is described in the summary. The upper part of the bank was the gritty yellow material (layer 6) derived from the ditch.

4. Cairn

At the centre of the enclosure was a low cairn c. 8 ft (2.4 m) diameter, mainly composed of quartz. Only the E side was recorded in any detail. Some of the stones were noted as 'high' – presumably just beneath the modern turf and forming an upper layer. But most were set on the old land surface and were likened to a 'paving'. The section measurements stop before the centre, at the edge of the stones, so no details of the stratigraphy beneath the cairn can be shown. In addition to the central cairn, 12 'stray white stones' were recorded in the N and S quadrants, and it was noted that '22 quartz and 2 slate stones were added to the central cairn from scattered stones'. In the ditch, as mentioned above, a number of stones mainly quartz, were also found and it is possible that these derived originally from the centre. Traces of a mound may have existed over the central cairn: on the E side a patch

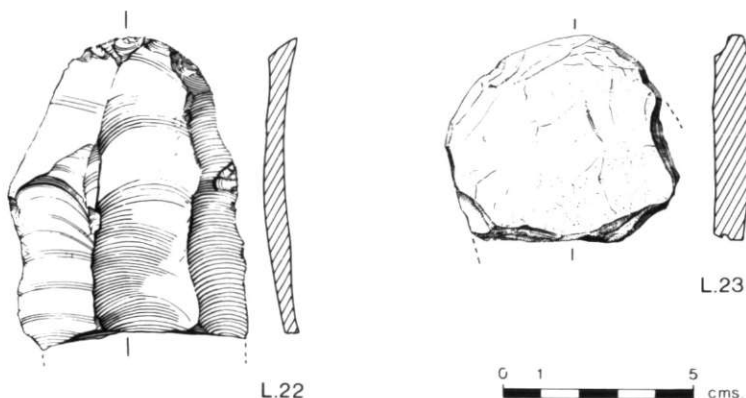


Fig 22

Site II(3) Lithic material: L22 from west quadrant, L23 from the north-west (1/1). Particulars in Table i

of paler clay stood 4–5 in. (106–125 mm) above the old turf just beyond the cairn, and similar traces were noted elsewhere outside the cairn. These were tentatively interpreted by the excavator as the remains of a mound, probably of turf, built over the cairn.

Lithic material (Fig 22, Table i) by Frances Healy

Worked lithic material consists of one flint flake, one chert flake, one flint blade, one flint scraper (L22) and a small slate disc (L23).

Discussion

This ditched and double ring-banked enclosure, with small central cairn, was described by the excavator as a disc barrow and certainly a similar monument up country would be classified as such. The monument appears to have been laid out from a nearly central stake, the turf from the ditch perhaps being laid over the enclosure floor, placed as the core of the banks over the enclosure floor, or stacked in readiness for covering the central cairn. After the cairn was built, the ditch would have been dug and the material used to form the encircling banks. Since there was no access after this construction phase had been completed (the site was completely stripped by the excavator so there is little reason to doubt this) the enclosure would have been sealed off. There is no direct evidence to indicate that this was a sepulchral monument, though its similarity with Site III suggests that it may have been. If the burial had been placed on the cairn in a similar manner, it would have been vulnerable and could have become dispersed over the years; though it is surprising that not a scrap of cremated bone appears to have survived. If the deposit had been a token one however, its total disappearance would not be so unlikely.

A feature of this monument is the use of quartz in building the cairn. This has been noted in other sites excavated by Croft Andrew, especially Treligga I (Christie, 1985, 69–74) supporting the suggestion that quartz may be seen as a favoured material in Bronze Age ritual construction in Cornwall (Christie, 1960, 88).

If the analogy with Site III is valid, and if the radiocarbon date for the latter can be accepted, this monument should belong in the eighteenth or nineteenth century BC (uncal).

Site IIA (3A)

This small site lay immediately SE of Barrow II and is described by CKCA as:

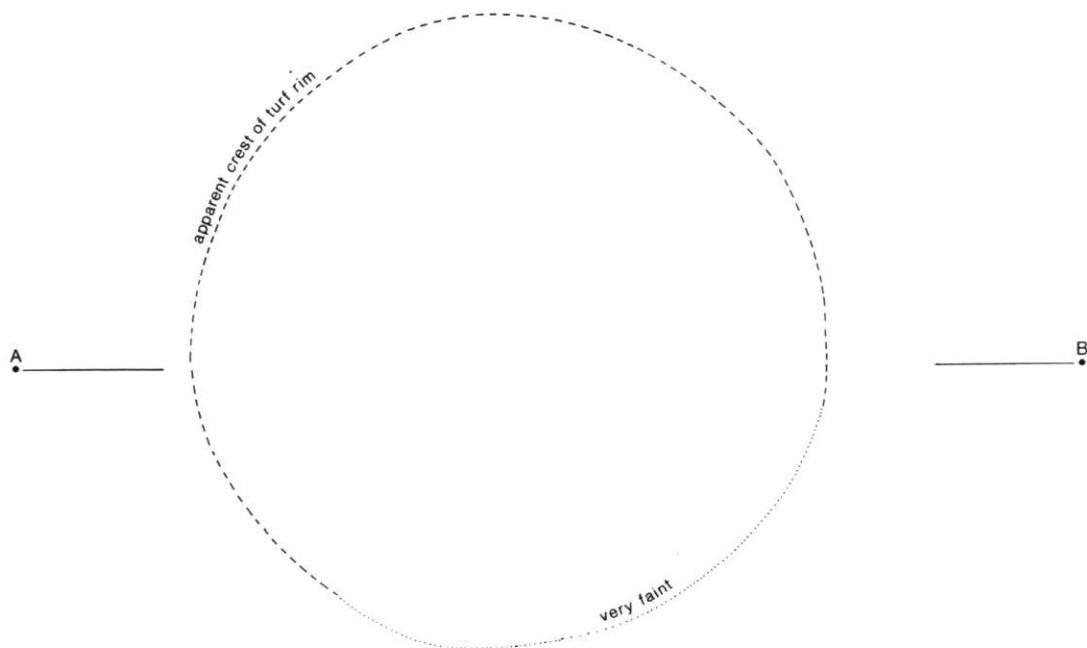
An artificial depression, circular and 17 feet in diameter by 1 ft depth, situate 110 ft centre-to-centre southeast of No. II. Its slightly but evenly banked rim, the bleaching of its clay wall by the acid surface water of the Moor, the gravelly and sedimentary deposits on its bottom, all suggested high antiquity; but as regards its original purpose and the question of contemporaneity with No. II the examination was indecisive.

The site appears to have been cross-sectioned only, and measurements for the main section (from Site II) are drawn out, as is the sketch plan in the notebook (Fig 21). The cutting was 5 ft (1.5 m) wide, and a second at right angles, 18 in. (0.46 m) wide, is shown on the plan, but no measurements are given.

There were no finds, and nothing further can be added to the excavator's original description, except that he referred to the site in correspondence with O'Neil, and in the notebook, as a possible 'pond barrow', together with sites VI (4a) and VII (7).

Davidstow Moor

Site IIA(3A)



Section A-B

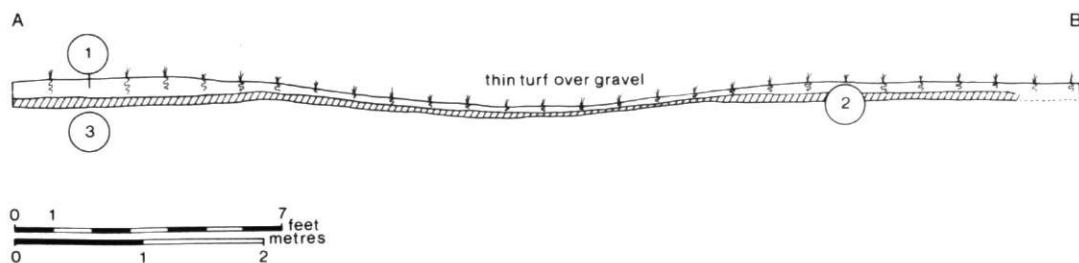


Fig 21

Site IIA(3A) Plan (tentative) and section A-B: (1) turf and topsoil; (2) bleached clay; (3) yellow subsoil

SITE III (8)

Introduction and summary

This site, the third barrow to be excavated on Davidstow Moor, lay 850 ft SE of Barrow I, with the line of an old road on the NE. Like Barrow II, it was dug over a three-month period, work being started on Wednesday 3 December 1941 and finally completed on 16 March 1942. The sort of weather frequently described in the excavator's notes is well illustrated by the view of this site in Fig 30B. The excavator describes the site as follows:

A disc barrow of highly unusual type. Ninety-seven feet in diameter, but only 1 ½ ft high, it was encircled by a shallow ditch which had a substantial bank on its inner side but only rudimentary traces of banking on the outside; save at the South-East, where the arrangement was reversed, the inner bank being interrupted to provide a (?) ceremonial entrance, the ditch becoming wider and shallower and outside it there commencing a broad, elliptical mound largely composed of burnt clay (?from a pyre site), which at East spread over and interrupted the ditch. On the top of this mound were traces of small fires and a few flints. At the centre of the earthwork, elevated on a small cairn, which formed the core of a turf-built mound, was a burial, consisting of cremated and comminuted bones in a (?) leather bag, immediately beneath which had been placed two utility-stones of elvan, foreign to this site. Other small finds were rather sparse. No signs of ritual on the floor, save that around the cairn a patch of pan on the old turf indicated a heavily-trodden area.

1941/2 Excavations

The records of the excavation are spread between three notebooks. Fortunately a diagram showing the layout of cuttings has survived. No further information is given in the notebooks as to the method or layout employed, though trench C-D (Section C-D, Fig 24) appears to have been dug first, followed by trenches A and B. As can be seen from the final plan (Fig 23) only part of the site was fully excavated, notably the central area and the east and west sides. Cuttings were made elsewhere round the barrow, and all sections measured.

Post excavation work

All sections have been drawn out from note-book measurements. Figs 24, 25 and 26 show the main cross-sections and Fig 27 shows the part sections across the ditch and bank elsewhere. An attempt has been made to show the central area in more detail than is given in the excavator's small scale plan. This (Fig 28) was drawn out from a number of separate sketches of groups of stones, position of burial deposit, etc, in the note-books where the measuring pegs could be identified (not always possible). A sketch plan also exists with measurements for a number of ditch profiles in the SE quadrant where the ditch becomes wider and shallower. However, since the excavation plan exists, showing this feature, together with a section across it in Fig 27 (Section L), these have not been drawn out. No good photographs exist, partly no doubt due to the weather, which was appalling most of the time, and partly to the nature of the site which was low and not particularly photogenic, with no noteworthy features. Those that do exist are mostly uncaptioned so not readily identifiable. Specialist reports have been obtained on the cremation, charcoal and artefactual material. From the available data the following information is presented:—

Barrow enclosure

The area enclosed by the ditch and bank contained the low mound, described as 'turf built' (layer 2) which had preserved the *old land surface* (layers 3 and 4) beneath it. This consisted of a dark 'turf' line over grey or fawn clay, beneath which was the 'yellow subsoil' (layer 5). In most sections a *pan* was noted at the base of the OLS between layers 4 and 5, but the

Davidstow Moor

SITE III(8)

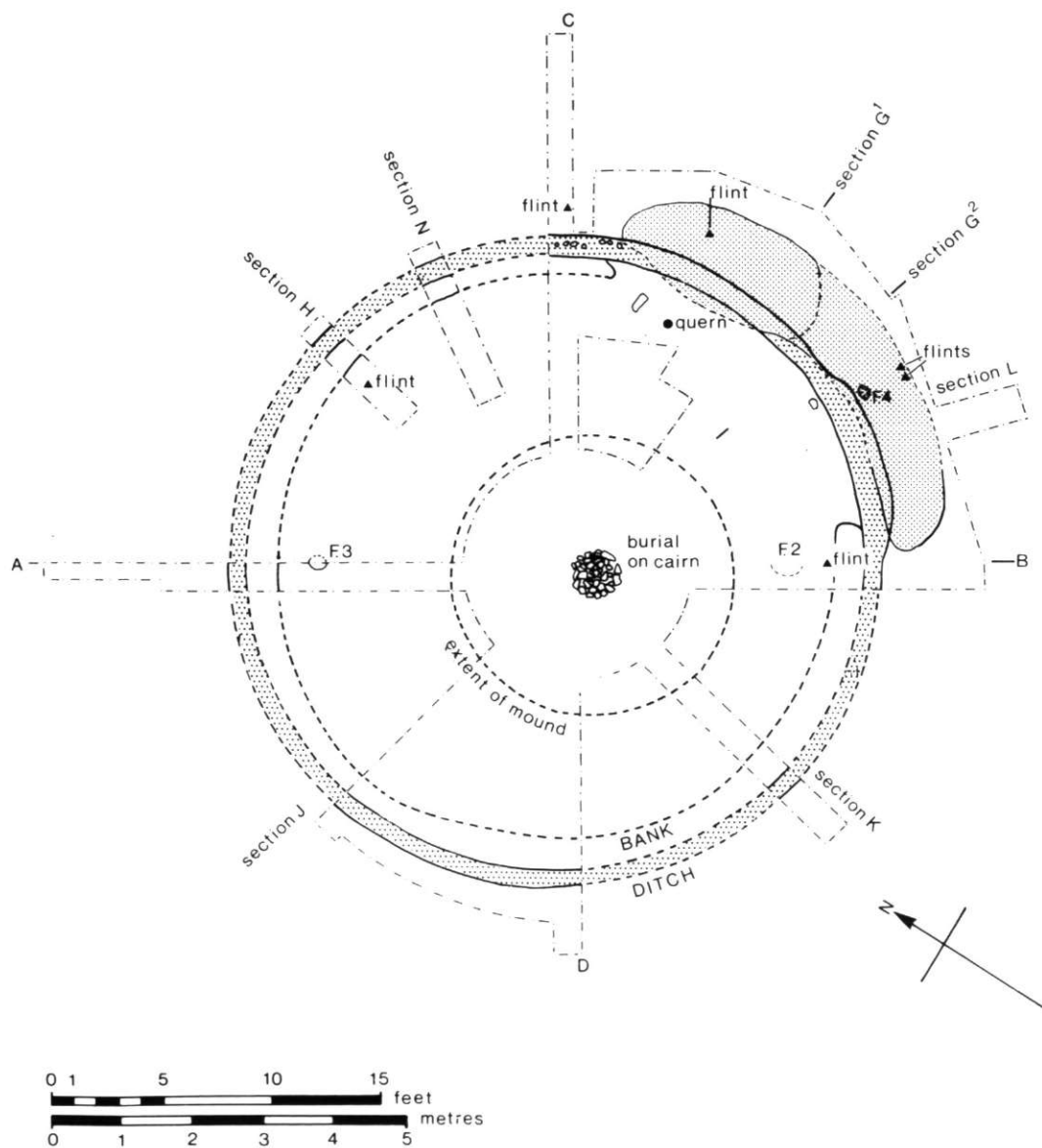
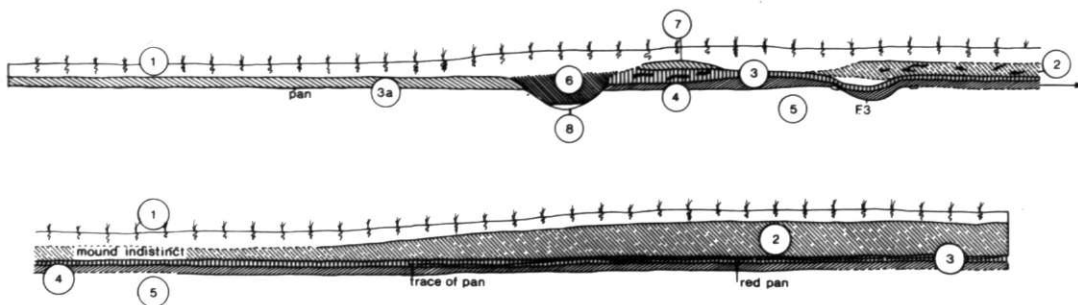


Fig 23
Site III(8) Plan

Site III(8)

Section A



Section B

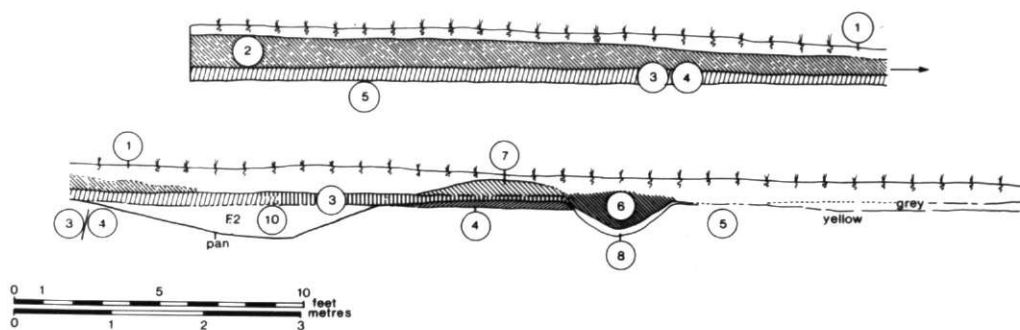
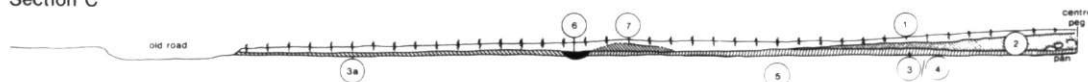


Fig 24A

Site III(8) Sections A, B: (1) turf; (2) barrow mound; (3) 'old turf'; (3a) grey/fawn clay = OLS beyond ditch; (4) grey clay; (5) yellow subsoil; (6) peaty ditch fill; (7) bank material (yellow upper, dark (turf) lower); (8) grey and yellow clay silt; (9) 'tiny mound of bleached shillet'; (10) whitish shillet in hollow (?natural feature)

Site III(8)

Section C



Section D

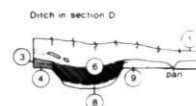
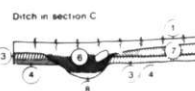
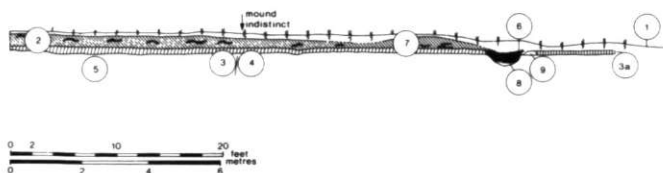


Fig 24B

Site III(8) Sections C, D (layers As Fig 24A)

Site III(8)

Section G'

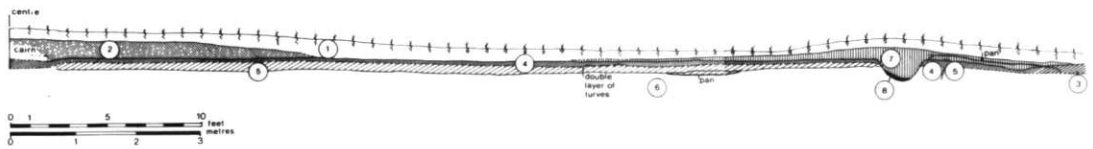


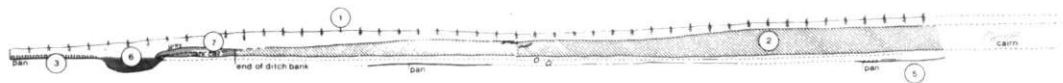
Fig 25

Site III(8) Section G¹: (1) turf; (2) central mound; (3) OLS outside ditch; (4/5) OLS beneath barrow with pan below; (6) yellow subsoil; (7) grey/white/pink clay of mound over ditch (F 1); (8) peat on grey silt

pan was also seen to occur higher up, as in Fig 24 Section A, where a red pan was noted only $\frac{1}{4}$ in. below the top of layer 3 (old 'turf'). A brief mention of a slight patch of pan on the old turf line, about 10 ft from the centre in the SE, is not recorded in any of the sections but must have been sufficiently noticeable in the plan during the excavations for it to be interpreted as 'heavily trodden area' (see summary above). In Section G, a considerable amount of pan was noted in and under the mound (F1) over the ditch.

Site III(8)

Section J'



Section K



Section F'



Section G

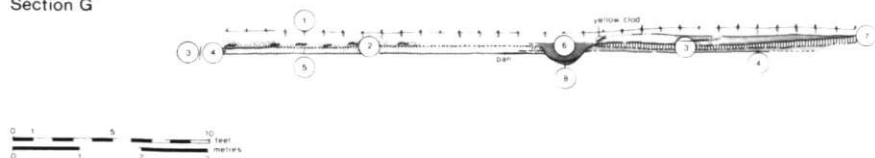


Fig 26

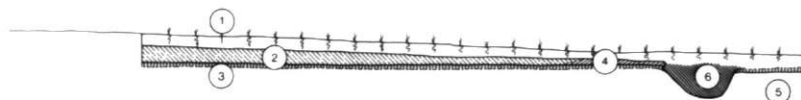
Site III(8) Sections J, K, F, G²: (1) turf; (2) mound; (3/4) OLS; (5) yellow subsoil; (6) ditch fill; (7) bank material with turves under; (8) primary silt

Site III (8)

Part Section H



Part Section N



Part Section L

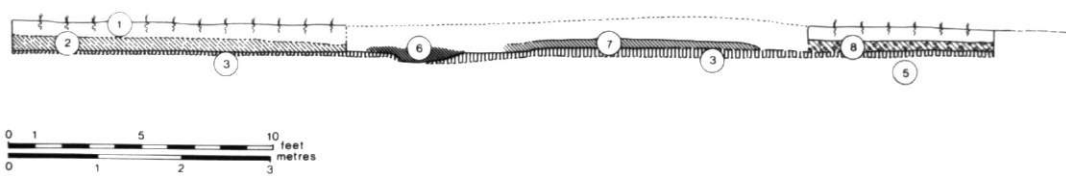


Fig 27

Site III(8) Part Sections H, N, L: (1) turf; (2) stiff clay of barrow mound; (3) black 'turf' over fawn clay (OLS); (4) yellow streaky (remains of bank); (5) yellow/grey subsoil; (6) ditch fill; (7) mound material (F 1); (8) brown clayey earth and grey clods (?remains of F 1)

Central area (Fig 28)

After the initial cross trenches, this was the first area to be dug, just before Christmas, and sections were cut back to expose the central cairn. This was composed mainly of quartz stones set on the OLS and apparently only 1–2 stones thick (Fig 30A). These stones are described as "9–14 ins. maximum length, many showing their origin by parts of the slate strata adhering" and nearly 60 stones in all were counted. The central burial is described as follows:

On a low cairn of stones . . . and wedged up by some of its upper stones was found a deposit of calcined bones (once contained in a leather bag?) intimately combined with a mass of peaty roots . . . Half concealed by the bone-clod there lay under it on either side a utility-stone or hone of granite . . .

The excavator goes on to remark that since the cairn and burial were covered by the turf of the barrow mound, the cairn could be regarded as a 'pedestal' for the bone deposit "which it would to some extent preserve from decay by providing drainage". On plotting the stones and the position of the burial from the measurements, it is clear that the top of the bone deposit and most of the cairn stones were only 5–6 ins. (125–150 mm) above the top of the OLS (Layer 3) and the rather bad photographs confirm this (Fig 30A). Although not mentioned in the note-book, a charcoal sample survived marked 'from centre on OLS'. This was submitted for C14 determination and gave a date of 3740 \pm 90 BP (HAR-6640).

Site III(8)

PLAN OF CENTRAL AREA

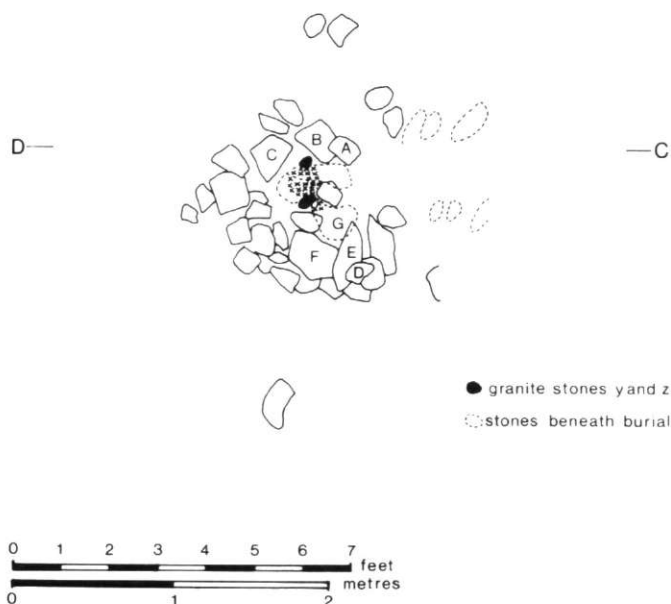


Fig 28
Site III(8) Plan of central area

Ditch (Fig 29)

This was small and shallow, averaging only 1 ft (0.3 m) deep and 2–2 ft 6 in. (0.6–0.76 m) wide when originally cut. The fill is described as ‘homogeneous peaty’ (layer 6) with, in some sections, a primary silt of grey/yellow clay (layer 8). On the SE side the ditch becomes wider and shallower, attaining only 5 in. (125 mm) depth at the shallowest part. Stones were noted in places in the fill, particularly on the SE where the ditch disappeared beneath the mound (FI).

Bank

The low internal bank, averaging c. 5 ft (1.5 m) wide, consisted of a turf core, laid on the OLS, with yellow material (dug from the ditch) over it. On the NW the bank is described as showing, when stripped, “a bold mottling of yellow and black patches, i.e. the yellow from ditch mixed in biggish patches with turf”. It is not clear whether the barrow mound continued to the bank originally – the bank core being part of the turf mound over which material from the ditch was heaped – but this seems a likely interpretation. Unlike the ditch, the bank was not continuous round the mound but had a gap of c. 50 ft (15 m) on the east side. There is little information concerning the terminals of the bank, apart from being marked on the plan, except for the south end which is plotted and sketched in the note-book, with the comment that “its extremity turns inward away from the ditch”.



Fig 29

Site III(8) Ditch. (Photo C.K. Croft Andrew)

F1 – Mound on east

This coincides with the gap in the internal bank and lay both outside and over the ditch (Section G1). The excavator's description of cutting this section is quoted in full as it elaborates the rather inadequate drawing and measurements:

Today 3.1.42 I cut through the bank which had hitherto appeared to interrupt the ditch . . . and found, as I half expected, that the ditch actually continued beneath it. The section revealed is an extraordinary one, the upper shoulders of the ditch being marked with a dark line of vegetation indicating that it lay open for a time, the lower part of the ditch full of black peat as in other parts of the circle, but all covered over by a thick layer of whitey-buff clay with considerable admixture of reddened clay pretty certainly fired; like other patches on the surface of the mound. There seems to have been a bank of this pale clay on both sides of the ditch and pan indicates that it was trodden firmly down . . .

He goes on to comment that it was a puzzle to decide where the pale and burnt clay came from. He notes elsewhere that the clay of the mound is pale yellow as well as white and red, with pan, and at the south end of the mound there was a lot of small charcoal. Patches of red clay 'apparently burnt' were noted also *on top* of the mound, near and at the north end (see Plan – Fig 23). Flints (L25, L28) were also found on the mound in the northern part, while beneath the mound, in the subsoil, a shallow depression (F.4) was noted.



Fig 30
Site III(8) A. Central area B. Flooded site. (Photo CKCA)



Fig 31
Site III(8) Mound of F 1 over ditch. (Photo CKCA)

Pits in subsoil

- F2** This depression in the subsoil is only noted in the measurements for section B (Fig 24A) with no details as to its extent in plan. Since the 'old turf' appears to run over it, it seems likely that it was a natural feature.
- F3** Noted in the measurements for section A as a "bowl shaped depression in yellow and old turf" (layers 5 and 3/4). Again no details of its extent in plan are recorded.
- F4** On removing the mound of F1, a shallow pit was uncovered 15 x 13 ins. (381–330 mm) across and only 3½ ins. (89 mm) deep, "filled with dark brown earth like old turf line above it".

F2 and **F3** are both within the enclosure and roughly equidistant, 11–12 ft (3.35–3.7 m), from the ditch (centre to centre). F.4 lies outside the ditch and alongside its shallowest point. Apart from these facts, little can be said about these features.

Small finds

These consisted exclusively of lithic material, summarised below. The measurements for six flints and a granite piece are given in the notebook and are plotted on the plan.

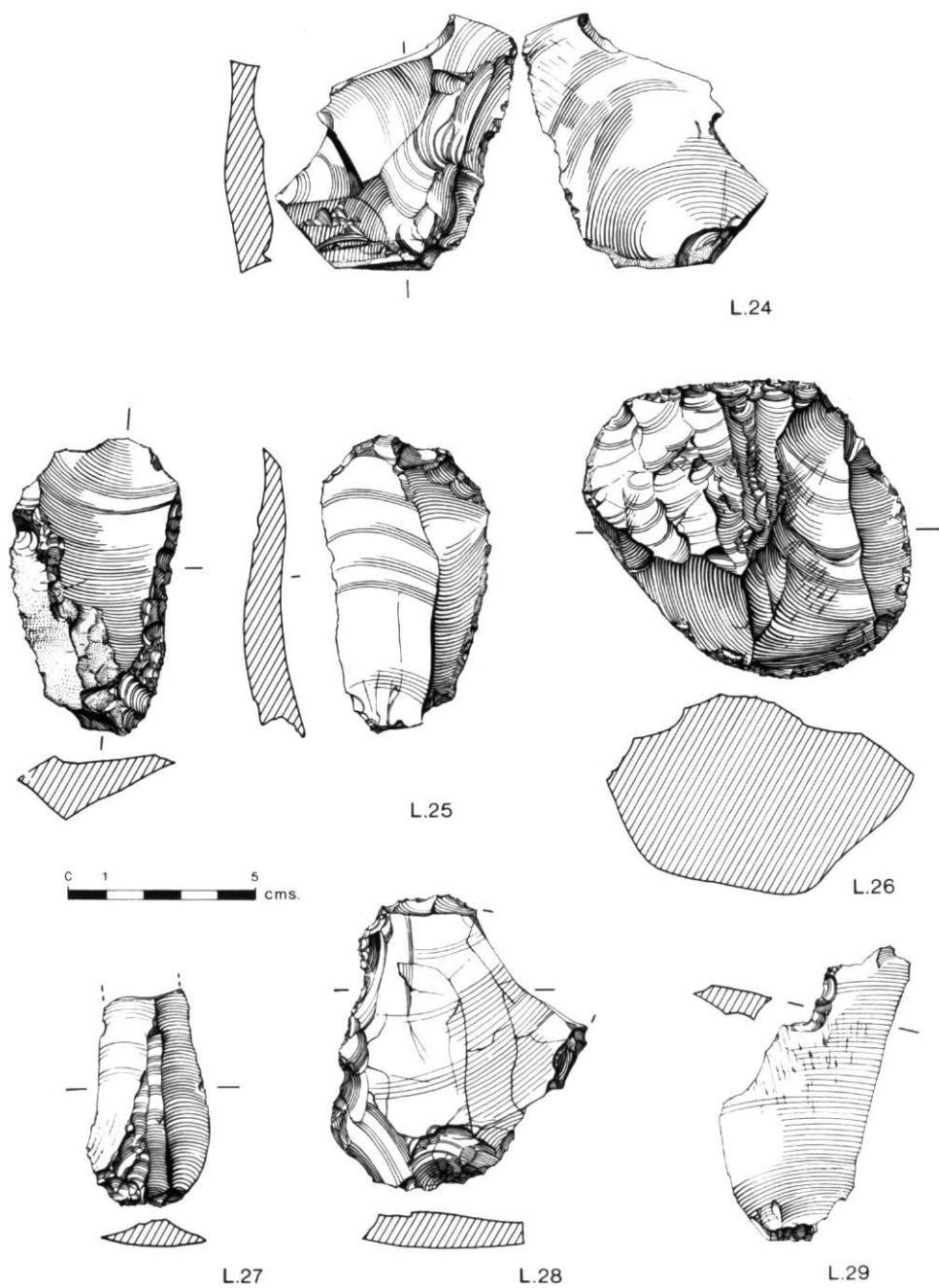


Fig 32
 Site III(8) Lithic material: L24 from mound; L25 from the mound surface; L26-29 unstratified. (1/1).
 Particulars in Table i

Lithic material (Fig 32, Table b and i) by Frances Healy

Table b

Categories	Ditch bottom	Mound	Mound surface	Outer bank	Other/unstrat	Totals	Drawing
Core					1	1	L26
Flakes	1	1		1	4	7	L24
Blades					3	3	L27
Scrapers			1		1	2	L25, L28
Notch					1	1	L29
Totals	1	1	1	1	10	14	
Drawings		L24	L25		L26–29		

The following granite objects were also found:

2 'utility stones' marked Y and Z found with cremation (Fig 28). These were of highly micaceous fine grained granite, and may have been especially chosen for their glitter.

A piece of granite flattened on one side (?quern stone/rubber) found with two slates on the SE under the turf.

Report on the Cremation by Sheelagh Stead

These cremated bones represent one individual, an adult in the age group 25–35. There is no evidence for sex other than the large size of a canine root which could indicate a male.

Bone fragments identified:

Skull

Teeth: one probably 2nd molar with crown, one incisor, 3 premolar, one large canine, one canine or upper premolar and one other root fragment. There are 10 other tooth fragments.

There are no vault fragments

Rest of skeleton

Femur and metatarsal head

Colour

White, some pinkish

Size

Skull – none present

Longbone – longest is 50mm; average 20

Weight

Teeth	1
Larger fragments	13
Rest	22
Total	36 grammes

Fragments of non-human bone were also found and these have been examined by Kevin Rielly (Institute of Archaeology, London):

9 bone fragments, 1 identifiable as pig scapula fragment, possibly neomate and burnt; 8 unidentifiable, 6 burnt.

Report on the charcoal by Caroline Cartwright

- Sample 2 — from OLS at centre (submitted for radiocarbon dating — see HAR-6640, Appendix 3):
- Sample 3 — believed to be from this site, but provenance unknown.
Soil sample — contains 8.5 grams charcoal fragments:
6 grams *Quercus* sp.
2.5 grams Leguminosae

Discussion

This monument was also described as a disc barrow, which indeed it is — i.e. a small mound within a banked and ditched enclosure — and compares with the neighbouring Site II. The main difference between the sites is that here there is a burial, and an entrance to the enclosure through the gap in the bank on the east. The presence of an extensive pan and the suggestion of a 'heavily trodden area' around the cairn recalls the trampled 'dancing' area for Pond Cairn in South Wales (Fox, 1938). If the burial was indeed male, as suggested by the large canine root, this conflicts with the Wessex evidence where disc barrows are more usually associated with female burials. The relationship of the mound, overlying what appears to be a shallow portion of the ditch on the east, and the enclosure is unclear, though it may perhaps be seen as a final sealing-off of the area after rituals and burial have been performed. The presence of fires and flints on its surface and its coincidence with the gap in the internal bank strongly indicate that it was contemporary with the use of the site and indeed constituted the final phase.

The use of quartz is noted, as at Site II, for the construction of the cairn, while the micaceous 'utility stones' also appear to have been chosen deliberately.

The date obtained for this site would place it among the group of early barrows which are now seen to be emerging in Cornwall, such as Trelan 2 (Smith, 1984) and Chysauster (Smith *pers. comm.*).

SITES IV(4) AND IVA, SITE VI(4a), SITE VII(7/4b), SITE IX(14)

This group of small sites, on the line of the first runway due to be constructed, was started immediately after Christmas and work continued — with a break in January — through to the end of April. Site VII(5) was also dug at this time and is described, together with Site XXIII in the report on the post-prehistoric sites at Davidstow (Christie and Rose, 1987, 66–9).

SITE IV(4)

This possible barrow lay slightly under half a mile south-east of Barrow III(8) and was described by Croft Andrew as ' . . . the most enigmatic structure encountered in these excavations'. He summarised his discoveries as follows:

. . . a circular platform, about 75 feet in diameter, built of turf and clay in the Bronze Age manner, its central area very slightly elevated within an annular bank which nowhere rose more than 6 inches above the level of modern turf at the centre. Its form was most evident in the south-eastern half of the circle, where the natural surface fell away slightly. On the opposite side the structure faded into the level of the moorland plateau. No ditch, wooden or stone structure, no cairn or central deposit, no small finds of any value.



Fig 33A

Site IV(4) General view during excavation. (Photo CKCA)

1941/42 Excavations

The site was excavated by the octant method and the central area cleared. A sketch map showing the trench layout exists in the notebook. Measurements for all eight sections exist, but only the four main cross-sections have been drawn out (Fig 34) since only these were completed through the centre. The other four part-sections were measured after the centre had been stripped but information from all eight sections, together with a sketch showing the trench layout, form the basis of the plan (Fig 33B). From the evidence available, which includes one captioned photograph (Fig 33A) the following structural features can be confirmed.

Central area

A layer of stiff, dark clay (layer 2, Fig 34) between the modern turf and the old land surface (layer 3) is described in the N section; in other sections the layer is either not noted or just described as 'mound'. This layer covered the area enclosed by the annular bank with which it appeared to merge. The excavator also noted that 'About 5 ins. under the surface the interior has a strewing of quartz gravel, probably of natural development'. He was no doubt correct in this assessment as the gravel layer coincided with the base of the modern turf, and is seen in sections through the modern land surface beyond the mound.

Davidstow Moor

SITE IV & IVa(4)

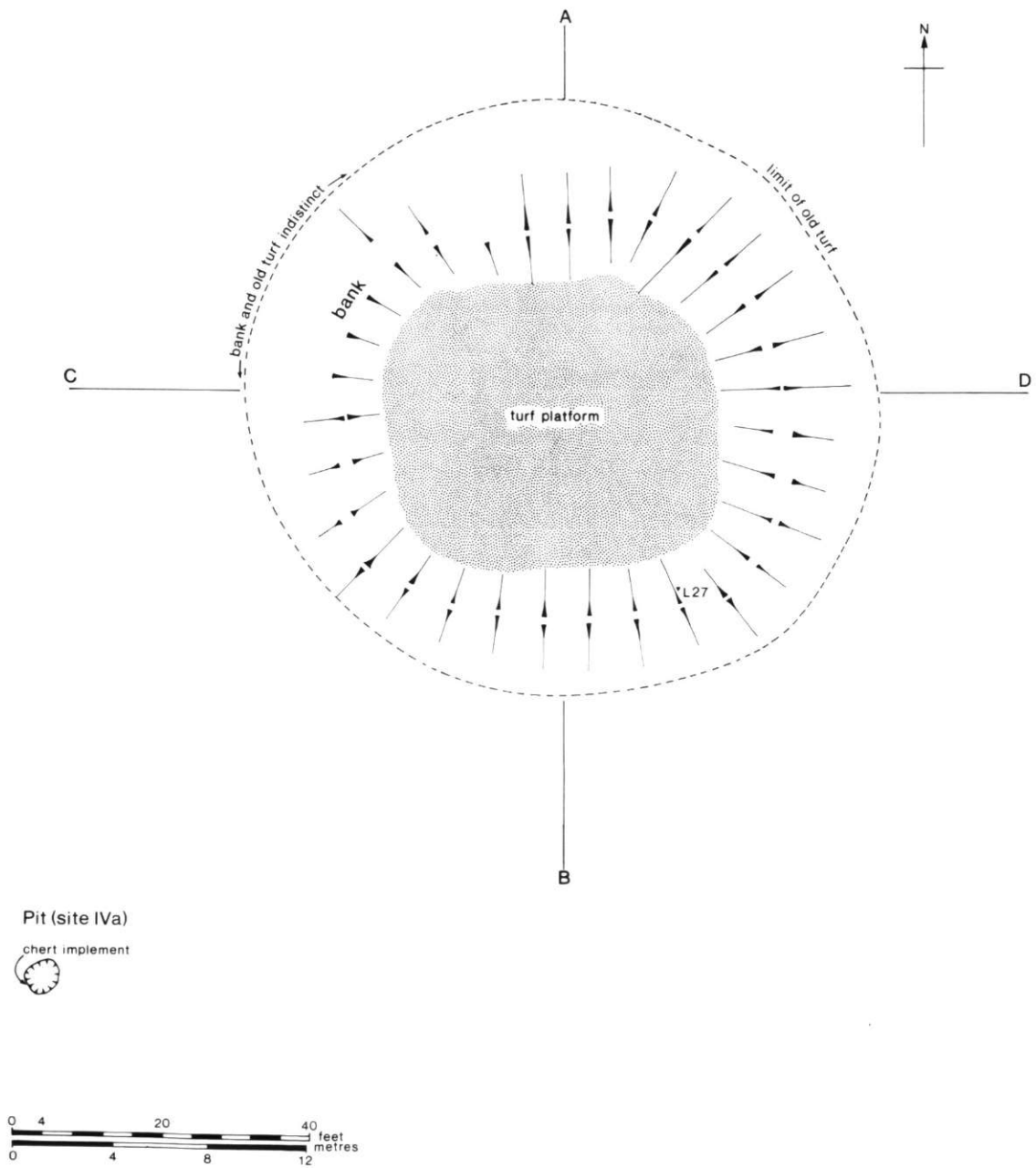


Fig 33B
Site IV(4) Plan

Site IV(4)
Section A,B,C,D

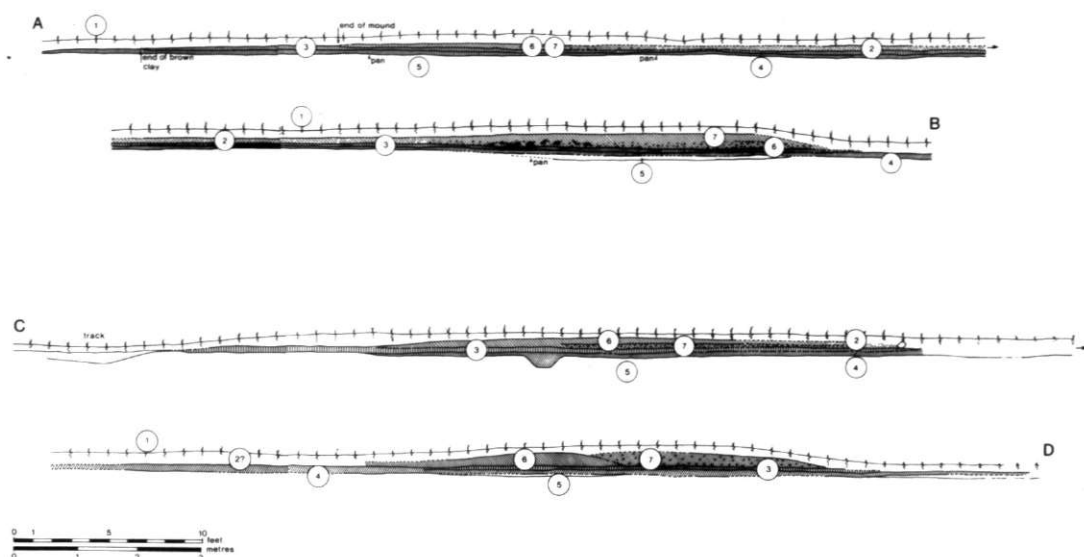


Fig 34A

Site IV(4) Section A-B and C-D: (1) turf; (2) stiff clay of central mound; (3) black 'old turf'; (4) fawn/grey; (5) pale yellow and pan (subsoil); (6) dark brown clay (turves; (7) yellow-fleck and yellow (6 & 7 = bank)

Bank

A low spreading mound surrounded the central area, best seen on the south-eastern side (Section C-D, Fig 34) where the land fell away slightly. This bank was built of 'clods' with yellow material adhering to them and reached a maximum thickness of 8-10 in. (203-254 mm). In places the 'clod structure' was clearly apparent; in others the bank material is just described as 'yellow flecked' (layers 6 and 7) with patches of clean yellow material in places. The old land surface (OLS) was clearly marked beneath the bank and central area as a thin black layer c. 2 in. (50 mm) thick on fawn (fading to whitish) clay over a pan layer which seems to have been reasonably continuous over the area excavated. The limit of this buried land surface extends slightly beyond the bank and covers an area c. 82 ft (25 m) in diameter, as is shown on the plan.

Discussion

Little can be added to the excavator's original description of the site which is quoted above. Despite the lack of evidence, he considered it to be 'comparable in point of antiquity with the other sites of the group to which I have assigned it' - this includes Barrows I, II(3), III(8), IV(4) and V(2) - and also that it was 'the central object to which sites IVa and VI(4a) and VII(7) were ancillary'.

Since all other sites in the group had evidence for a central cairn, Croft Andrew has an explanation for the absence of one here:

If there had originally been a central cairn, its absence at the time of excavation might be attributable to the fact that (a) in this smooth part of the moor the surface turf has in modern times been cut for fuel by ploughing and (b) before the days of motor traction employees of the highway authority were paid by the load for supplying and breaking stone wherewith to maintain the moor road and for this purpose used to collect the massive quartz lumps such as occur naturally on the moor and were used . . . for the cairns at Nos. II and III.

It is not possible to state from where the turf for the central platform and the turf and yellow material for the bank were derived, in the absence of a ditch. The OTL was preserved beneath the structure, so presumably the material was stripped from the surrounding area. One possibility is that turf and subsoil were taken from Site VI and its 'hollow way' described below. Structurally, the site falls into the platform barrow class now seen to be fairly common on Bodmin Moor (RCHME forthcoming).

Pit outside Site IV(4) on SSW

This is recorded in a sketch in the note-book, but no further information is given other than in the synopsis sent to the Ministry of Works at the end of the Davidstow campaign, when it is given the number 'Site IVa'. This therefore quoted in full:

Site IVa. A small straight-sided pit, about a yard across and slightly less in depth, situate 100 ft SSW from the centre of No. IV. Almost filled by accumulations of silt and peat, this was revealed in wet weather by a persistent pool. Details of its filling suggested considerably antiquity. On the bottom was an implement of chert.

About 10 ft (3 m) further to the south another pit is noted, but this appears to be connected with mining exploration, since CKCA describes it as a 'costean pit'.

Lithic material (Fig 34B, Table i) by Frances Healy

Worked lithic material consists of a chert flake from a 'pit SSW of site' (presumably IVa above) and a segment of a large serrated flint blade (L30) found in the SE quadrant of Site IV(4), though its exact location is not recorded.

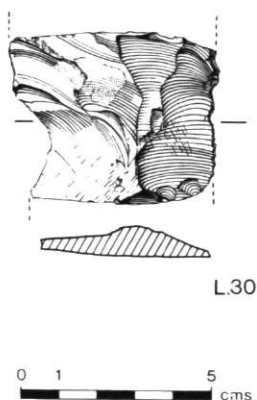


Fig 34B

Site IV(4) Lithic material: L30, fragmentary serrated blade from south-east quadrant. (1). Particulars in Table i

Davidstow Moor

Site VI(4a)

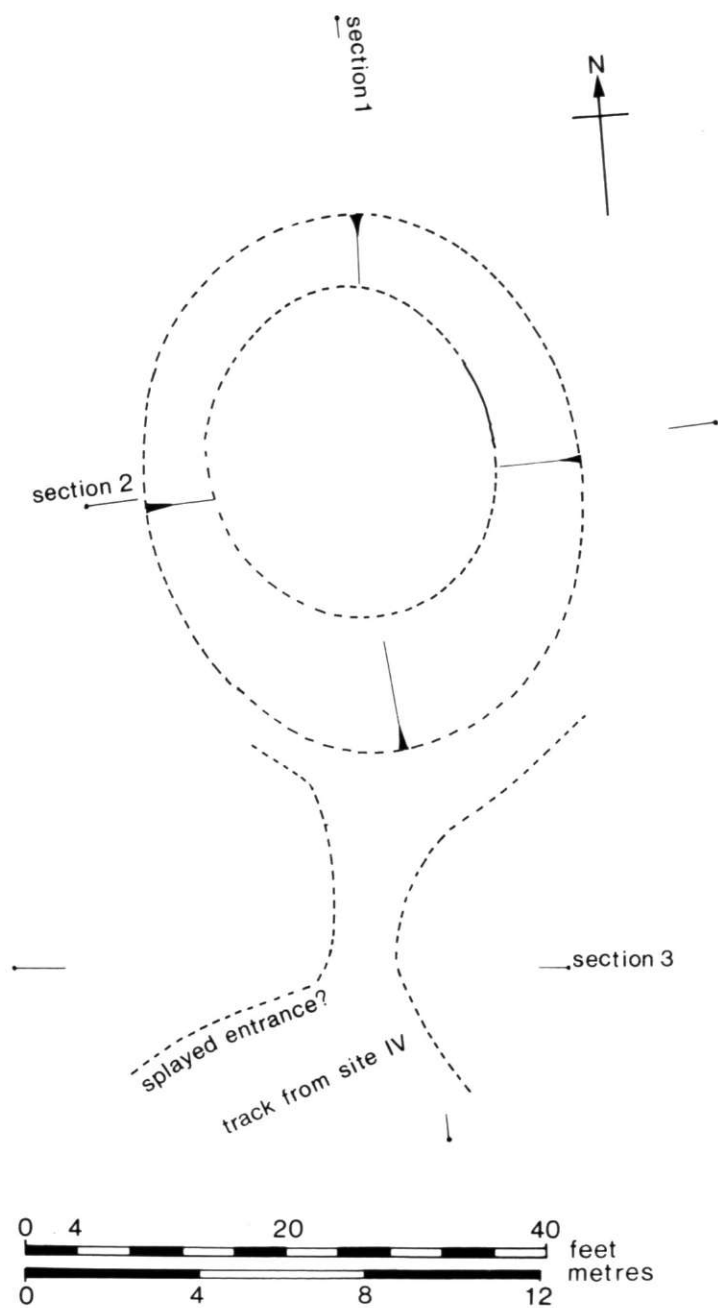


Fig 35
Site VI(4a) Plan

SITE VI(4a)

This is referred to throughout in the note-book as Site 4a — the 'pond barrow' — and is described as follows:

An artificial, saucer-shaped depression in the subsoil, 30 feet across and 2 feet deep, situate 150 feet NNW from site IV, with which it seemed originally to have been linked by a hollow way. As in other examples of the "pond" barrow group, stratification and bleaching in the bowl vouched considerable antiquity, but finds were trivial. This site and No. VII were remarkable for a lining of quartz gravel too dense and even to be judged natural.

1942 Excavations

Excavations were carried out during February, concurrently, it seems, with sites IV, VII, VIII and IX which all form a cluster in the mid-SE part of the threatened area. Fortunately a sketch plan of the trench layout for the site exists in the note-book, but otherwise few details are recorded. A main trench (Fig 36, Section 1) was laid S—N; two further trenches (Fig 37) were subsequently dug from E to W: one across the 'hollow way' (Section 3) and the other across the depression (Section 2).

Little can be said about the depression, and the excavator may have been right in regarding this site as a 'pond barrow', and linking it with sites IIA (above) and VII (below). There is evidence in Section 1 (north) and Section 2 (west) of a lip (?deliberately cut) to the edge of the depression, but the evidence in the E and S section is less clear. A layer of brown clay with gravel (layer 2) at its base filled the hollow and overlay the thick, even layer of quartz gravel (layer 3) which was thought to be artificially placed, but may in fact have accumulated naturally.

The 'hollow way' is described as having an 'apparent splayed entrance' and the tentative outline of this in Fig 35 (plan) is copied from the note-book sketch, which is not measured. Layers similar to those found in the main depression (brown clay (2) and gravel in dun clay (3)) formed the filling of this feature.

Discussion

In the absence of artefactual or direct environmental evidence, it cannot be confirmed that this site belongs to any prehistoric context or even that it was man made. Only its association

Site VI(4A)

Section 1

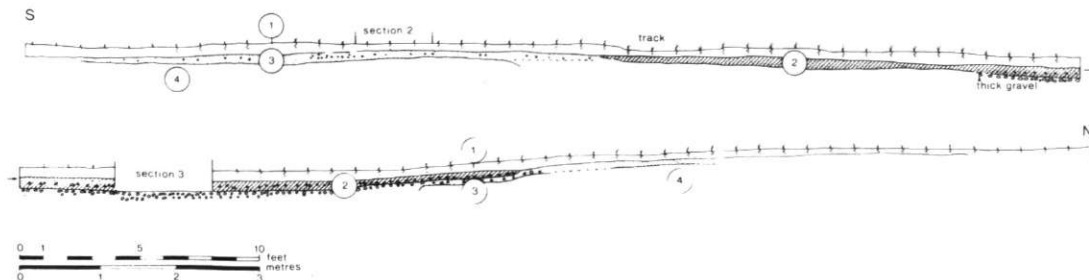


Fig 36

Site VI(4a) Section 1: (1) turf; (2) brown clay and gravel; (3) gravel over dun clay; (4) yellow subsoil, grey in centre

with site IV — itself not necessarily prehistoric — suggests that it may not have been a purely natural feature. One possible interpretation could be that it was the quarry for the turf and bank material used in building site IV. Stripping turf from a circular area, approximately the same diameter as the 'platform' of site IV, and perhaps from the linking trackway as well, might have had some ritual significance. Also, the contrast between the results of this excavation and those of another site (site X) which was clearly of recent origin may have confirmed CKCA in his view that this site, together with site VII(7), was of some antiquity, if not necessarily Bronze Age.

SITE VI(4A)

Section 2

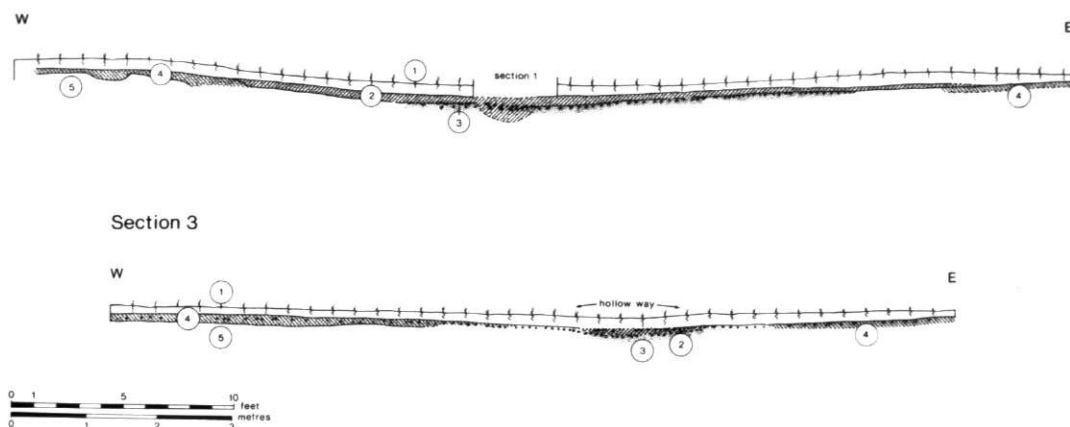


Fig 37

Site VI(4a) Sections 2 and 3: (1) turf; (2) brown clay with gravel; (3) thick gravel on grey clay; (4) fawn/grey clay (over pan) with gravel; (5) yellow/orange subsoil

SITE VII (7 also 4b)

Summary (Croft Andrew)

An artificial, saucer-shaped depression in the subsoil, 25 feet in diameter and 22 inches deep, situate 130 yards SE from Site IV. This was the least disappointing monument of its group; the stratified lining producing, from its lowest layer beneath the gravel, flints — including a significant implement, and from its uppermost layer immediately under the grass coins of King George II . . . From the centre of the depression had been sunk a small elliptical pit, its mouth closed by two quartz stones, but the earth filling of this had been altered by the vigorous root action of rushes growing above, and no indication could be found of the deposit it may originally have contained.

1942 Excavation

This site was first thought to be a hut. Work was started on 29 January and sections measured on 10 February, after sites IV, VI and VIII had been dealt with. By this time CKCA was describing it as a 'pond barrow'. The excavation consisted of two cuttings (of unspecified width, but thought to be c. 2 ft 6 in. (0.76 m)) at right angles, which gave the cross-sections drawn out in Fig 39. Most of the area within the bank appears to have been de-turfed and the central part was fully cleared (Plan, Fig 38). The following information from notes and drawings supplements to a small extent the excavator's own summary, given above.

Davidstow Moor

SITE VII(7)

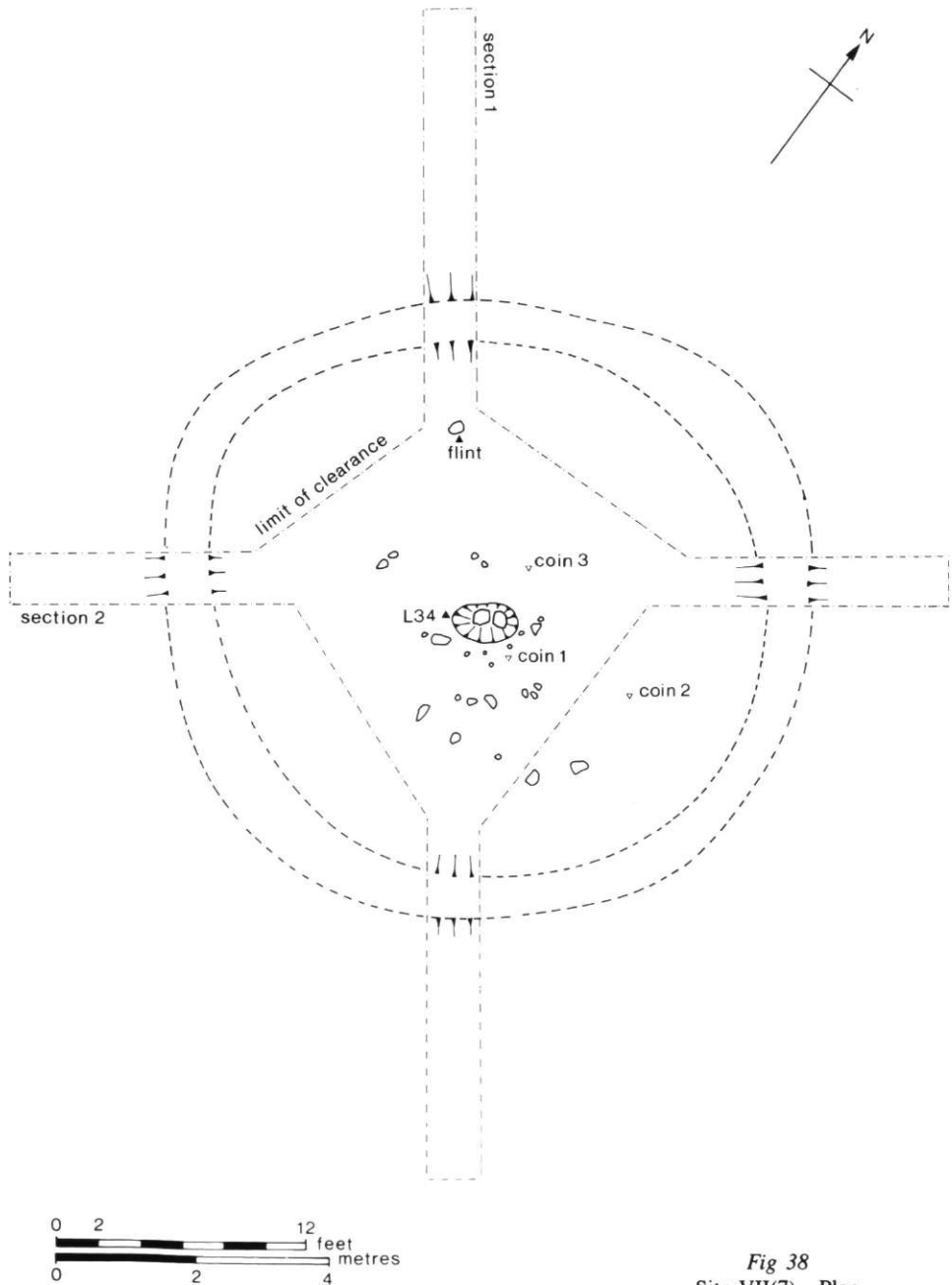


Fig 38
Site VII(7) Plan

Bank

The low bank appears to have been continuous round the depression, i.e. no mention is made of an entrance. Nor is the make-up of the bank described. The sections do not indicate that any paler coloured (subsoil) material was used in its make-up, so presumably only the topsoil was stripped off the depressed area enclosed by the bank. From the sections and measurements on the sketch plan, the bank appears to have been between 4 and 5 ft (1.2 and 1.5 m) wide and its height barely 6 to 8 in. (150–203 mm) above the original land surface which was preserved beneath it.

Central Area

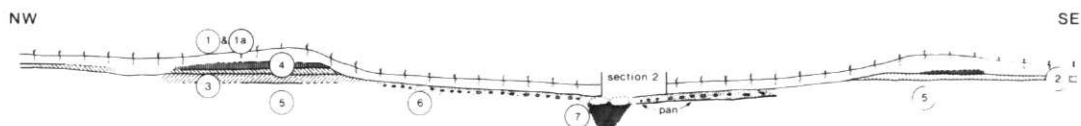
According to the section measurements the OLS had been cut down to the subsoil so that the subsequent soil within it overlay a bleached, gravelly yellow clay (layer 6). CKCA notes that the 'stratification is all wavering and irregular'.

Stones are carefully plotted over the centre, in the note-book; but no further details are given and none are mentioned in the section measurements so it is not known where they occurred vertically, though it is likely that they appeared at the base of the turf. On the same sketch plan the positions of the George II coins are plotted, and in the summary above these are mentioned as 'immediately under the grass'. One coin and some stones on the SE lie outside the fully excavated area, so must have been at a high level. The two stones over the pit (see below) are not measured in and so were presumably in a lower layer, namely the top of the pit fill.

Pit. The measurements for this are given as 2 ft x 1 ft (0.6 x 0.3 m) wide and 1 ft 3 in. (0.38 m) deep, filled with 'black clay in which the rush roots had run down into the subsoil'. Two large quartz stones, measuring 10 x 5½ x 6 in. (254 x 138 x 150 mm), were packed into the (? top) of the pit. The drawings in the sections indicate how they may have lain horizontally (Fig 39) but no details of the precise position are given in the notes. A flint borer (L34) was found c. 6 in. (150mm) from the rim of the pit on the SW side, as described below.

Site VII (4b/7)

SECTION 1



SECTION 2

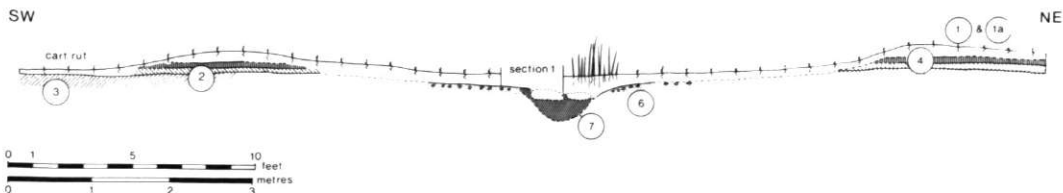


Fig 39

Site VII(7) Section 1 and 2: (1) turf; (1a) bank – peaty; (2) fawn clay; (3) mixed dirty yellow clay; (4) soft black ?buried turf; (5) clean yellow subsoil; (6) bleached and gravelly yellow clay; (7) black fill in pit

Lithic material by Frances Healy (Fig 40, Table i)

A flint borer (L34) came from the south-west side of the central pit. From the same location are three slate fragments, one of them perforated, the others apparently trimmed but of irregular outline. The perforated fragment may be an atypical holed stone, of the same class as those from some of the other barrows. It may also, however, be a fragment of more recent roofing slate, since it has an approximately right-angled corner and a vertical-sided perforation, perhaps made with a metal drill.

L34, recorded as found on the south-west side of the central pit, may well equate with a 'borer' recorded elsewhere as coming from 'the pale clay beneath the gravel', i.e. layer 6. If the notes refer to the same implement, it is well stratified and possibly associated with the pit. A further flint was found in the north cutting, in yellow clay (? layer 6) and nearby a 'biggish quartz stone' on the same layer. A piece of 'brown hardstone' (? granite fragment) is also mentioned as coming from the pale layer beneath the gravel. No mention is made of the provenance of the broken perforated slate.

? Bone

A sample of clay containing what appeared to be bone was examined by Kevin Rielly who identified 1 shell fragment of a mollusc (?), burnt.

Discussion

This site was also referred to as a 'pond barrow' by the excavator and indeed it does seem to have the remains of a bank round the rim. Pond barrows, however, should have burial pits within the embanked depression, and the central pit with its stones and possibly associated flint borer, L34, go some way to supporting a prehistoric origin. The effects of waterlogging and the growth of rushes had obscured what evidence may have existed.

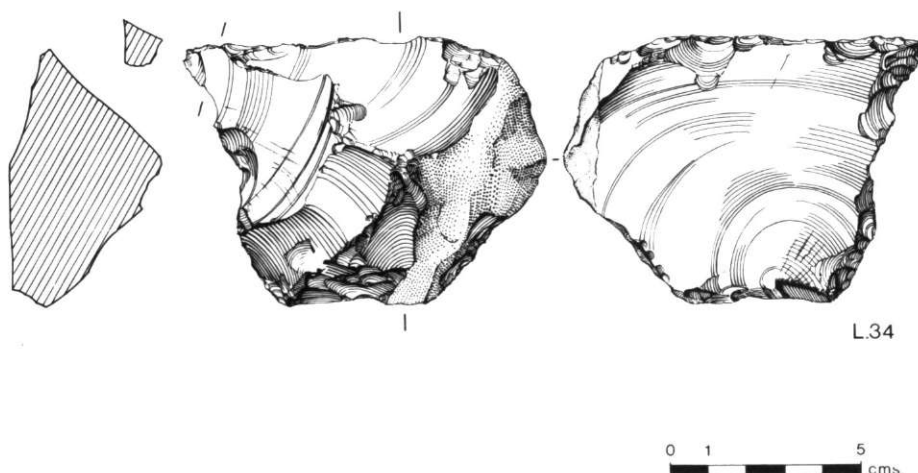


Fig 40

Site VII(7) Flint awl from south-west side of central pit. (1/1). Particulars in Table i

Davidstow Moor

Site IX(14)

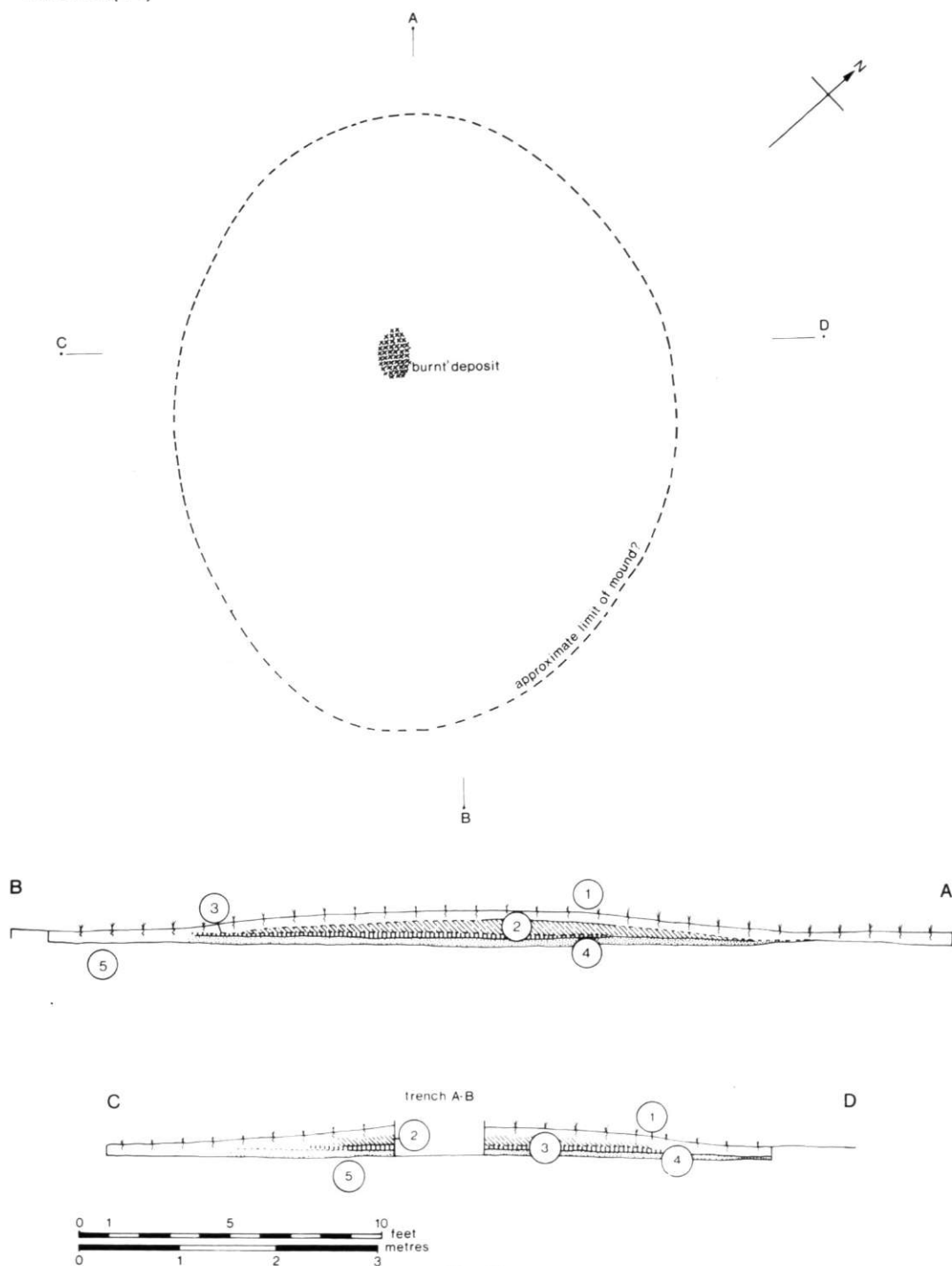


Fig 41

Site IX(14) Tentative plan and sections A-B, C-D: (1) turf; (2) mound (?peaty/turves); (3) ?old turf; (4) fawn clay; (5) yellow subsoil

SITE IX (14)

Croft Andrew's description of the site was as follows:

A little turf mound, of elliptical plan, about 20 by 18 ft across, and hardly a foot high, raised over a small deposit of reddened, clayey matter, whose nature and significance must be explained, if at all, by appropriate specialists.

1941/2 Excavations

Excavation started on 29 December 1941, at the same time as Site IV(4). The first trench (A-B) was laid out 3 ft (0.9 m) wide and excavated. Subsequently the cross trench C-D was also dug (Fig 41). However the sections were not measured until 12 February, and final clearance of the site took place the following day, according to the sketch plan on which Fig 41 is based.

No further details of the site exist, either in the note-books or in correspondence with O'Neil, to add to the excavator's original description given above. The mound material is not described, though it was probably turf. The surface of the buried soil ('old turf') beneath the mound does not appear to have been very distinct, except for one place in Section C-D where it is firmly noted as 'old turf' rather than '?old turf'.

The only feature encountered, despite the clearance of the centre, was a 'patch of burnt clay with red matter on top' which had been found in the original trenches. This deposit was 1 ¾ in. (43 mm) thick and lay 'on the old peat surface'. Unfortunately no samples of this ? burnt material survive, though they must have been taken; and no other finds, structural or artefactual, are reported.

Discussion

Little can be said about this site beyond the excavator's original description. The mound is thought to have been built of turf (or the prevailing A horizon of the surrounding soil at the time) since had it contained material from the yellow subsoil this should surely have been noted by the excavator.

SITE V (2)

Introduction and summary

Work began on this barrow on 20 January 1942, when sites II (3) and III (8) further north became unworkable owing to bad weather. Croft Andrew's summary of the excavations was lengthier than usual and a shortened version is given here:

A platform mound of turf and clay construction . . . its outer rim c. 7 ins. higher than the modern surface at the centre, which in turn was hardly a foot above the ancient turf level. The floor seemed in places to have been stripped of its original turf before the mound was raised over it. There was no burial or central deposit and only one trace of fire-ritual . . . in association with a small cairn (F1) of quartz concealed in the mound . . . The sloping sides of the mound had been stiffened with stones thrust into the piled turf-clods and this, compacted by time, when stripped presented the appearance of a rough kerbing . . .

On the eastern kerb was a small cairn of quartz (F2) 'in a bed of charcoal . . . which produced the carbonised remains of a wooden frame . . . and, still further out, a posthole (F3) . . . in which the object had stood'. A miniature collared urn was found in a pit on the east (F4); holed stones and worked flints were also found.

Davidstow Moor
Site V(2)

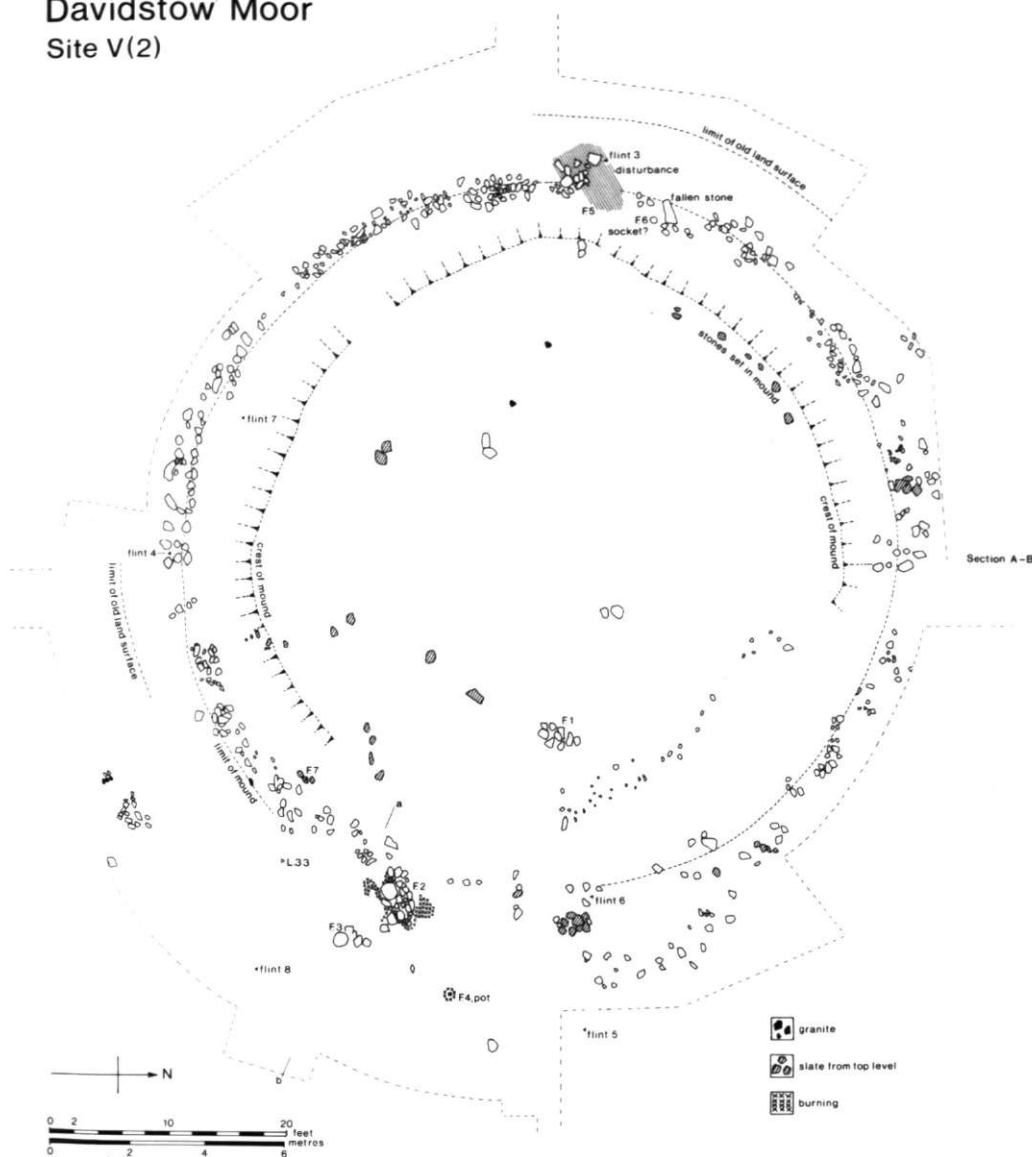


Fig 42
Site C(2) Plan

1942 Excavations

Work begun on the main N/S cutting at the end of January was soon abandoned in order to complete Site IV (4) and adjacent sites, on learning that the No. 2 Runway would be built first. Work was resumed again at the beginning of March, but only briefly and it was early May before the site was finished. As a result, the data is spread through three site note-books, in common with several other sites.

No plans or sections were drawn out but a sketch plan shows the trench layout. Two 5-foot-wide cuttings were laid out at right-angles N/S and E/W and excavated, after which

each of the four quadrants was stripped. The limits of excavation were noted and are shown on the plan (Fig 42). An area on the north of the SW quadrant was recorded as left undug, though the bank and revetment must have been reduced sufficiently to plot the limit of the artificial mound. In addition to the main cross sections A–B and C–D, a part section through the posthole (F3) on the SE was measured after the quadrant had been stripped to the level of the old land surface.

Post Excavation

All sections and measured sketches have, where possible, been drawn out for the archive, and the main ones are published as Figs 43, 44 and 45. Features and layers have been numbered where identifiable. Although the information is on the whole fairly comprehensive, section measurements are not always adequate and some of the structural details are unclear. But a reasonably complete plan has emerged (Fig 42) and the position of small finds could be plotted on it with some accuracy. However, since the finds were not marked, and the bags unsealed, it is not always clear which artefact belongs where. Nine worked lithic pieces were found, and some can be identified. They are reported on by Dr Healy and the illustrated examples given L-numbers along with the rest of the lithic material from Davidstow, hence L32 for the flint borer (9) and L33 for the holed stone.

Thirteen photographs presumed to be from this site (though only three are captioned) provide a good record of the main features. Specialist reports have been obtained and the following information on the site is presented.

Construction

The construction layers 1–4 are shown in Figs 43–45.

The excavator described the building of the mound as ‘commencing with the laying of a layer of turf, flat. This is seen mixed with foot-carried yellow grit overlying the old turf . . .’ He goes on to mention ‘a dark turf bank with vertical inner face built up and enclosing the yellow clod mixture (i.e. the bank) . . .’ and that ‘an elevated rim of yellow-clod

Site V(2)

Section A-B

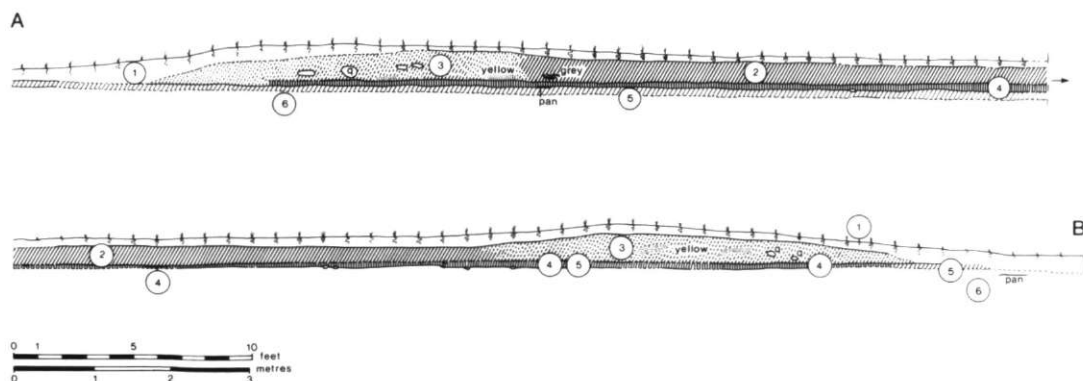


Fig 43

Site V(2) Section A–B: (1) turf; (2) black/grey clay (mound of turves); (2a) gritty lower mound material; (3) stones and yellow material; (4) black ‘old turf’; (5) grey/yellow clay; (6) orange/yellow clay and pan

Site V (2)

Section C-D

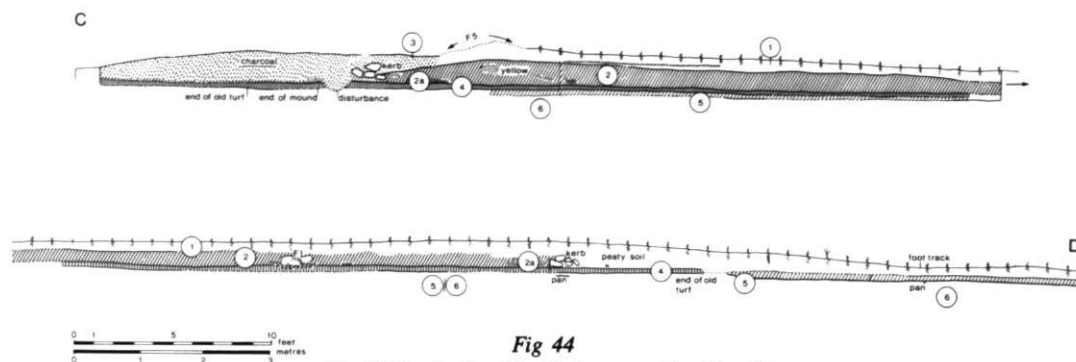


Fig 44

Site V(2) Section C-D: layers as for Fig 43

was a radical feature of this mound'. This description is based on the N section, in May, several months after it had been dug, and no mention of a turf bank with vertical inner face is noted in the section measurements.

The old turf (layer 4) is described variously as a 'thin black line' and a 'thick dark band', but sometimes as absent altogether, causing CKCA to suggest it might have been stripped in places before the mound was built. However, where recorded it appears to have survived a good 5–6 ft (1.5–1.8 m) out beyond the mound and revetment kerb. The mound material (layer 2) is described as 'black and grey turf work', but the material of the bank (layer 3) as 'yellow-clod'. CKCA notes that the material for the mound would have consisted of turves cut more shallowly than for the bank, which was c. 7 ft (2 m) wide, with stones set in and on its shoulder and a rough revetment round the outside. The outer limit of the mound was carefully recorded and coincides with the bank-revetment.

In his synopsis CKCA gives the barrow as having a diameter of 80 ft (24.4 m), but on drawing out the plan and sections it appears that neither revetment nor edge of mound give a diameter of more than c. 60 ft (18 m). His measurements coincide more nearly with the limit of the old turf, i.e. diameter c. 76 ft (23 m).

Site V (2)

Part section through F3

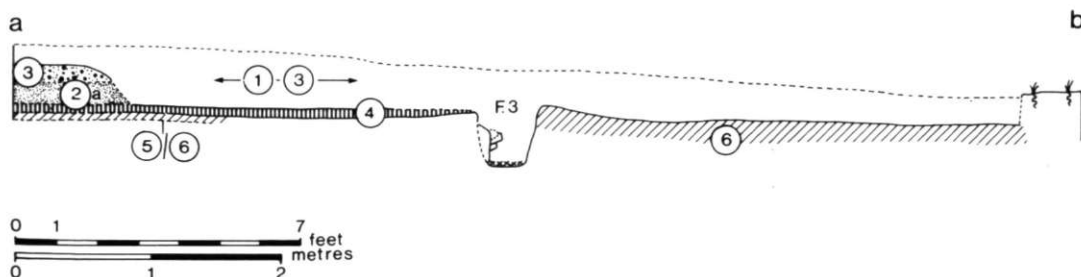


Fig 45

Site V(2) Part Section through F3: layers as Fig 43

A rough kerb of slate and some quartz surrounded the whole structure at ground level and was best preserved on the SW (Fig 49b). As can be seen in the photograph, even here it is very sparse, with the stones not laid as a retaining wall but rather being set into the outer (sloping) side of the bank (layer 3), with some stones higher up the bank falling down to fetch up on the surface beyond the kerb. The scatter of stones well outside the line of the kerb on the NE may be accounted for in this way.

High stones were recorded on and in the mound material especially a group on the NW which led the excavator to suggest an upper cairn of quartz may have stood on the platform of the barrow. This could have been robbed subsequently for road material and other purposes for which quartz was collected on the moor.

A small group of stones outside the SE quadrant, including 3 of granite, is recorded in the notebook, but with only one measurement, i.e. distance from centre. It was therefore impossible to plot them as they could be anywhere round the circumference of the SE quadrant.

Features beneath the barrow:

- F1** — *Cairn on E.* This contained 12 pieces of quartz and lay over a shallow depression containing charcoal and white clay.
- F2** — *Cairn on SE.* The low cairn consisted of slate and some quartz, with a large tilted stone near the centre and a lower course of flat stones laid horizontally on a 'dark clay layer containing plentiful charcoal'. A charcoal sample (DM2/4) associated with this cairn has given a date of 3580 ± 70 BP (HAR-6635). See Appendices 2 and 3).

Beneath the cairn were found:

- (a) *Timbers.* Against the SE edge of the cairn and 'obviously placed after the lower stones were in place' were the carbonised remains of timbers thought to represent 'an upright post and some of the imposts'. A sample from one of these timbers (timber A) was of oak (*Quercus* sp.).

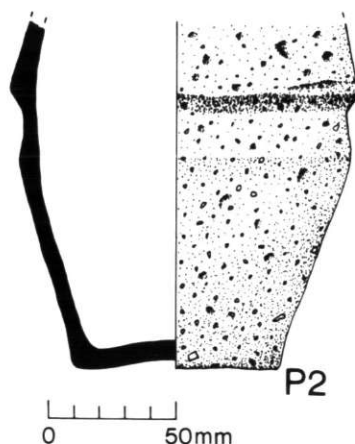


Fig 46A

Site V(2) P2 — Collared vessel from F 4 (1/3). Particulars in Table h

- (b) *Pit*. According to the measurements, this lay beneath the large tilted stone mentioned above, near the centre of the cairn, and was defined by a sprinkling of yellow material round its upper edge. It measured c. 4 in. (10 mm) deep and was filled with charcoal.

F3 — *Post-hole SE of cairn (F2)*. This large post-hole measured 17 in. (0.43 m) diameter (top), 13–11½ in. (0.33–0.28 m) diameter (base) and 15 in. (0.38 m) deep, with a patch of charcoal on the bottom. When cleared the base was nearly flat, but slightly 'bowled', with rounded corners and traces of wood surviving at the angle of the sides. The hole was lined with clean yellow packing, separated from the true side of the hole by a black film, giving a diameter for the original post of 14 in. (0.36 m). Packing stones were found on the side, and in the stiff grey clay with charcoal which filled the hole. Yellow packing 'pushed down from rim' suggested to the excavator that the post fell to the west and formed the timbers described under F2 (a), though from the notes and sketches it seems more probable that the post was deliberately withdrawn after burning. A sample of charcoal from this feature consisted of 8 grams of *Quercus* sp.

F4 — *Pot (P2) in pit in SE (Fig 49a)*
The pot (Fig 46) was set upright in a shallow pit c. 4 in. (100 mm) deep and 'probably 17 in. (0.43 m) E–W and 19 in. (0.48 m) N–S'. A scatter of charcoal surrounded the pot rim, especially on the north side where it was dense and extended 15 in. (0.38 m) outward. The contents of the pot are described as 'a stiff clay throughout with a little charcoal showing at the top . . .'. A sample labelled 'pot contents, lower part' is thought to have come from this vessel and has been

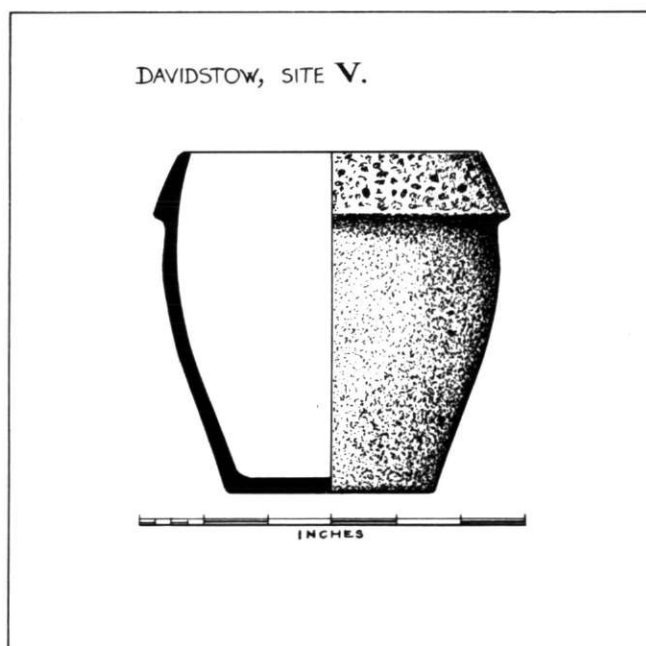


Fig 46B

Site V(2) Croft Andrew's original drawing of P2 — collared vessel

examined by John Evans of the NE London Polytechnic. The results obtained were similar to that for the contents of the small pot from Treligga 5 (Christie, 1985, 93) namely that the sample contained traces of the degenerate fat system adipocere and traces of a wood resin. No other organic substances were present.

F5 — *Recent disturbance on west*

F6 — *?Fallen orthostat and socket on west*

A large, long stone of elvan (or granite) lying among the kerb stones on the west was described as a possible fallen orthostat. A shallow hollow only 3–4 in. (75–100 mm) deep, lying to the south of this stone was tentatively suggested as its socket.

F7 — *'Holed stone' by kerb in SE*

In plotting the kerb in this quadrant, a group of slates at a high (surface) level including a holed one, was found to be carefully recorded and is shown on Fig 42. No notes or further details were given and it is not known if the perforation is complete or partial through the 'holed stone'.

Small finds by Frances Healy

Pottery (Fig 46 Table h)

P2, from F4 above, is assignable to the Collared Urn tradition. Its small size is well within the range of miniature examples, some of which are as little as 6 or 7 cm in height and rim diameter (Longworth, 1984, 28, 34). The simple form and lack of decoration almost defy classification. The externally straight collar is among the characteristics of Longworth's primary series (1984, 21), and of the early and middle stages, dated to c. 1800–1450 BC (uncal) (2100–1750 BC cal), of the scheme proposed by Burgess (1986). Collared urns seem to have continued in manufacture until c. 1100 BC (uncal) (1400 BC (cal); Longworth, 1984, 79).

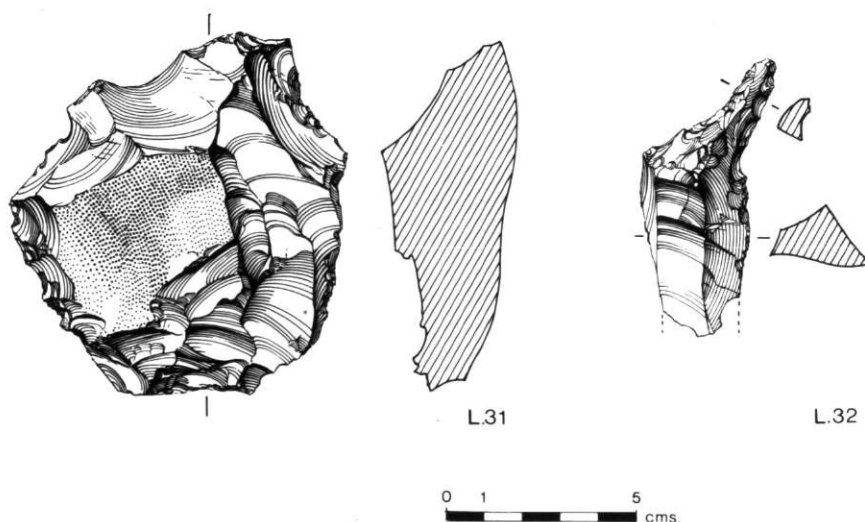


Fig 47

Site V(2) Lithic material: L31 and L32. (1/1). Particulars in Table i

Lithic material (Figs 47, 48, Table i)

Worked lithic material consists of four flint flakes (flints 3, 6, 7, 8) including L31, two flint blades (flints 4, 5), one flint borer (L32, flint 9) and one holed stone (L33). The positions of these are marked on Fig 42 except for L32 which was outside the mound on the west. Some perforated stones were also recorded *in situ*.

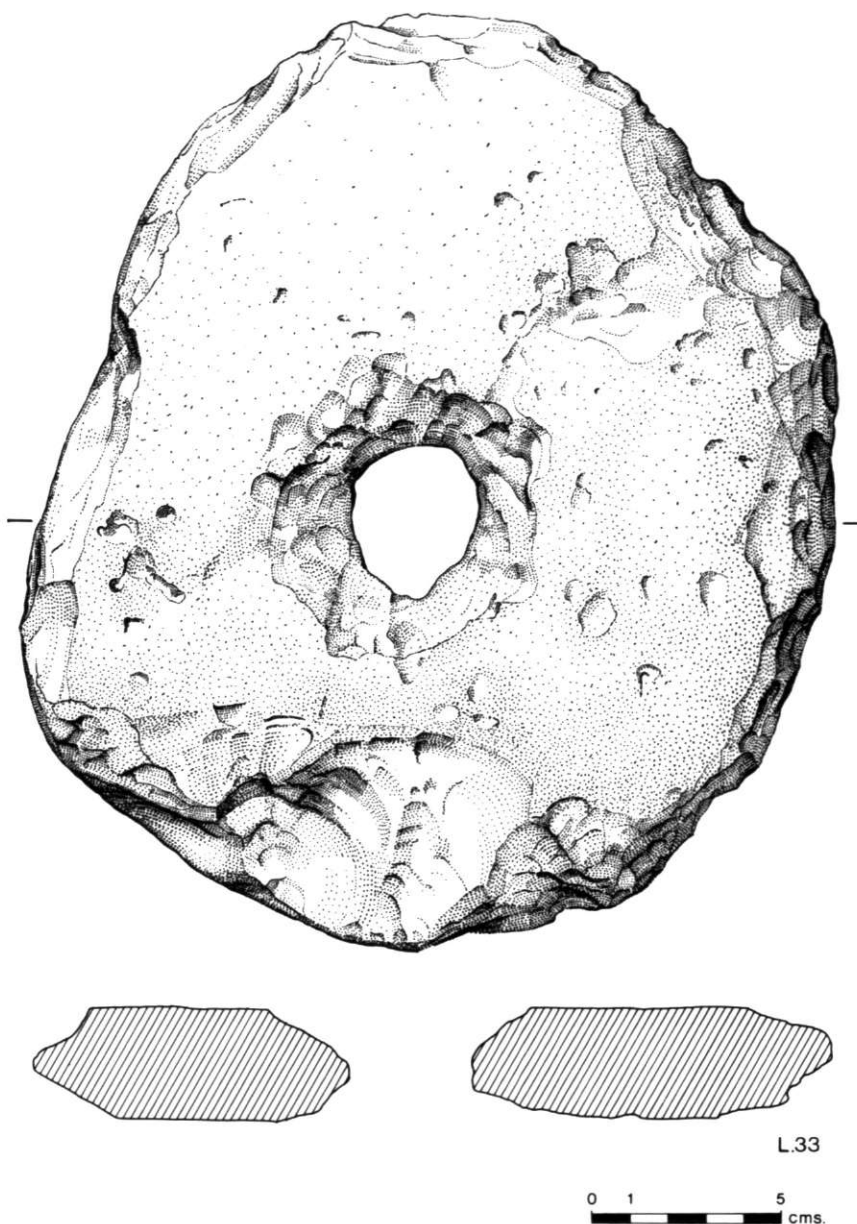


Fig 48
Site V(2) Holed stone L33. (2/3). Particulars in Table i

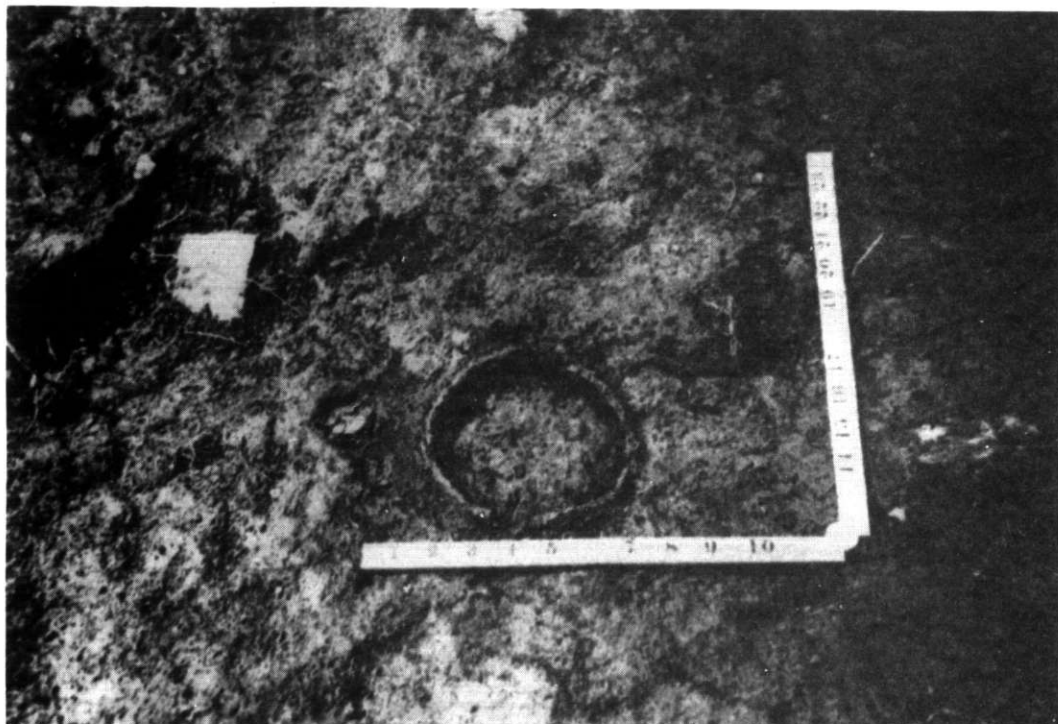


Fig 49

Site V(2) · a) Pot emerging. b) Kerb emerging. (Photo CKCA)

Discussion

This was one of the more rewarding sites on the moor, providing as it has both pottery and a radiocarbon date which are compatible. Here too the extensive use of quartz is noted, both for the cairns beneath the mound and in the possible ring cairn at a high level – the latter having no doubt been robbed out subsequently. As seen before excavation, the site would have presented itself as a kerbed, rimmed platform cairn of the type identified by CAU on Bodmin Moor (RCHME forthcoming). The excavated features on the barrow floor within the enclosure are concentrated on the eastern side, and nothing of significance was found elsewhere, including at the centre. The timber structure and post hole, the two quartz cairns, the small, apparently non-funerary pot and the lack of burial evidence all suggest that this site falls into the category of non-sepulchral sites discussed by Griffith in connection with Colliford (1984, 82–86). The use of quartz and granite is again demonstrated here, while the perforated stones such as L33 link this with other barrows in the group.

It would appear on first examination that this site represents a single phase monument – the features on the barrow floor being covered by the turf mound and surrounded by the bank and kerb, though to what extent the bank and kerb were originally present on the east is not clear. Since features 1–4 had survived, it seems possible however that the kerbed bank was never very substantial on the east and that activities took place over a period of time.

While the charcoal sample providing the radiocarbon date was not directly associated with the Collared Urn, a date in the seventeenth century BC (uncal) can be suggested for the use of the site, making it broadly contemporary with Colliford IVC (Griffith, 1984).

SITE XIX (11)

Summary (Croft Andrew)

A low round barrow, evidently adopted as a landmark in the laying out of Larkabarrow farm: the hedge between two fields . . . riding over its crest, while the corners of two others adjoined its eastern flank. The first pair of fields had been cultivated, and the halves of the barrow consequently mutilated, in different degrees. At the time of examination field OS 945 (on the south) was a meadow . . . 937 (on the north) was in root crops . . . and here heavy cultivation had left hardly a trace of the mound's structure.

Further, after three trenches had been dug, I found it necessary for a time to divert all efforts to a distant site and in our absence a heavy mechanical bulldozer in demolishing the hedges obliterated our work, so that a fresh start had to be made from new base lines.

In these circumstances I cannot write with confidence about the original size and form of the barrow, but its diameter was probably over 50 feet and when first seen the mound was standing about 18 inches high at the hedge. Its substance was again of turf clods and contained a few flints, but the most interesting discovery eventually made was that of an elliptical burial chamber at the centre.

Introduction and 1942 Excavation

Work started on 14 February 1942, with two trenches A and B being dug on the south (?) side of the mound. A narrow trench (trench C) was dug on the north side of the field wall. After only three days, attention was diverted to other sites and bad weather restricted work for several weeks. As a result the site was left for the next two months and only at the beginning of May did CKCA turn his attention to it again. The site was laid out afresh and the main north-south section dug across the mound, at right-angles to the field hedge, and the central area excavated in which the burial pit was found.

Davidstow Moor

Site XIX(11)

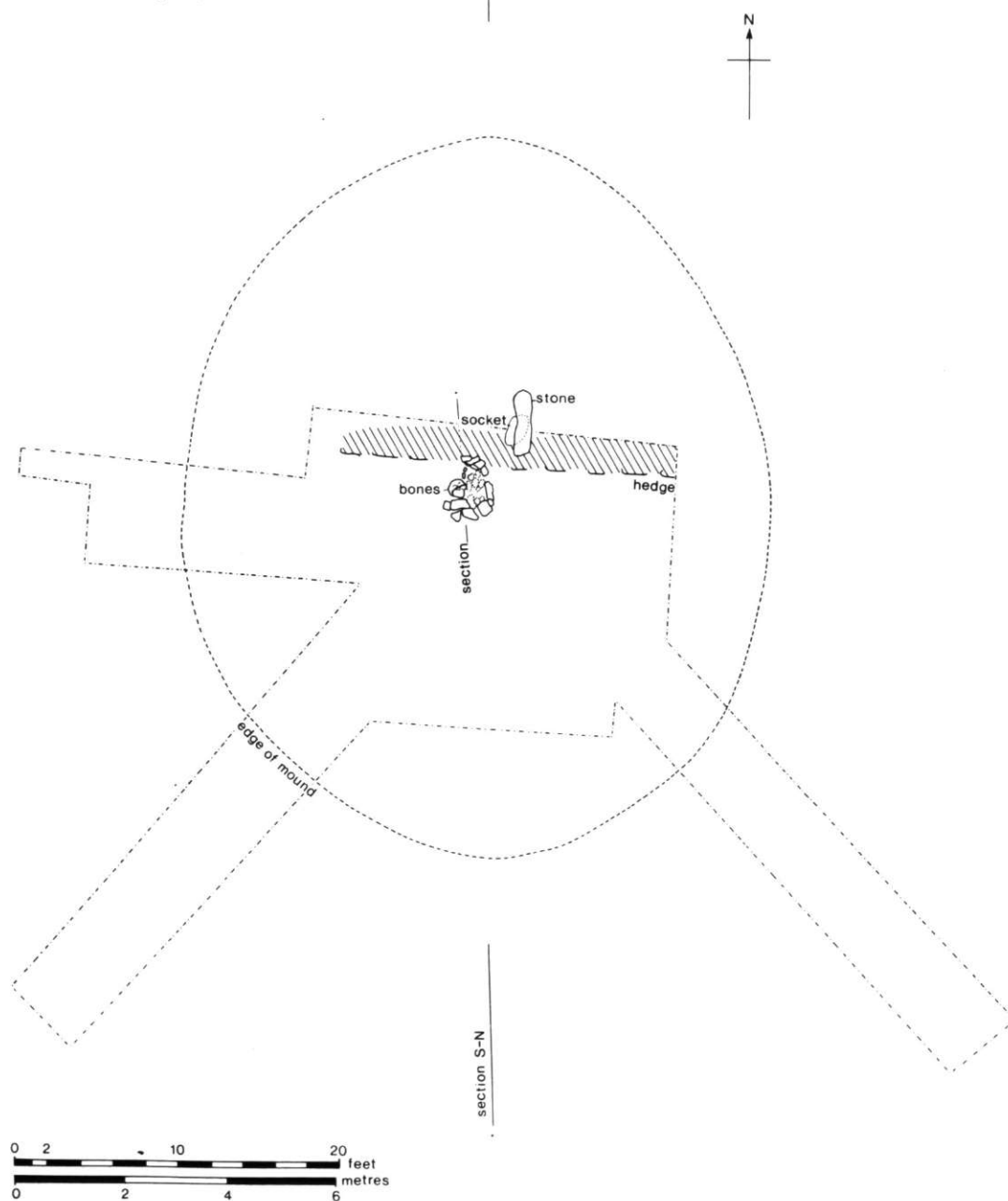


Fig 50
Site XIX(11) Plan

Post Excavation

The details of this site are extremely difficult to interpret, partly owing to the damage described above and partly due to inadequate and confusing records. It has therefore not been possible to reconstruct the barrow or draw an adequate plan. Fig 50 is largely conjectural though the position of the trenches should be accurate. Fortunately a few good photographs of the central area survive, and give more information on the grave pit than could be achieved by attempting to draw it from the notes. The north-south section has been drawn out (Fig 51). No other section was measured, apart from a small section over the stones of the burial pit which is quite inadequate (Fig 52b). The complicated layout of the trenches is partly shown in Fig 50, but it is not clear from the notes how much of the area was fully excavated. From these scant records the following information is presented:

Barrow Construction

The low mound was stated to have been composed of 'turf clods' and the evidence for this is seen in Fig 51 where the mottled clay (layer 4) was interpreted as mound material. CKCA clearly tried to define the extent of the mound, and notes this in two places, on the south and west. The old turf (layer 3) was preserved beneath the barrow on the south side but no mention is made of it on the north, where 'heavy cultivation' appears to have penetrated to the yellow subsoil. No further constructional features were discovered.

Judging from the photographs and sketches in the note-book, a number of stones were measured in, in addition to the stones of the grave pit (below). It is not clear however which of these are field hedge and which were believed to belong to the barrow; nor is their orientation easy to ascertain. Fig 53a shows some of these stones at what must be an early stage of excavation, while Fig 53b shows the stone-lined grave pit in relation to the central cleared area.

Grave pit (Fig 54)

The excavator's description of this is as follows: 'A pit 2½ x 3½ feet across and 1 ft deep, with sloping sides, had been carefully cut in the subsoil. Sides and bottom were then very neatly lined with elvan slabs, the top was corbelled over and covered by a small cairn'. No details of the corbelling or cairn (noted above) are given in the notes, but the photographs show what was left of the structure. Above the stone lining a layer (layer 5, Fig 52b) of black clayey soil was noted as '? old filling' over which was a thin yellow layer 'caused by the hedgers'. The upper part of the pit 'was filled and covered with smallish stones mostly laid flat'. On the floor of the pit 'lay some cremated bones in a poor state of preservation', and

Site XIX(11)

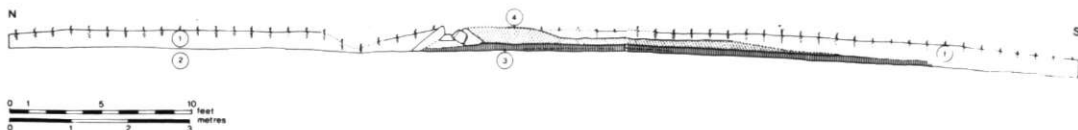


Fig 51

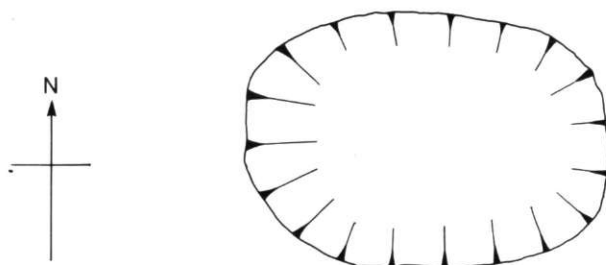
Site XIX(11) Section S-N: (1) cultivated soil; (2) yellow subsoil; (3) buried 'turf'; (4) mottled clay (?remains of mound)

these on analysis prove to represent one young person (Cremation, below). The bones seem to have been found in a little pile measuring 6 in. x 4 in. (150 x 100 mm) and this lends weight to Sheelagh Stead's suggestion below that they might have been in a container in view of their being 'very white and clean'.

Beneath the stones on which the bones lay were a further two layers of flat stones of slate and elvan, with '¼ in. of black greasy soil and a little silt' between them and the subsoil floor of the pit. It was noted that the side stones had been put into the pit before the floor stones.

Site XIX(11)

Plan of Grave Pit



Section through Grave Pit

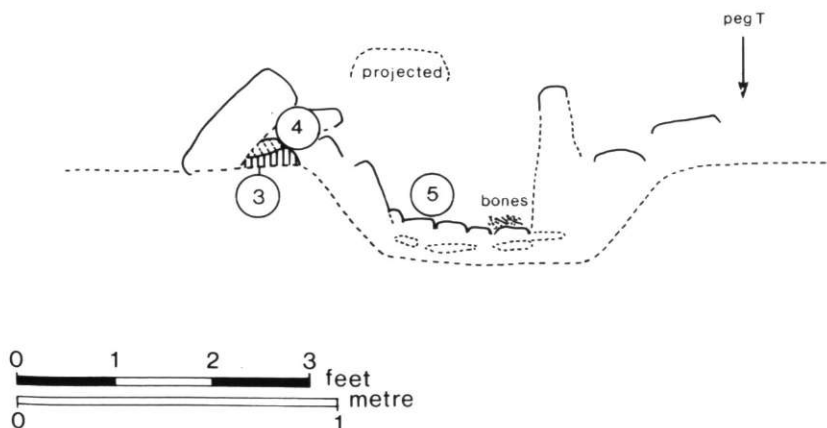


Fig 52

Site XIX(11) a) Plan of grave pit; b) Section through grave pit: (3) buried turf; (4) mottled clay; (5) black soil in pit



Fig 53

Site XIX(11) a) Stones of field hedge and grave pit in centre before clearance. (Photo C.K. Croft Andrew)
 b) Field hedge in relation to grave pit. (Photo CKCA)

Small finds by Frances Healy

Lithic material (Fig 55, Table i)

A flint core (L35) was found on the 'floor level'. There are also five flakes and one fragment of an abruptly retouched flake, all of flint, and all from the barrow floor.

Cremation by Sheelagh Stead

This cremation represents one individual, possibly a sub-adult, though the evidence for this is not conclusive, i.e. the lack of attrition on a molar crown fragment and the thinness of the cranial plate. There is no evidence for sex.



Fig 54

Site XIX(11) Stone-lined grave pit. (Photo C.K. Croft Andrew)

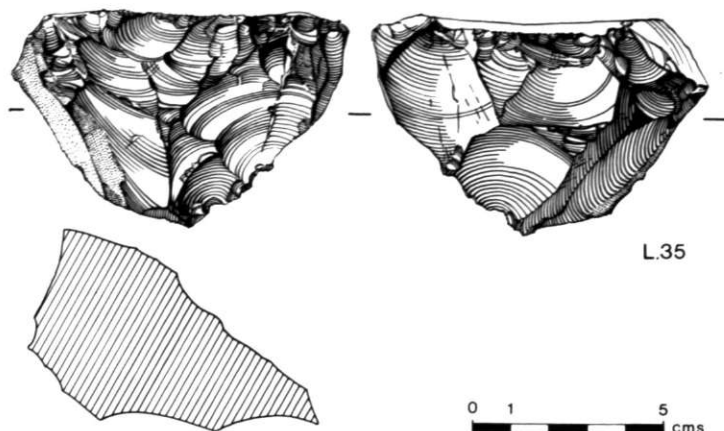


Fig 55A
Site XIX(11) Flint core (L35) from old land surface. (1/1). Particulars in Table i

Bone fragments identified:

Skull

Teeth: 9 tooth fragments including a premolar, a probable upper premolar, a canine or upper central incisor, a lower incisor and a molar.

Vault fragments some with serrated edges, two probable petrous temporal.

Rest of skeleton

Left lunate carpal, fibula, radius and unidentifiable long bone fragments.

Colour

Very white and clean. Could the cremated bones have been in a container? Two fragments have a green external surface. This does not have the same appearance as bronze staining and probably has some p.m. natural cause. The fragments do not join but are probably from the same bone, which is very small in diameter (between 3 and 4mm), possibly a phalange.

Size

Skull, largest is 28mm x 19mm, average is 5mm x 7mm.

Long bone, longest is 29mm.

Weight

Skull	13
Larger fragments plus long bones	16
Rest	51
Total	80 grammes

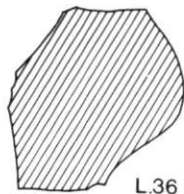
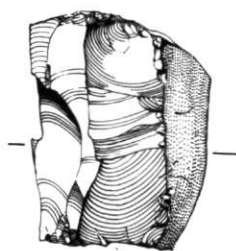
Discussion

This site was so badly damaged, both by cultivation before the excavation and by bulldozer action during the time Croft Andrew was actually engaged in the campaign, that little can be said about its date or its construction. On the assumption that the two points where Croft Andrew defined the extent of the mound were similar on the north and east, and that the grave was centrally placed, a tentative picture emerges of a low oval mound measuring approximately 44 ft (13 m) N/S and 36 ft (11 m) E/W. A rather larger oval mound, also unditched, was excavated by CKCA at St Eval (Christie, 1986).

Certainly, an interesting feature of this site, which is assumed to be of Bronze Age date and part of the cemetery on Davidstow Moor, is the careful construction of the grave pit. CKCA appeared to think that it had been robbed of its contents, probably by the hedgers who had 'broken the northern crown of the chamber while setting on edge a large grounder . . . it seems likely that they removed any pot or other grave goods, discarding the bones as uninteresting'. But he points out that one could not be sure about this disturbance as the soil in the pit 'had been altered by seepage of water since the hedge was built' and furthermore that the burial pit at Treligga 2 (Christie, 1986, 79) which was not disturbed, had contained only a cremation and no artefacts. This north coast site did, however, contain a Trevisker-style pot on the barrow floor which was assumed to be contemporary with the burial.

Note

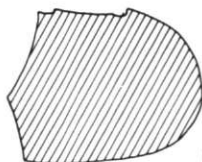
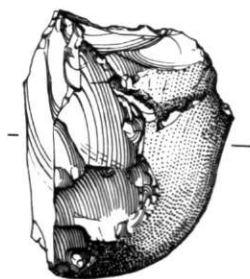
Lithic material L36 and L37–L38 (Figs 55B and 55C) from Sites XX(12) and XXII(15) respectively is illustrated here to complete the catalogue from Davidstow Moor (Table i). (For a description of these post-prehistoric sites, see Christie and Rose, 1987, 193).



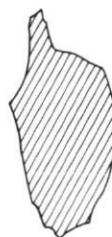
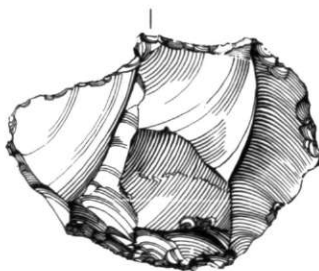
L.36

Fig 55B

Site XX(12) Flint core (L36). (1/1). Particulars in Table i



L.37



L.38



Fig 55C

Site XXII(15) Flint core (L37) and piercer (L38). (1/1). Particulars in Table i

SITE XXIV (16/23)

The two adjacent sites XXIV and XXV (Fig 56) share the distinction with Barrow I of being the only ones marked on the Ordnance Survey maps. They were to the northwest of the runways, on land beside the road in the vicinity of a bungalow ('Stephen's bungalow'), and may have been left until late in the campaign for the reason that they were not under immediate threat. Excavations were started on 11 May and continued for one month. The following is a shortened version of CKCA's summary:

A round barrow, the eastern of two marked on the O.S. map, in field 283, was composed of turf clods mixed with the native clayey subsoil, but in this case the latter element predominates. The field, including the surface of the barrow, having been in cultivation for a number of years, it is not surprising that a central burial, elevated above the floor and thus brought close to the top of the mound, should have been disturbed. This interment apparently took the form of bones from a cremation, enclosed in a large urn which in turn was protected by some kind of cist, loosely built with rough lumps of quartz . . . Enough sherds were recovered to indicate a well made and carefully decorated pot very similar to that which I have since recovered from another mutilated site on Fore Down, St Cleer . . . On the floor of the barrow . . . was a large deposit of charcoal. Under the floor, near the eastern periphery, was an oblong pit large enough to take a 6-foot man fully extended. There was a general strewing of charcoal on the floor and a fair number of small finds, including flints, were picked up. A ritual pit in the floor was situated close to, but on the north side of, the urn and charcoal deposit.

1942 Excavations

One main north-south trench was put through both barrows and cross trenches dug across the individual sites. The notes describe Site XXIV first, but features and details of XXV are interspersed throughout, indicating that the two sites were dug together. Measurements were taken for a contour plan and also for the N/S section (Trench A-D) and the E/W section (Trench B-C). All measurements remain in note-book form and none were drawn out by the excavator. Four photographs survive: two of the 'grave' (F4, below) and two of a stone lined field drain which is not mentioned in the notes, though the print is captioned.

Post Excavation

The main cross sections have been drawn out (Fig 57), but those for the contour plan have not. Two part sections across F2 and F3 (Fig 58) have also been drawn but details for these were inadequate. The site plan has been reconstructed, but the disposition of some stone areas and other features cannot be guaranteed as accurate. It should be said that CKCA's summary does not always tally with evidence as seen in the note-books, but from the latter the following can be deduced:

Mound

An elliptical mound was constructed of yellow-brown mixed clay (Fig 57, layer 2) with an E/W diameter of approximately 36 ft (11 m) and a N/S diameter slightly less, according to the fragmentary evidence from the sections (as opposed to approximately 40 ft (12 m) quoted by CKCA). Streaks outlining turves showed clearly in places, especially near the centre where they had been laid flat. No well defined *old land surface* appears to have survived but a grey band (layer 4) of varying thickness, usually with a pan layer beneath, is recorded intermittently in the sections as '?old turf'. Beneath the mound on the south a 'rough disturbance floor' was noted, and this appears to coincide with the stony layer described below. The barrow had been disturbed at the centre and pottery from the central deposit (F1) dispersed by ploughing over the rest of the mound.

Davidstow Moor

Site XXV(17/24)

Site XXIV(16/23)

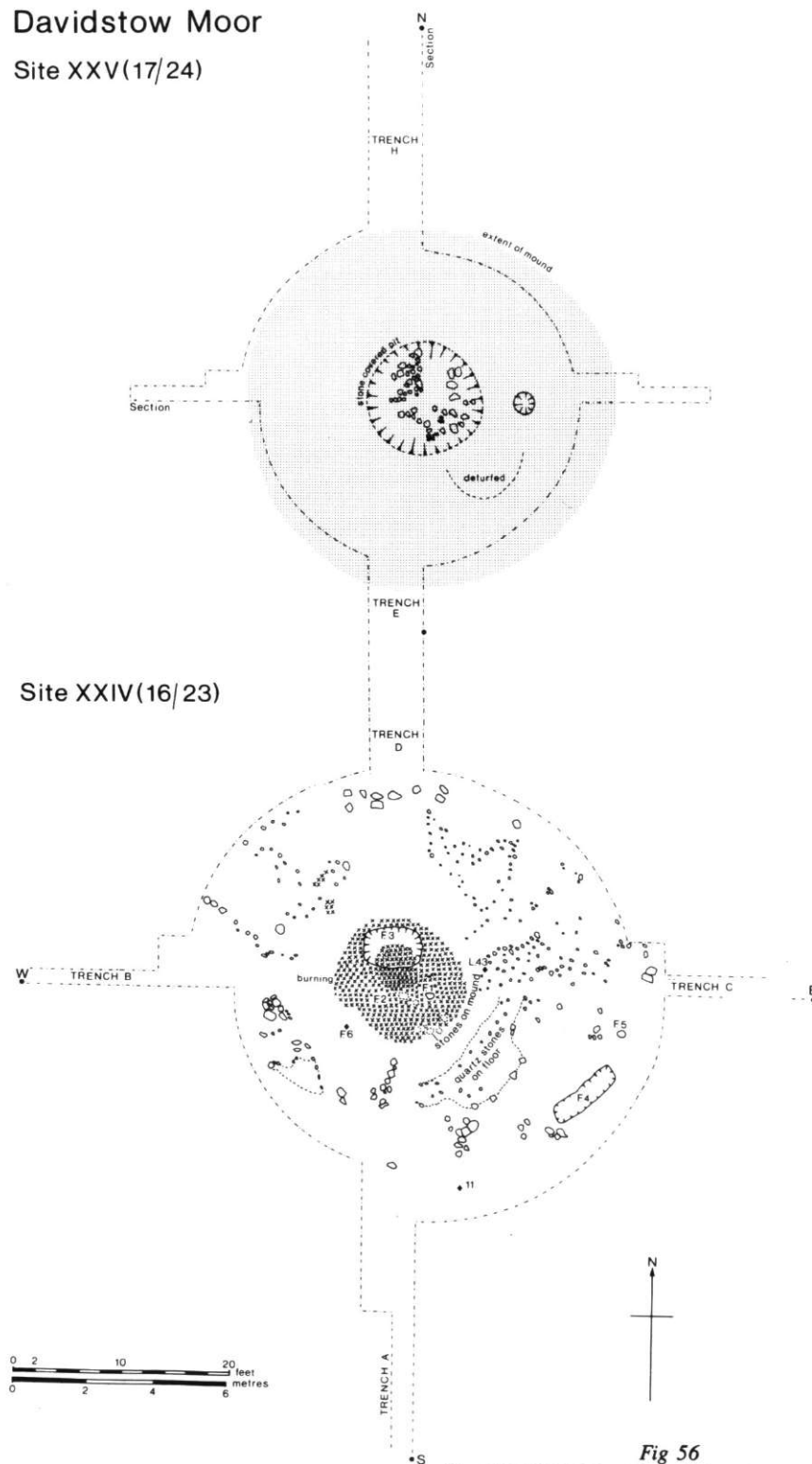


Fig 56
Site XXIV(16/23) Plan of sites XXIV and XXV

Stones on and under the mound

Some 700 stones, mostly quartz, are noted as having been removed from all four quadrants. This apparently does not take into account any which were not cleared in the final stages of excavation. Some of these stones were on or in the mound, but in the SE (certainly) and the NE (probably) they lay directly on the barrow 'floor', with some fine charcoal beneath them. This stone layer, the levels for which are meticulously given (but usually without noting the datum) does not appear to have been more than c. 1 ft (305 mm) maximum. At the base of it on the NE was apparently found a holed stone. Since the mound was ploughed, and the centre disturbed, it is difficult to interpret the extent and disposition of these stones. The excavator makes no mention of them in his summary, despite the careful recording, perhaps for this reason. The plan attempts to show the extent of the stones, but the measurements are highly unsatisfactory and it can only be considered a tentative reconstruction.

Features beneath the mound

F1 Pot and bone at centre

The remains of a broken pot (P3) together with a scattering of human bone (see *Cremation* below) was found in a hollow within the mound at the base of the central disturbance. The excavator's description is as follows:

The appearances demonstrate that a large pot has been crushed with bone and charcoal but it is not at all clear how the pot was deposited. Only a few small stones are now in evidence so that there is not likely to have been a stone-built cist . . . Eight sherds in all were found here, the last lying nearly flat (sloping NW) on the bottom of hollow . . . Under the stone and sherds there was a little bone and then the yellowish bottom of a bowl depression, but the upper part of this cavity (?) was lost.

The excavator speculated that the pot may 'have been put into a turf-built cist with stone floor and rim', and drew a sketch of a possible reconstruction of the interment. He noted that since the site had been cultivated with heavy machines 'no wonder the pot is completely crushed'. The remainder of the pot was found dispersed over the barrow.

Site XXIV(23)

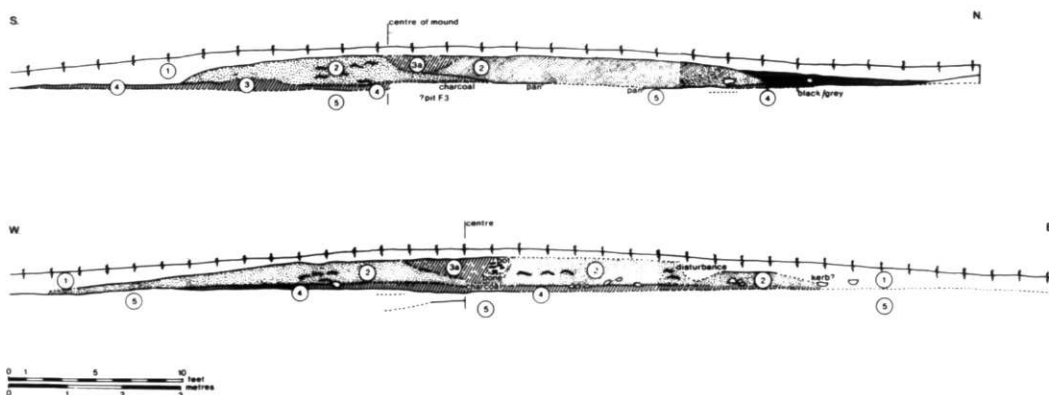


Fig 57

Site XXIV(16/23) Section S-N and E-W: (1) cultivated soil; (2) yellow-brown material; (3) disturbed 'floor'; (3a) 'recent' disturbance; (4) grey/dun clay (?*LS); (5) clay shillet

F2 Charcoal spread (Fig 58B)

This was encountered in trenches A and B at an early stage of excavation. The plan (Fig 56) shows the possible extent of this charcoal spread, with the main concentration to the north of the centre peg, partly overlying F3 below. Measurements are ambiguous, however, and the main concentration could have been further south, while scatters were noted in Trench A. When first discovered the charcoal deposit in the north trench (Trench D) is described as having 'a belt of small quartz stones laid over it and a thin ($\frac{1}{2}$ in.) layer of reddish matter, then an inch or more of grey clay'. The main charcoal mound is described as 'c. 3 ft 9 in. (1.14 m) wide, maximum depth at middle $5\frac{1}{2}$ in. but this includes a good many stones', and that the 'charcoal is thrown on a yellow mound and is consequently not as thick as it looked when first exposed', giving a sketch to illustrate this point. (NB On drawing out the plan, it would appear that the 'yellow mound' may be the top of F3). A charcoal sample from this feature has given a date of 3440 ± 100 BP (HAR-8098).

F3 Pit (Fig 58A)

Beneath the charcoal of F2 a 'deep disturbance in the shillet subsoil' was described as a 'ritual pit c. 5 ft across at top and smoothly bowl-shaped'. The pit was filled with 'dull brown shillety mixture' and the bottom was 'thickly lined with dirty fawn shillety clay' which had been 'invaded by some burrowing vermin which had left tunnels and brought in scraps of

Site XXIV(16/23)

F3 Disturbance in Subsoil

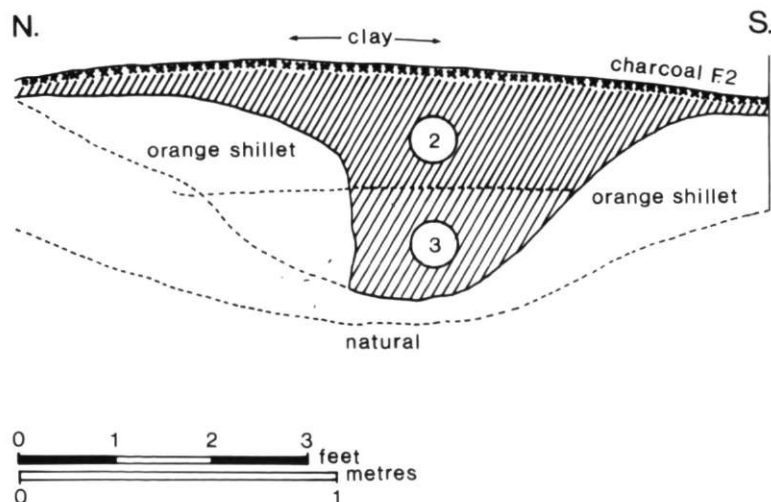


Fig 58A

Site XXIV(16/23) F3 Disturbance in subsoil: (2) 'brown shillety'; (3) 'dirty fawn shillety clay'

Section in Trench D

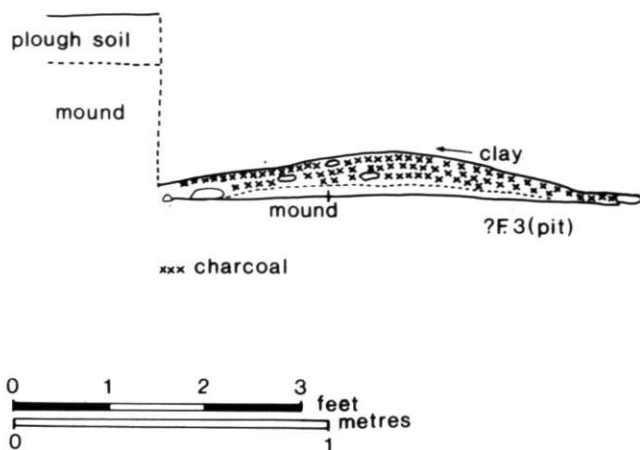


Fig 58B

Site XXIV(16/23) F2 Charcoal spread: section in Trench B

charcoal'. This information comes from the section in the east face of trench D, and it appears that the feature had been dug away within the cutting without being recorded. From a further section in the west face it cannot be ruled out that it was a natural feature. In the notebook sketches the charcoal layer overlying this pit is clearly marked.

F4 'Grave pit' in SE

This is described by CKCA as an 'empty grave' measuring 6 ft x 1 ft 9 in. (1.8 x 0.53 m), 'loose, slightly darkened yellow shillety soils' with quartz lumps on and in this fill. A partial streak of dark ?silt halfway down was noted, with a similar dark layer on the bottom. Fig 58C shows this feature after excavation.

F5 Small pit

A small depression measuring 8½ x 12 in. (215 x 304 mm) and barely 3 in. (75 mm) deep was noted in the SE quadrant. It contained 'charcoal and dirty soil' and was thought to be a stone socket.

F6 ?Post hole

This was noted on clearing the SW quadrant and is described as the base of a 'peg hole . . . 5–6 in. (125–150 mm) across at the mouth' and penetrating barely 3 in. (75 mm) deep into the yellow subsoil.

The photograph of an old field drain which must have impinged on the barrow, though no mention is made of it, is printed here (Fig 58D) to complete the picture of this site. The stone lining of this drain, of a type known from Iron Age times onward, is of interest.

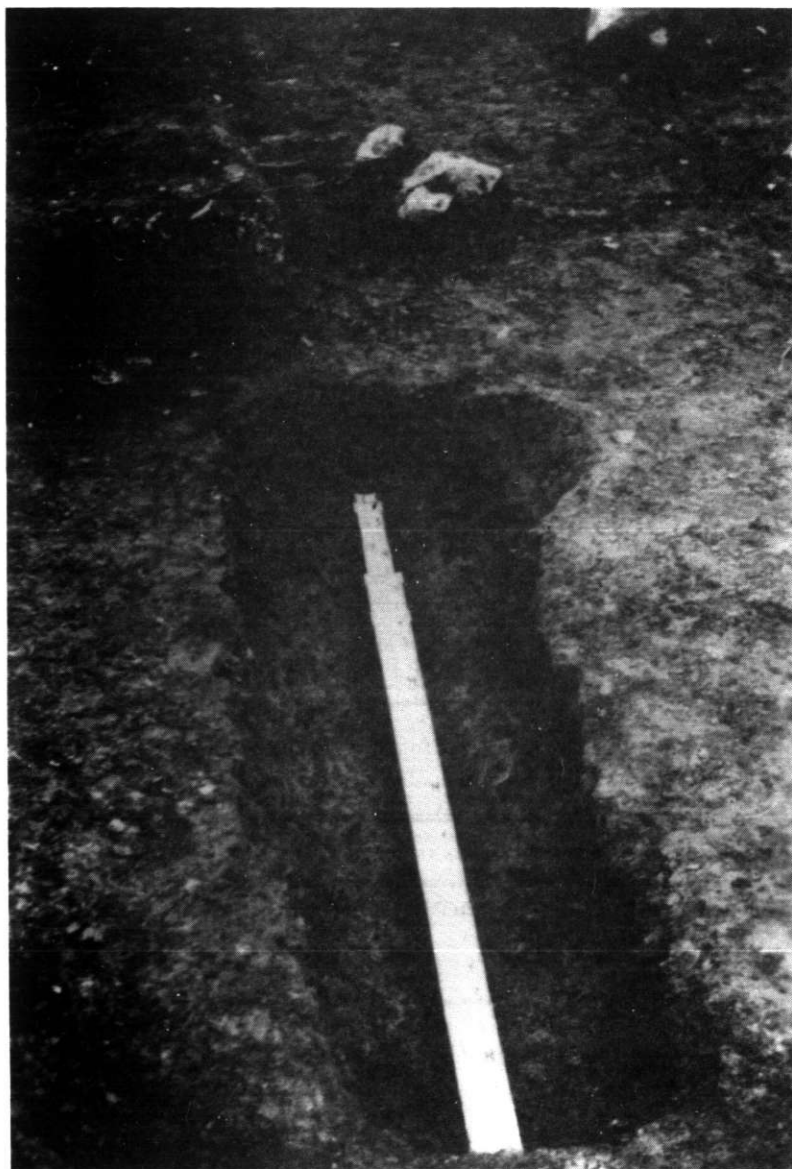


Fig 58C
Site XXIV(16/23) F4 Grave. (Photo CKCA)



Fig 58D
Site XXIV(16/23) Field drain. (Photo CKCA)

Small Finds by Frances Healy

Pottery (Fig 61, Table h)

The illustrated sherds of P3 were selected from eighty-odd sherds collected by Croft Andrew from various disturbed areas of the barrow, all of which he considered to derive from a single burial. This is confirmed by joins between sherds from different locations, and is almost certainly true of the bulk of the collection. P4, however, may represent a second urn because, although it exhibits the same scheme of decoration as P3, both horizontal and oblique cord impressions on it run in opposite directions to those on the other shoulder sherds. P3 and P4 are placed early in the Trevisker series by their cord-impressed decoration, and by the similarity of P3's everted, decorated rim to Food Vessel forms (ApSimon and Greenfield, 1972, 326).

Lithic material Fig 62, Tables c, i)

After site XXVI(22), this site produced the greatest volume of lithic material, which is summarised below.

Table c: worked lithic material

Categories	Beneath mound	Mound & ?mound	Other/ unstrat.	Totals	Drawings
Cores			5	5	
Irregular waste			1	1	
Split pebbles			2	2	
Flakes	2	1	36	39	
Blades			10	10	
Leaf-shaped arrowhead			1	1	L41
Oblique arrowhead		1		1	L40
Scrapers	1		1	2	L39
Straight-edged flake knife			1	1	L42
Misc. retouched piece			1	1	
Holed stone	1			1	L43
Hone frag. (recent)			1	1	
Totals	4	2	59	65	
Drawings	L39, L43	L40	L41-42		

Note on holed stones:

Two holed stones are mentioned in the notebook:

1. (on p. 70, 30 May) – 'little holed slate in SE Quad, measured in at Centre 19' + 4' from S Trench'. This is L43.
2. (on p. 93, 3-7 June) – 'Bed of Lane's holed stone 5.03 in. Now found Centre 6 ft 3½ in. x S 46 ft 7 in.' – apparently in connection with NE quadrant.

Only one holed stone was among the finds from this site, namely L43. It is possible that the second was left *in situ*.

In addition to the above, there exists a slip of paper headed:

Site 23. The pitted and perforated stones at this site are

A	Slate with 1 deep and 1 shallow cup mark	9 x 6½ x 1¾ in.
B	Slate with perforation	6¼ x 6¼ x 1¼ in.
C	Slate shaped with ?waist for cord	6 x 3 in.
D	Slate with paene-perforation	---
E	Slate with large perforation	(3¼ x 2¾) NE quad 14¼ x 8¼ in.
F	Slate (broken) with half of perforation	6¾ x 5½ in.
G	Slate cupmarked (2¾ in dia.) from ditch	6 x 5½ x 1½ in.
H	Slate with perforation, flat in NE quad	---

Stones A, B and C were found in CKCA's absence on 9-12 March 1942.

Stones F, G and H were plotted in and occurred on the NE side of the barrow.

All stones except D and H are marked as being at the home of the excavator, hence presumably their dimensions being recorded.

SITE XXV (17/24)

Summary (Croft Andrew)

A smaller round barrow of similar substance and apparent age . . . like XXIV had been looted, but in far more determined manner . . . At the centre a pit had been driven down into the subsoil, and from its filling nothing was recovered but a small number of quartz stones. Apart from a ritual pit, this site yielded little further evidence.

1942 Excavations

The site was dug concurrently with Site XXIV, as described above. After cutting the main north-south trench (trench E-H) and east-west cross trench, the quadrants were cleared, but to an arbitrary radius of c. 15 ft (4.6 m) only, as shown on the plan (Fig 56).

Post Excavation

The main cross sections have been drawn out (Figs 59 and 60) and a tentative plan reconstructed. From these the following can be deduced:

Site XXV(17/24)

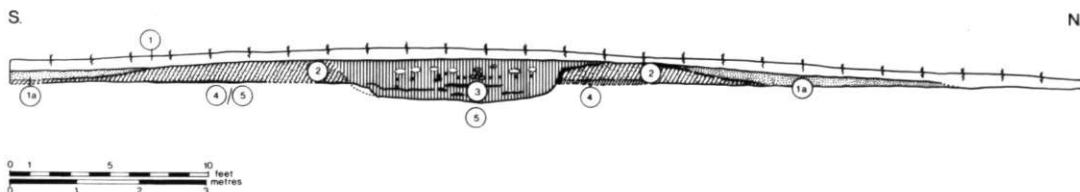


Fig 59

Site XXV(17/24) Section S-N: (1) plough soil; (1a) yellow shilley soil; (2) yellow-grey mound clay; (3) pit fill (mound material over bands of ?turfes); (4) grey clay (?OLS buried turf); (5) yellow shillet with pan over

Mound Except in the main trenches this was not cleared completely to its furthest extent. The construction was similar to other barrows in the group, namely mixed yellow/grey clay (layer 2) interpreted as turfes, and the mound measured 36 ft (11 m) east-west and c. 32 ft (10 m) north-south, according to the section measurements. The west section (Fig 60) shows a small V-shaped pit at the point where the mound ends. The grey clay of the 'old turf' was noted beneath the mound as 'very patchy and irregular throughout' while in the SE a patch of yellow floor indicated possible deturfing in that area.

Site XXV(17/24)

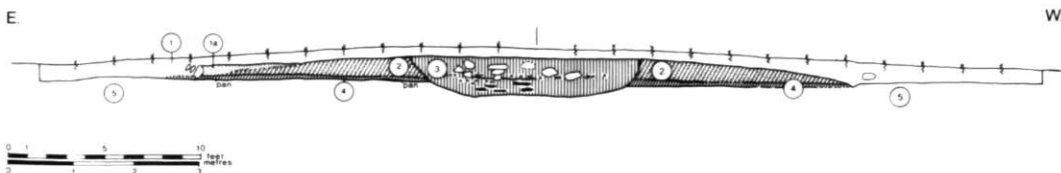


Fig 60

Site XXV(17/24) Section E-W (layers as for Fig 59)

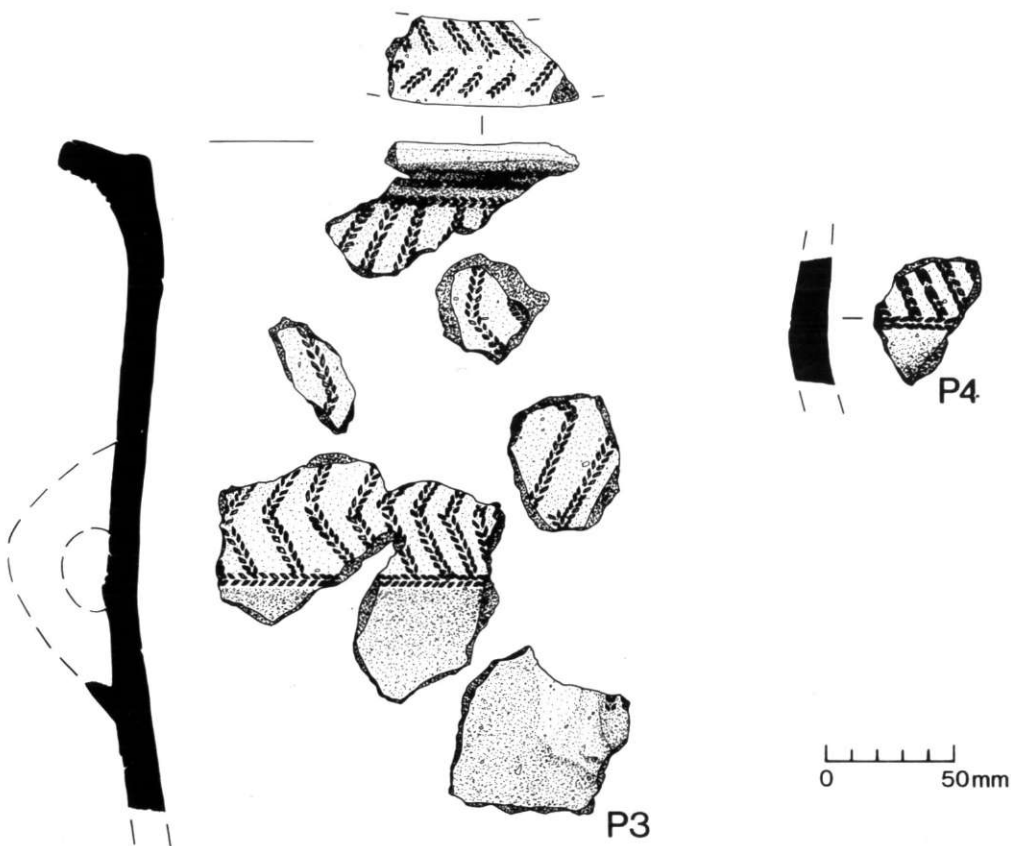


Fig 61

Site XXIV(16/23) Pottery from F 1 and disturbed areas of mound. (1/3). Particulars in Table h. (P3 and P4)

Central pit with stones. A pit 10 ft (3 m) in diameter had been dug through the barrow mound into the shillet subsoil. An upper fill of quartz stones (first believed to be a cairn) overlay the fine charcoal and mixed yellow/brown soil. Below this, bands of grey/brown/ yellow clay filled the base. It was interpreted as a robber pit which had destroyed the central burial. No pot or bone survives, however, and CKCA speculated later in the notes as to whether the barrow mound had been 'used to bury a dead beast or some infected material'. The 'stratified' nature of the clay bands (?turves instead of loose backfill), the layer of charcoal between them, and the continuous upper covering of stones all suggest that this may be the right interpretation rather than a robber pit of the usual kind dug by antiquarians or treasure-hunters.

Pit in NE. This is described as a 'ceremonial pit . . . of subconical section, the lower part only 7 in. across, roughly cut in the loose shillet' to a depth of c. 1 ft (0.3 m). The fill of soil and shillet was 'similar to natural, but stained dark by organic material'. From the measurements it appears to have been fairly regular: 1 ft 10 in. x 2 ft (0.56 x 0.6 m) at the mouth and is well within the covering of the mound, indicating that it may belong to the barrow.

Careful measurements and a sketch section are also given in the notes for a further pit dug in the shillet in the SE. This, however, proved impossible to plot, owing to presumably faulty triangulation. It is not mentioned in CKCA's summary and it may not belong to this site, despite its position in the note-book.

Small Finds by Frances Healy

Lithic material (Fig 63, Table i)

From Site XXV came one core fragment, one blade and a fragment of a large serrated blade (L44), all of flint.

Clay dumped from the mounds of Sites XXIV and XXV yielded one core fragment, one fragment of irregular waste, one flake and one blade, all of flint.

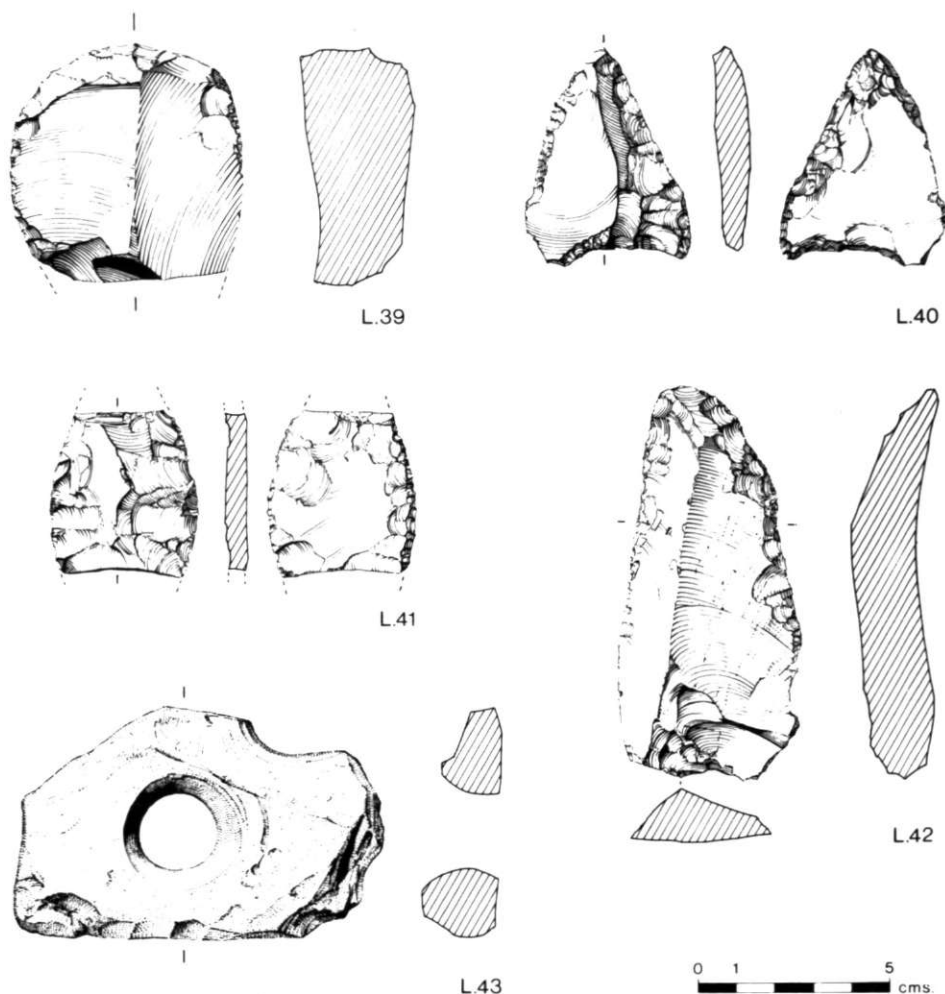


Fig 62

Site XXIV(16/23) Lithic material: L39 and L43 from beneath the mound, L40 probably from the mound, L41-2 from other contexts or unstratified. (L43 2/3, others 1/1). Particulars in Table i

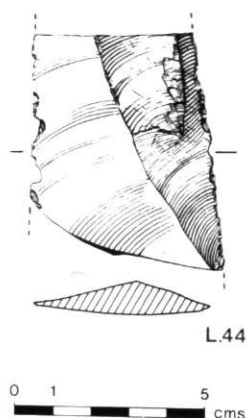


Fig 63

Site XXV(17/24) Fragmentary serrated blade L44 from west trench. (1/1). Particulars in Table i

Report on the Cremation by Sheelagh Stead

This cremation, from Site XXIV, F1, represents one individual, probably an adult. There is no evidence for sex.

Bone fragments identified:

Skull

Teeth: two fragments including a premolar and a molar.

A few cranial fragments, none with serrated edges.

Rest of skeleton

Scapula and unidentifiable long bones

Colour

Creamy white and two blue/black fragments

Size

Skull: largest is 13 x 19 mm

Long bone: longest is 29 mm

Weight

Skull	2
Larger id. and unid.	9
Rest	20
Total	31 grammes

Discussion

Little can be said regarding Site XXV (17/24) beyond the excavator's original comments. The central pit had destroyed any prehistoric evidence there may have been. However, the mound's turf construction and its proximity to site XXIV suggest that they were broadly contemporary. Linked barrows are known, and are a feature of some groups in Wessex (Ashbee, 1986, 71) and elsewhere, as a Site 2, Four Crosses, Powys (Warrilow et al, 1986). In Cornwall they are rare, though the group on Caerloggas Down (Miles, 1975) could be one example.

Site XXIV (16/23), on the other hand, although truncated by ploughing, provided a good deal of material which may be contemporary with the monuments. The site appears to have been, in its final form, a simple, unditched single phase turf mound. It is possible, however, that an earlier phase is represented by a low cairn ring, mainly of quartz, which underlay the mound and surrounded the central charcoal spread (F2) covering a 'ritual pit' (F3). These features were then mounded over, though whether this took place immediately or after a lapse of time is not known. The burial (or burials) associated with early Trevisker pottery was subsequently inserted into the mound, to be dispersed later — presumably by ploughing. The pits (F4 and F5) and post hole (F6) provided no clues as to their function, nor whether they were associated with the barrow, though the excavator implies that F4 may have been intended as a grave.

The barrow lies between Site XXVI(22) on the north and Sites I and III on the south, the lithic material linking it with the former and the Trevisker pottery with the latter. The charcoal sample from F2 has given a date which compares closely with that obtained for Stannon 2 (Harris and Trudgian, 1984) as can be seen in Appendix 3.

SITE XXVI (22) (NGR 142 867)

Introduction and Summary

On 16 March, 1942, CKCA started work on this site, which he described in a letter to O'Neil of the same date as follows:

I am sorry to tell you that there is another proved site at Davidstow — site 22, on Air Ministry Building site No. 4 — the knoll in the field E of Taylor Woodrow's huts, which you visited with me. In my absence (on 10–12 March) Medland put down a pair of cross trenches, which shew an annular ditch, numerous ugly stones — some pitted, cup-marked and perforated — a fair number of flints and some pottery . . . If the thing had been a barrow, cultivation has planed off almost every trace of the superstructure converting it into plough-soil . . . I shall strip the enclosure.

The excavation proved rewarding and his 1942 synopsis contains a long description of the site of which an abbreviated version is given here:

A barrow so grossly mutilated by the farmers as to be detected only by a slight break in the profile of the ridge on which it was situated, at the western edge of field 375, with a ditch averaging 3½ ft in width and diameter 52 ft from North to South and 48 ft from East to West (to centre) . . . Its superstructure, of which only traces remained, was composed of turf and clay, reinforced by at least a broad annular band, and perhaps a massive cairn, of dry stones.

Roughly concentric with the ditch and nine feet inside it there was a retaining circle of smallish stone slabs on edge, socketed in the subsoil . . .

A surprising and perplexing feature was the number of flat stones pitted, perforated or notched by man which appeared to have been deliberately laid out on the floor in a circle concentric with the ditch and retaining ring . . .

Near the centre were found two pits sunk by treasure-hunters, both about 5 ft in diameter and of similar depth. From one I recovered parts of a discarded urn and from the other a fair quantity . . . of bone . . .

Between the centre and the retaining ring on the east I also recovered four sherds from a different vessel . . . These lay beside the site of a small fire, immediately outside which was the ritual pit . . . containing considerable quantities of charcoal.

1942 Excavation

The two trenches were laid out and dug by the foreman, Medland, as described above; the N/S section was measured by CKCA the next day, and the E/W section two days later.

Davidstow Moor

Site XXVI(22)

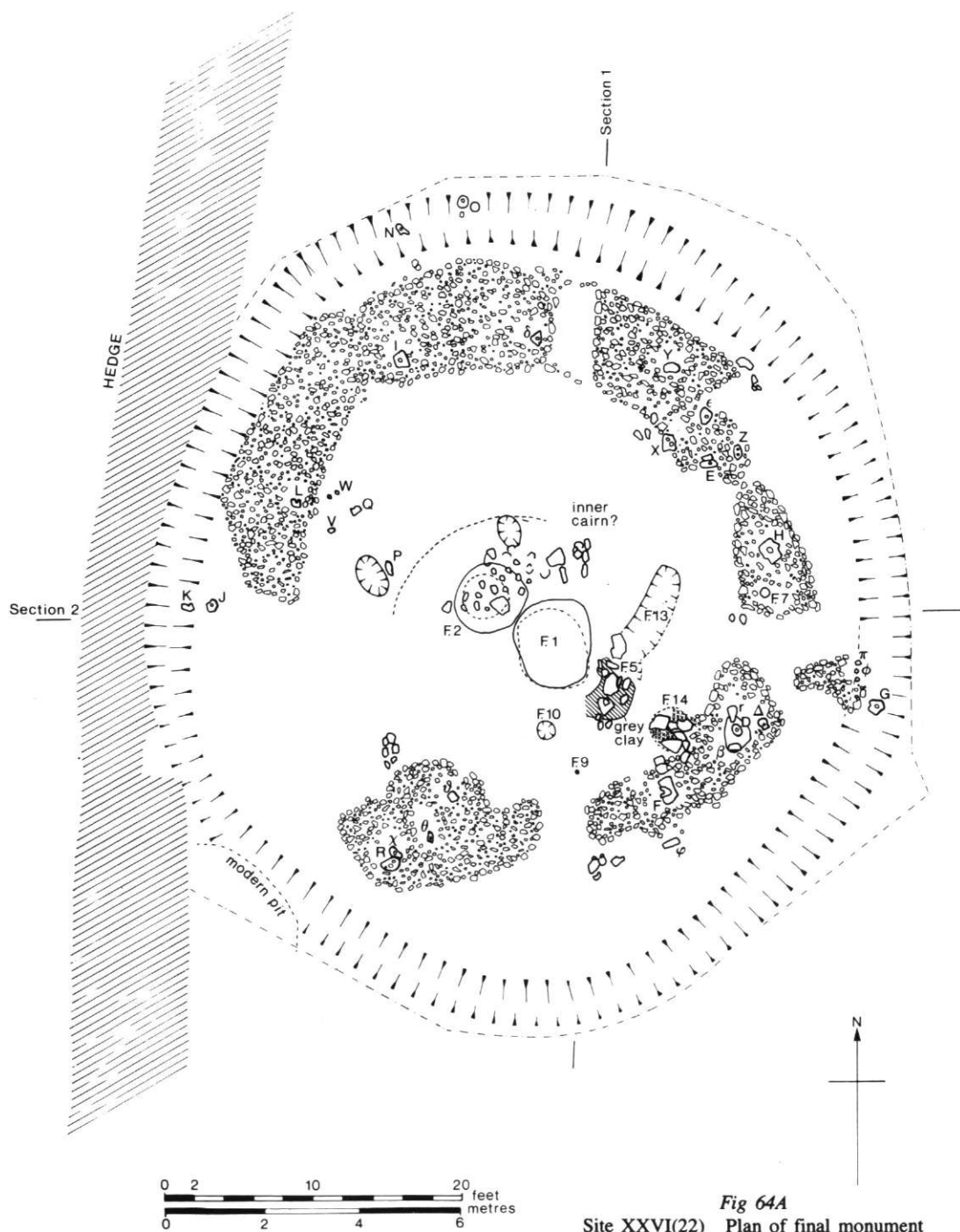


Fig 64A
Site XXVI(22) Plan of final monument

Site XXVI(22)

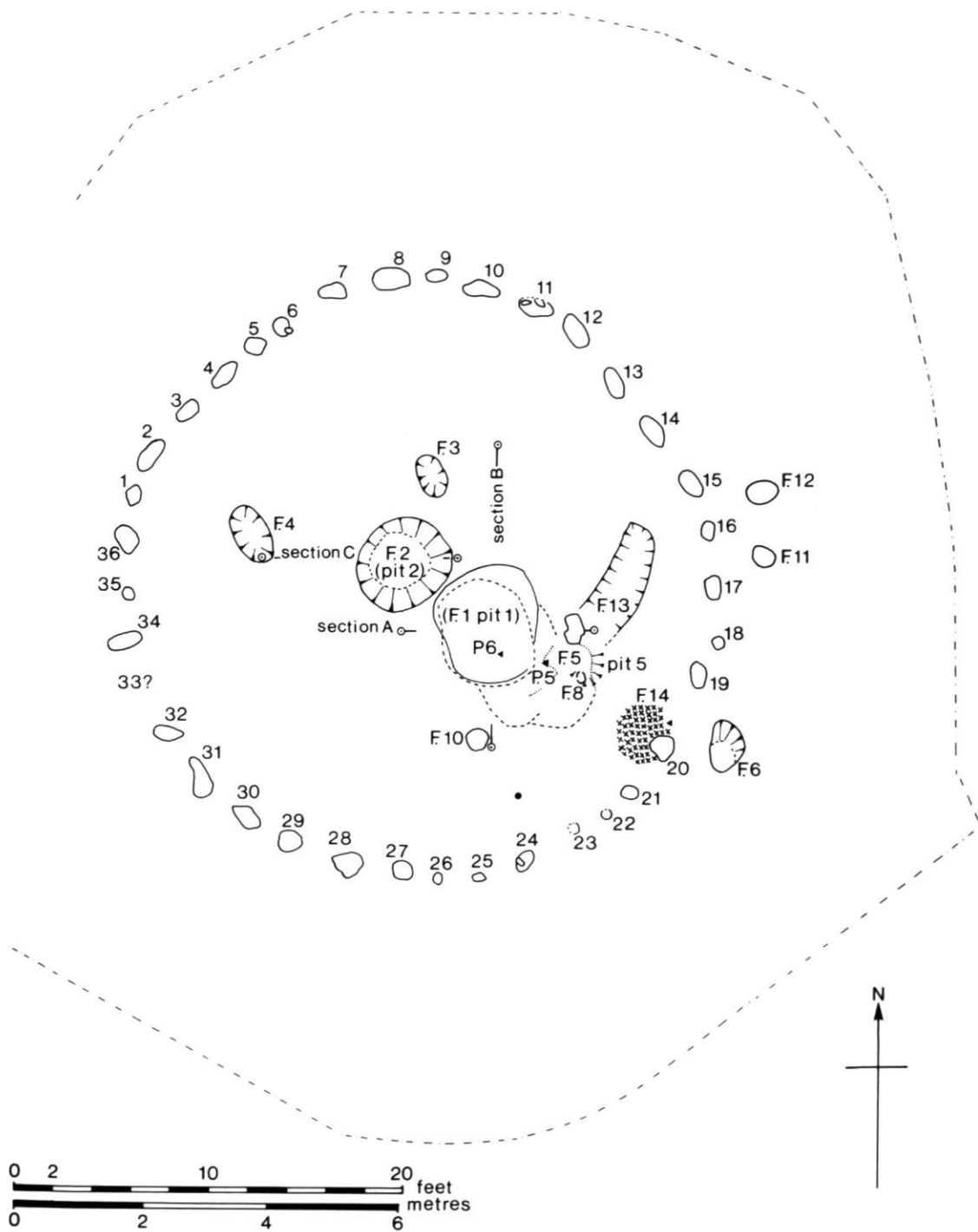


Fig 64B
Site XXVI(22) Plan of early features

Site XXVI(22)

Section 1



Section 2

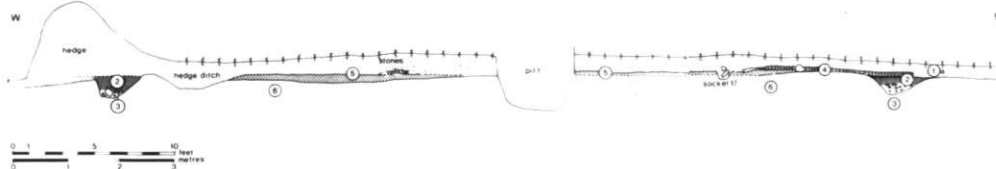


Fig 65

Site XXVI(22) Sections 1 and 2: (1) turf within enclosures; (1a) turf and plough soil over and outside ditch; (2) black upper ditch fill; (3) stony lower ditch fill; (4) black (charcoal) in cairn ring; (5) pale 'floor' clay over shillet; (6) natural shillet

The SE and NE quadrants appear to have been dug next, uncovering the stones piles in the former and the throw out from the robber pit in the latter. The holed stones were all carefully plotted in and given letters. The pits in the centre and features in the SE quadrant near the centre were apparently all excavated before clearance of the cairn ring. The ditch was then plotted, and, finally, the stone sockets. It is far from clear, however, if the barrow was excavated in that order and the stratification near the centre, south-east of Pit 1, is unreliable, especially since the two trenches were dug before CKCA was present. No plan or sections were drawn out, but a sketch with measurements establishing the trench layout and relationship to the hedge exist in the site note-book.

Post Excavation

The finds from this site were disturbed by the vandals who broke into the excavator's house after his death. Fortunately, however, the pottery and the bulk of the lithic material have survived, though the bones from Pit 2 (F2) and much of the charcoal have not.

The two cross sections have been drawn (Fig 65) though the details are totally inadequate and do not correlate with features measured later on in the excavation. Part-sections across

PIT 1

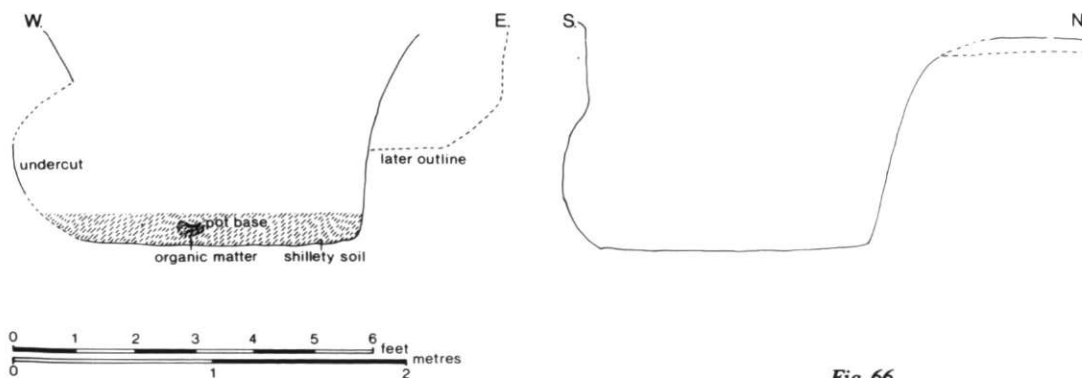


Fig 66

Site XXVI(22) F 1 (Pit 1): Sections A and B

PIT 2

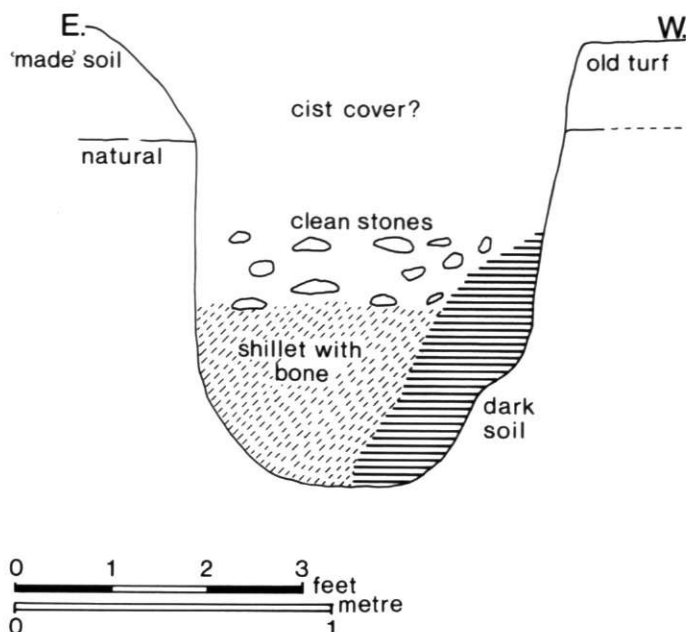


Fig 67
Site XXVI(22) F 2 (Pit 2): Section C

Pits 1 and 2 have also been drawn out (Figs 66–7) and the numerous finds (mainly holed stones) and features on and under the barrow mound have been plotted (Fig 64). In view of the complexity of the site and the inadequacy of much of the record, the accuracy of Figs 64A and 64B cannot be guaranteed. Only a few, rather poor, photographs survive. Much of the record surviving in the note-book is, however, full and detailed and from this, together with the drawings and photographs, the following information can be presented:

Construction

Stone sockets This feature would appear to have been associated with the first constructional phase, enclosing the ritual area. The sockets number 36 in all, though some are noted as 'very poor' or 'trace only'. Despite the reference in the summary, it is not clear from notes or photographs (Fig 68) whether any stones were actually found *in situ* in their sockets. Measurements and details for each socket are as follows:

1. 15 x 10 in. (0.38 x 0.25 m) wide; depth in shillet 4½ in. (115 mm).
2. 22 x 13½ in. (0.56 x 0.34 m) wide; depth 9 in. (228 mm).
3. 18 x 11 in. (0.46 x 0.28 m) wide; depth 8 in. (203 mm).
4. 2 x 1 ft (0.6 x 0.3 m) wide; depth 10¼ in. (260 mm).
5. 11 in. (0.28 m) diameter, circular; depth 6½ in. (165 mm).
6. 1 ft (0.3 m) diameter, circular; depth 8½ in. (216 mm).
7. 17 x 6 in. (0.43 x 0.15 m) wide; depth 8¼ in. (209 mm).

8. 22½ x 11½ in. (0.57 x 0.29 m) wide; depth 11 in. (279 mm).
9. 12½ x 6½ in. (0.32 m x 0.16 m) wide; depth 9¼ in. (235 mm).
10. 20 x 12 in. (0.5 x 0.3 m) wide; depth 8¾ in. (222 mm).
11. 20 x 11 in. (0.5 x 0.28 m) wide; depth 9½ in. (241 mm).
12. 21 x 10 in. (0.53 x 0.25 m) wide (boat shaped); depth 8½ in. (216 mm).
13. 19½ x 11 in. (0.49 x 0.28 m) wide; depth 5½ in. (140 mm).
14. 20 x 8½ in. (0.5 x 0.21 m) wide; depth 6 in. (152 mm).
15. 20 x 11 in. (0.5 x 0.28 m) wide (boat shaped); depth 6½ in. (165 mm).
16. 13 x 6 in. (0.33 x 0.15 m) wide (very poor and rough); depth 5 in. (125 mm).
17. 14 x 6 in. (0.35 x 0.15 m) wide (in E/W section); depth 4 in. (100 mm).
18. 'site only'.
19. 15 x 9½ in. (0.38 x 0.24 m) wide; depth 4½ in. (114 mm).
20. 9½ x 10 in. (0.24 x 0.25 m) wide; depth 4 in. (100 mm).
21. 79 in. (?0.23 m) diameter (little pit in rough shillet); depth 4 in. (100 mm).
22. 8 in. (0.2 m) diameter (site only); depth 4 in. (100 mm).



Fig 68A
Site XXVI(22) Stone sockets. (Photo CKCA)

23. 6 x 5 in. (0.15 x 0.12 m) wide; depth 5½ in. (140 mm) very small and poor.
24. 12 x 7 in. (0.30 x 0.17 m) wide; depth 5½ in. (140 mm).
25. 6 x 3½ in. (0.15 x 0.07 m) wide (trace only).
26. 5 x 6 in. (0.12 x 0.15 m) wide (bottom only).
27. 13 x 10 (0.33 x 0.30 m) wide; depth 4½ in. (114 mm).
28. 19 x 13 in. (0.48 x 0.33 m) wide (bottom only); depth 4½ in. (114 mm).
29. 13 in. (0.33 m) diameter; depth 4 in. (100 mm).
30. 16½ x 11 in. (0.42 x 0.28 m) wide; depth 6 in. (152 mm).
31. 21 x 11–9 in. (0.53 x 0.28–0.23 m) wide; depth 6 in. (152 mm).
32. 18 x 7 in. (0.46 x 0.17 m) wide; depth 3–6 in. (75–152 mm) sloping.
33. Uncertain: a bit in or out of the circle.
34. 20 x 6 in. (0.5 x 0.15 m) wide (bottom only).
35. 6 x 5 in. (0.15 x 0.12 m) wide (trace only).
36. 12 x 10 in (0.3 x 0.25 m) wide; depth 8 in. (203 mm).



Fig 68B

Site XXVI(22) Close-up of socket. (Photo CKCA)

Three further pits, interpreted as possible stone sockets by CKCA were found under Stone H (F12), under Pit 7 (F11) and south of the centre (F10) and will be described below.

While there is no reason to doubt the excavator's interpretation of the holes described above as stone sockets, the lack of evidence that stones were found in any of them makes their function uncertain. It is unlikely that all 36 would have been removed, except as a deliberate act such as remodelling the site, and in view of a probable early phase this is a possibility. The photograph looks convincing (Fig 68) but equally the possibility of the sockets holding posts cannot be ruled out, since these could have decayed (or have been removed), leaving only the packing stones which are visible in the photograph.

Cairn Ring (Fig 70)

This consisted of a rough, irregular ring of small stones, c. 6 ft (1.8 m) wide, surrounding the burial area. The inner limit of the cairn ring appears to have coincided with the circle of stone sockets, except on the west where the cairn stones are shown spilling inside the socket circle. The note-book sketches of the cairn ring in the SE quadrant show signs of a more deliberate 'wall face' between sockets 20 and 19 (which had not yet been discovered), suggesting that the latter were part of the inner retaining wall of the cairn.

The section measurements show little indication of the cairn ring, though the stones noted 7 ft (2 m) south of the ditch in the N section could belong and are therefore shown on the plan, despite their not having been measured-in by the excavator (due to clearance of the barrow floor after the section had been drawn?). In any event, as CKCA observed, little of the superstructure of the barrow remained, and although the presence of a cairn ring is not disputed, its original thickness and extent is not known. It appears to have been continuous except for a gap on the SW, near the hedge (NB: two sockets, 33 and 35, in this gap are also dubious). A layer of charcoal (Fig 65, layer 4) is recorded in the section, but no mention is made of it otherwise.

An integral feature of this cairn ring is provided by the 'pitted, perforated and notched stones' which were found in, under and on the stones of the cairn, though some were displaced further out (i.e. stones G, N and O). CKCA mentioned some 40 stones in all, of which 34 survive; most of these were sketched in the note-book, given letters, and their position measured. As far as possible, these have been plotted on the plan (Fig 64). A selection of these stones is described and illustrated in the report on the lithic material by Frances Healy below. CKCA's lettering starts from D. It has not always been possible to relate the note-book sketches to the surviving stones, many of which bear no letters. Greek characters identify twelve of the excavated stones. For technical reasons the Greek letters have been replaced by BB, CC, DD etc.

Stone	Area	Position
D	SE quad	in cairn over Pit 6
E	NE quad	?
F	SE quad	on cairn
G	SE quad	in ditch fill — displaced
H	NE quad	under cairn on ?OLS — overlay
I	NW quad	displaced — under turf
J	W section	on hedger's ditch under turf — displaced
K	W section	under root of hedge
L	NW quad	over socket 2 ?in cairn
M	NW quad	in/under cairn?

N	NW quad	displaced — over ditch
O	NW quad	displaced — over ditch
P	NW quad	?
Q	NW quad	?
R	SW quad	?
S)		
T)—		in pit F2. T is a holed stone
U)		
V	NW quad	?
W	NW quad	?
X	NE quad	in situ
Y	NE quad	in situ in peaty soil among stones (‘Face stone’) Fig 78, L77
Z	NE quad	in cairn
BB	SE quad	in cairn over Pit 6
CC	SE quad	in cairn over Pit 6
DD	SE quad	in cairn N of Pit 6
EE	SE quad	near E trench
FF	SE quad	1 ft (0.3 m) S of stone EE
GG	NE quad	in cairn
HH	SW quad	in cairn
II	SW quad	in cairn
JJ	SW quad	in cairn? under stone R
KK	NW quad	in cairn (unlettered by CKCA)
LL	SE quad	‘under big quartz stone N of fire’
MM	SE quad	micaceous shist

Ditch

This seems from the notes and measurements to have been totally excavated, even beneath the hedge on the west, and proved to be continuous with no sign of a causeway. It was shallow, nowhere more than 2 ft (0.6 m) deep and, judging from the photograph (Fig 69), had a rounded or bowl-shaped base. The upper edges were much eroded on both sides and ‘very ill-defined in the shillet’. The filling consisted of a black upper layer (layer 2) and a lower stony layer (layer 3). Stones were noted as choking the ditch in the south section. Since there was no causeway across it, the ditch was presumably dug last, and the material used to augment the cairn ring and (possibly) to seal the burial enclosure.

Mound

Very little information exists concerning the mound within the cairn ring. CKCA refers to it as a ‘turf-and-clay mixture’ but the section measurements give no indication of the material. No mention is made of an old turf (unlike most other Davidstow sites) and only a pale ‘greyish clay floor’ 1 in. (25 mm) thick is noted, over the natural shillet. (This may represent the A-horizon of a soil from which the organic layer has been removed, though without the appropriate soil samples this cannot be proved.) On the west ‘a mound of yellow over the clay floor’ is mentioned (see F15 below). This coincides with the dump of yellow believed by CKCA to have been thrown out in recent times by the ‘treasure hunters’ digging into pit 1 and covering pit 2. It is not certain, therefore, to what extent the area enclosed by the cairn ring was actually mounded over.



Fig 69

Site XXVI(22) Ditch on SW (staff indicates recent disturbances). (Photo CKCA)

Features within the enclosure

F1 *Pit with pot* (Fig 66)

CKCA describes this pit (and pit 2) as having been 'sunk by treasure hunters'. In fact, according to his description and section measurements across it, although the upper part had been damaged, the lower part appears not to have been too badly disturbed. The base of P6 was found 'lying upright but shattered and telescoped by pressure of the surrounding and super-incumbent shilley subsoil. Under and outside the base was a marked coating of brown, peaty matter as though the urn had had some sort of organic coating when buried'. He also notes that a few fragments of bone and a fair quantity of charcoal (none of which has survived) — some of it within the pot base — were associated with the pot, which was in a bad 'mushy' state and difficult to remove.

F2 *(Pit 2) Pit with bones*

This pit was covered by the 'yellow subsoil and stones obviously thrown out from digging pit 1'. It was excavated by Medland who found two large slate slabs measuring 3 x 3 ft (0.9 x 0.9 m) and 2 ft 6 in. x 2 ft 1 in. (0.46 x 0.63 m) respectively. Further big stones were

found, in particular a quartz lump of $\frac{3}{4}$ cwt (38 kg) and two smaller stones, which led the excavator to wonder whether there had been a cist. Beneath the slate slabs and the 'clean stones' were fragments of bone and charcoal, mixed with 'broken clean subsoil and shillet' as well as two or three flints, a holed stone and a notched stone. The latter were given letters like those found associated with the cairn ring (see above) and the holed stone T has been identified. Stones S and U, however, cannot be traced, though one of them must be the notched stone referred to; nor can the bones, which are presumed to have been burnt (though the fact is not recorded).

F3 (*Pit 3*)

This pit in the NW quadrant is recorded as measuring 17 x 27 in. (0.4 x 0.68 m) wide and 6–8 in. (150 x 203 mm) deep. No details are given as to its filling.

F4 (*Pit 4*)

This large pit on the west measured 2 ft 2 in. x 2 ft 10 in. (0.66 x 0.86 m) and 9½ in. (241 mm) deep, with a 'bowl' base. Like Pit 3, no other details are given.

F5 *Stone pile, grey clay and pit*

Beneath a stone pile containing quartz and slate near the centre, was a patch of grey clay over which was a streak of yellow subsoil. From the levels noted a few inches of yellow may have



Fig 70

Site XXVI(22) General view from NW, showing Pits 1 and 2 in foreground and cairn ring beyond
(Photo CKCA)

occurred between the base of the stones and the grey clay. CKCA remarks that the clay 'might be old turf' and that it is 1-1½ in. (25-38 mm) thick, rather irregular, with a little small charcoal in it. Near the centre of the patch was a shallow depression (F8) interpreted as a possible posthole. It seems more likely, however, that this was part of a pit not fully revealed (Pit 5), possibly due to the fact that the E baulk was not cleared, and is described as 'a small pit lined with charcoal with a depressed roof of floor clay'. On drawing out the plan, it can be seen that this pit lay beneath the shallow depression (F8) and also the grey clay. About 5 in. (125 mm) beneath the surface of the grey clay, on the west edge of the patch, the position of potsherds is recorded (P5) which prove to be of Late Neolithic Grooved ware.

F6 (Pit 6)

Described as the 'ceremonial pit', this measured 2 ft 6 in. x 2 ft (0.76 x 0.6 m) and 18 in. (0.46 m) deep at its S end, with vertical sides on the west. The top fill was of dun-coloured 'floor clay' and 'charcoal all the way down but especially thick down the sides of the pit'. From this description and shape it would appear likely that this feature was a large posthole. On drawing out the plan, it can be seen that it was overlain by stones D, BB and CC. A charcoal sample from this pit has returned a date of 4130±70 BP (HAR-6643).

F7 (Pit 7)

A small pit containing charcoal, in the NE quadrant, is seen on drawing out the plan to overlie F11 below. No dimensions are given.

F8 This *shallow depression*, in the grey clay of F5 above, measured 5 x 6½ in. (125 x 165 mm) and overlay pit 5.

F9 Stakehole in S trench. A very faded photograph exists of what is presumed to be this feature, described in the note-book as follows: 'For 19 in. up from the bottom it is a very slender cone, then widens more rapidly. Width at bottom = ¾ in. Width at 19 in. up = 2½ in'. It was identified early in the excavation in the S trench and noted as 4½ in. in front of the section where the diameter was '4½ in. in the orange shillet'.

F10 (Pit 10)

A pit in the SW quadrant measured c. 15 in. (0.38 m) diameter and was apparently 'filled with grey clay'. It was thought to be a possible stone socket.

F11 Hollow in the NE quadrant measuring 14 in. x 18 in. (0.35 x 0.46 m) and 4½-8 in. (114-203 mm) deep was interpreted as a possible stone socket. It appears to have lain beneath Pit 7 above, though no mention is made in the notes of these two pits as coinciding. It would seem likely that they represent the same feature, possibly a post rather than a stone-socket.

F12 Hollow in NE quadrant, beneath Stone H. This measured 17 x 12 in. (0.43 x 0.3 m) and 8½ in. (215 mm) deep. Like F11, it was interpreted as a stone socket.

F13 'Trough' in NE quadrant. This feature, also described as a 'palisade trench', contained charcoal and discoloured soil and measured nearly 5 ft (1.5 m) long. At its SE end it was 2 ft (0.6 m) wide, but only 11 in. (279 mm) wide at the NE end. It is recorded in the notes

that 'at the E section this trough is 18 in. deep' though no mention is made of it in the original section measurements. It was discovered late in the excavations, presumably when the clay floor was removed. The proximity of this feature to Pit 5 suggests that the two may have been associated, or may even have been the same feature, both covered with the clay floor. The charcoal from this feature gave a sample of 4 grams of carbonised bark, possibly oak.

F14 *Fire on SE*

On 23 March a group of stones was plotted, and later the same day a 'fire site' was plotted in the same position. This is described as a 'patch of shillet burnt red with charcoal and fine clayey ash on it. It is overlaid by floor clay'. No mention is made of the stones which overlay it also, though from the levels given no more than 1½ in. (38 mm) separated the base of the stones from the black surface of the fire. However, Socket 20, which can be seen in Fig 64B to impinge on the SE side of the burnt area, is mentioned as being 'in fire'. Three possible Bronze Age potsherds together with a fourth from a different pot (not illustrated) were found beside this fire at the level of the burning, just north of Socket 20.

F16 *Stones and yellow material in NW quadrant*

A dump of yellow subsoil and stones, shown as a regular arc in the notebook sketch, is interpreted as the throw-out from Pit 1, presumably left by the treasure hunters. On clearing this dump, which is described as lying on the floor of the barrow, Pit 2 was discovered and the excavator therefore concluded that this was dug before Pit 1, i.e. (presumably) robbed before Pit 1, since it was covered with the material thrown out from the latter. No details of the extent of this dump are given, though the yellow noted beneath the stones in F5 above may represent its extension to the south and east. Also connected may be the stones shown in the north section (Fig 64A) near the centre and described in the section measurements as 'inner ring wall', though no further mention is made of any such feature. As mentioned above (see Mound), it seems possible that a low central cairn may originally have been present over the Pits 1 and 2 before their disturbance.

The Small Finds by Frances Healy

Pottery (Fig 71, Table h)

P5 consists of three sherds (one unillustrated) lifted in a lump of clay from near the centre of the barrow. The clay, which also contained flecks of charcoal and small fragments of stone, may have formed part of the old land surface. The sherds are of Grooved Ware, perhaps of the Durrington Walls sub-style. Their combination of horizontal grooving and rows of triangular impressions is matched on sherds from Woodhenge, Wiltshire (Longworth, 1979, Fig 54: P344) and, less closely, on a pot from Durrington Walls itself (Wainwright and Longworth, 1971, Fig 49: P222). The southern variants of Grooved Ware, including the Durrington Walls sub-style, seem to have been made from the mid-third to the mid-second millennium BC (uncal) and to have been most widely used in the middle centuries of this period (Healy, 1984, 112).

The sherds of P6 were recovered from Pit 1 (F1). So much of the pot remains that it must have been complete until disturbed, only the upper part being much damaged. It is described by Croft Andrew in his 1942 synopsis: 'A lightly moulded base is in evidence, with some well turned contours on the wall, but the rim is in doubt. The conception of the form far outstrips the execrable potting and the plentiful but infantile ornament of scored chevrons and horizontal lines'. More prosaically, it may be classed as a Late Beaker of Clarke's (1970) Final Southern group or Lanting's and Van der Waals' (1972) step 7. Its slack profile and

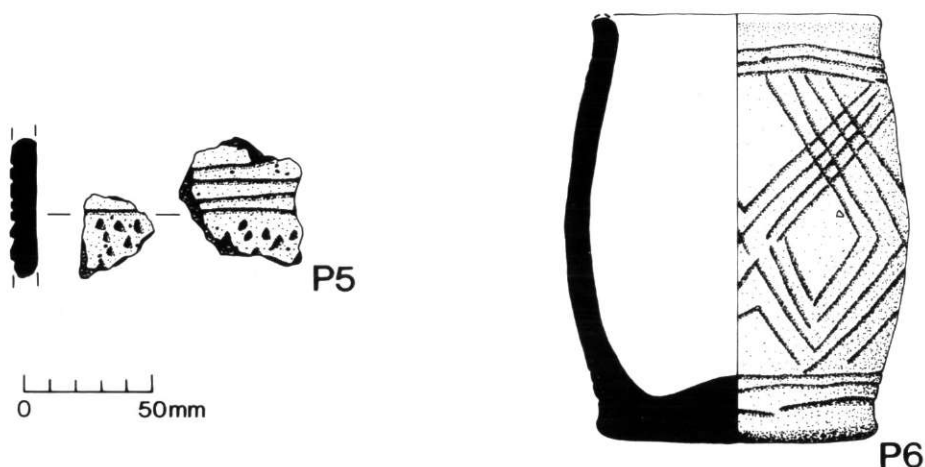


Fig 71

Site XXVI(22) Pottery: P5 from grey clay near centre (?OLS); P6 from pit (F 1) near centre. (1/3). Particulars in Table h

bold, unzoned lozenge decoration are matched in a complete beaker from Wilsford, Wiltshire (Clarke, 1970, Fig 1036). On present evidence, a date in the period c. 1600–1450 BC (uncal) (c. 1900–1750 BC (cal) seems likely (Burgess, 1980, 68).

At least two further pots are represented by plain body sherds of different fabrics to those of P5 and P6. There are three stone-tempered sherds and one grogged sherd from the south-east quadrant found beside the fire (F14) and single, stone-tempered sherds from the south trench 'turf deep' and from the north-east quadrant 'in the floor clay immed. over shillet'.

Lithic material (Figs 72–80, Tables d, i)

This site was by far the most productive of lithic material, which is summarised below.

The holed stones and related pieces came mainly from the old land surface, as described above. A slate disc (L77) which formed part of the stone ring is pecked and incised with a rough representation of a human face, perhaps with a moustache.

Most of the other stones are holed, generally from both faces. It is difficult to tell if those described by Croft Andrew as 'notched' (e.g. L79–82, L84, L86) were originally intended to be so, or whether they simply broke across perforations during or after manufacture. Breakage seems likely in the case of L82, where trimming does not extend completely around the notched edge. Four are cupped rather than holed, two from one face, the other two (e.g. L83) from both. They are listed as unstratified in Table d because it is generally impossible to tell which were those plotted in the stone ring. (The list above gives details where possible).

L75, from outside the stone ring in the south-east quadrant, is most easily seen as part of a stone vessel. A dark deposit on its inner surface and rim bevel is superficially similar to that on some urns, including P3 from Site XXIV (16/23). It appears to have been found with a fragment of clay pipe stem, and its date is uncertain. L76 is also of uncertain date and context. Its straight, battered end suggests that it was used as a hammer or pestle; oblique striations may also indicate use as a hone.

Table d: worked lithic material from Site XXVI (22)

Categories	?beneath mound	Nr. fire	Stone pile in NE quad.	Other/ unstrat.	Totals	Drawings
Cores				8	8	L47-51
Irregular waste				10	10	
Split pebbles				5	5	
Flakes		1	1	131	133	L52
Blades			1	26	27	L53-55
Leaf-shaped arrowhead	1				1	L45
Oblique arrowheads				2	2	L56-57
Scrapers		1		11	12	L46, L58-67
Borers				3	3	L68-70
Serrated piece				1	1	L71
Truncated piece				1	1	L72
Misc. retouched pieces				9	9	L73
Pebble tool				1	1	L74
?stone vessel				1	1	L75
Stone hammer or pestle				1	1	L76
Slate discs				2	2	L77-78
Holed and cupped stones				33	33	L79-86
?roof slate				1	1	
Totals	1	2	2	246	251	
Drawings	L45	L46		L47-86		

Discussion

Despite its 'gross mutilation' this northernmost of the sites examined proved to be the most interesting. In its final form it would probably have appeared as a platform cairn, possibly with a central mound similar to Colliford IVA (Griffith, 1984, 67-72), though at Davidstow the outer cairn ring was wider and evidence for the inner cairn is minimal. A closer analogy may be with Tregulland (Ashbee, 1958) where a cairn ring and ditch succeeded a stake circle of an earlier phase, linking it here with the sockets from which the stones or posts must have been withdrawn before the building of the cairn ring. The site was so badly damaged that the coincidence of sockets and the inner limit of the cairn ring cannot be established. However, if they did coincide, then this would represent an internal revetment either in timber or in stone. If the former, the lack of surviving stones and the spilling inward of the cairn ring is more easily explained.

The monument clearly spanned several centuries, with different phases of activity. It should be possible to assign certain features to these phases, and the following sequence is tentatively suggested, bearing in mind the damage to the site and the limited data available after more than 40 years:

Phase 1 - Late Neolithic

Evidence for this earliest activity on the site comes from the pottery (P5) and the charcoal from F6, which has given a date in the late third millennium BC (uncal). This charcoal-filled

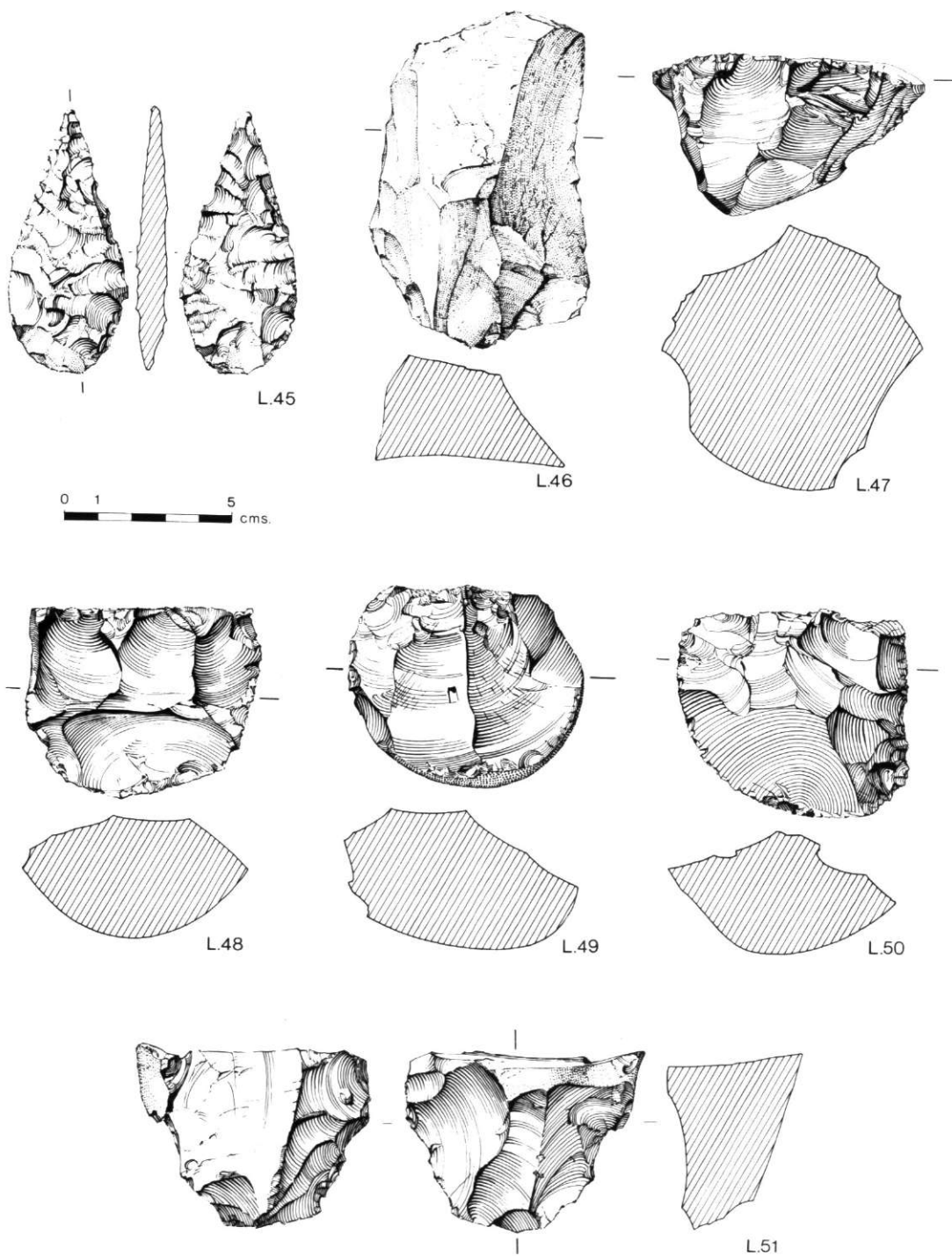


Fig 72

Site XXVI(22) Lithic material: L45 perhaps from the old land surface, L46 from 'near fire', L47–51 from other contexts. (1/1). Particulars in Table i

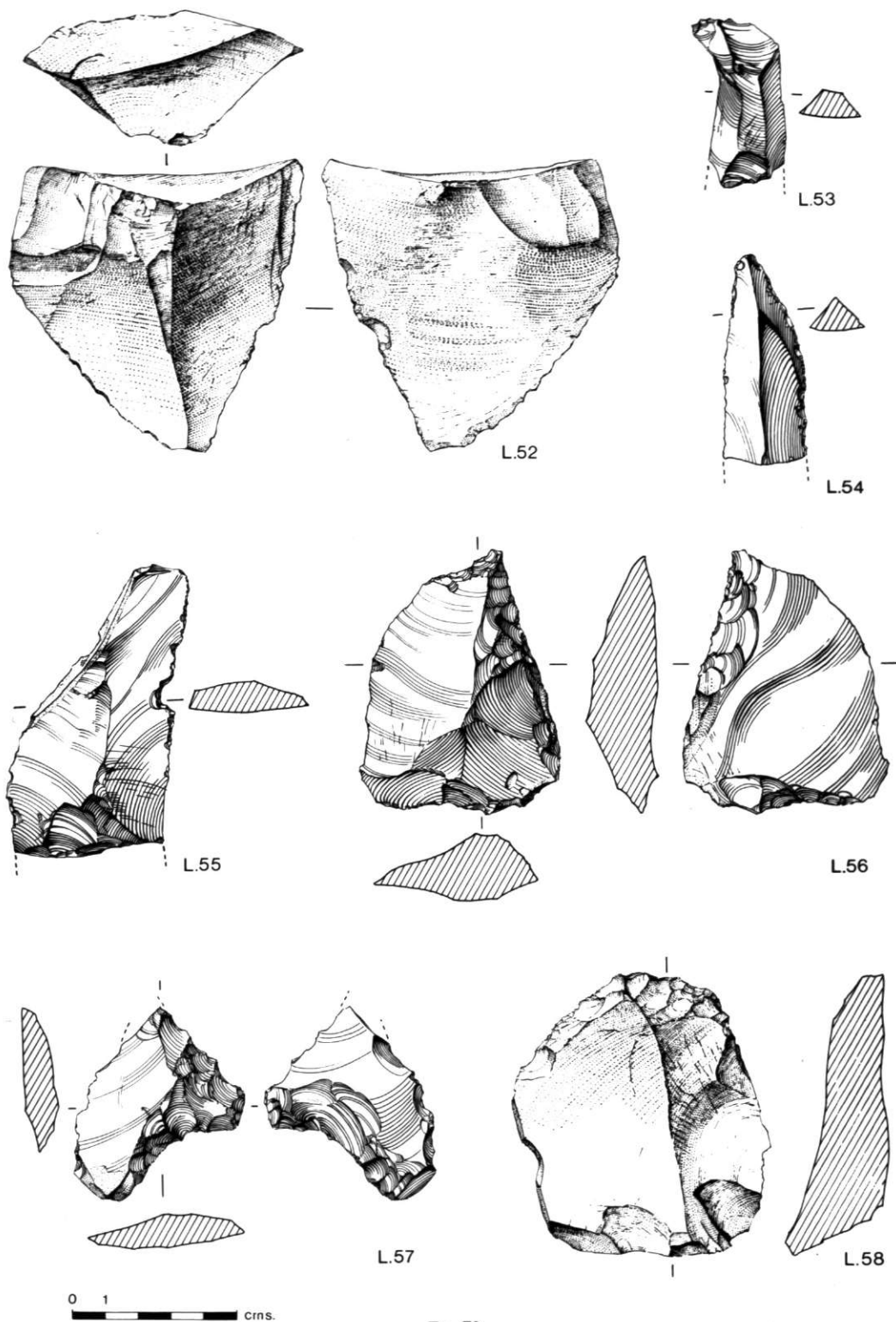


Fig 73

Site XXVI(22) Lithic material, various contexts. (1/1). Particulars in Table i

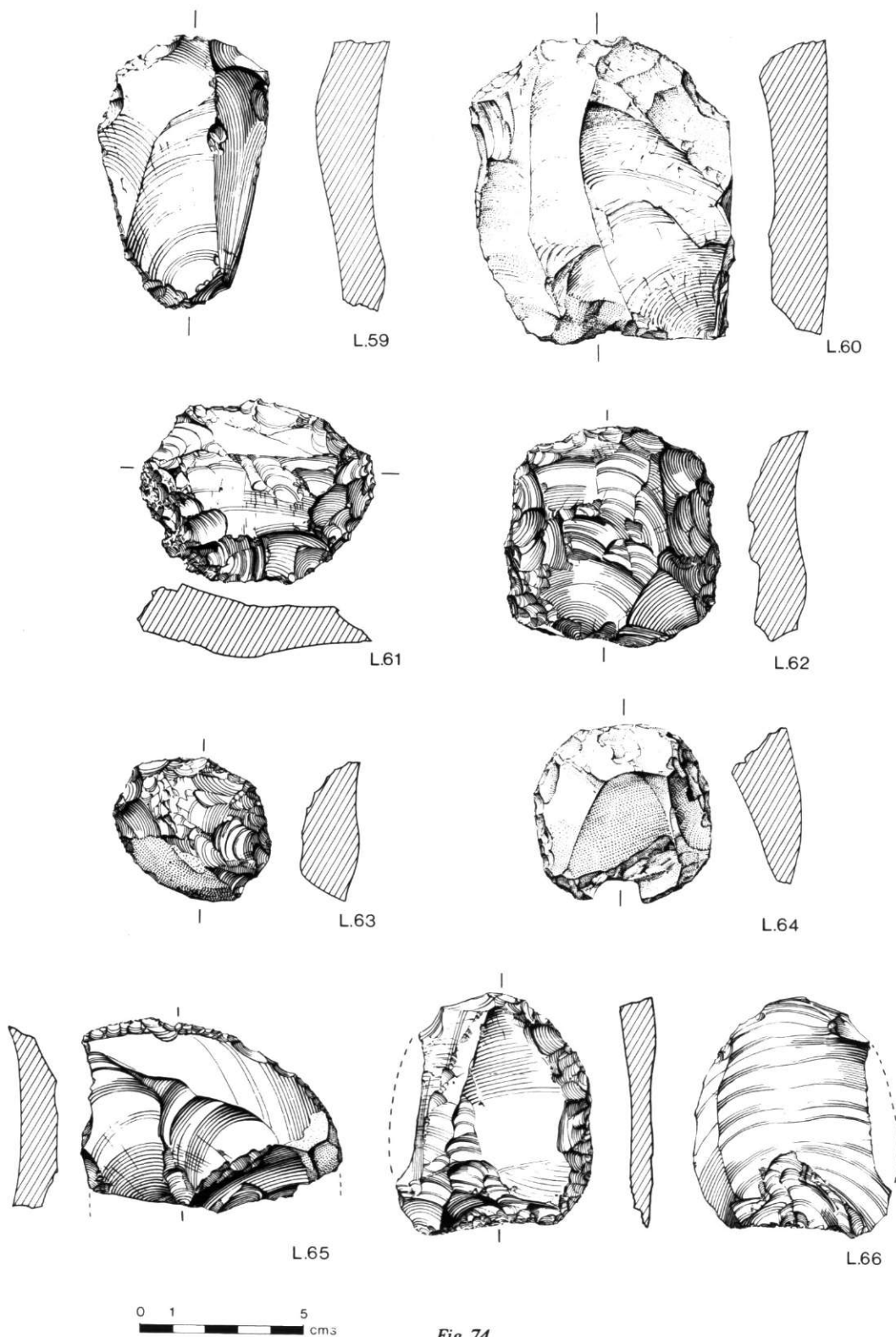


Fig 74
 Site XXVI(22) Lithic material, various contexts and unstratified. (1/1). Particulars in Table i

pit or post hole was covered by the cairn ring and therefore preceded it. No other features can with certainty be assigned to this phase, though F8, F13 and the stones and grey clay of F5 may also belong. The two oblique arrowheads, (L56–57), may also fall within this phase, as may most of the worked flint and chert recovered from the site.

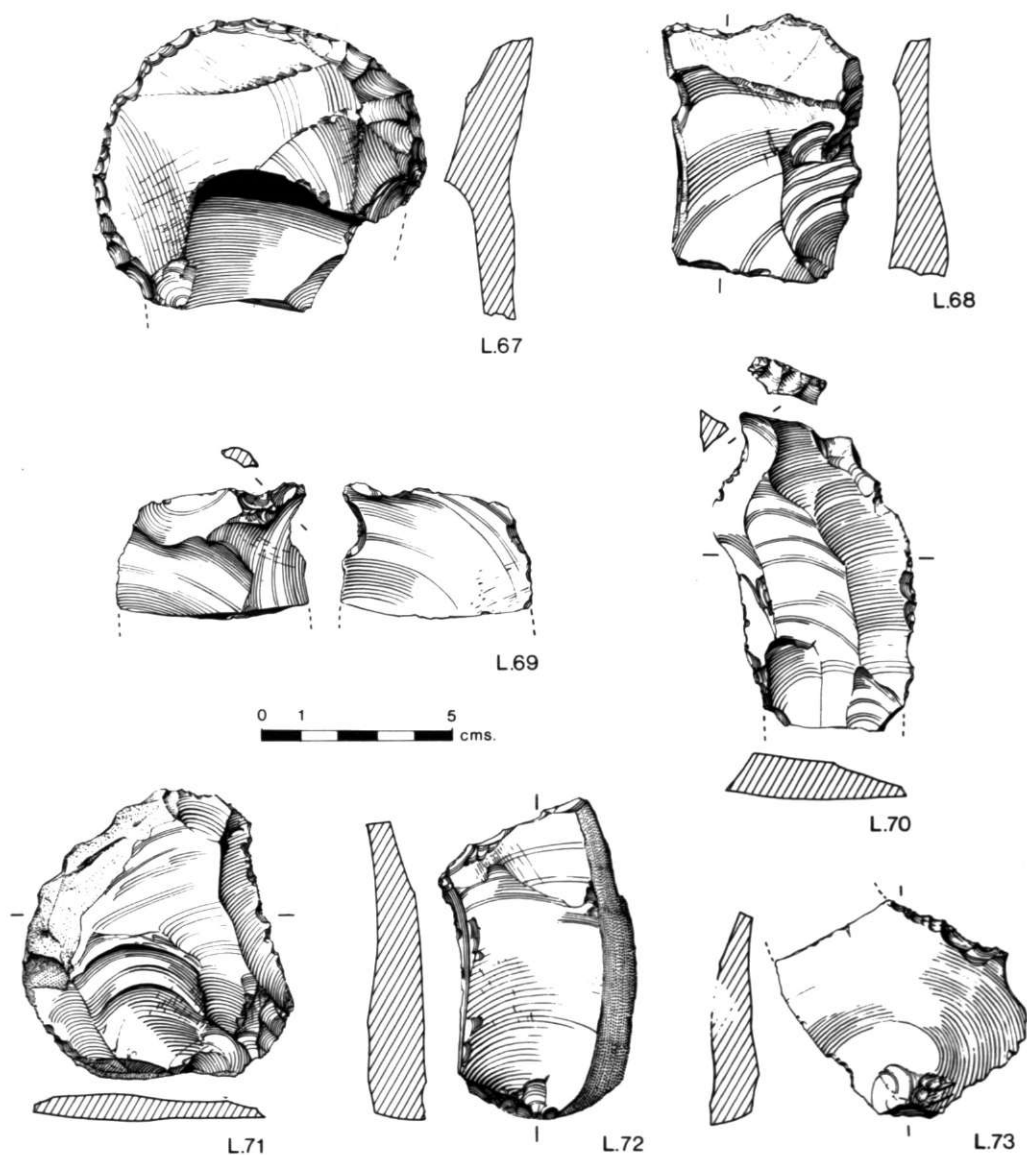


Fig 75

Site XXVI(22) Lithic material, various contexts and unstratified. (1/1). Particulars in Table i

Phase 2 – Late Neolithic/Early Bronze Age (?)

Pit 2 (F2) and the stone sockets should belong to this phase. The pit is central within the circle of sockets; the large slabs and ?burnt bones from the pit indicate burial in a stone-lined cist, though in the absence of the bones it is not possible to establish whether more than one individual was interred. The holed stone (T) found in the pit links it with the holed stones placed round the central area, which should also belong to this phase. The near-correspondence between the number of sockets (36) and the number of holed and notched stones (33–40) is interesting and suggests their contemporaneity.

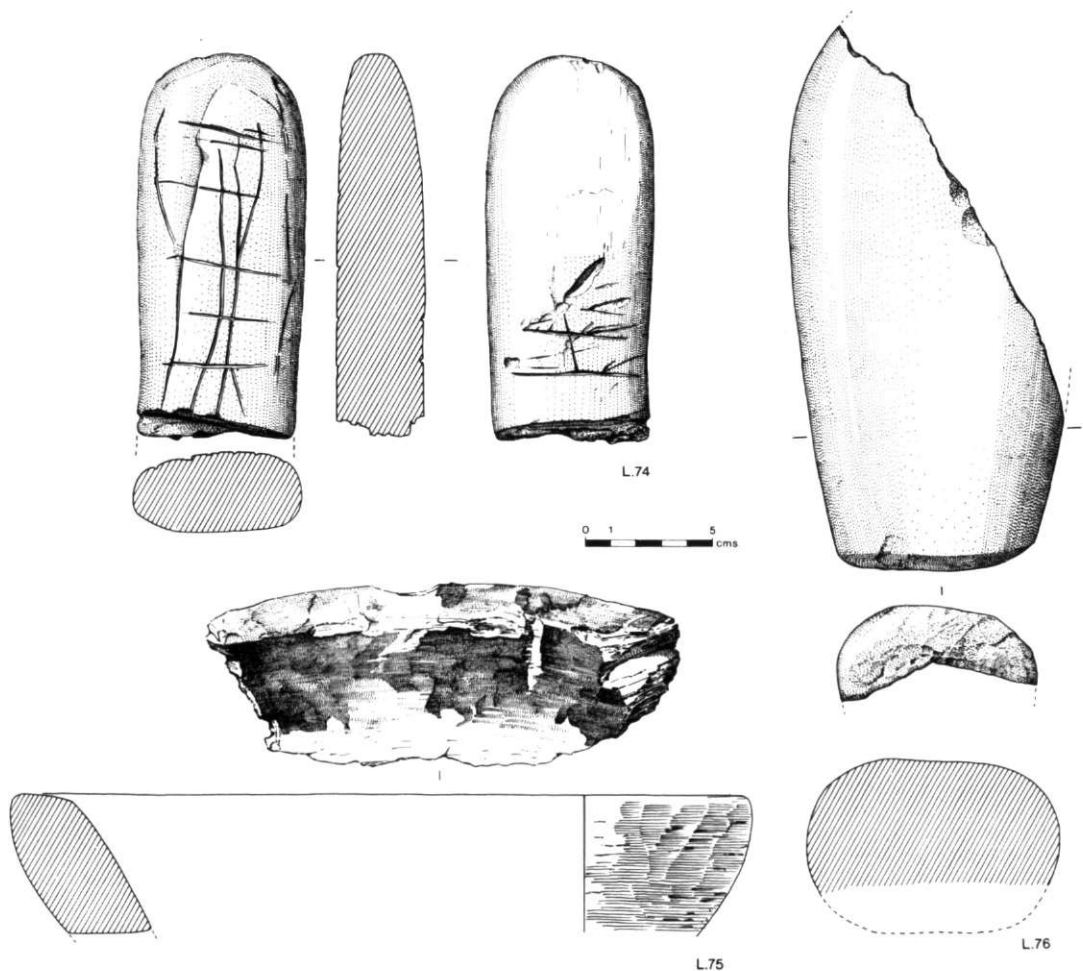


Fig 77

Site XXVI(22) Incised pebble tool (L74), slate vessel (L75) and hammer or pestle (L76): various contexts and unstratified. (2/3). Particulars in Table i

This phase may have constituted a time when the monument was a ritual area, enclosed by a free-standing stone or timber circle, to which access was periodically made through an entrance on the south-west. The sockets either side of socket 34 were extremely faint, while 34 itself could represent a gate post. The cairn ring may have been built to incorporate a free-standing circle as an inner revetment, still with an entrance on the south-west, towards the end of the phase. The holed and notched stones were found on the barrow floor, but also in and on the cairn ring. While this may be due to later disturbance, their deposition should correspond with, or precede the construction of the cairn ring.

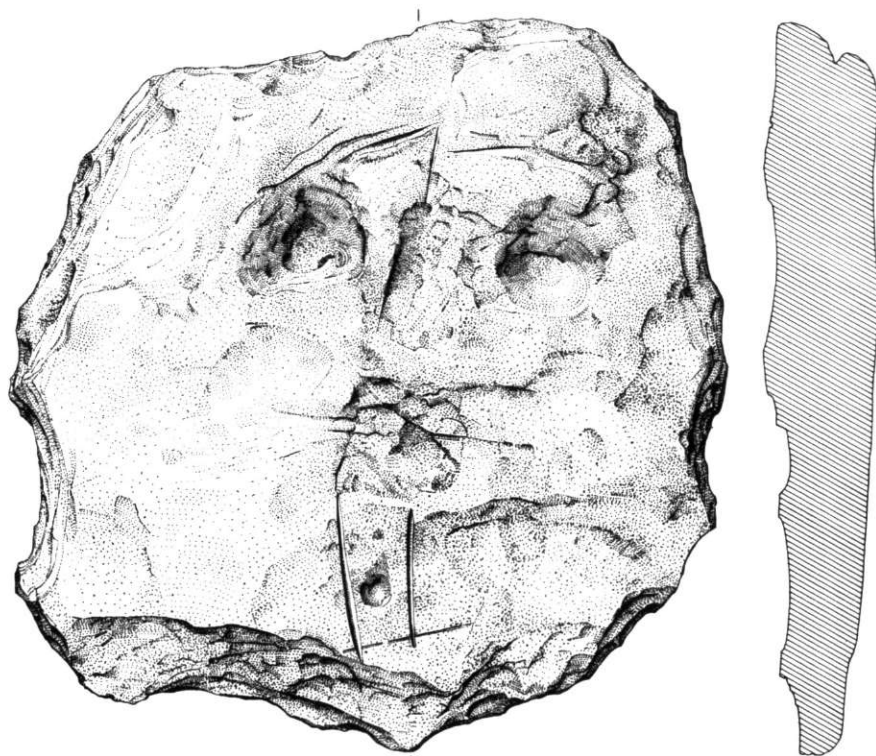
Phase 3 – Early Bronze Age

This is associated with Pit 1 containing the late Beaker burial (?), possibly the cairn ring, if not already built, the ditch and the mound over all. Some of the upcast from the digging of Pit 1 appears to have covered the Phase 2 cist, which may have been disturbed at this time. Since the yellow material (F15) lay directly on the barrow floor, it seems probable that it derived from the *original* digging of Pit 1, and formed the base of an inner central mound integral to the barrow, rather than solely the remains of a later disturbance; though the latter had of course confused the situation before CKCA's work began. The final form of the monument would probably fall into the platform cairn class, but with a ditch.

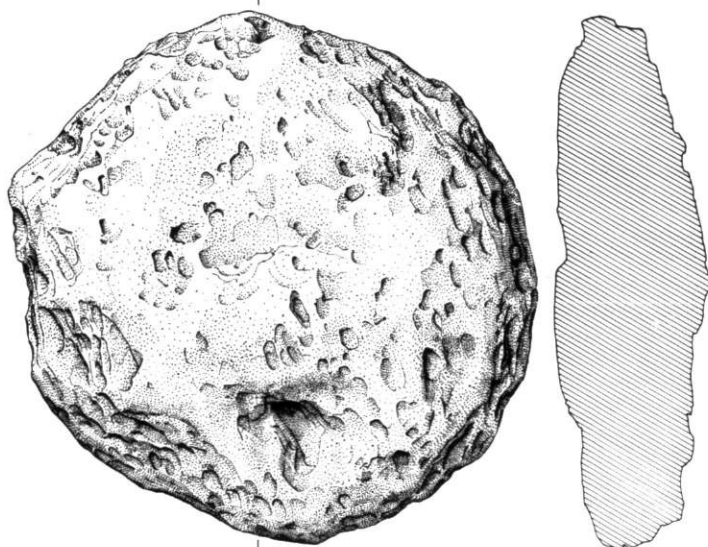
Little can be deduced concerning the ritual or burial of the earliest phase. The association in Phase 2 of a circle with the holed and notched stones strongly suggests the concept of a burial or burials within a house-like structure, symbolic in that the thatch roof-weights, if that is what they were, may have been re-used and did not weigh down an actual roof. If they belong in Phase 2, when the enclosed area may have been accessible, it is possible to envisage visits, over a short or longer period of time, by relatives bringing token roof weights to prepare the 'house' for the after-life of the deceased.

The time lag between phases 2 and 3 may have been brief, but a considerable remodelling and ?change of use is implied by the total removal of the stone/timber circle, the digging of a continuous ditch, and the final mounding over of the interior, thereby sealing the site. It is remarkable that the contents of the sockets were all removed, without exception. If the cairn ring had been built to incorporate the (presumably) stone circle as an inner kerb, it seems more likely that the removal of the stones took place at a later, post-barrow date, thereby suggesting that the final monument left them visible. CKCA described the mound as 'turf built' and since the turf was apparently stripped from the barrow floor this, plus material obtained from the ditch, could have been used to build a smallish mound over the presumed inner cairn and some of the area between it and the inner limit of the cairn ring, in the manner of Colliford IVA, as mentioned above. This would have become dispersed and flattened by later disturbance, to give the profile seen in the sections (Fig 65).

If the three phases suggested above have any validity, a sequence can be broadly established for the site, though the details of activities in each phase must always elude us. The dating of the sequence appears to start in the last centuries of the third millennium BC (uncal.) and on the evidence of the Late Beaker pottery, could continue until the mid-second millennium BC (uncal). In this case the site could have been used regularly or, perhaps more likely, sporadically – possibly seasonally – for burials and rituals over at least 500 radiocarbon years, and a good deal longer when the dates are calibrated. In this connection too it should be noted that the date for Colliford IVA, with which analogies in phase 3 have been drawn, is 3510 ± 80 BP (uncal. – HAR 2994) (Griffith, 1984, 69).



L.77



L.78



Fig 78

Site XXVI(22) Carved and plain slate discs, L77 and L78. (2/3). Particulars in Table i

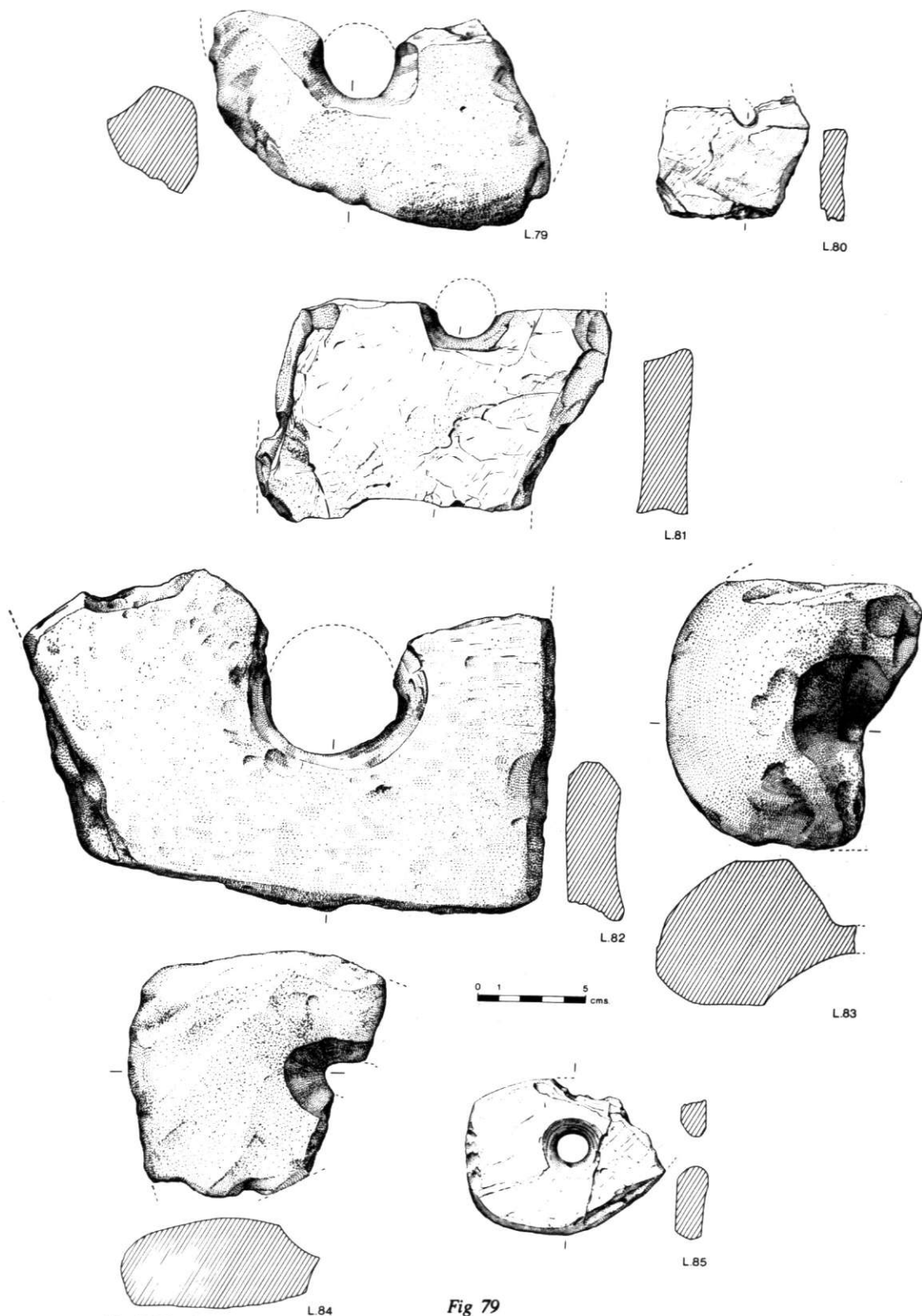


Fig 79

Site XXVI(22) Holed and cupped stones from various contexts. (2/3). Particulars in Table i

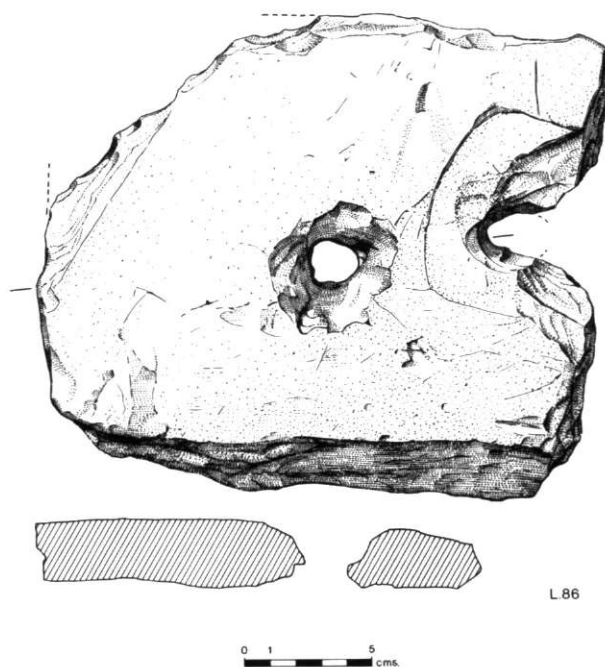


Fig 80

Site XXVI(22) Holed stone. (2/3). Particulars in Table i

FORE DOWN ST CLEER

SMR SX 26 NE 5

NGR (Approx) SX 278693

A barrow on Fore Down Common, St Cleer, was dug into by three men employed by the Cornwall War Agricultural Executive Committee, on 16th June 1942. C.K. Croft Andrew, who was at the time excavating on Davidstow Moor, came to hear of this (probably because he lived nearby at Darite) and visited the site on the evenings of the 16th and 17th June. He found pottery laying about and it would appear that some sort of rescue excavation was then carried out by him and his wife. Correspondence with the CCWAEC early in July confirms that he was given permission to make 'further investigations' on Fore Down Common, and this suggests that he returned to the site later in the month. This is borne out by a charcoal sample (see below) which is labelled and dated 28.7.1942. One of the two photographs surviving shows the mound in section, which would have been unlikely to have been achieved in the initial digging by the County Council men alone. However, no excavation records survive save the dimensions of the mound, inserted into the Davidstow Site Book IV together with the circumstances of the discovery, and four photographs, two of the mound and two of the finds (Figs 83 and 84). The finds themselves, together with a small amount of bone and charcoal, have now become available for study.

The barrow

The precise location of the site is not known, and the grid reference obtained from the Cornwall Archeological Unit's SMR, is an approximation only (Fig 81). It would appear to have been situated on or slightly above the 750 ft contour on the SW side of Fore Down.

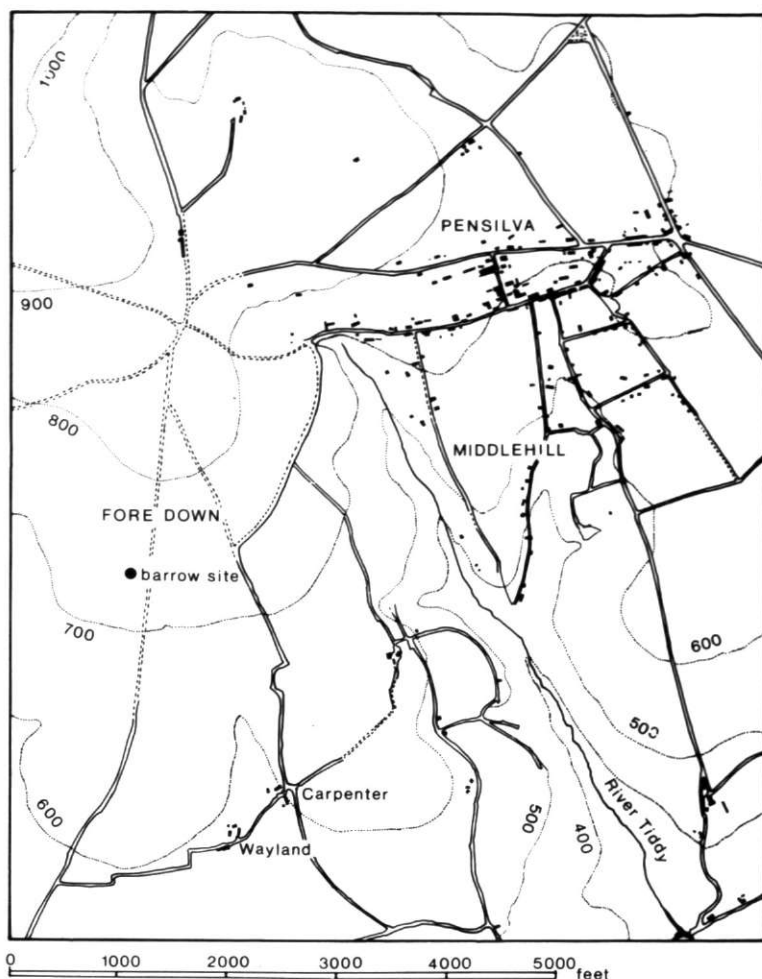


Fig 81
Fore Down St Cleer. Location Map

The mound measured 26 ft (7.9 m) across and 3 ft (0.9 m) high (Fig 82) and contained a (presumably) central cremation burial of an adult in a large handled urn (Fig 86), more than 30 sherds of which were retrieved. Also found were a flat bronze dagger, flints and charcoal.

It is not possible to reconstruct the plan or section of the mound. Croft Andrew noted that 'a score or so of granite slabs rounded by weathering but now white, size c. 12–26 in. x 4 in. thick, may represent the structure enclosing the urn'. This note, and the photograph, indicate a small cairn within an earth mound covering an inurned cremation. It is likely, though admittedly not certain, that the dagger was associated with this burial. There is no mention of a ditch.

Pottery by Frances Healy (Fig 86, Table h)

Croft Andrew's notes record that the sherds of P7 were collected in the course of six visits between late July and late August 1942. Their condition reflects this, since some are fresh and others show varying degrees of weathering, as if exposed to the elements for some time



Fig 82
Fore Down St Cleer. View of damaged barrow. (Photo CKCA)

before collection. Form and decoration place the urn early in the Trevisker series (ApSimon and Greenfield, 1972, 326). The flaring handles, deeper and thicker at their edges, are paralleled at Trevisker itself (ApSimon and Greenfield, 1972, Fig 14:1), and at Tor Farm, Menheniot (information from Arthur ApSimon). A relatively early date is also suggested by a general similarity to the urns from Crig-a-Minnis, Perranzabuloe (Christie, 1960, Fig 4), charcoal from one of which was radiocarbon-dated to 1565 ± 90 bc (1900 BC; NPL-193; Christie, 1976).

Lithic material by Frances Healy (Fig 87, Table i)

A flint 'fabricator' (L87) is marked 'Fore Down with burial' in Croft Andrew's hand. There are two flint blades, one from the peat of the old land surface, one from the mound. A label written by Croft Andrew reads 'this little black flint from sieving of a SE dump' and carries a sketch apparently of a flint flake, which is now missing. A surviving flake is marked 'Foredown St Cleer Not from barrow'. A worn, squared siltstone rod, perhaps natural, perhaps a hone, is of uncertain provenance.

The Dagger by Brian Oldham (Fig 84)

A label with the dagger gives Croft Andrew's address and the year 1942. It notes that the dagger was 'in six fragments, including one of the three rivets (detached)'. Croft Andrew sent it to the British Museum for conservation by Dr H.J. Plenderleith in 1942 (Fig 85). The method which he used has removed the corrosion products and it is not certain how much of the original shape and size of the object has been lost. What exists today comprises two parts: most of the blade, including two rivets, and the tip, part of which has been lost.

The dagger blade is 110mm long, 34mm wide (max) and 3.8mm thick (max). It is made of copper alloy, as are the two rivets. Much of the edge of the blade has been lost due to corrosion although the basic outline would appear to be representative of the original shape. There is a slight midrib which follows the blade outline and has a maximum width of 13.5mm. The hilt end of the blade is badly affected by corrosion and it is not certain what



Fig 83

Fore Down St Cleer. Finds from barrow. (Photo CKCA)

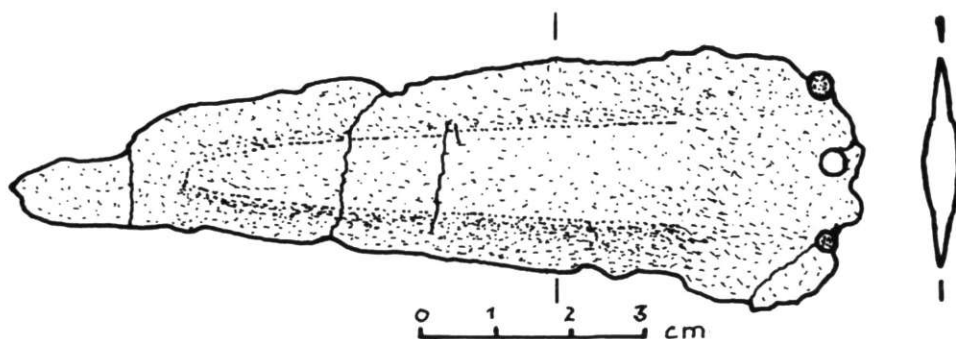


Fig 84

Fore Down St Cleer. Bronze dagger (drawing B. Oldham 1987)

the shape was originally. The blade was retained in its hilt grip, probably organic, by means of three rivets. The two which remain have a diameter of 4mm and the length of the longest is 9.1mm. The line of the grip plate is not visible.

If what remains is indicative of the original form of the dagger it is an example of a knife-dagger with mid-rib (Gerloff, 1975, 168–70). Such daggers are invariably associated with cremation burial under a barrow; a fact which supports the association of this dagger with the urn and barrow. This is the first record of such a dagger coming from Cornwall. Pearce (1983, 367) notes only three in south-west Britain and that from Priddy has most similarity to the Fore Down example. The Priddy dagger is set by Pearce within her Plymstock-Wessex 2 phase, the equivalent of the Arretton phase in the south-east. Of the six other Cornish daggers listed by Pearce five are of the Camerton-Snowhill type, which she also sets in the same phase. The concentration of all except one of the Cornish daggers within a circle of only 20 km radius is noteworthy. This small area must have been of some import during the currency of such daggers and it is tempting to see a connection between the show of wealth which these daggers represent and the rich metal resources of the area. The Fore Down dagger fits in well with the social scenario developed by Pearce (1983, 274–9).

Report on the cremated bones by Sheelagh Stead

These cremated bones represent one individual, an adult, not young.

Bone fragments identified:—

Skull No teeth, vault fragment at serrated edge with inner plate extending beyond suture. This last is an indicator of age.

Rest of skeleton Unidentifiable long bones.

Size	Skull, largest is	25mm
Weight	Skull	4
	Larger long bones	6
	Rest	11
Total		21 grammes

Report on the charcoal by Caroline Cartwright

FD/S 2 Trench A.

17 grams *Quercus* sp. charcoal

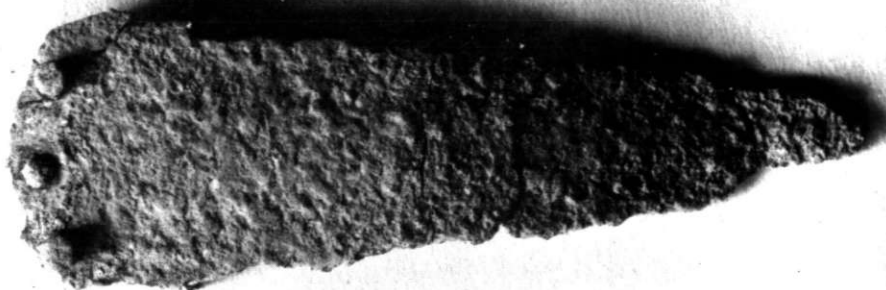


Fig 85
Fore Down St Cleer. Bronze dagger. (Photo British Museum 1942)

Discussion

Since this was a salvage operation and no drawings made of the excavation survive, little more can be added to the account given above. It is unfortunate that so little of the burial remains, but what does survive appears to represent a single adult individual, and in view of the dagger association it is tempting to see this as a middle-aged male. The size and quality of the pot, together with the dagger, indicate an individual of some importance.

The barrow must have been one of a group, though no others are marked on the map — the nearest being the large cluster on Caradon Hill less than a mile to the north west. The area is rich in prehistoric sites and finds: Trethevy megalithic tomb $1\frac{1}{4}$ miles west, the Hurlers and the Rillaton barrow beyond Caradon to the NW, while to the south a barrow at Menheniot has yielded another fine Trevisker pot (Patchett, 1946, Table II, B.15) with plaited cord decoration, apparently associated with a small vessel.

The similarity between the Fore Down urn and the pots from Crig-a-Mennis with its radiocarbon date, is of considerable interest. If the dagger is associated with the urn, the Wessex 2 dating may have to be re-considered, at least back to around 1600–1550 BC (uncal). What is apparent, as Brian Oldham has stressed above, is the importance of the area in the early Bronze Age, along with others in the region linked with the metalliferous centres and the transpeninsular routes (Christie, 1986, 104).

Pottery

The sepulchral pottery from Davidstow Moor and Foredown St Cleer permits of few conclusions. It can only be said that all the vessels could have been made during the second and third quarters of the second millennium BC (uncal.) and that national styles were in use alongside the local Trevisker series. P1, P3 and P7 emphasise the almost stereotyped uniformity of the tradition. Its uncertain chronology has already been discussed in relation to the pottery from the coastal barrows excavated by Croft Andrew (in Christie, 1985). It may be added that, at site I, the deposition of sherds of P1, stylistically early in the series, on the mound surface, succeeded by an unknown interval the "fires" of the old land surface, charcoal from two of which was radiocarbon-dated to 3520 ± 70 BP (HAR-6634).

The Grooved Ware sherds (P5) from site XXVI(22) belong to a tradition which is rare in Cornwall, especially in moorland locations. The two published finds are from coastal sites at Carrick Crane Crag, St Keverne (Patchett, 1950, 45-6, Fig 1:2-4) and Trevone, Padstow (Longworth in Buckley, 1972). To these may perhaps be added an undecorated, lugged, flowerpot-shaped vessel of gabbroic fabric found in a pit at Poldowrian, St Keverne, associated with charcoal radiocarbon-dated to 4000 ± 150 BP (HAR-3108; Harris, 1979, 19).

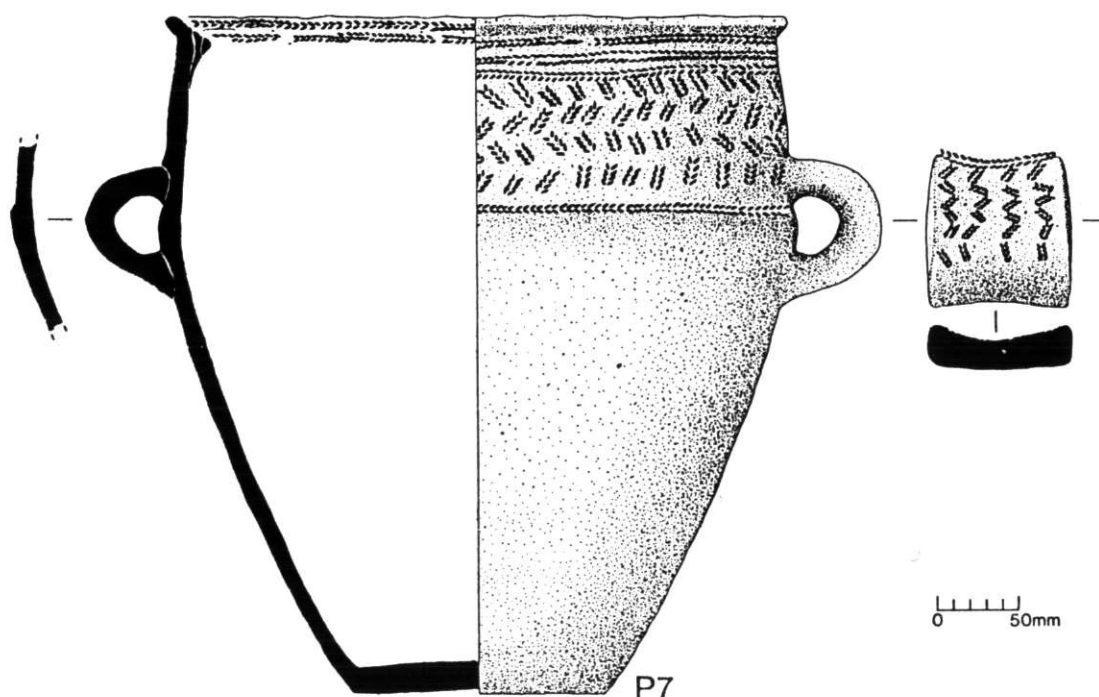


Fig 86
Fore Down St Cleer. P7, urn from barrow. (1/4). Particulars in Table h

Table h: Catalogue of Illustrated Pottery

Note: Colours are recorded by Munsell notations followed by subjective descriptions, not by the corresponding soil colour names. Fillers have been identified by Dr David Williams in thin section under a petrological microscope and are described and discussed in detail by him in Appendix 2

No.	Site	Context	Small find	Colour	Hardness	Texture	Filler(s)	Decorative Technique(s)	Style	Comments
P1	Davidstow I(1)	grey/fawn clay of mound	16, 17, 18	ext. 5YR 3/1 to 5/6 grey-brown to orange-brown core 5YR 2.5/1 black int. 5YR 3/1 to 4/2 grey-brown to grey-buff	Soft	Coarse	Gabbro + Sandstone	Plaited cord impression, surface originally smoothed	Early Trevisker	Some secondary blackening; 15 sherds (11 unillustrated); no trace of ribbon handle mentioned by Patchett (1944, table II: B.22)
P2	Davidstow V(2)	hollow in subsoil		ext. 7.5YR 5/4 to 7.5YR 3/2 buff to brown core 7.5YR 3/0 grey int. as ext.	Soft	Coarse, friable	Grog + a little sandstone		Collared urn	Very badly eroded. Many grog fragments visible on surface, as are holes from which others have fallen
P3	Davidstow XXIV(16/23)	disturbed burial	1, 2, 8	ext. 5YR 5/2 to 4/1 buff to grey-buff core 5YR 3/1 grey int. 5YR 4/2 grey-buff	Medium	Coarse	Gabbro	Plaited cord impression	Early Trevisker	Some secondary blackening; shoulder diameter perhaps 360 mm; listed by Patchett (1944, table II: B16)
P4	Davidstow XXIV(16/23)	disturbed burial	8	ext. 5YR 5/2 buff-grey core 5YR 3/1 grey int. 5YR 4/1 grey	Hard	Coarse	Gabbro	Plaited cord impression	Early Trevisker	
P5	Davidstow XXVI(22)	grey clay nr. centre, possibly OLS	1B	ext. 5YR 4/4 brown core as ext. int. as ext.	Soft	Coarse	Gabbro	Grooving with square-ended implement; deep impression with sub-triangular stamp	Grooved Ware	3 sherds (1 unillustrated) separated 1985 from caked clay with charcoal flecks and stone fragments
P6	Davidstow XXVI(22)	pit near centre	1	ext. 5YR 5/6 orange-brown core 5YR 3/1 dk. grey int. 5YR 6/4 buff	Soft	Coarse	Grog + some chert, sandstone and greenstone	Light channel-ling with blunt-ended implement	Late Beaker	Listed by Patchett (1944, table I: A9) and Clarke (1970, corpus no. 97) as from site XXIV
P7	Fore Down St Cleer	?small cairn within mound	1	ext. 7.5YR 5/4 to 5/6 buff-orange to orange core 7.5YR 3/0 dk. grey int. 7.5YR 5/4 to 4/1 buff-orange to grey-brown	Medium	Coarse	Gabbro + quartz grains + mica flecks	Plaited cord impression; slight burnish on better-preserved parts of exterior	Early Trevisker	Reconstructed from 275 + sherds; shoulder flattened under handles, more pronounced elsewhere; handles fragmentary: illustrated one seems more extensively decorated than other; listed and illustrated by Patchett (1944, table II, fig 6, B8)

The determination is comparable with that of 4130 ± 70 BP (HAR-6640) for charcoal from F6 below the mound of site XXVI(22), which may be contemporary with the Grooved Ware sherds also from beneath the mound.

Dr David Williams has analysed the fabrics of the pottery described in his report and of that from coastal barrows excavated by Croft Andrew (Christie, 1985). His results (Appendix 1) show a strong correlation between style and fabric. The Grooved Ware sherds from site XXIV(22) P5, are of gabbroic clay, like local earlier Neolithic pottery. Trevisker or Trevisker-related vessels are likewise of gabbroic or gabbroic admixture clays, irrespective of distance from the gabbro outcrop on the Lizard. Pots attributable to national, rather than local, Early Bronze Age styles are distinguished by their predominantly grog-tempered fabrics. Those examined by Dr Williams consist of P2 and P6 from Davidstow Moor and middle and late Beakers from Lousey Barrow, St Juliot (Christie, 1985, 2–3). To these may be added a rusticated sherd from Trevellas Down and a probable Food Vessel from Treligga 7, St Teath (Christie, 1985, P1, P4), which were not available for sectioning, but which are both also grogged. A pygmy cup from barrow CRIVC at Colliford is similarly grog-tempered (Ellison in Griffith, 1984). The introduction of national styles may have involved the introduction of new potting practices.

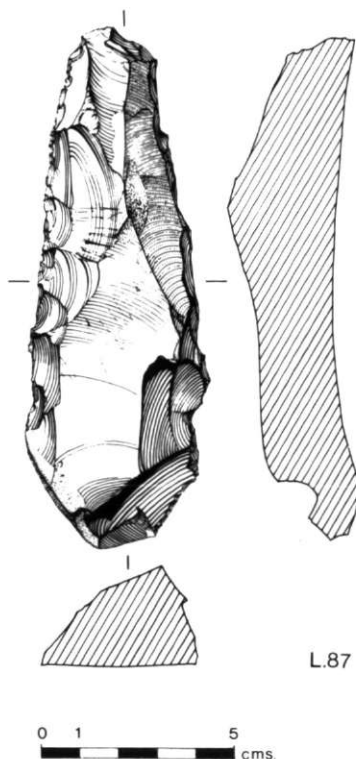


Fig 87

Fore Down St Cleer. Flint 'fabricator', L87, found with burial. (1/1). Particulars in Table i

Lithic material – summary, discussion and conclusions

The composition of the worked lithic material from Davidstow Moor is summarised in Table e. Little of it can be regarded as relating to the barrows. Although the contexts of much of the material are unclear, at least some of it was recovered from old land surfaces beneath the mounds or from the mounds themselves, presumably displaced from the surrounding areas during their construction. The collection is thus potentially multi-period. It is also probably incomplete, given discrepancies between the material surviving from sites V(2) and XXII(15) and Croft Andrew's accounts of it.

Table e – Davidstow Moor: Summary of worked lithic material

Category	Site XXIV (16/23)	Site XXVI (22)	Remainder	Totals
Cores	5	8	9	22
Irregular waste	1	10	3	14
Split pebbles	2	5	5	12
Flakes	39	133	42	214
Blades	10	27	15	52
Leaf-shaped arrowheads	1	1		2
Oblique arrowheads	1	2		3
Scrapers	2	12	6	20
Borers		3	3	6
Straight-edged flake knives	1		2	3
Backed knife			1	1
Notches			2	2
Serrated pieces		1	2	3
Truncated pieces		1	1	2
Misc. retouched pieces	1	9	3	13
Chopping tool			1	1
Pebble tools		1	1	2
Stone ?vessel		1		1
Stone hammer or pestle		1		1
Oblique-ended slate			1	1
Slate discs		2	2	4
Holed and cupped stones	1	33	2	36
Irregular trimmed slates			3	3
?roof slate		1	1	2
Hones & hone frags, (recent)	1		2	3
TOTALS	65	251	107	423

Condition

Some of the material is fresh, and patination is rare. Breakage and edge-damage are, however, frequent, both perhaps the result of incorporation in mounds built at least partly of stone. Of 209 unretouched flakes and blades from sites XXIV(16/23) and XXVI(22), for example, only 85 complete ones could be measured for inclusion in Fig 89.

Raw material

1. *Flint and chert*

Fig 88 summarises the incidence and use of flint and chert. Beach pebble flint is distinguished by rounded surfaces and pale-coloured, battered cortex (e.g. L4, L8, L48, L49).

Beneath the cortex it is generally a mottled pale grey. Non-beach flint, like the non-beach flint from Carn Brea, is characterised by 'brown coloured, thin and relatively unabraded cortex or nodules which can retain marked surface irregularities' (Saville, 1981a, 107; e.g. L34, L35, L47, L51, L57, L63, L65, L68, L71–2). The flint itself is generally dark grey to black, sometimes mottled with paler, almost white, flecks. It compares closely with flint from Beer Head, Devon, although it is impossible to tell if it was obtained from there or from secondary sources, like the more westerly head and gravel deposits noted by Wainwright and Smith (1980, 104, 106).

Only pieces retaining adequate areas of cortex could be assigned to either class. In the absence of cortex flint colour alone is an unsure guide, because a minority of the beach flint (e.g. L8, L26) is of similar colour to the non-beach flint and may derive from the same source or sources (cf Saville, 1981a, 108). Most of the flint is therefore unassigned. It is likely to consist mainly of non-beach flint for the following reasons: (1) its predominantly dark colour is rare among the beach flint but almost universal among the non-beach flint; (2) the percentages of various classes of artefact among it are closer to those among the non-beach flint than those among the beach flint (Fig 88); and (3) because unassigned flakes and scrapers from sites XXIV(16/23) and XXVI(22) have a similar size-range to those of non-beach flint (Fig 89). The frequency of the latter material may be best reflected in the c. fifty-five percent (forty-six out of eighty-three) of non-beach flint among cortical flakes from sites XXIV(16/23) and XXVI(22). This compares with a figure of c. sixty-four percent for a sample of cortical flakes from Carn Brea (Saville, 1981a, Table 6). It may still be an underestimate, if, as suggested below, non-beach flint cores were originally larger than those of beach flint and hence produced lower proportions of cortical flakes.

Chert makes up less than five per cent of the total. Ten of the fourteen pieces are coarse-grained and honey-coloured, and are presumably of Greensand chert. They comprise six flakes (including L52), a blade, and three large scrapers (L46, L58, L60). This material is concentrated on site XXVI(22) (Table e). A much finer-grained dark grey-green material, apparently Portland chert, is represented by two flakes, a leaf-shaped arrowhead (L41) and a retouched flake (L73).

Table f: Holed and cupped stones

Site	Slates	Granites	Greenstones	Totals	Drawings
I(1)		1		1	L21
V(2)			1	1	L33
XXIV(16/23)	1			1	L43
XXVI(22)	31		2	33	L79–86
Totals	32	1	3	36	
Drawings	L43 L79–82, L84–6	L21	L33, L83		

2. Other rocks

Both pebble tools (L19, L74) have the smooth, flat form of beach pebbles, as do six unmodified pebbles, apparently brought from the coast, which were found on sites I(1), II(3), IV(4), and XXVI(22). Other worked and modified stone objects were made on the slates, granites and greenstones of the moor. Holed and cupped stones, the most numerous stone objects, were generally made of slate:

Flint and chert-working

The presence of cores, irregular waste, and relatively high proportions of unretouched flakes and blades in all three classes of flint (Fig 88) shows that both beach and non-beach flint were worked on the moor. Correspondingly, the composition of 139 classifiable flakes

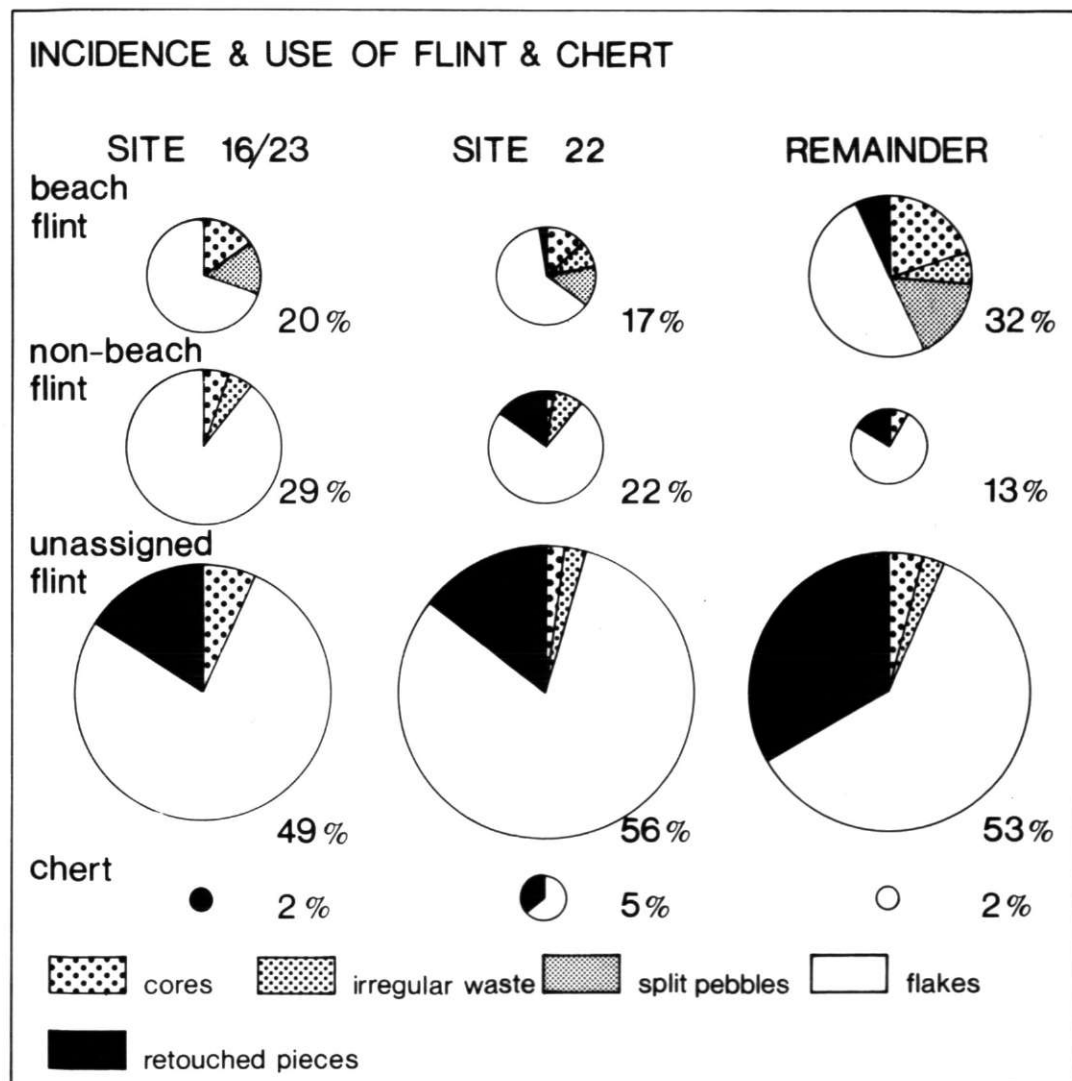


Fig 88

Davidstow Moor: incidence and use of flint and chert

from sites XXIV(16/23) and XXVI(22) (1% primary, 55% secondary, and 44% tertiary) differs little from that of the flakes of industries from sites where flint was more readily available. In the case of beach flint, on-site flint-working is further confirmed by the presence of split pebbles, which represent the first stage in the reduction of pebble cores (Smith, 1982, 39). One scraper (L61) seems to have been made on a flake from a flint hammerstone. Punctiform butts occur on some blades (e.g. L10), faceted butts on a minority of flakes (e.g. the blank of L16). Attributes of the relatively small number of cores in the collection are summarised in Table g.

Table g: Cores from Davidstow Moor, Classified according to the scheme used for the industry from Hurst Fen, Suffolk (Clark *et al* 1960, 216).

Type	A1	A2	B1	B2	B3	C	D	E	Incl./ frag.	Totals	No with blade scars	Draw- ings
Site XXIV (16/23)												
Beach flint		1								1		
Non-beach flint						1		1		2		
Unassigned flint						1			1	2	1	
Totals		1				2		1	1	5	1	
Site XXVI (22)												
Beach flint			1			3				4	1	L48–50
Non-beach flint		1					1			2	1	L47, L51
Unassigned flint						2				2		
Totals		1	1			5	1			8	2	
Drawings		L47				L49, L50	L51					
Remainder												
Beach flint		2		2		1				5	4	L11, 12 L26, L36, L37
Non-beach flint				1					1	2		L35
Unassigned flint								1	1	2		
Totals			2	1	2		1	1	2	9		
Drawings			L12 L36	L35	L26 L37		L11					
Overall totals		2	3	1	2	7	2	2	3	22	10	

Mean weight of complete cores:

beach	20.2g
non-beach	19g
unassigned	6.5g

Their salient characteristics are the prevalence of multi-platformed (B and C) and keeled (D and E) forms, and small final size, irrespective of raw material. A particularly low mean weight for unassigned cores simply reflects the non-cortical, and hence unclassifiable, state of the most completely worked-down cores.

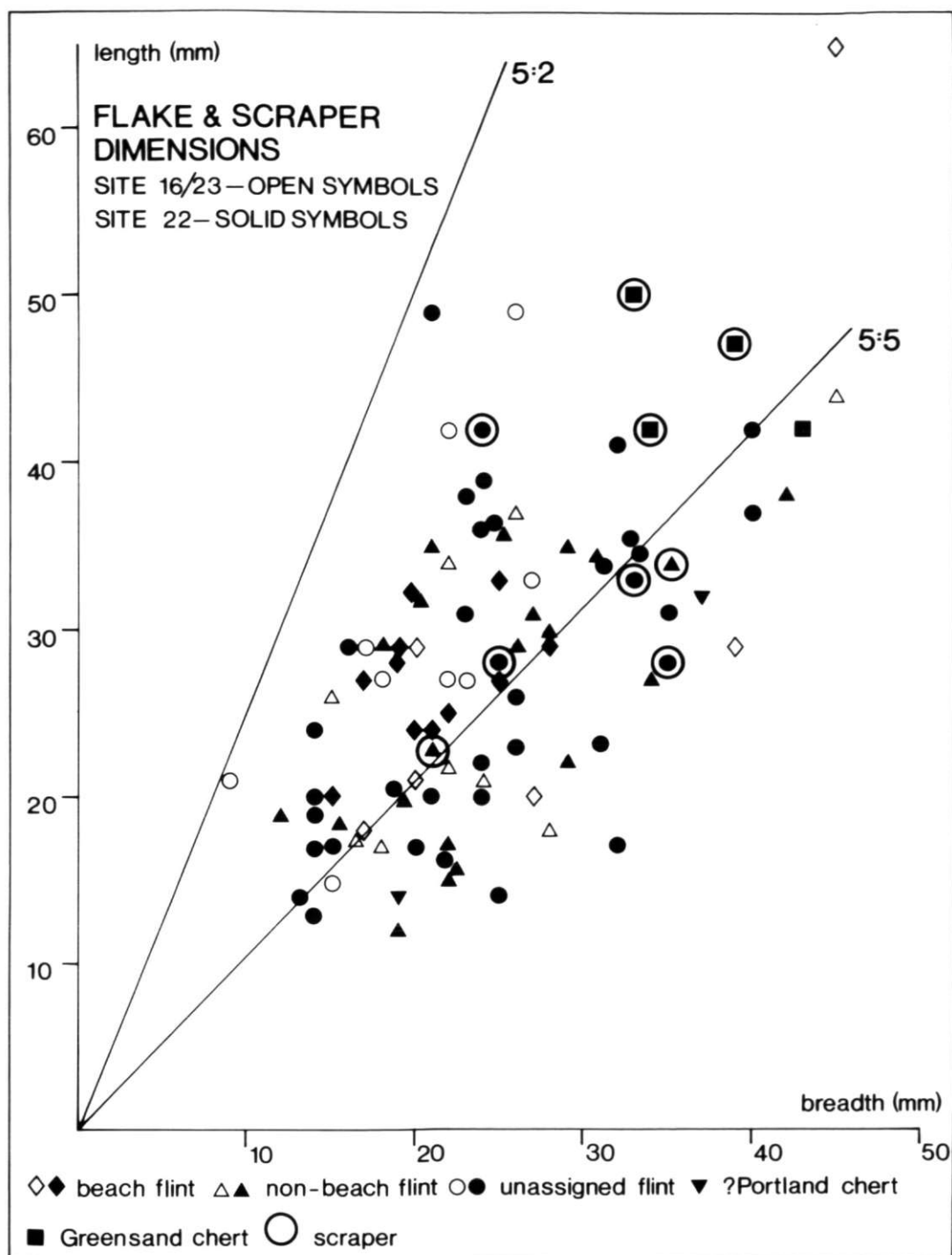


Fig 89

Davidstow Moor: dimensions of complete scrapers and unretouched flakes from sites XXIV(16/23) and XXVI(22)

Similarity of final size between beach and non-beach cores is unlikely to reflect their original state. None of the beach pebble cores (e.g. L11–12, L26, L36–7) could have produced many flakes; while some of the non-beach cores (e.g. L35, L47, L51) could have been worked down from much larger nodules or fragments. Cores and irregular waste form a higher proportion of beach flint than of the other classes, with a core: flake ratio of 1:3:6 for beach flint as against 1:19:7 for non-beach and 1:25:2 for unassigned flint. Flakes of non-beach and unassigned flint are generally larger than those of beach flint (Fig 89), and were more often selected for retouch (Fig 88), perhaps because of their higher quality as well as their size. Some non-beach flint flakes, such as L31, must have been struck from more substantial cores than any now in the collection. Fig 89 understates the size of some non-beach and unassigned flint flakes and blades, since several broken ones would have been as much as 50–60mm long when complete (e.g. L9, L55 and the blanks of L16, L17, L22, L30, and L44).

Narrower, more blade-like flakes are under-represented in Fig 89 because they are more fragile and more often broken, as is made clear by the frequency of broken blades among the illustrated material. Conversely, they must be over-represented in Tables c, d and e, where visually-defined blades, most of them fragmentary, amount to approximately twenty percent of all unretouched flakes and blades.

Scrapers were made on some of the larger flakes (Fig 89), with only one 'thumbnail' form (L63). The three largest (L46, L58, L60) are of macroscopically identical Greensand chert. The presence of all three on the same site, together with a large flake of the same material (L52) suggests that they may have been made from a single pebble.

Stone-working

The four slate discs (L20, L23, L77–8) seem to have been trimmed to shape. The face on L77 has been pecked and incised. Most of the thinner holed and cupped stones, whether of slate or other rocks, have also been trimmed (e.g. L33, L43, L80–82, L84, L86). Edge-grinding is more frequent on thicker examples (e.g. L21, L83–4), although also present on L85. All the perforations taper from the surface inwards and, with four or five exceptions (e.g. L80–1) have been made from both faces. Three of the five cupped stones are also worked from both faces (e.g. L21, L83). Method of manufacture is difficult to determine. Most perforations and cups seem to have been at least finished by grinding or drilling, rather than by pecking. It is not clear whether pieces like L21 and L83 are finished artefacts, or whether the opposed cup-marks are incomplete perforations. It may be no coincidence that three of the five are of other rocks than slate (two of greenstone and one of granite) which would have been more laborious to perforate.

L75, a slate vessel, seems, from the flat facets on its outer surface, to have been carved rather than turned.

Affinities and dating

Where flake proportions have been published for Cornish industries they conform to the general pattern established for southern and eastern England (Pitts, 1978): the flakes of a predominantly later Mesolithic scatter at Poldowrian, St Keverne (Smith, 1982, Fig 14) and those of the earlier Neolithic settlement of Carn Brea, Illogan (Saville, 1981a, Table 22) share a high frequency of narrow, blade-like flakes and a low frequency of broad flakes (i.e. flakes broader than they are long) with other industries of both periods; those of a predominantly Bronze Age flint-working area at Carngoon Bank, Lizard (Smith, 1980, Fig 22) include many broad flakes and have the squatter proportions characteristic of later Neolithic and subsequent industries elsewhere.

1. *Mesolithic and earlier Neolithic*

Despite the presence of several Mesolithic sites around Crowdy Marsh, immediately to the south (Trudgian, 1977a and b), little definitely Mesolithic or earlier Neolithic material was excavated on Davidstow Moor. Visually-defined blades are slightly commoner among the more southerly sites, closer to the Crowdy Marsh scatters. They form twenty-four percent of the scant total of unretouched flakes and blades from sites 1 to 15 as against eighteen percent of the larger total from sites 16/23, 17/24 and 22, farther to the north. Some blade cores, such as L12 from site 1(I) or L36 from site XX(12), might be attributable to either period; as might some of the finer blades, such as L2, L3 and L10, from site 1(I).

The only artefacts which are almost certainly Mesolithic are two pebble tools, L19 from site I(1) and L74 from site XXVI(22), which are of a form consistently found with later Mesolithic material (Jacobi, 1979, 77, 85). The incised decoration of L74 is paralleled only at Poldowrian, St Keverne (Smith, 1982, Fig 17). Both are utilised, but, like some of the pebble tools from Poldowrian (Smith, 1982, 45) they seem to have been subjected to percussion rather than to the grinding which characterises the bevelled pebbles of coastal sites (e.g. Jacobi, 1979, Fig 5). The possibility of a later date is raised by the presence of utilised pebbles in various contexts in Bronze Age monuments at Watch Hill, St Stephen-in-Brannel, and Caerloggas I, St Austell (Miles, 1975, Figs 8:23–6, 18:65–6). Most of these are, however, less regular than examples from Mesolithic collections.

Two leaf-shaped arrowheads, L41 from site XXIV(16/23) and L45 from site XXVI(22), are of a type characteristic of the earlier Neolithic but current well into the second millennium BC (uncal) (Green, 1980, 92–6). Their manufacture from Portland chert, as in the case of L41, goes back to the earlier Neolithic, on the evidence of finds like the six examples from Carn Brea, Illogan (Saville, 1981a, 109).

2. *Later Neolithic*

Three oblique arrowheads from sites XXIV(16/23) and XXVI(22) (L40, L56, L57) are of a type which seems to have been made from the late third to the mid-second millennium BC (uncal), during which period its most common ceramic association is Grooved Ware, especially of the Durrington Walls and Clacton sub-styles (Green, 1980, 108, 235–6). Other characteristics of the collections from sites XXIV(16/23) and XXVI(22) suggest that they are mainly contemporary. Such high percentages of broad flakes (Fig 89) would be unusual at an earlier date. Large scrapers in a variety of forms, some of them extensively retouched, characterise non-beaker later Neolithic industries, such as the small assemblage from Topsham, Devon (Jarvis and Maxfield, 1975, 252–7) and more substantial ones from the West Kennet Avenue Occupation Site (Smith, 1965, Figs 41, 82) and Durrington Walls (Wainwright and Longworth, 1971, Figs 69–71), both in Wiltshire. The range of retouched forms from sites XXIV(16/23) and XXVI(22) (Figs 62, 72–74; Table e) compares with that of these and other non-beaker later Neolithic industries, in Wessex and beyond (Cleal, 1984, 151–5; Healy, 1985). The same is true of some of the material from site 1 (I; Table a, Figs 12–14).

Also possibly contemporary are three straight-edged flake knives, L6 and L15 from site I(1) and L42 from site XXIV(16/23). Similar forms were, however, made well into the mid if not the later second millennium BC (uncal). Local finds from Bronze Age contexts include those from the mound of the Tregulland barrow, Treneglos (Ashbee, 1958, Fig 7:4), from a post-hole of the circle beneath Cocksbarrow, St Mewan (Miles and Miles, 1971, Fig 9:12), from the Carngoon Bank flint-working area, Lizard (Smith, 1980, Fig 21:16) and from the Stannon Down settlement, St Breward (Mercer, 1970, Fig 17:1, 2).

3. Bronze Age

Few objects can be seen as grave goods. The most convincing exception is L87, a flint 'fabricator' from Fore Down St Cleer, marked 'with burial' in Croft Andrew's hand. It is all the more likely to have been deliberately deposited because 'fabricators' have been found in broadly contemporary burials accompanied by beakers and collared urns elsewhere in Britain (Clarke, 1970, 448; Longworth, 1984, 68), and because they are among the few implement types regularly found in Bronze Age industries (Saville, 1980, 20-1, 1981b, 67-8; Ford *et al* 1984).

Slate discs, like L30 from site I(1), L23 from site II(3), and L78 from site XXVI(22), are repeatedly found in Bronze Age barrows and cairns in upland Britain, as in the Tregulland barrow, Treneglos, 6km to the east (Ashbee, 1958, Fig 7:8-12). Neolithic antecedents, mainly from chambered tombs, are listed by Ashbee (1958, 188) and, most recently, by Savory (1984, 26). The Early Bronze Age date of L77, which bears one of very few contemporary representations of the human face, is not in doubt, since it formed part of the ring of stones on the old land surface beneath site XXVI(22). Carved slate in any form is scarce in this period, local examples being confined to three small fragments with linear incision from Bronze Age contexts in the ring-banked enclosure of Caerloggas I, St Austell (Miles, 1975, 41, Fig 18:62, 63).

Holed and cupped stones are, like stone discs, often found in upland barrows and cairns. There is nothing exceptional in single finds, such as L21 from site I, L33 from site V(2) or L43 from site XXIV(16/23), which can be matched, for example, at Tregulland (Ashbee, 1958, 188, Fig 7:7) or at Trelystan, Powys (Britnell, 1982, 173, Fig 23:S3). They are, however, overshadowed by the circle of over thirty holed, cupped and otherwise modified stones laid on the old land surface beneath the mound of site XXVI(22). Their function is problematical. It is suggested above that the site XXVI examples may have been roof-weights. Trudgian, however, claims that the shape and wear of the perforation in the Tichbarrow holed stones show that they were not suspended, but rather used as spokeshaves. He adds that cupped stones from the same site with hollows on opposed faces are not incompletely perforated because the hollows do not correspond (1976, 35-36).

It may be significant that slate discs and holed stones, whether separately or together, are repeatedly found in the same mounds as larger, cup-marked stones. Instances include Tichbarrow (Trudgian 1976, 35-8), the Tregulland barrow, Treneglos (Ashbee, 1958, 188-91), and barrow I at Trelystan, Powys (Britnell, 1982, 172-4).

Since much of the worked slate from Davidstow is of Bronze Age date, it is tempting to attribute L75, apparently a fragment of a slate vessel, to the same period. Its uncertain context, however makes a later date as likely as a prehistoric one.

Transport of raw material

Lithic raw materials used by the occupants of Davidstow Moor were obtained from the moor itself, from the coast, and from more distant sources. The nearest flint-bearing raised beach mapped by Care (1982, Fig 2) is 9.5km away. The Isle of Portland is 150km to the east. The westward distribution of arrowheads (and other artefacts) of Portland chert extends to West Penwith (Green, 1980, Fig 25). It may be attributable to the natural movement of beach pebbles along the south coast. Even if this was the case, however, the inland locations of some finds would have entailed deliberate transport, for some 35km in the case of Davidstow. Beer Head is 110km to the east, although secondary sources of non-beach flint are closer. The westward transport of flint from Beer Head and probably from other sources in the early third millennium BC (uncal) is documented by Care (1982, 277) and Whittle

(1977, Fig 9). The Davidstow material indicates that this process continued to the end of the millennium, since at least some of the artefacts, including an oblique arrowhead (L57), in the predominantly later Neolithic collections from sites XXIV(16/23) and XXVI(22) were made from it. The scale, nature and chronology of this traffic is discussed elsewhere (Healy, 1985).

Table i: Catalogue of illustrated lithic material

No.	Site	Context	Small find no.	Description
L1	Davidstow I(1)	'grave'	78	Flat fragment, worn along oblique end, and, less markedly, along right edge. Artefact or sliver broken from water-worn pebble? Slate
L2		trench D, in old turf	7	Blade fragment. Unassigned flint
L3		trench D, under 8 OLS, on 'pannish' yellow subsoil	8	Blade fragment. Beach flint
L4		trench B, W balk, in black band in clay of mound	1	Split pebble. 2 ventral removals less matt than rest of surface, perhaps subsequent. Beach flint
L5		trench D, ?on OLS	5	Fragmentary horseshoe scraper. Non-beach flint
L6		body of barrow mound	26	Straight-edged flake knife. Non-beach flint
L7		trench H, in clay mound	13	Notch. Unassigned flint
L8		clay of mound	64	Chopping tool on pebble. Beach flint
L9		sector J, on clay of mound	23	Flake fragment. Non-beach flint
L10		on clay of mound	58	Punch-struck blade. Unassigned flint
L11		trench D	6	D core on pebble. Beach flint
L12		cutting R, inner end close under turf	38	B1 blade core on pebble. Beach flint
L13		central area	11	Burnt blade fragment. Non-beach flint
L14		sector T	48	Side-end scraper worked inversely on irregular flake. Unassigned flint
L15		S. quad., under turf	44	Straight-edged flake knife, with irregular wear on unretouched edge. Non-beach flint
L16		?	77	Fragmentary backed knife on blade with faceted butt; regular, abrupt retouch on left edge, irregular wear or damage on right edge. Unassigned flint
L17		Q, under turf	34	Truncated piece on blade, partly formed by abrupt retouch, partly snapped; left edge possibly serrated, possibly worn or damaged; right edge worn or damaged. Unassigned flint

L18		top of balk, over fire in T	62	Misc. retouched piece on irregular fragment. Unassigned pinkish cherty flint
L19		sector P-P2? found with 2 fragmentary flint flakes, 1 of them burnt	75	Pebble tool with irregular, stepped flaking, presumably from use, on one face of narrower end. Smooth, elongated beach pebble of soft, fine-grained silt - or mudstone
L20		trench D	3	Trimmed fragment, perhaps originally a disc. Slate
L21		cutting Q	35	Cupped stone, with opposed depressions worked from both faces, and apparently ground around its edge. Granite
L22	Davidstow II(3)	W quad.	2	Fragmentary end scraper on blade. Unassigned flint
L23		NW quad., found with ?granite pebble	4	Irregular trimmed disc. Slate
L24	Davidstow III(8)	halfway down in mound	14	Flake with positive bulbs of percussion on both faces, apparently struck from a core already struck from a larger nodule or fragment. Non-beach flint
L25		top of mound	13	End scraper on ventral face of flake from core with opposed platforms; regular flat retouch on right edge of dorsal face. Beach flint
L26		?	6	B3 core on pebble of dark grey flint with lighter mottling. Beach flint
L27		?	9	Blade fragment. Unassigned flint
L28		?	5	Fragmentary scraper, burnt; dorsal patina cut by retouch. Unassigned flint
L29		dump of 1st trench	4	Notch. Unassigned flint
L30	Davidstow IV(4)	SE quad.	1	Blade fragment, serrated along right edge, with macroscopically visible gloss on serrated edge, especially on ventral face. Unassigned flint
L31	Davidstow V(2)	? E side	6	Flake with faceted butt, probably from a Levallois-like core. Non-beach flint
L32		?	9	Fragmentary long-pointed piercer. Unassigned flint
L33		?	1	Holed stone trimmed around its edge and perforated from both faces. Greenstone
L34	Davidstow VII(7)	SW side of central pit, with a ?root slate and 2 irregular trimmed slate fragments	3	Awl. Non-beach flint
L35	Davidstow XIX(11)	floor level	1	B2 core. Non-beach flint
L36	Davidstow XX(12)	?	1	B1 core on pebble. Beach flint

L37	Davidstow XXII(15)	?	4	B3 core on pebble. Beach flint
L38		?	3	Piercer. Unassigned flint
L39	Davidstow XXIV (16/23)	charcoal pile in N. trench	31	End scraper. Unassigned flint
L40		dump outside SW quad., in yellow clay 'presumed to come from inner substance of mound'	27	Oblique arrowhead of Clark's (1934) class E; burnt. Unassigned flint
L41		dumps	30	Fragmentary leaf-shaped arrowhead. ?Portland chert
L42		?	29	Bilaterally-retouched straight-edged flake knife. Unassigned flint
L43		SE quad.	11	Holed stone, perforated from both faces. Slate
L44	Davidstow XXV (17/24)	W trench	2	Blade fragment, right edge serrated, left edge worn or damaged. Unassigned flint
L45	Davidstow XXVI(22)	SW quad., ?= Croft Andrew's 'fine Neolithic arrowhead found on the floor'	33	Leaf-shaped arrowhead. Unassigned flint
L46		Nr. fire, found with a flint flake	49	Side-end scraper. Coarse honey-coloured, ?Green- sand chert
L47		NW quad.	4	A2 core. Non-beach flint
L48		SW quad.	41	B1 core on pebble. Beach flint
L49		E. trench	6	C core on pebble; 3rd platform not visible on illustrated face. Orange-brown beach flint
L50		NE quad.	10	C core on split pebble. Beach flint
L51		NE quad. out by ditch	20	D core. Non-beach flint
L52		SE quad.	44	Flake. Coarse, honey-coloured, ?Greensand chert
L53		NW quad.	4	Distal blade fragment. Unassigned flint
L54		SW quad, in clearance — innermost rectangle	9	Distal blade fragment, edge-damaged. Non-beach flint
L55		c. 4/6 inside ditch	2	Distal blade fragment, edge-damaged. Unassigned flint
L56		NW quad.	4	Oblique arrowhead of Clark's (1934) class E; heavy and thick, perhaps unfinished. Unassigned flint
L57		NW quad.	13	Oblique arrowhead of Clark's (1934) class H. Non- beach flint

L58	NW quad.	57	End scraper. Coarse, honey-coloured, ?Greensand chert
L59	SE on dump	32	Double end scraper. Unassigned flint
L60	SE quad. in clay patch near centre peg	59	End scraper. Coarse honey-coloured, ?Greensand chert
L61	SW quad. in clearance innermost rectangle	9	Side-end scraper on flake apparently from hammer-stone. Unassigned flint
L62	W trench, turf deep	25	Horseshoe scraper on flake with faceted butt. Unassigned flint
L63	NW quad.	4	Horseshoe scraper. Non-beach flint
L64	NW quad.	53	Horseshoe scraper, burnt. Unassigned flint
L65	N trench	27	Fragmentary scraper. Non-beach flint
L66	NE quad.	7	Fragmentary scraper; flake detached from ventral face after manufacture. Unassigned flint
L67	SE quad., outside stone ring, found with L75, 4 flint flakes, & a clay pipe stem fragment	54	Fragmentary scraper. Unassigned flint
L68	N trench	29	?piercer, formed by intersection of abruptly re-touched distal end and cortical lateral edge, on flake with faceted butt. Non-beach flint
L69	NE quad.	7	Fragmentary awl. Unassigned flint
L70	NW quad.	13	Piercer. Unassigned flint
L71	SW quad. in clearance-innermost rectangle	9	Serrated flake. Non-beach flint
L72	SW quad.	41	Truncated flake. Non-beach flint
L73	SW quad. in clearance-innermost rectangle	9	Fragmentary retouched flake. ?Portland chert
L74	dump	34	Fragmentary pebble tool, battered at surviving end, cut, rather than broken, at other; linear incision on both faces. Smooth, elongated beach pebble of micaceous siltstone
L75	SE quad. outside stone ring, found with L67, 4 flint flakes, & a clay pipe stem fragment	55	Fragmentary carved stone vessel, with dark deposit on rim bevel and inner surface. Slate or fine-grained slaty mudstone
L76	?	59	Fragmentary hammer or pestle, battered on straight end. Oblique striations on flat face, which may be found, suggest use as hone. Micaceous sandstone

L77	ring of stones beneath mound, marked 'Y'	60	Roughly-trimmed disc, pecked and incised with human face. Slate
L78	?	60	Disc. Coarse, spotted slate
L79	NE quad.	14	Fragmentary holed stone with perforation worked from both faces. Slatey siltstone
L80	SE quad.	37A	Holed stone, perforated from unillustrated face, and apparently trimmed to shape. Fine, spotted slate
L81	NW quad.	13	Holed stone, perforated from illustrated face and apparently trimmed to shape along surviving edge. Fine, spotted slate
L82	SW quad. — initial clearance	11	Holed stone, perforated from both faces, and apparently trimmed to shape. Hornfels slate
L83	SW quad. in stone ring	15	Cupped stone, with opposed depressions worked from both faces. Coarse-grained greenstone
L84	as L83	15	Fragmentary holed stone, perforated from both faces. Slatey siltstone
L85	SW quad.	47	Holed stone, perforated from both faces and ground smooth around its edge. Fine, spotted slate
L86	?	58	Holed stone, perforated from both faces, and apparently trimmed to shape. Fine, spotted slate
L87	Foredown with burial	3	Unifacially-retouched 'fabricator'. Unassigned flint

Unprovenanced material

The Croft Andrew collection includes material which by the 1980s could not be attributed to any particular site. It is listed briefly here.

Davidstow Moor?

Five water-worn pebbles and an unworn slate fragment were found loose in a box which contained Davidstow Moor material.

Davidstow XXIV(22) or Treligga 1?

Another box contained a scrap of pottery or fired clay, together with 95 small fragments of slate and 6 of other rocks. Most of the stone fragments carry markings composed of Arabic numerals and Roman capital letters, either alone or combined with Greek letters. These would be consistent with Croft Andrew's recording both at Treligga 1, St Teath (Christie, 1985) and Davidstow XXVI(22). It is not, however, possible to relate them to either barrow.

Completely unprovenanced

There are also a slate disc (damaged) and an ovoid holed and cupped slate.

GENERAL DISCUSSION

by Patricia Christie and Frances Healy

The excavations on Davidstow Moor provide the first example in Cornwall in which *all* the sites in a defined area have been examined. Of the 28 sites excavated by C.K. Croft Andrew, 11 are thought to be prehistoric, most of them barrows or related structures. The nearest analogy to such a campaign since the Second World War was that undertaken by Charles Green at Shrewton, Wiltshire in 1958–60 and recently published (Green and Rollo-Smith, 1984). Amongst other comparable campaigns undertaken over the past 30 years are Nicholas Thomas's excavations on Snail Down, Wiltshire, Brewster's work in Yorkshire, Lynch's work at The Brenig, Denbighshire (Lynch, 1974) which has produced a range of radiocarbon dates in the mid-second millennium BC (uncal) and most recently the ring ditches at Four Crosses, Llandysilio, Powys (Warrilow *et al*, 1986).

Since all the barrows on Davidstow Moor belong to a single group, it is possible to study them together and isolate certain similarities and differences both in structure and in function within the group itself and to compare these with other sites in Cornwall and elsewhere. Table j is an attempt to present the details of Cornish sites excavated since 1939. The radiocarbon dates are too few to draw any meaningful inferences, though a list of these, together with dates from other Cornish barrows, is presented in Appendix 3.

Topography and Environment

It can be seen that the earliest well-defined activity was in the north of the area, shown by the concentration of lithic material including Neolithic arrowheads (L40, L41, L45, L56, L57) from sites XXVI(22) and XXIV(16/23). It may be suggested that the barrow cemetery started as an extension of the Tichbarrow group immediately to the north. Tichbarrow itself is linked to site XXIV(22) by the holed stones found in a similar position at both sites. It is further suggested that the original movement was from north to south, reflecting the inland penetration of groups represented by such coastal sites as Lousey Barrow (St Juliot) with its Beakers (Christie, 1985, 55) and Carruga, also in St Juliot, where the gold lunula, reportedly from a barrow, was found (Pearce, 1983, 411 No. 71 and Christie, 1985, 59). Some huts on Roughtor (Roughtor North, SX 143815) have been identified in the Bodmin Moor Survey as belonging to several phases, and may include some of earlier Bronze Age date. It seems possible that certain occupants of the moor chose to site their burial and ritual centres at a distance from their settlement, yet intervisible, on the south-facing ground to the north from whence they had perhaps originally come. The land between is marshy now (Crowdy Marsh, which has a post-war reservoir) but may have been less so in the earlier Bronze Age.

There is no way of telling, in the absence of pollen analyses, what the immediate area may have supported in terms of vegetation, nor whether any cultivation was taking place during the building and use of the barrows. The only clue to the environment is discussed in Appendix 2 in relation to the charcoal. This indicates mixed oak woodland, while the woodland species represented by the charcoal suggest forest clearance, though equally there is evidence of heathland or scrub vegetation. It is not possible to tell what the Bronze Age soils were like, as no suitable samples were kept, but from the excavator's observations it would appear that they were gleyed brownearths and peaty gleyed podzols, with considerable iron pan (Claydon, 1964, 315). The flat ground was not well drained before the airfield was constructed, and damper conditions since the latter part of the Bronze Age, together with changes in land use, may have resulted in a change of soil type since the barrows were built. The excavations at Davidstow, therefore, contribute little to the palaeoenvironmental

evidence now accumulating for upland areas in the county, some of which is discussed further below.

Structure

As with barrows everywhere, considerable variation is to be seen in building techniques. The Davidstow Moor group includes ditched and unditched sites, flat-topped turf mounds, cairn rings and internal cairns. Table j shows some of the features distinguished. The only site in the group to reveal *stake settings* was Site I, but it can be linked with Tregulland on the northeast (Ashbee, 1958) and the Otterham barrow to the north (Dudley, 1961) both of which had stake circles, albeit of a different type (Ashbee, 1960, 64). No chronological inference can be drawn from stake circles, but, like ditches, they may represent a cultural tradition (Christie, 1985, 115). The circular setting interpreted as stone sockets at site XXVI(22) may have performed a similar function, namely that of enclosing the ritual or burial area.

Ditched barrows, while more frequent than previously thought, are still rare in Cornwall. At Davidstow only three sites have ditches: those of sites II(3) and III(8) are similar, both regular and an integral part of the design, while at the same time providing material for the banks on their inner and outer lip. In contrast, the ditch of site XXVI(22) is irregular, singularly shallow and may have been dug as a quarry for the small amount of material which the final monument appears to have contained, rather than primarily to enclose the ritual area as in the other two sites. Ditches in general, then, could be an early feature of the Davidstow group, as at Treligga on the north coast, where it has been suggested that the ditched barrow Treligga 7 may have been the earliest in that group (Christie, 1985, 87). The function of ditches, as quarries or as part of barrow design, has been discussed by Henrietta Quinnell in connection with Watch Hill (Miles, 1975, 23) and more recently by George Smith in connection with Trelan 2 (1984, 24).

Where *turf mounds* are present, they appear to be flat-topped, including the largest site, Site I, where the upper surface served for further rituals. These activities support the interpretation that the upper stake setting formed a palisade associated with the barrow, rather than being a later feature, and may be compared with Phase III at the much higher mound (Amesbury G71) on Earls Farm Down, Wiltshire (Christie, 1967). Nearer at hand, the scattering of sherds on the surface of the mound at Cataclews provides an analogy within the county. While many of the flat-topped mounds may be explained by the robbing of any pre-existing stone superstructure (especially if this was of quartz, which was favoured for road surfacing) and other factors of denudation over the centuries, this cannot wholly explain their shape. The Bodmin Moor survey carried out by CAU and RCHM has shown that platform cairns, mainly stone built, of several different types, all over 10m diameter, are common on the moor. The predominantly turf-built ones on Davidstow Moor would fit within this pattern.

The size and shape of barrow mounds has recently been discussed in connection with Trelan 2 (Smith, 1984) from which it appears that both conical and flat-topped mounds were current in the county during the earlier Bronze Age. That they were broadly contemporary is shown by Crig-a-mennis and Davidstow I, the first conical, the second flat-topped, with comparable radiocarbon dates (Table j and Appendix 3).

It could be suggested that a tendency toward regularity, whether in the layout of ditches or stake circles, may have increased during the early part of the Bronze Age, so that by the mid-second millennium BC (uncal) certain sites, whether sepulchral or ritual, were being more carefully planned from the start. This is demonstrated at Davidstow by site I. However,

the regularly laid out and neatly cut ditches at Davidstow II(3) and III(8), as at Trelan 2 on the Lizard which also has an early radiocarbon date, suggest that this tendency was already well developed by the 18th century BC (uncal).

Burial and ritual

The group has given important evidence of Bronze Age ritual, the detailed nature of which we can never know. As is now beginning to be recognised, not all barrows are burial mounds, and many would appear to have some other, non-sepulchral, function. At Davidstow, it is the largest site, namely site I, which is the most obviously non-sepulchral, and elaborate rituals involving fires, wooden objects and broken pottery appear to have been carried out within a palisaded enclosure. Site V(2), where again no direct burial evidence was found, contained a large wooden object on the east side of an enclosure which otherwise appears to have been virtually empty at floor level. Other non-sepulchral sites may include the possible 'pond barrows' VI and VII.

The nature of the *wooden objects* is unknown, but the recorded shape of the ones in Site I suggest possible agricultural implements (turf cutters etc?) and may have been votive deposits. The large wooden object from site V(2) was interpreted as a totem by the excavator. The frequent use of *quartz* in the building of barrows has already been noted (Christie, 1985) and its use was carefully recorded by Croft Andrew at several barrows in the present group.

The *holed stones* set on the barrow floor in site XXVI(22) are thought to represent roof weights which symbolically recall the house of the deceased, though other functions have been suggested for the Tichbarrow examples (Trudgian, 1976, 36). Underbarrow structures have been recently discussed by George Smith and compared with other sites within Cornwall (1984, 25). Indeed site XXVI(22), the most complex and perhaps most interesting of all the sites excavated by Croft Andrew, shows influences from beyond the county (ditch, Late Neolithic pottery, house-of-the-dead, late Beaker) which support the theory that it was the earliest monument in the group. Moreover it was situated on high ground overlooking the area to be developed by the linear Bronze Age cemetery. It is perhaps relevant that the three known barrows containing holed stones, including Tichbarrow, have cairn rings, while the two fully excavated examples on Davidstow Moor also contain burials. It would indeed be interesting to know what Tichbarrow itself contains.

Artefactual material

This has been fully discussed by Frances Healy in her general discussion of the ceramic and lithic material. None of the artefacts can compare in quality and richness with those from some other Cornish barrow groups, but a few unusual and interesting objects have come to light. The cupped stone from Site I (L21) may be related to others from Cornish barrows recently discussed by Fiona Roe in connection with Lousey Barrow (in Christie, 1985, 56–9) which could represent prehistoric nutcrackers.

The face stone (L77) from site XXVI(22) is of considerable interest if, as is thought, it represents a stylised portrait, perhaps of someone connected with the funerary rituals? Carved slate is rare, as stated by Frances Healy in her discussion of the Bronze Age lithic material above, while this object is unique of its kind both for Cornwall and indeed elsewhere. It may represent the first known portrait in Britain for this period.

The pottery finds, though sparse, form a useful adjunct to the main body of material already known from the peninsula. The identification of Grooved Ware is of particular importance. This, together with further finds of national styles of pottery from Croft

Andrew's excavations, give good indications that Cornwall, far from being an isolated backwater in the later 3rd and early 2nd millennia BC (uncal), was in the mainstream of activities – no doubt due to its mineral wealth. The Trevisker pottery from the excavations swells the corpus of this style and adds more radiocarbon dates to those already available, confirming that the Trevisker style was fully established in Cornwall itself by around 1550 BC (uncal) with its occurrence outside the county, in Devon, rather later. Dr Williams' analysis of the pot fabric (Appendix 1) is of particular interest in showing that the use of gabbroic clay returned once again into fashion at this time. This matter has been discussed in a recent paper (Quinnell, 1987) and it only remains for this writer to endorse the need for more detailed geological studies, and for the analysis of pottery already in museum collections. The latter might confirm whether there was, as seems probable, discontinuity in the use of gabbroic clay at various times, namely in the Late Neolithic/Early Bronze Age, when new ceramic traditions were introduced, and again in the Early Iron Age, when further new traditions appeared.

No metal objects of Bronze Age date were found at Davidstow, but the dagger from Fore Down St Cleer is an important addition to those known from the county. As has been mentioned elsewhere, Wessex II dating of these daggers is thrown out by the association here of the early Trevisker pot, suggesting that in Cornwall at least there may be considerable overlap between Wessex I and Wessex II, that is, Pearce's Trenovissick and Plymstock phases of the local Bronze Age (Christie, 1986, 104).

Local settlement

The occupation of Davidstow Moor is shown by lithic finds to start in the Mesolithic and to continue well beyond the period of the barrows into medieval and post-medieval times. No Neolithic settlement was identified, but the lithic material suggests it existed nearby. The Grooved Ware sherds from site XXVI(22) may be related either to pre-barrow settlement or to a Late Neolithic site which was remodelled in the earlier Bronze Age. Elsewhere on Bodmin Moor the main periods of settlement have so far seemed to be the Mesolithic (Jacobi, 1979, Fig 2 and 17), the later Bronze Age, and the Middle Ages (Johnson, 1980, 161–8, 172, Fig 11) with the earlier Neolithic scarcely represented and the later Neolithic and Early Bronze Age known mainly by ritual and funerary monuments (Johnson, 1980, 145–6, Figs 2, 4). Yet there are indication of occupation in the third and early second millennia BC (uncal) which current work is beginning to confirm (information CAU).

Some enclosures on the moor seem to be Carn Brea-like settlements (Mercer in prep.), while Neolithic activity is further represented by finds of stone axes, polished flint axes, and leaf-shaped arrowheads (Mercer, 1981, 180–1). The huts and enclosure walls of the Bronze Age settlement on Stannon Down, St Breward, were built over a soil which covered the possible ruins of earlier enclosure walls and contained not only sherds of early Trevisker series pottery but possibly Neolithic material in the form of sherds reminiscent of Grooved Ware, and two greenstone axes (Mercer, 1970, 35–8, Fig 15: 10–13, Fig 9: 2–3; Mercer and Dumbleby, 1978). Collections from the Dozmary Pool area on the west of the moor include many Neolithic and Early Bronze Age implements (Wainwright, 1960, 197; Jacobi, 1979, 52), although these have not been published in the same detail as the accompanying Mesolithic material. Later Neolithic material is similarly present in a large collection made around Siblyback reservoir on the south of the moor (information from Henrietta Quinnell). Combined with the Davidstow evidence, these suggest that third and early second millennium BC (uncal) settlement on the moor may have been extensive.

Table j: Cornish barrows excavated since 1939

	Burials cr = cremation	Pits c = central	Structures: u = upright T = timber S = stone	Fires/charcoal	Stake/post circle s = stone circle	Ditch	Stone ring/kerb e = entrance	Clay/earth bank	Turf mound	Stone mound	Capping c = clay s = stone	Over 10 m. diameter p = platform mound	Pottery t = Trevisker	Lithics r = residual	Other finds h = holed stones cm = cupmarks	Quartz use p = pebbles	Multiphase	C-14 date (uncal.)
DMI	?	Xc		X	X				X			Xp	Xt	X	X	?	X	3520±70 BP
DMII				Xs		X		X	X			Xp		Xr		X		
DMIII		X		Xs		X		X	X			Xp		X		X		3740±90 BP
DM IV								X	X			Xp						
DM V			X	Xts	X		X		X			Xp	X	X	X	X	?	3580±70 BP
SAUCER-SHAPED ?POND BARROW																		
DM VII		Xc	Xs					X	? POND BARROW					Xmollusc		X		
DM XIX		Xcr	X?c	Xs					X			? oval		X				
DM XXIV		Xcr	Xc		X				X	X	?	X	Xt	Xr	Xh	X		3440±100 BP
DM XXV			?	Xs					X					X		X		
DM XXVI		Xcr	X	Xs	X	Xs	X	X	?			X	Xbgw	X	Xh	?	X	4130±70 BP
Tichbarrow		PARTIAL EXCAVATION						X		X	X		X		Xh		?	
Otterham		?	Xc	Xs		X	X			X	X		X		X		?	
Stannon 1			Xc	Xs						X				X				
Stannon 2			Xc		X	MOUND LARGELY				X	DESTROYED						3440±70 BP	
Stannon 3		Xcr	Xc	X			X			X			Xt	X	X			
Tregulland		Xcr	X	Xs		X	X	X		X	X		X		Xm		X	
Colliford II			Xc		X			X		X				Xr				3610±70 BP
Colliford IVA				Xts				X		X	X		X		Xr			3510±80 BP
Colliford IVB				Xs				X		X				Xr				
Colliford IVC		Xcr	Xc		X			X		X			X	Xr				3580±80 BP
Fore Down St Cleer		Xcr		?					X	?			Xt	X	X			
St Neots		?		Xs		Xs		X		X		X					?	
Watch Hill		X	Xc	Xs			X	X?e		X		Xc		X			X	3470±70 3420±80 BP
Cocksbarrow		Xcr	Xc	Xs		X		Xe		X		Xc		X	X	X	Xp	X

	Burials cr = cremation	Pits c = central	Structures: u = upright T = timber S = stone	Fires/charcoal	Stake/post circle s = stone circle	Ditch	Stone ring/kerb e = entrance	Clay/earth bank	Turf mound	Stone mound	Capping c = clay s = stone	Over 10 m. diameter p = platform mound	Pottery t = Trevisker	Lithics	r = residual Other finds h = holed stones cm = cupmarks	Quartz use p = pebbles	Multiphase	C-14 date (uncal.)			
Caerloggas I		Xc	Xt		X	X		X			Xc			Xr	X	Xp	X				
Caerloggas II		X?					X		X		Xc										
Caerloggas III			Xus?t				Xe		X		Xc			Xr		Xp					
Trenance Down				Xus			Xe		X		Xc			Xr		Xp	?				
Lousey Barrow	X		Xs	X		X	X		X	X	Xc	X	Xb		X	Xp	X?				
Cataclews	Xcr	X	?s	X			X		X				Xt	Xr		X	?	3510±70 BP			
Harlyn Bay		X	Xs		PART ONLY				X				Xt					3460±70 BP			
Trevone A			Xus		PART ONLY					X			Xgw								
Trevone B										X			Xgw								
Treligga 7	?	X?usX		X		X	X		X		X		Xfv	X	Xcm	X	X?				
Treligga 1	Xcr	X		X			X			X			X?	?	X	X	X?				
Treligga 2	Xcm	Xc	Xs	X			X			X			Xt	X	Xcm			3380±80 BP			
Treligga 5	?cr	X	NO INFORMATION ON MOUND										?	Xt		X					
St Eval		Xs?	DAMAGED MOUND							X		Xoval				X?					
Glendorgal	X	X	Xs				X						X	X	X	Xp					
Rosecliston	X	Xc				X	MOUND DEMOLISHED						Xt		X						
Crig-a-mennis		X	Xs			X	Xe		X		Xs	X	Xt	X	X	X		3515±90 BP			
Carvinack	Xcr	X	Xs		X		X		X		Xs	X	Xb	vt	X	X	X	X?			
Trevellas Down		X PLOUGHED DOWN MOUND								X			X								
Nancecuke		X		X		X	X?		X			X		X	X			3550±80 BP			
Carnon Downs	Xcr			X	X UNPUBLISHED					X			X								
Gloweth		X	Xs		X		X	UNPUBLISHED													
Treliske		X				X	X	DESTROYED				X				X					
Chysauster	X	X	UNPUBLISHED				X			X			X		X						
Trelan	?	Xc			X	X		X	X		Xjc		X	Xr				3740±110 BP			
Tregiffian	ENTRANCE TOMB					SECONDARY USE								X		Xcm		3489±59 BP			

There is some corresponding palaeoenvironmental evidence. On East Moor, oak woodland had been cleared by the time Clitter's Cairn was built. The cairn itself seems to have been of earlier Bronze Age date, since it pre-dated a probably later Bronze Age field system and contained holed stones like those discussed above (Brisbane & Clews, 1979). To the south of the moor at Colliford, the soils beneath two barrows, one of them radiocarbon dated to the mid-second millennium BC (uncal) were highly podsolised, with prominent iron pan formation and a distinct peaty surface, while the soil beneath a contemporary barrow on the opposite slope of the St Neot Valley was much less heavily podsolised. The variation may be attributable to human activity, as may the diminished woodland cover which obtained in the area by the time the barrows were built (Maltby and Caseldine, 1984) both at Colliford and at Davidstow, as discussed in Appendix 2.

The presence of beach flint and other beach pebbles at Davidstow suggests that the occupants of the moor may have also spent time nearer the coast. The finding of a crustacean in site I may be relevant here. Jacobi's model for the local Mesolithic, of summer exploitation of the upland by groups whose more permanent bases were at lower altitudes (1979, 84-6) may well be applicable into the earlier second millennium BC (uncal). Given the inimicality of the moor in winter, and the scarcity of evidence for Bronze Age or earlier cultivation there (Bell, 1984, 52-4), the upland may have been used for summer pasture, perhaps accompanied by hunting. However, more permanent occupation at these altitudes is not unknown (approximately 280m at Davidstow) and, as mentioned above, some hut groups on the moor are at even higher altitudes on the slopes of Roughtor and elsewhere. Further afield, excavation of barrows at 370m at Trelystan, Powys, revealed a late third to early second millennium BC (uncal) settlement, occupied by users of Grooved Ware and interpretable in terms of seasonal transhumance (Britnell, 1982).

Dating

While too much reliance should not be put on single dates, the five radiocarbon determinations for Davidstow (Appendices 2 and 3) are a useful confirmation of the sequence seen in the ceramic evidence: the earliest date associated with a site where Grooved Ware was found and the latest, Site XXIV(16/23) with Trevisker pottery, while the Collared Urn from Site V(2) lies in between. The Sites II and III, while not providing any ceramic material, are structurally similar so should be contemporary, and are earlier than Site V. If the Grooved Ware date from Site XXVI is excluded as relating to earlier settlement, the barrow group should span some 4-500 years, comparable to the span of a Cornish churchyard. With the earlier date included, some 1000 years of activity on Davidstow Moor can be envisaged. The gap between the dates for Sites XXVI and III does no more than reflect the lack of data.

Over forty years ago Sir Cyril Fox wrote that "the landward inaccessibility of Cornwall, and its accessibility by sea, tends to give a distinctive quality to its culture in all periods" (Fox, 1947, 41). This is still true today, even in the light of accumulated data and vastly increased knowledge, though the isolation of the peninsula may have been less than formerly envisaged in view of the occupation density now known to exist on Bodmin Moor, which has features linking it with Dartmoor further east. Some of this knowledge comes from the work of one man. The excavations by Kenneth Croft Andrew, despite the 40-year delay in publication, make a substantial contribution to the data available for two regions of the county, and to Cornish Bronze Age studies in general.

APPENDIX 1: PETROLOGICAL EXAMINATION OF BRONZE AGE POTTERY FROM THE CROFT ANDREW BARROWS,

By D.F. Williams (DOE Ceramic Petrology Project, Department of Archaeology, University of Southampton)

Introduction

Seventeen small sherds of predominantly Bronze Age pottery representing urns and associated vessels recovered from barrow excavations carried out in the 1940s by C.K. Croft Andrew (on behalf of the Ministry of Works) were submitted for thin section examination under the petrological microscope. The majority of sherds come from a series of barrows spread out along the north Cornish coast (Treligga, Lousey Barrow, St Juliot and Cataclews) while the remainder are from the Bodmin Moor area (Davidstow Moor and Foredown St Cleer). The object of the analysis was twofold: (1) to characterise in detail the fabrics involved and compare them with each other, and (2) if possible to suggest likely source areas for the pottery. (*Note: Pot numbers for north coast barrows relate to reports in *Cornish Archaeol* 24 (1985, 1–123).*)

Petrology

On the basis of the range of non-plastic inclusions present in the pottery samples, a number of fabric divisions have been provisionally made.

Group 1: *Gabbro*

Cataclews P11	cord-impressed Trevisker
Cataclews P12	? Trevisker, ? Food Vessel
Davidstow Moor Site 16/23 P3	cord-impressed Trevisker
Davidstow Moor Site 16/23 P4	cord-impressed Trevisker
Davidstow Moor Site 22 P5	? Grooved Ware
Treligga 1 P5	

The most prominent inclusions are made up of angular grains of partly decomposed feldspar, some of which have altered to sericite, fresher plagioclase and colourless or brown grains of amphibole, many of which appear as fibrous aggregates. Also present is a little pyroxene, serpentine and some grains of quartz. This assemblage of minerals closely resembles Peacock's (1969a; 1969b) description of the natural weathering clay overlying the gabbro on the Lizard Head, and this is likely to be the source of the clay used for the above vessels (see also, for example, Freestone and Rigby, 1982; Freestone, 1982). Previous work by Peacock (1972) on samples of Bronze Age pottery from Trevisker attributable to styles 1, 2 and 4 has shown that the characteristic clay used is gabbro.

Group 2: *Gabbro admixture*

The fabric of the sherds placed in this mixed group also contains the range of disaggregated minerals described in Group 1 and so therefore suggests the use of a weathered gabbroic clay from the Lizard. However, in addition to the gabbro other, non-gabbroic, inclusions are also present. These include large discrete grains of quartz and quartzite, frequent smaller quartz grains, sandstone, chert and granite. This 'mixed' gabbroic clay – if that is what it represents – seems to be a phenomenon restricted to the Bronze Age. An admixture of gabbro and additional inclusions is not normally found in gabbroic pottery of

the Neolithic, Iron Age, Roman and later periods (Peacock, 1969a; 1969b; 1969c; 1975; Williams, 1975).

It is not clear at present what explanation should be advanced to account satisfactorily for this gabbro admixture in the Bronze Age. Certainly there appears to be no good technological reason to add a temper or additional clay to gabbroic clay. Experiments carried out at Southampton University in the early 1970s showed that pots made of gabbroic clay from the Lizard stood up remarkably well to the rigours of bonfire firing when compared to pots made from other clays with different kinds of temper (pers. comm. D.P.S. Peacock). It is also interesting to note that Mannoni (1974) has shown that mediaeval gabbroic dishes from Liguria have good heat-storing qualities and provide high resistance to thermal shock.

These points may help to explain the exploitation of the Lizard gabbroic clays for pottery making over many hundreds of years. They may also suggest a reason for the possible exportation or collection of the Lizard gabbro clay during the Bronze Age to pottery-making centres some distance away where, either by accident or design, additional clay or inclusions were mixed in with the gabbro. Many of the non-gabbroic inclusions found in the pottery listed below, for example, could have been obtained within a reasonable distance to the find-sites. Indeed, several ethnological illustrations can be quoted for the long-distance transportation of raw clay (eg. Arnold, 1981; Bohannon, 1968). However, as pointed out by Peacock (1979), these tend to be exceptional, and about two miles or so is normally the maximum distance travelled for clay. The majority of the Croft Andrew barrow sites are some 50 miles distance from the Lizard.

An alternative explanation is that these vessels were made fairly closeby to the gabbro outcrop, but not actually on it; a suggestion that was made by Parker-Pearson (1979) some time ago. A variety of rocks can be found in the Lizard and Meneage district, either as outcrops, conglomerate beds or recent superficial deposits. Apart from the gabbro, these include serpentine, granite and granite gneiss, greenstone, pillow lavas, quartzite, slate, limestone, chert, sandstone, hornblende schist and mica schist (Flett and Hill, 1912). If, to some extent in the Bronze Age but perhaps not exclusively, the gabbro clay from the Lizard was quarried and then taken a little distance before being used for pot-making – ? a situation that appears to have been different to gabbro pot-making in other periods – additional, local, non-gabbroic inclusions may have ? inadvertently been introduced into the gabbro clay.

Cataclews P8

cord-impressed Trevisker

Cataclews P9

Bronze Age

Cataclews P10

?Trevisker

All three sherds contain gabbro plus a scatter of very large discrete grains of quartz and quartzite (up to 6.5mm across) and some sandstone.

Davidstow Moor Site 1 P1

cord-impressed Trevisker

Gabbro plus a highly altered sandstone showing traces of shearing.

Foredown St Cleer P7

cord-impressed Trevisker

Gabbro plus a groundmass of frequent well-sorted subangular quartz grains normally under 0.10mm in size and some flecks of mica. Grains of quartz are often present in gabbroic pottery, but usually not in such frequent numbers as they are in the Foredown St Cleer sherd.

Treligga 2 P6

cord-impressed Trevisker

Gabbro plus sandstone, chert and quartzite.

Treligga 5 P7
Gabbro plus several fragments of granite.

cord-impressed Trevisker

Group 3: Grog

Davidstow Moor Site V(2) P5	miniature collared vessel
Davidstow Moor Site XXVI(22) P6	? late beaker
Lousey Barrow, St Juliot P2	middle beaker
Lousey Barrow, St Juliot P3	late beaker

All three sherds contain scattered inclusions of grog (crushed up pottery). In addition, the sherd from Davidstow Moor Site V(2) also contains a little fine-grained quartz sandstone in an otherwise fairly clear clay matrix; while the sherd from the other Davidstow Moor site XXVI(22) contains ?chert, sandstone and greenstone; a little shale is present in sherd P2 from Lousey Barrow; and sherd P3 from the same site has some coarse ferruginous sandstone, muscovite mica, quartz grains and a little sericite. Due to the nature and widespread use of grog tempering in late Neolithic and early Bronze Age pottery, it is difficult to suggest a likely origin for these sherds on that basis alone (Clarke, 1970; Peacock, 1970; Darvill, 1982). However, it is clear that there is some variety in the non-grog inclusions of this group, suggesting that these vessels were not all made at the same location. In fact, it is quite possible that all four vessels may have been made locally to their find-site. Davidstow Moor lies just to the north of the granite mass of Bodmin Moor, in an area of Upper Devonian rocks, schist and greenstone (Geological Survey Sheet 336), while Lousey Barrow, St Juliot, is situated on Culm Measures (Geological Survey Sheet 322).

APPENDIX 2: THE CHARCOAL FROM DAVIDSTOW MOOR

By Caroline Cartwright

Twenty samples of charcoal from excavated contexts were submitted for identification and the results have been incorporated in the reports above. Two larger samples (53 grams and 725 grams) simply labelled 'Davidstow fires' were also examined and found to contain mostly *Quercus* sp. with some Leguminosae.

Five samples were submitted for C-14 dating at Harwell, and have given the following results:

Site XXIV, Sample DM 16 5/2

Charcoal from F.2, HAR-8098: $3440 \text{ BP} \pm 100 = 1490 \text{ BC}$ (1746 cal BC).

Site I(1), Sample DM1 4/7 (total weight 95 grams)

This comprises material from DM1 samples 4 and 7, combined for C-14 date. DM1 4 contained 50 grams of charcoal which included *Quercus* sp. (oak), Leguminosae, *Corylus* sp. (hazel), *Calluna* sp. (heather) and ?*Carpinus betulus* (hornbeam) charcoal.

DM1 7 contained 45 grams of charcoal from Leguminosae. This represents charcoal from 'fires' in Barrow I. HAR-6634: $3520 \text{ BP} \pm 70 = 1570 \text{ BC}$ (1883 Cal BC).

Site V(2), Sample DM2 4 (total weight 48 grams)

Charcoal includes: *Calluna* sp., *Quercus* sp., Leguminosae. Material derives from miniature cairn (F2) outside kerb on axis of south east quadrant of Barrow V(2).

HAR-6635: $3580 \text{ BP} \pm 70 = 1630 \text{ BC}$ (1936 Cal BC).

Site III(8), Sample DM8 2 (total weight approx. 18 grams)

Charcoal includes *Calluna* sp., Leguminosae and ? *Quercus* sp. Sample derives from centre on old turf in Barrow III(8).

HAR-6640: 3740 BP \pm 90 = 1790 BC (c. 2160 Cal. BC).

Site XXVI(22), Sample DM22 3 (total weight approx. 23 grams)

Charcoal includes *Corylus* sp., *Calluna* sp., *Quercus* sp., Leguminosae and *Salix/Populus* (willow/poplar). The material derives from a pit (F.6) in Barrow XXVI(22).

HAR-6643: 4130 BP \pm 70 = 2180 BC (c. 2740 Cal. BC).

(Calibrations based on Pearson and Stuiver, 1986).

Discussion

Most of the charcoal fragments examined and identified from Davidstow Moor derive from small branch and twig material. The fragments are usually fairly small and friable; overall weight totals are very low. *Quercus* sp. (oak) is well represented throughout the variety of excavated contexts – not surprising as oak has been an extremely useful multi-purpose timber for building and artifacts, fuel, fencing and the like, from the time of man's earliest exploitation of his surrounding vegetational resources. *Corylus* sp. (hazel) is also fairly well represented at Davidstow Moor; again, not unusually, since not only may hazel be used as part of a dietary regime, but the timber has many varied uses from bowstaves, axe handles and other artifacts to building material, fuel and hedging, fencing and basketry. Other components of a mixed oak woodland environment (apart from oak and hazel) may include *Fraxinus* sp. (ash) and *Carpinus betulus* (hornbeam), possibly with *Salix/Populus* (willow/poplar) on the fringes. Charcoal from these are represented sparsely from the barrows on Davidstow Moor. Heathland or scrub vegetation has yielded *Calluna* sp. (heather) and Leguminosae-type charcoal found in the excavated contexts.

Apart from the instances where one may be sure that the charcoal present is representative of fires or hearths, we may assume that much of the charcoal fragments from the above contexts must relate to a variety of on and off-site activities: economic, functional and environmental.

APPENDIX 3: DETAILS OF RADIOCARBON DATES FOR CORNISH BARROWS

Site	Context	Ref no	Sample no	Date bc	s.d.	Cal BC (mean date)
Moorland						
Davidstow XXVI(22)	phase 1	1	HAR 6643	2180	70	2740
Davidstow III(8)	primary	2	HAR 6640	1790	90	2162
Colliford CRII	?primary	3	HAR 2624	1660	70	1970
Davidstow V2	?secondary	4	HAR 6635	1630	70	1936
Colliford CRIVC	primary	5	HAR 2991	1630	80	1936
Davidstow I	primary	6	HAR 6634	1570	70	1883
Colliford CRIVA	primary	7	HAR 2994	1560	80	1830
Watch Hill	primary, in ditch	8	HAR 654	1520	70	1820
Davidstow XXIV(16)	primary	9	HAR 8098	1490	100	1746
Stannon cairn 2	primary	10	HAR 5130	1490	70	1746
Watch Hill	primary (as no 8)	11	HAR 655	1470	80	1740

Coastal

Nancekuke	primary	12	HAR 8097	1600	80	1898
Crig-a-minnis	primary	13	NPL 193	1565	90	1880
Cataclews	primary	14	HAR 8099	1560	70	1830
Harlyn	primary	15	BM 2472	1510	70	1856
Treligga 2	?secondary	16	HAR 8100	1430	80	1685

South-West

Trelan 2	pre-barrow	17	HAR 5280	2020	120	2440
	post-hole					
Chysauster cairn 38	satellite	18	HAR 6549	1840	120	2270
Trelan 2	phase 2	19	HAR 4540	1790	110	2172
Chysauster cairn 38	central	20	HAR 6652	1790	90	2175
Chysauster cairn 38	satellite	21	HAR 6651	1730	80	2076
Chysauster cairn 38	old land surface	22	HAR 6548	1700	80	2030
Tregiffian	secondary	23	BM 935	1540	60	1830
Chysauster cairn 38	central	24	OXA 822	1480	80	1770
Chysauster cairn 38	satellite	25	OXA 821	1380	80	1632
Trelan 2	primary silt of	26	HAR 5510	1380	120	1640
	phase 2 ditch					
Chysauster cairn 38	outlying	27	HAR 6927	1330	120	1582
Chysauster cairn 38	satellite	28	HAR 6926	1200	90	1420
Chysauster cairn 38	satellite	29	HAR 6654	1160	70	1385

(Dates calibrated according to Pearson and Stuiver, 1986)

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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**; 302–381.
- Arnold, D.E., 1981. 'A model for the identification of non-local ceramic distribution: a view from the present', in Howard, H. and Morris, E.L., *Production and Distribution: a Ceramic Viewpoint*, Brit Archaeol Rep **120**; 31–44.
- Ashbee, P., 1958. 'The excavation of Tregulland barrow, Treneglos Parish, Cornwall', *Antiq J* **38**; 174–196.
- Ashbee, P., 1986. 'The Excavation of Milton Lilbourne Barrows 1–5, Wiltshire Archaeol and Nat Hist Magazine **80**; 23–96.
- Axford, E.C., 1975. *Bodmin Moor*.
- Barnatt, J., 1982. *Prehistoric Cornwall – the Ceremonial Monuments*, Wellingborough.
- Beckensall, S., 1986. *Rock Carvings of Northern Britain*, Shire Publications.
- Bell, M., 1984. 'Environmental archaeology in south west England', in Keeley, H.C.M. (ed), *Environmental Archaeology: a Regional Review*, Directorate of Ancient Monuments and Historic Buildings Occasional Paper **6**; London; 43–131.
- Bohannon, P. and Bohannon, L., 1968. *Tiv Economy*, London.
- Brisbane, M. and Clews, S., 1979. 'The East Moor systems, Altarnun and North Hill, Bodmin Moor', *Cornish Archaeol* **18**; 33–56.
- Britnell, W., 1982. 'The Excavation of Two Round Barrows at Trelystan, Powys', *Proc Prehist Soc* **48**; 133–201.
- Burgess, C., 1980. *The Age of Stonehenge*, London.
- Burgess, C. and Shennan, S., 1976. 'The Beaker phenomenon: some suggestions', in Burgess, C. and Miket, R. (eds) *Settlement and Economy in the Third and Second Millennia BC*, Brit Archaeol Rep **33**, Oxford.
- Burgess, C., 1986. "'Urns of no small variety": Collared urns reviewed', *Proc Prehist Soc* **52**; 339–351.
- Care, V., 1982. 'The collection and distribution of lithic materials during the Mesolithic and Neolithic periods in southern England', *Oxford J Archaeol* **1**(3); 269–85.
- Christie, P.M., 1960. 'Crig-a-Mennis: a Bronze Age barrow at Liskey, Perranzabuloe, Cornwall', *Proc Prehist Soc* **26**; 76–97.
- Christie, P.M., 1964. 'A Bronze Age round barrow on Earls Farm Down, Amesbury', *Wilts Archaeol and Nat Hist Mag* **59**; 30–45.
- Christie, P.M., 1967. 'A barrow-cemetery of the second millennium BC in Wiltshire, England', *Proc Prehist Soc* **33**; 336–366.
- Christie, P.M., 1976. 'C-14 date for a Cornish round barrow', *Antiquity* **50**; 240.
- Christie, P.M., 1985. 'Barrows on the North Cornish Coast: wartime excavations by C.K. Croft Andrew 1939–44', *Cornish Archaeol* **24**; 23–118.
- Christie, P.M., 1986. 'Cornwall in the Bronze Age', *Cornish Archaeol* **25**; 81–110.
- Christie, P.M. and Rose, P., 1987. 'Davidstow Moor, Cornwall: the medieval and later sites, wartime excavations by C.K. Croft Andrew 1941–42', *Cornish Archaeol* **26**; 163–195.
- Clare, T., 1986. 'Towards a reappraisal of henge monuments', *Proc Prehist Soc* **52**; 281–316.
- Clark, J.G.D., 1934. 'Derivative forms of the Petit Tranchet in Britain', *Archaeol J* **91**; 34–58.
- Clark, J.G.D., 1936. 'Report on a Late Bronze Age site in Mildenhall Fen, West Suffolk', *Antiq J* **13**; 29–49.
- Clark, J.G.D., Higgs, E.S. and Longworth, I.H., 1960. 'Excavations at the Neolithic site at Hurst Fen, Mildenhall, Suffolk, 1954, 1957 and 1958', *Proc Prehist Soc* **26**; 202–45.
- Clarke, D.L., 1970. *Beaker Pottery of Great Britain and Ireland*, Cambridge.
- Clayden, B., 1964. 'Soils of Cornwall', in *Present Views on Some Aspects of the Geology of Cornwall and Devon*, Truro; 311–330.

- Cleal, R., 1984. 'The later Neolithic in eastern England', in Bradley R. and Gardiner, J. (eds) *Neolithic Studies, a Review of Some Current Research*, Brit Archaeol Rep 133, Oxford; 135–58.
- Coles, J.M., Hibbert, F.A. and Clements, C.F., 1970. 'Prehistoric roads and tracks in Somerset, England', *Proc Prehist Soc* 36; 125–51.
- Coles, J.M. and Orme, B.J., 1978. 'Bronze Age implements from Skinner's Wood, Shapwick', *Somerset Levels Papers* 4; 114–23.
- Croft Andrew, C.K., 1945. 'Recent archaeological work in Cornwall', *Annual Reports and Transactions of the Plymouth Institution* 19–20 (1948); 39–46.
- Darvill, T.C., 1982. 'The ceramic fabrics', in Britnell, W., 'The excavation of two round barrows at Trelystan, Powys', *Proc Prehist Soc* 48; 193–195.
- Dudley, D., 1961. 'The excavation of the Otterham Barrow, Cornwall', *J Roy Inst Cornwall* 4 (Pt. 1); 62–80.
- Dudley, D., 1964. 'The excavation of the Carvinack barrow, Tregavethan, near Truro, Cornwall', *J Roy Inst Cornwall n. ser.* 4; 414–450.
- Ellison, A., 1984. 'The pygmy vessel', in Griffith, F.M. 'Archaeological investigations at Colliford Reservoir, Bodmin Moor, 1977–78', *Cornish Archaeol* 23; 79–81.
- Flett, J.S. and Hill, J.B., 1912. *The Geology of the Lizard and Meneage*, London.
- Ford, S., Bradley, R., Hawkes, J. and Fisher, P., 1984. 'Flint-working and the metal age', *Oxford J Archaeol* 3(2); 157–173.
- Fox, C., 1938. 'Two Bronze Age cairns in South Wales: Simonstown and Pond Cairns, Coity Higher Parish, Glamorgan', *Archaeologia* 87; 129–80.
- Fox, C., 1947. *The Personality of Britain* (4th edn.), Cardiff.
- Freestone, I.C., 1982. 'Applications and potential of electron probe micro-analysis in technological and provenance investigations of ancient ceramics', *Archaeometry* 24; 99–116.
- Freestone, I.C. and Rigby, V., 1981. 'Class B cordoned and other imported wares from Hengistbury Head, Dorset', in Freestone, I., Johns, C. and Potter, T. *Current Research in Ceramics: Thin Section Studies*, British Museum Occasional Paper 32; 29–41.
- Gerloff, S., 1975. *The Early Bronze Age Daggers in Great Britain and a Reconsideration of the Wessex Culture*, Prähistorische Bronzefunde Abt. VI Bd. 2 Beck, Munich.
- Green, H.S., 1980. *The Flint Arrowheads of the British Isles*, Brit Archaeol Rep 75, Oxford.
- Green, C. and Rollo-Smith, S., 1984. 'The excavation of eighteen round barrows near Shrewton, Wiltshire', *Proc Prehist Soc* 50; 255–318 and microfiche.
- Greenwell, W., 1877. *British Barrows*, Oxford.
- Griffith, F.M., 1984. 'Archaeological investigations at Colliford Reservoir, Bodmin Moor, 1977–78', *Cornish Archaeol* 23; 49–130.
- Grinsell, L.V., 1978. 'Dartmoor Barrows', *Proc Devon Archaeol Soc* 36 (1979); 85–180.
- Harris, D., 1978. 'A cist at Trevemedar, St Eval', *Cornish Archaeol* 17; 137–9.
- Harris, D., 1979. 'Poldowrian, St Keverne: a beaker mound on the gabbro of the Lizard peninsula', *Cornish Archaeol* 18; 13–32.
- Harris, D. and Trudgian, P., 1984. 'The excavation of three cairns at Stannon, Bodmin Moor', *Cornish Archaeol* 23; 141–55.
- Healy, F., 1984a. 'Farming and field monuments: the Neolithic in Norfolk', in Barringer, C. (ed), *Aspects of East Anglian Prehistory: Twenty Years after Rainbird Clarke*, Norwich; 77–140.
- Healy, F., 1984b. 'Lithic assemblage variation in the late third and early second millennia bc in eastern England', *Lithics* 5; 10–18.
- Healy, F., 1985a. 'And so to Cornwall', *Lithics* 6; 18–20.
- Healy, F., 1985b. 'The struck flint', in Shennan, S.J., Healy, F. and Smith, I.F., 'The excavation of a ring-ditch at Tye Field, Lawford', *Archaeol J* 142; 177–207.

- Jacobi, R.M., 1979. 'Early Flandrian hunters in the south-west', *Proc Devon Archaeol Soc* **37**; 48–93.
- Jarvis, K. and Maxfield, V., 1978. 'The excavation of a first century Roman farmstead and a Late Neolithic settlement, Topsham, Devon', *Proc Devon Archaeol Soc* **33**; 209–66.
- Johnson, N., 1980. 'Later Bronze Age settlement in the south-west', in Barrett, J. and Bradley, R. (eds), *The British Later Bronze Age*, *Brit Archaeol Rep* **83**; 141–80.
- Johnson, N. and David, A., 1982. 'A Mesolithic site on Trevoise Head and contemporary geography', *Cornish Archaeol* **21**; 67–103.
- Keeley, H. (ed), 1984. *Environmental Archaeology: a Regional View*. DAMHB Occ. Paper 6; 47–54.
- Lanting, J.N. and van der Waals, J.D., 1972. 'British beakers as seen from the continent', *Helinium* **12**; 20–46.
- Longworth, I.H., 1972. 'Report on the pottery from Trevone: the grooved ware vessel', in Buckley, D.G., 'The excavation of two slate cairns at Trevone, Padstow, 1972', *Cornish Archaeol* **11**; 14–5.
- Longworth, I.H., 1979. 'The Neolithic and Bronze Age pottery', in Wainwright, G.J., *Mount Pleasant, Dorset: excavations 1970–1971*, *Rep Res Comm Soc Antiq London* **37**; 75–124.
- Longworth, I.H., 1984. *Collared Urns of the Bronze Age in Great Britain and Ireland*, Cambridge.
- Lynch, F., 1972. 'Ring Cairns and related monuments in Wales', *Scottish Archaeol Forum* **4**; 61–80.
- Lynch, F., 1973 and 1974. 'Excavations at the Brenig, Denbighshire: Interim Reports', *Denbigh Hist Trans* **23** and **24**.
- Maltby, E. and Caseldine, C.J., 1984. 'Environmental reconstruction at Colliford', in Griffith, F., 'Archaeological investigations at Colliford Reservoir, Bodmin Moor 1977–78', *Cornish Archaeol* **23**; 49–131.
- Mannoni, T., 1974. 'Mineralogical analysis of medieval pottery', *Records of the VII International Ceramics Congress*.
- Matthews, C.L., 1976. *Occupation Sites on a Chiltern Ridge*, *Brit Archaeol Rep* **29**, Oxford.
- Mercer, R.J., 1970. 'The excavation of a Bronze Age hut-circle settlement, Stannon Down, St Breward, Cornwall, 1968', *Cornish Archaeol* **9**; 17–46.
- Mercer, R.J., 1981. 'Excavations at Carn Brea, Illogan, Cornwall, 1970–73', *Cornish Archaeol* **20**.
- Mercer, R.J. and Dimbleby, G.W., 1978. 'Pollen analysis and the hut circle settlement at Stannon Down, St Breward', *Cornish Archaeol* **17**; 25–28.
- Miles, H. and Miles, T.J., 1971. 'Excavations on Longstone Downs, St Stephen-in-Brannel and St Mewan', *Cornish Archaeol* **10**, 5–28.
- Miles, H., 1975. 'Barrows on the St Austell granite', *Cornish Archaeol* **14**; 5–81.
- O'Neil, B.J. St. J., 1948. 'War and archaeology in Britain', *Antiq J* **28**; 22–24.
- Parker-Pearson, M.G., 1979. *Ceramic Exchange in South West England during the Bronze Age*. Unpublished dissertation, University of Southampton.
- Patchett, F., 1944. 'Cornish Bronze Age pottery', *Archaeol J* **101** (1946); 17–49.
- Patchett, F., 1950. 'Cornish Bronze Age pottery, Part II', *Archaeol J* **107**; 44–65.
- Peacock, D.P.S., 1969a. 'Neolithic pottery production in Cornwall', *Antiquity* **43**; 145–149.
- Peacock, D.P.S., 1969b. 'A contribution to the study of Glastonbury ware from south-western Britain', *Antiq J* **49**; 41–61.
- Peacock, D.P.S., 1969c. 'A Romano-British salt-working site at Trebarveth, St Keverne', *Cornish Archaeol* **8**; 47–65.
- Peacock, D.P.S., 1970. 'The scientific analysis of ancient ceramics: a review', *World Archaeol* **1**; 375–389.
- Peacock, D.P.S., 1972. 'Petrology', in ApSimon, A.M. and Greenfield, E., 'The excavation of Bronze Age and Iron Age settlements at Trevisker, St Eval, Cornwall', *Proc Prehist Soc* **38**; 331.
- Peacock, D.P.S., 1975. 'The grass-marked sherd', in Platt, C. and Coleman-Smith, R., *Excavations in Medieval Southampton, 1953–69*, Leicester; 47.
- Peacock, D.P.S., 1979. 'Glastonbury ware: an alternative view', in Burnham, B. and Kingsbury, J., *Space, Hierarchy and Society* **59**; 113–115.

- Pearce, S., 1983. *The Bronze Age Metalwork of South Western Britain*, Brit Archaeol Rep 120, Oxford.
- Pearson, G.W. and Stuiver, M., 1986. 'High-precision calibration of the radiocarbon time scale, 500–2500 B.C.', *Radiocarbon* 28(2B); 839–62.
- Pitts, M.W., 1978. 'Towards an understanding of flint industries in post-glacial England', *Univ London Inst Archaeol Bull* 15; 179–97.
- Quinnell, H., 1987. 'Cornish gabbroic pottery: the development of a hypothesis', *Cornish Archaeol* 26; 7–12.
- R.C.H.M.E. (forthcoming) *Bodmin Moor. Vol. 1, The Prehistoric and Historic Landscape*.
- Saville, A., 1980. 'Five flint assemblages from excavated sites in Wiltshire', *Wiltshire Archaeol Mag* 72/73; 1–27.
- Saville, A., 1981a. 'The flint and chert artefacts', in Mercer, R.J., 'Excavations at Carn Brea, Illogan, Cornwall, 1970–73', *Cornish Archaeol* 20; 101–52.
- Saville, A., 1981b. *Grimes Graves, Norfolk, Excavations 1971–72: Vol. II, The Flint Assemblage*, Department of the Environment Archaeological Report 11, London.
- Saville, A., 1982. 'Carrying cores to Gloucestershire: some thoughts on lithic resource exploitation', *Lithics* 3; 25–8.
- Savory, H.N., 1984. 'The Pen-y-wyrlod long cairn, Talgarth, Brecknock', in Britnell, W.J. and Savory, H.N., *Gwernvale and Pen-y-wyrlod: Two Neolithic Long Cairns in the Black Mountains of Brecknock*.
- Smith, G.H., 1980. 'The chipped stone', in McAvoy, F., Morris, E.L. and Smith, G.H. 'The excavation of a multi-period site at Carnagoon Bank, Lizard, Cornwall, 1979', *Cornish Archaeol* 19; 52–9.
- Smith, G.H., 1982. 'The Mesolithic and Neolithic settlement (Area 2)', in Smith, G. and Harris, D. 'The excavation of Mesolithic, Neolithic and Bronze Age settlements at Poldowrian, St Keverne, 1980', *Cornish Archaeol* 21; 26–55.
- Smith, G.H., 1984. 'Excavations on Goonhilly Downs, the Lizard, 1981', *Cornish Archaeol* 23; 3–48.
- Smith, G.H. (forthcoming). 'A kerbed chamber at Chysauster'.
- Smith, I.F., 1965. *Windmill Hill and Avebury: Excavations by Alexander Keiller 1925–1939*, Oxford.
- Smith, I.F., 1979. 'The chronology of British stone implements' in Clough, T.H. McK. and Cummins, W.A. (eds), *Stone Axe Studies*, Res Rep Councl Brit Archaeol 23, London; 13–22.
- Soil Survey of England and Wales, 1983. *Sheet 5: SW England*, Harpenden.
- Trudgian, P., 1976. 'Observation and excavation at Tichbarrow, Davidstow', *Cornish Archaeol* 15; 31–45.
- Trudgian, P., 1977a. 'Excavation of a cairn at Crowdy Marsh, Advent, near Camelford', *Cornish Archaeol* 16; 17–21.
- Trudgian, P., 1977b. 'Mesolithic flint scatters around Crowdy Marsh', *Cornish Archaeol* 16; 21–24.
- Wainwright, G.J., 1960. 'Three microlithic industries from south-west England and their affinities', *Proc Prehist Soc* 26; 193–201.
- Wainwright, G.J., 1965. 'The excavation of a cairn at St Neot, Bodmin Moor', *Cornish Archaeol* 4; 4–9.
- Wainwright, G.J. and Longworth, I.H., 1971. *Durrington Walls: excavation 1966–1968*, Rep Res Comm Soc Antiq London; 29.
- Wainwright, G.J. and Smith, K., 1980. 'The Shaugh Moor project: second report – the enclosure', *Proc Prehist Soc* 46; 65–122.
- Warrilow, W., Owen, G. and Britnell, W., 1986. 'Eight ring ditches at Four Crosses, Llandysilio, Powys, 1981–85', *Proc Prehist Soc* 52; 53–87.
- Whittle, A.W.R., 1977. *The Earlier Neolithic of Southern England and its Continental Background*, Brit Archaeol Rep S35, Oxford.
- Williams, D.F., 1976. 'Petrology of the pottery', in Schwieso, J. 'Excavations at Threemilestone Round, Kenwyn, Truro', *Cornish Archaeol* 15; 63–64.

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Recent Work: Survey

Launceston Town Wall, The Dockey

In August 1988 Orbit Housing Association, in advance of the construction of a four-storeyed sheltered housing complex, dug 5 rectangular trial trenches on the site of the old Smith's Garage, to establish the needs of their foundations. As it was thought that the external ditch of the early 13th century Launceston town wall probably ran through this site, CAU staff were in attendance during the excavations (undertaken by earth-moving machinery). Each trench contained, beneath layers of post-medieval debris, a substantial depth of grey/black waterlogged organic silty clay. (Trench depths ranged from 2.3 to 3.9 m, to natural shillet; the silty clay was between 1.2 and 2.3 m deep). This was clearly the fill of some sort of gully, almost certainly the medieval ditch. In none of the trenches was an edge found to the gully/ditch and the disposition of the trenches indicated that its width must have been in excess of 14 metres suggesting a substantial defence.

Within the waterlogged levels were found several wall-preserved fragments of wooden vessels (bowls and platters) which, through association with a small pottery sherd, can be suggested as being medieval in date. Unfortunately it was too dangerous to enter the trenches and investigate the sections directly; the material was found in the bucket dumps.

Sadly, it proved impossible to obtain funding from the non-profit making housing association to excavate the site more fully in order to obtain more medieval organic material (virtually non-existent in Cornwall).

Peter Herring

Minions Area

Fieldwork for the Minions Project continued through late spring and early summer of 1988, the detailed planning of individual sites complementing the survey of the broader landscape being undertaken by the survey staff, whilst the last phase of documentary work concentrated on the analysis of parish census returns. Work based in the Minions Area finished at the end of September, and over the next few months the results of the year-long investigation were condensed into a full and comprehensive report, now available from Cornwall Archaeological Unit (price £12.00).

Adam Sharpe

Launceston Castle

In March and April 1988 elevations were recorded here by Cathy Parkes and Nigel Thomas prior to continuation of restoration work. Drawings were made of the exterior of the 13th century High Tower on its SW side, and of the 14th–15th century South Gate barbican; 'filling out' outline plots by the University of York Photogrammetric Unit, and by English Heritage. A variety of building materials were recorded, primarily slates and shales with the purple Polyphant stone for details. Features included newly exposed rows of holes for joists in the barbican; these would have supported timber flooring, leading into the gateway from a bridge over the ditch outside.

Cathy Parkes

Luxulyan Valley

The Luxulyan Valley Project came to an end in August 1988, and successfully completed a full archaeological survey of the Valley. Not only did this produce a comprehensive archive of the industrial remains for the County Archaeological Unit, but of equal importance was the heightened awareness of the public in the area as to the significance of this major resource. Several exhibitions, a regular newsletter, and good PR by members of the team all contributed to a new perception of the Valley and its place in local history.

Equally gratifying was the large number of team members who managed to find full-time employment after the Project had finished. They have a permanent reminder of their excellent work in the form of 'The Luxulyan Valley', an illustrated report available from CAU at Old County Hall.

John Smith

Kilhampton Castle

In the 1920s Charles Henderson noted internal features on a sketch plan he made of Kilhampton castle (SS 2425 1155). All these structures have been rendered invisible in recent years due to the growth of dense bracken scrub. In 1988 the scrub was cleared out by the British Trust for Conservation Volunteers on behalf of the National Trust, the owners of the Castle. A number of building platforms and low banks were exposed, including a probable hall with opposed entrances. The features were surveyed by Ann Preston-Jones and Nigel Thomas and were added to a plan of the castle made by the National Trust.

Nigel Thomas

Excavation of the Iron Age Cliff Promontory Fort and of Mesolithic and Neolithic Flint Working Areas at Penhale Point, Holywell Bay, near Newquay, 1983

GEORGE SMITH

Approximately 700 sq m of the interior of the fort was excavated revealing one round house associated with pottery of South Western, La Tène decorated, 'Glastonbury' style and two radiocarbon dates centred on the middle of the first century BC. One trench through the bivallate defences showed that the fort probably had offset entrances with a trackway between the inner and outer ramparts. A quantity of flintwork was also found, with two centres of concentration, one probably later Mesolithic associated with narrow-blade microliths, the other probably Neolithic in date.

Introduction

The cliff castle at Penhale has been known since at least the beginning of the 19th century (Thomas, 1842) and its ramparts were recorded on the first edition (surveyed 1805) of the Ordnance Survey. Lead mining (with traces of silver) since the late eighteenth century has caused extensive damage to the site. The mine (Wheal Golden, main phase 1849–1874) had three shafts running across the site and one of its two engine houses (pumping and winding/stamping) was sited on the outer ditch, and the boiler house and associated cinder dump across the outer and inner ramparts, thus obliterating the southern one third of the defences. Several mine tracks break the ramparts in the northern sector, leading to terraced processing floors which were fed from reservoirs sited in the middle of the enclosure. Close by the most northerly shaft is the embanked platform of a horse windlass used to haul ore up from the lower levels. During the Second World War the engine houses were blown up by American troops. Access to the headland has been restricted since the war when the War Office requisitioned Penhale Farm as a training camp. It was only in 1983 that the coastal footpath was allowed to pass along the cliffs and it then became clear that, despite the mining activity, a substantial length of the ramparts of the cliff castle still existed.

In 1983 work began on the construction of an extensive satellite aerial array, one aerial of which was to be within the interior of the fort. Nicholas Johnson and Peter Rose of the Cornwall Committee for Rescue Archaeology (CCRA, now the Cornwall Archaeological Unit, CAU) then carried out a detailed survey and trial excavations (for full details see CAU archives, Truro). These recorded the mining traces previously mentioned and, in addition a circular house with stone-faced wall-bank 6 m in internal diameter thought to be associated with the promontory fort. Leading northwards from the round house was a low bank (Fig 1c) which was thought might be another early feature. The survey also showed that parts of the fort defences survived relatively intact. The northern part of the threatened area was found to have been lowered by construction of a mine reservoir (Fig 3, 151) removing all prehistoric archaeological features. Outside the fort defences but within the area threatened by construction, a watching brief showed a field bank and ridge and furrow (Average 3.00–3.75 m wide, 0.10–0.25 m high). Although post-medieval in appearance they are part of the medieval farm of Penhale. Within the development area a low cairn (12.1 m diameter) was trenched revealing a central cremation pit with some traces of burnt bone, but no

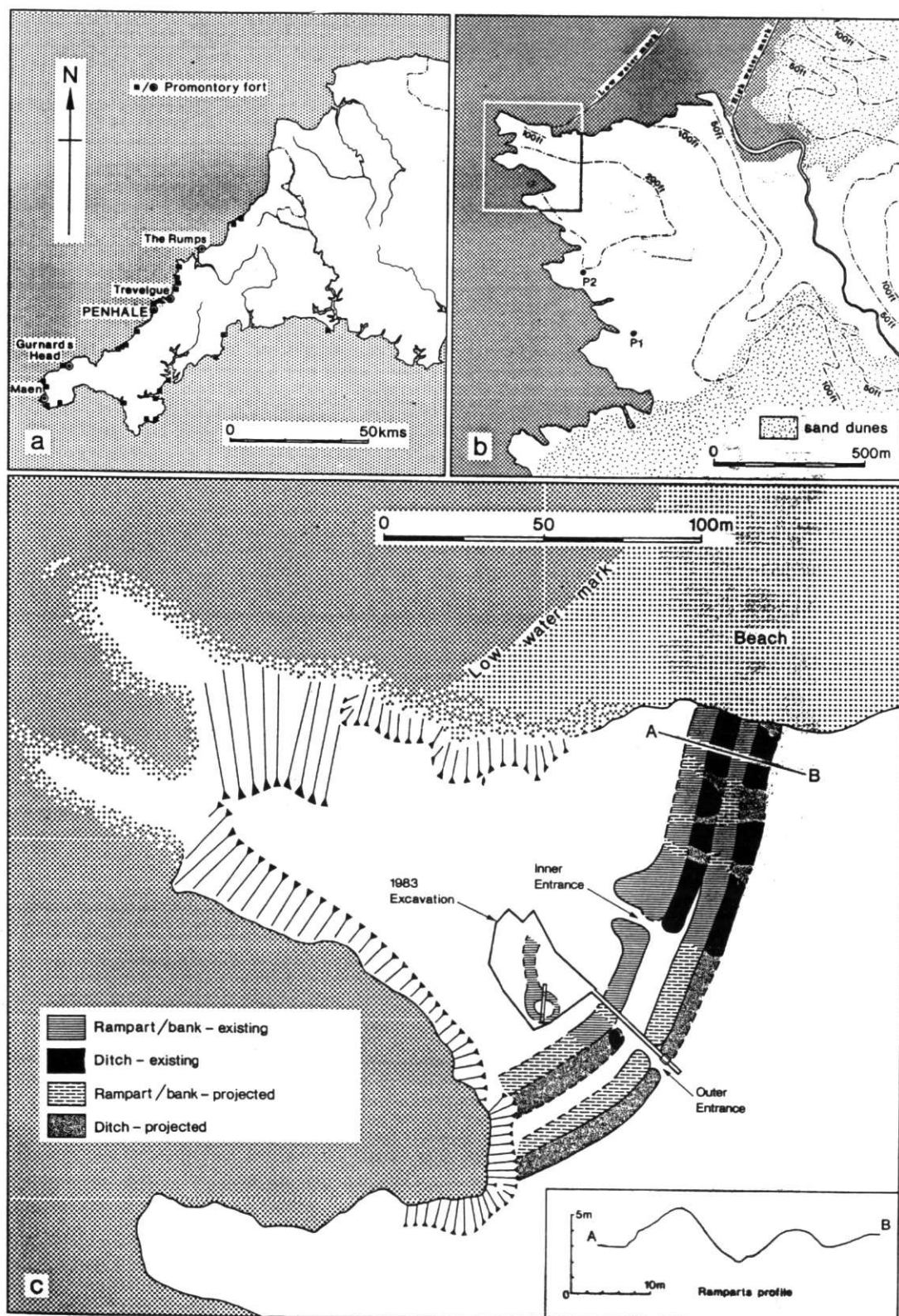


Fig 1
Location plans
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artefacts. Beyond the threatened area but on the headland a probable ring cairn (14.00–17.50 m diameter, 0.50 m maximum, high) was also identified. The report on the work (Johnson and Rose, 1983) recommended that more extensive investigations be undertaken which led to the excavations reported here, carried out by the Central Excavation Unit of the Department of the Environment (now English Heritage), between June and August, 1983.

Situation

Penhale Point is a narrow promontory (Fig 2), at a height of c. 70 m OD, delimited by steep or sheer cliffs eroded from dark grey slates of the Lower Devonian Meadfoot Beds (Barton, 1969, 70–5). It is very exposed and includes little level ground. The cliff edge on the northern, lee, side is probably that existing when the promontory fort was built as the ends of the fort ramparts are not being eroded. The south western side, however, faces the prevailing winds and seas and a considerable, but unknown area has been eroded by wave action. The promontory at present is rather isolated, almost surrounded by extensive sand dunes (Fig 1b), and the nearest fresh water is a kilometre away.



Fig 2

General view of the Penhale peninsula looking south after excavation and construction. Photo: S. Hartgroves
Copyright: Cornwall Archaeological Unit

1. THE IRON AGE DEFENCES AND SETTLEMENT

Introduction

The area to be investigated comprised the site for a circular base for an aerial (Figs 1c and 2) and of this nearly half consisted of a silted-up mine reservoir (Fig 3, 151) identified by CCRA. Two one metre wide machine trenches dug across the reservoir confirmed the earlier interpretation that it had been terraced into the bedrock, removing any archaeological horizons. A long, one metre wide trench was also excavated by hand across the fort defences where cables were to be laid. This trench lay alongside a well-worn trackway on the crest of the promontory ridge.

The Interior

The area of c. 700 sq m excavated was the largest area yet investigated within the interior of a promontory fort in Cornwall. It was found that a large part of the deposits consisted of 19th century ore washings or of post second world war building rubble. These overlay a deep, homogeneous, brown silty soil which represented the land surface prior to mining activity. The top of this old land surface was easy to recognise as it was picked out by a strong panning layer deriving from the overlying mine washings. The mine washings and more recent layers were therefore removed by machine. In the northern part of the main trench the mining activity and trackway had entirely removed the pre-mining soil horizon. It was found that the low linear bank recorded by the CCRA survey was part of the upper, mining horizon only. The mine deposits consisted of thinly banded, multi-coloured silty and gritty washings or 'tailings'. The features belonging to this phase of activity (Fig 3) were: the large reservoir 151, three small gulleys 60, 65 and 66, a small reservoir, 56, with a slot for sluice and a levelled working area (?), 51. Features relating to recent use of the area were: a post-hole line (197) along the north side of the former trackway (with wooden post-fragments preserved) and a machine-cut slit trench, 64. There were also a few scattered small recent

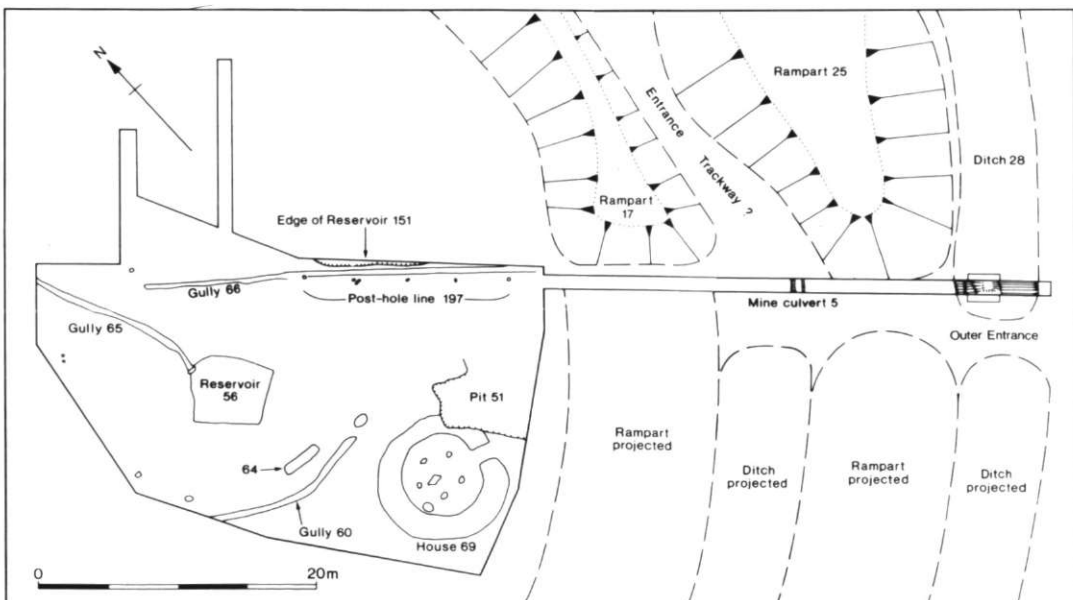


Fig
General plan of excavated area

post-holes without recognisable function. The top fill of reservoirs 56 and 151 consisted of recent building rubble.

The brown loam below the mining deposits was uniform and fairly stone-free and represents a long period of undisturbed cultivation-free soil accumulation. This loam lay over the tumble of the round house identified by the CCRA.

The round house, 69, (Fig 4), consisted of a low circular wall-bank (1.5 m wide) enclosing a circular room 6.2 m in diameter. The wall-bank survived to a height of only 0.2 m but was relatively well preserved, with carefully laid slate facing stones. These survived in places to

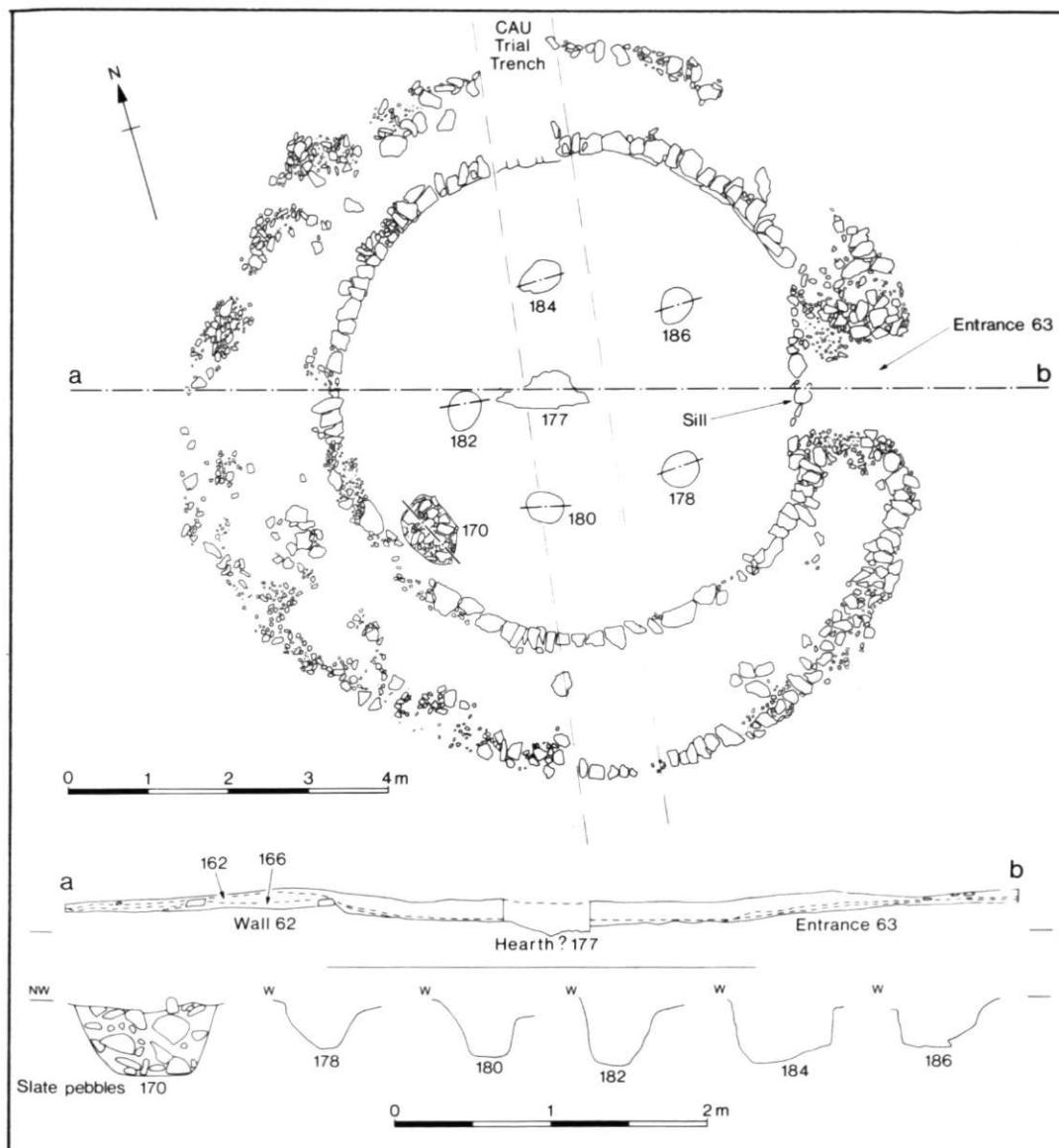


Fig 4
House 69, plan and sections



Fig 5

House 69 after excavation showing pits and post-holes, looking north-west. Scale with 10 cm divisions

Photo: G. Smith

three courses high on the inner face. The outer face survived less well, preserved only where protected by the rampart spill on the south-east side. A small amount of rubble lay around the wall-bank, mainly inside the house. Part of the wall-bank consisted of deposited rubble (Layer 162, Fig 4) but much of it was in fact only an upstanding remnant of old soil (Layer 166, Fig 4), revetted by the facing stones which sat on the bedrock (Fig 5).

This old soil within the wall-bank was the only surviving remnant of soil predating the house. A certain amount of brown loam survived around the back (west) of the house (on which lay Pebble Group 82, Fig 11, for instance), but it appeared that the land surface contemporary with the house both within the house and outside the entrance was the bedrock surface. The contemporary soil may have been eroded or deliberately removed to expose the rock surface as a floor. The bedrock surface within the house was also lowered by c. 0.2 m (Fig 4, section a–b). This could be a result of trampling and repeated cleaning or be deliberate to provide greater headroom. Trampling alone seems an insufficient answer since in an experimental Iron Age house reconstruction the greatest floor wear was found to be just outside the entrance (Reynolds, 1982, 196) while at Penhale there was no comparable wear.

The roof of the house was supported on five posts set in a ring c. 3 m in diameter. The post-holes, 178, 180, 182, 184 and 186 were filled with soil and loose slate fragments with

no sign of packing in situ. There were, however, slight post-butt impressions in their bases showing that the posts had been slightly oval and well matched, varying only from 0.23 m x 0.18 m to 0.27 m x 0.23 m. The wall-plate which supported the ends of the rafters probably sat toward the inner side of the wide (1.5 m) wall-bank. The depth of thatching must have carried the run-off beyond the wall-bank. The entrance, on the south east side of the house, was structureless apart from a line of stones forming a sill in line with the inner face of the wall-bank. There were no post-holes for door or porch. Approximately central to the house was an irregular pit, 177 (Fig 4), probably a hearth since the bedrock was reddened around it although the fill was devoid of charcoal. The only other internal feature was a small, steep-sided pit, 170 (Fig 4), c. 0.90 m diameter and 0.50 m deep, close to the inner face of the wall-bank. This contained only one cultural artefact, a fragment of pottery, but did contain 72 part-rounded slate pebbles, presumably deliberately buried since they took up most of the space in the pit (Figs 4 and 6). A group of similar pebbles (Group 82, Figs 7 and 11) was found outside and just north west of the house. Small amounts of charcoal were found in Pit 170 and in the post-holes (see Dating and Discussion, below). Other artefacts associated with the house were a group of small pebbles (Group 195, Fig 11), a whetstone, a burnisher and a group of pottery fragments scattered on the bedrock surface within and just outside the house entrance (Fig 11). A spindle whorl (Fig 13, No 1) was found on top of the wall remnant close to the entrance (Fig 11).



Fig 6

Pit 170 inside House 69 showing slate pebble fill, looking west. Scales with 10 cm divisions. Photo: G. Smith

A suggested reconstruction of the house is shown in Fig 8 using the evidence from the excavation and comments kindly offered by Dr Peter Reynolds. The Penhale house is of a similar size and similar stone-walled construction to the Conderton house recorded in excavations at the Iron Age hill fort of Conderton Camp, Bredon Hill, Worcs, and experimentally reconstructed by Dr Reynolds (Reynolds, 1982). In the Conderton house, however, there was no internal ring of posts, the entire weight of the roof (timber plus thatch) of over 5.5 tonnes being supported on the walls. At Penhale the main weight of the roof was supported by the posts. The substantial size of the posts in the Penhale house (from trees of c. 45 years of age, Reynolds, *pers. comm.*) shows that the roof was of some height and Dr Reynolds suggests walls of c. 1.00–1.50 m in height. In the reconstruction drawing a height of 1.00 m has been used (rising to 1.50 m at the doorway) and with a roof pitch of 45 degrees this shows that the greater part of the interior floor space would have standing headroom without resorting to lowering the floor. The walls of the Penhale house are considerably wider, at 1.50 m, than the Conderton house, at 0.91 m, and as the Penhale walling materials were of a poor quality a slight wall batter has been suggested.

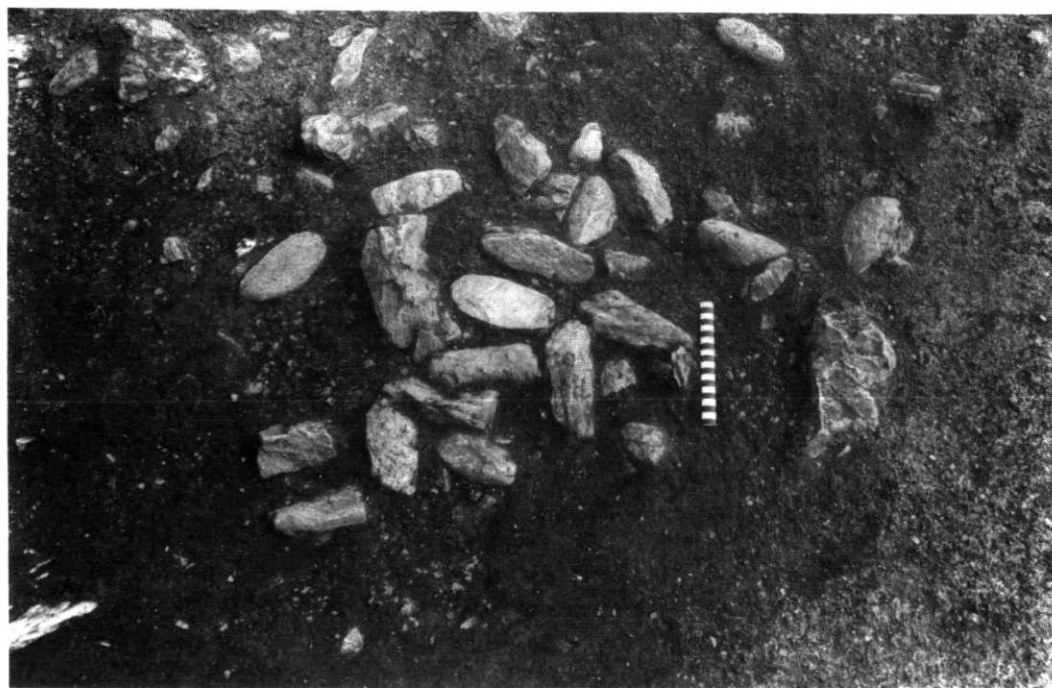


Fig 7

Pebble group 82 outside House 69, looking north-west. Scale with 1 cm divisions. Photo: G. Smith

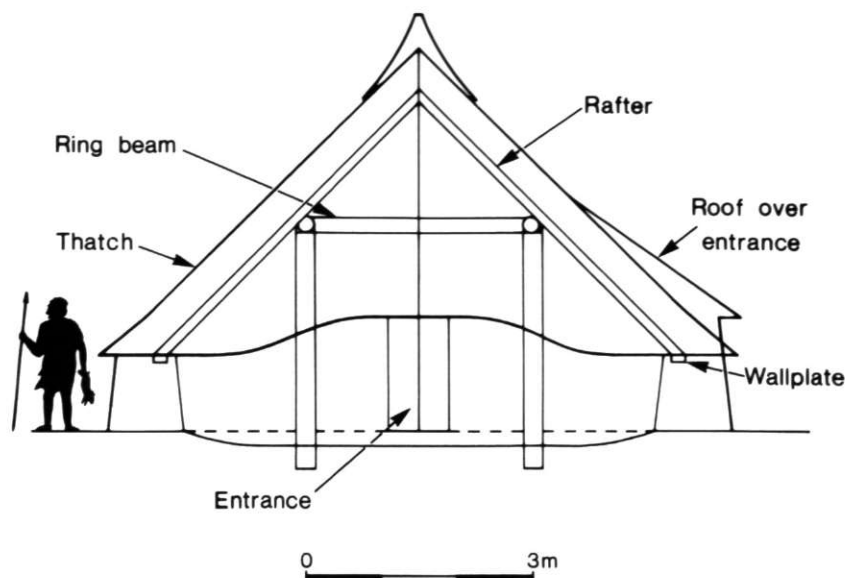


Fig 8

House 69, reconstructed elevation

The Defences

A one metre wide trench was excavated, on a line predetermined by the construction work, across the whole width of the defences (Figs 1 and 3). Fortunately, this was a nearly perpendicular transect of the two ramparts but, on the other hand, cut the defences at one of their least well preserved points alongside the main recent trackway.

The earthwork survey by the CCRA showed that the inner rampart was considerably larger than the outer (Fig 1c). This was confirmed in excavation (Fig 9) which showed that the ramparts were of very different construction. The inner rampart (17) was composed of relatively large rubble with some use of horizontally-laid, large slabs, which could indicate the remains of a substantial wall-faced bank. The outer rampart (25), however, was composed of finely broken stone in a series of slightly varying dumps with tip lines showing that the dumps came from the outer, ditch, side. No clear limits could be discerned to either rampart in such a narrow cutting but possible revetting stones were recorded at the rear of the inner rampart and at the front of the outer rampart (Fig 9). The most striking fact to emerge was the absence of a ditch to accompany the inner rampart at this point. A large linear feature was found where a ditch would be expected but this turned out to belong to the mining works (Culvert 5, Fig 9) apparently taking washings under the mine access trackway. The outer ditch (28) was 2.20 m in depth and originally probably about 3.5 m wide. Its upper part was entirely filled with recent building rubble and mining dumps. Its lower fill was devoid of finds and consisted of silted-in slate fragments. This appeared to have been a recut of the ditch since there was a deeper part with a slightly different fill on the outer side of the ditch (Fig 9). Furthermore it could be seen that the cutting was close to a terminal of the ditch and that this was not just the partial terminal of a recut (Figs 9 and 10). There must have been a causeway and entrance here through the outer ditch and rampart and no inner ditch was found because there was also an inner causeway at this point. However, excavation showed fairly clearly that there had not been an entrance through the inner rampart here. It appears that the original fort trackway turned to run northwards between the ramparts in which area there had been no inner ditch. Some fine cobbling found between the inner and

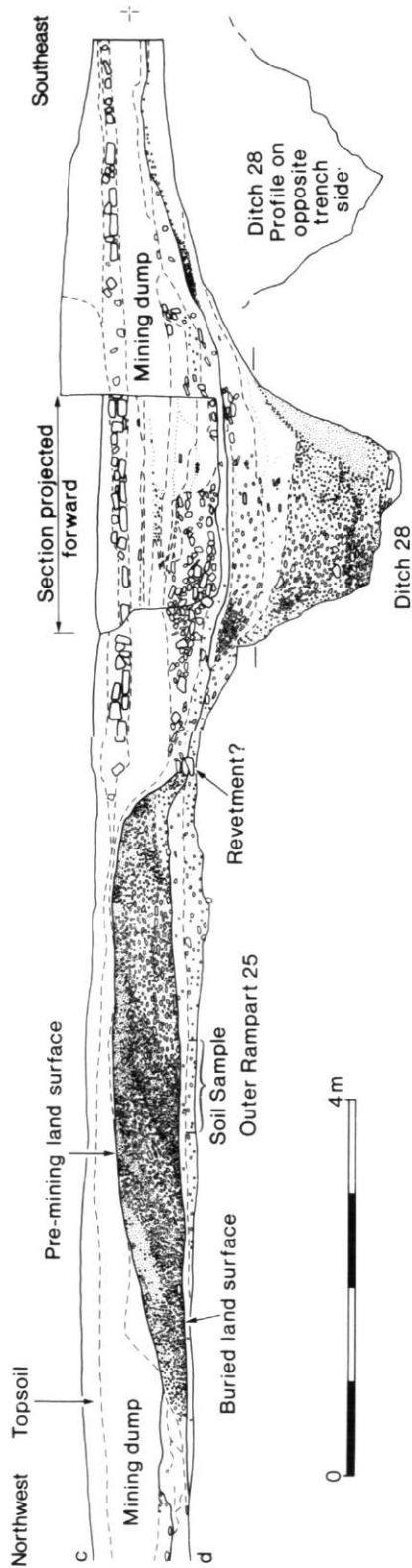
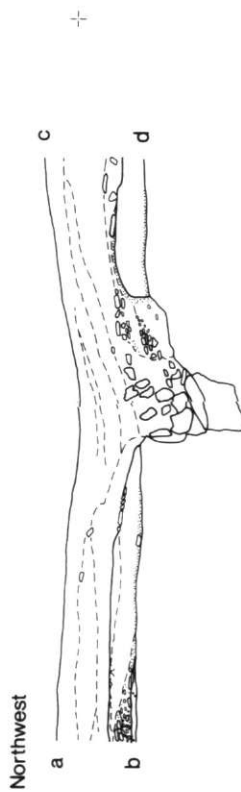
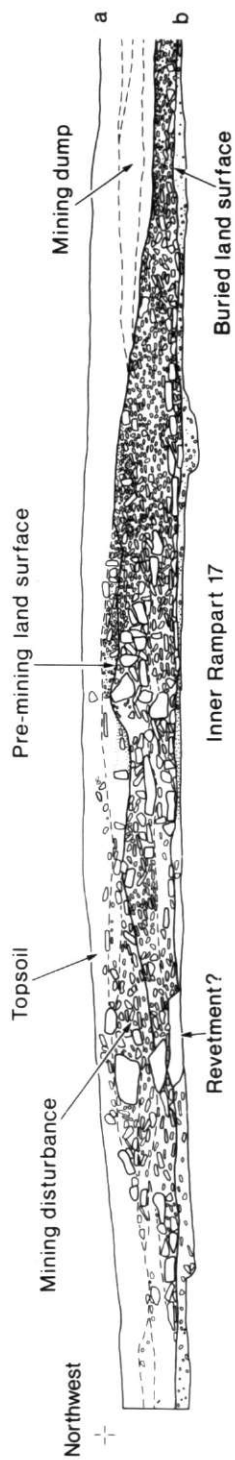


Fig 9
Section of ramparts and ditch

outer ramparts may have been the remains of this early trackway. It probably turned through the inner rampart at the point where the CCRA survey had noted a discontinuity of the inner rampart (Fig 1c). This had at first been thought to be an early feature and then regarded as a product of the construction of the adjoining mine reservoir, 151. In fact, the thickening of the rampart by this breach could well be the elaboration of a gateway with a short corridor entrance. Beyond this entrance, surface features suggest the inner ditch commences. The mining trackway had utilised the original outer entrance and then breached the inner rampart which could be seen to be trampled down and disturbed, possibly deliberately levelled (Fig 9).

If the outer rampart was dumped, as its make-up suggests, from the construction of the outer ditch then the material for the construction of the inner rampart, in that area where there was no adjoining ditch, must have been quarried elsewhere. It could be that the outer rampart and ditch alone constitute an earlier phase with the inner defences as an elaboration but the most likely interpretation is of a single period design with a larger, possibly walled, inner rampart fronted by a lower, unmanned, simple dump rampart. Lamb (1980) has pointed out that some Breton and Irish cliff promontory forts have the same design. Unfortunately no artefacts or datable material was found in either the ramparts or the outer ditch. A buried soil lay beneath the ramparts, better preserved beneath the outer than the inner rampart, but this was of similar status to nearby, present day, heathland soils (Keeley, 1988).

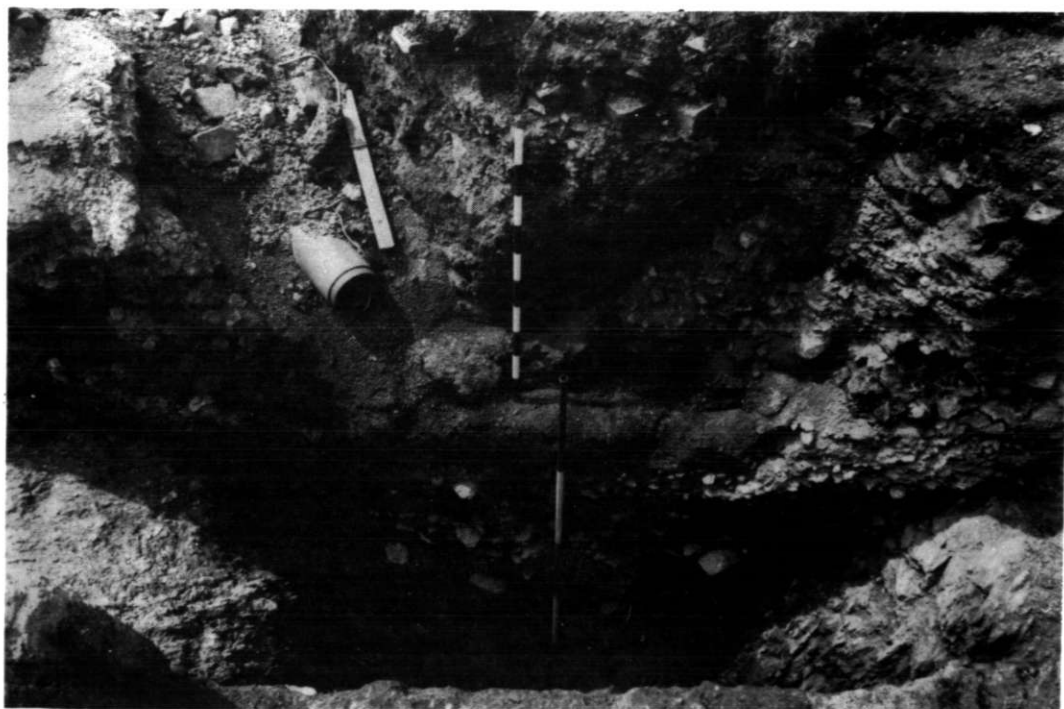


Fig 10

Ditch 28, section looking south showing start of terminal at base. Upper scale with 10 cm divisions, lower scale with 50 cm divisions. Photo: A. Kurlis

The Artefactual Evidence

Pottery

Twenty five sherds were found (285 gm), most in a single scatter on top of the bedrock outside the entrance to the round house (Fig 11). Although most pieces did not join it seems certain that they all derive from a single vessel, an everted rim jar (Fig 12, No 1). Nine sherds had decoration with infilled curvilinear panels and horizontal bands. Fig 12, Nos 1–5 shows a reconstruction of the profile and examples of all the motifs represented although the full design could not be reconstructed. The fabric consists of a matrix of dark brown clay with numerous small, fairly evenly graded, angular inclusions, and matches sherds from the settlement of Carngoon Bank (The Lizard) which were identified as of gabbroic fabric by thin sectioning (Morris, 1980), deriving from clays on the Lizard Peninsula. Peacock's study of Glastonbury style pottery in the South West (Peacock, 1969) showed that Group 1, the gabbroic fabric, was the most widely occurring of the six fabric groups recognised. South Western decorated pottery of gabbroic fabric and similar motifs to that from Penhale has, for instance, been found at the settlement on Hengistbury Head, Dorset, where it apparently arrived in the Late Iron Age (Cunliffe, 1987, 259 and 316–7). The general dating for the pottery style is 4th to 1st century BC. Elsdon (1978), following Avery (1971) has suggested a chronology for Later Iron Age pottery in the South West which would put pots with simple, light, incised decoration, like the Penhale pot, as equivalent to Castle Dore II, originally suggested as being late 2nd to mid 1st century BC but without the benefit of radiocarbon dating evidence. More recent work e.g. at Killibury (Miles, 1977) and Meare (Coles, 1987, 246–8) has shown that the South Western Decorated pottery style was in existence by the third century BC and a reassessment of the Castle Dore chronology (Quinnell and Harris, 1985) has shown that the original scheme should be revised with a commencement date some two centuries earlier than previously proposed, extending the potential timescale of each phase. The radiocarbon dates from Penhale are late in the currency of South Western Decorated pottery and help to define the long period of use.

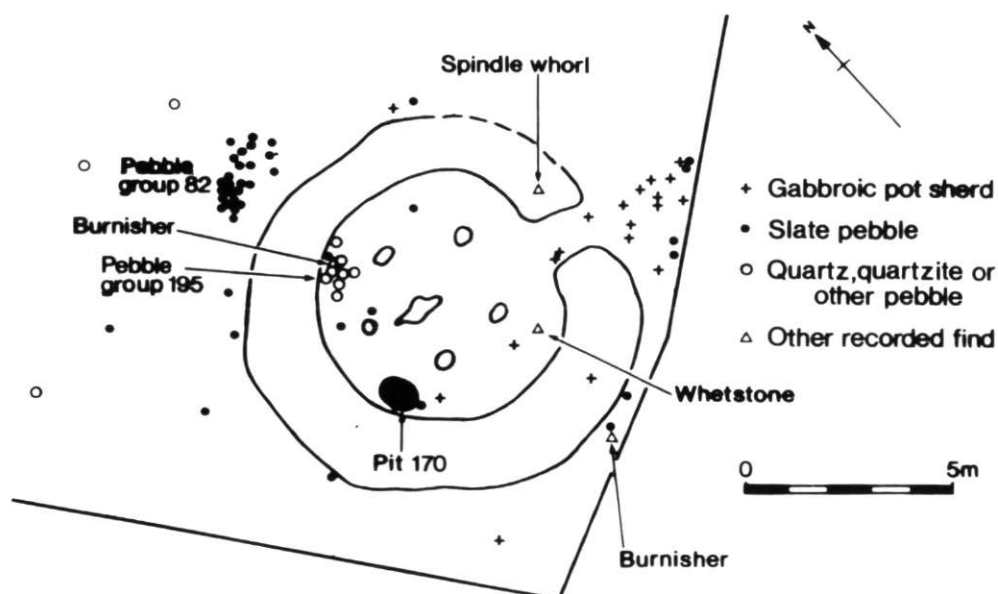


Fig 11
House 69, finds distribution

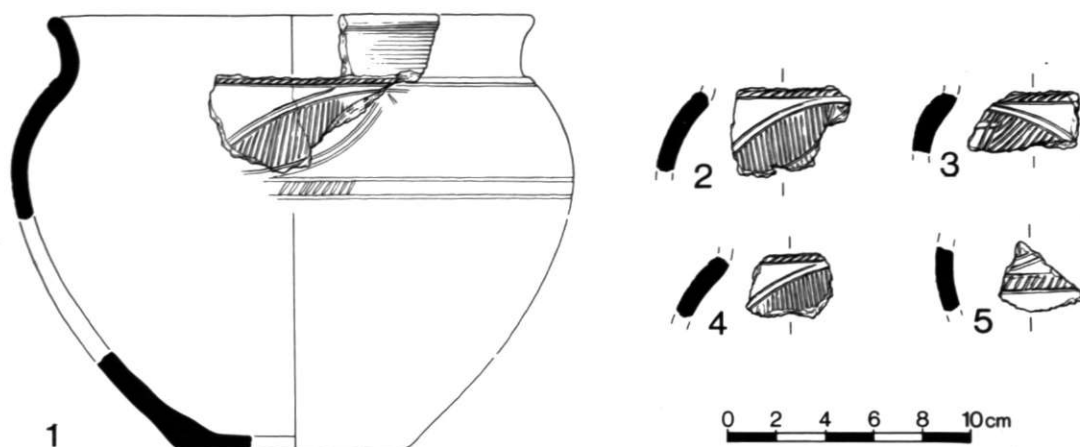


Fig 12
Pottery. Scale $\frac{1}{3}$

Stone

Only one manufactured stone artefact was found within the roundhouse, this was a spindlewhorl (Fig 13, No 1) found on top of the wall-bank next to the entrance (Fig 11). It is of local slate smoothed around the circumference and with a parallel-sided drilled hole. There were also two utilized stones, one a slate whetstone (Fig 13, No 2) and the other a small slate pebble (not illus) with burnishing polish, part of Group 195 described below. Another burnishing pebble was found outside the house.

A group of pebbles (Group 195, Fig 11) was found on the floor of the house. These were small oval pebbles within a tight size range (Fig 14), six of white quartz, three of slate and one of flint. The close identity of size of the group and the selection of the white quartz suggests that they could have been game counters although they also fall within the size range of slingstones.

Another manufactured stone artefact found was a roughly chipped disc of slate (not illus) found in the northern part of the main trench (Fig 17). It is 40 mm in diameter and 8 mm thick and therefore of the right size to be a spindlewhorl rough-out.

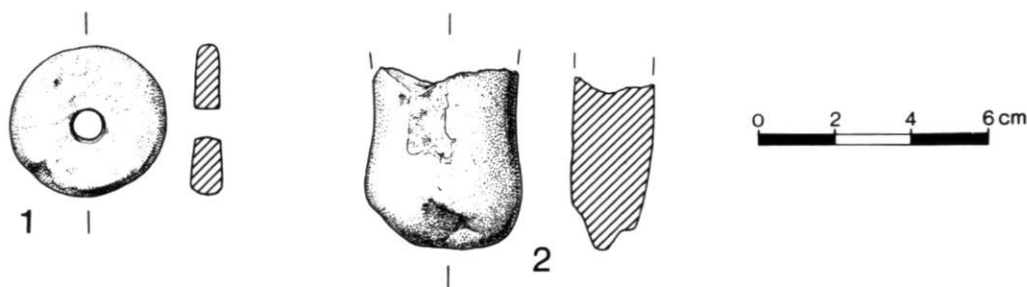


Fig 13
Stone. 1, slate spindlewhorl. 2, slate whetstone. Scale $\frac{1}{2}$

A considerable number of large, sub-angular pebbles of slate were also found. The largest number (72) were found packed in, and taking up most of the space in, Pit 170 within the roundhouse (Figs 4, 6 and 11). Five other slate pebbles were found scattered on the roundhouse floor and more were scattered around the outside of the house on the west side, including a clear group (82, Fig 11). Comparison of the dimensions of these pebbles (Fig 14) show that those from Pit 170 and from Group 82 fall into a similar size range (Fig 14) and may therefore have been selected for the same function. Most of the pebbles were complete and as the slate is not very durable were unlikely to have been hammers. The pebbles had greater similarity in length and breadth than in weight. Those in Pit 170 varied

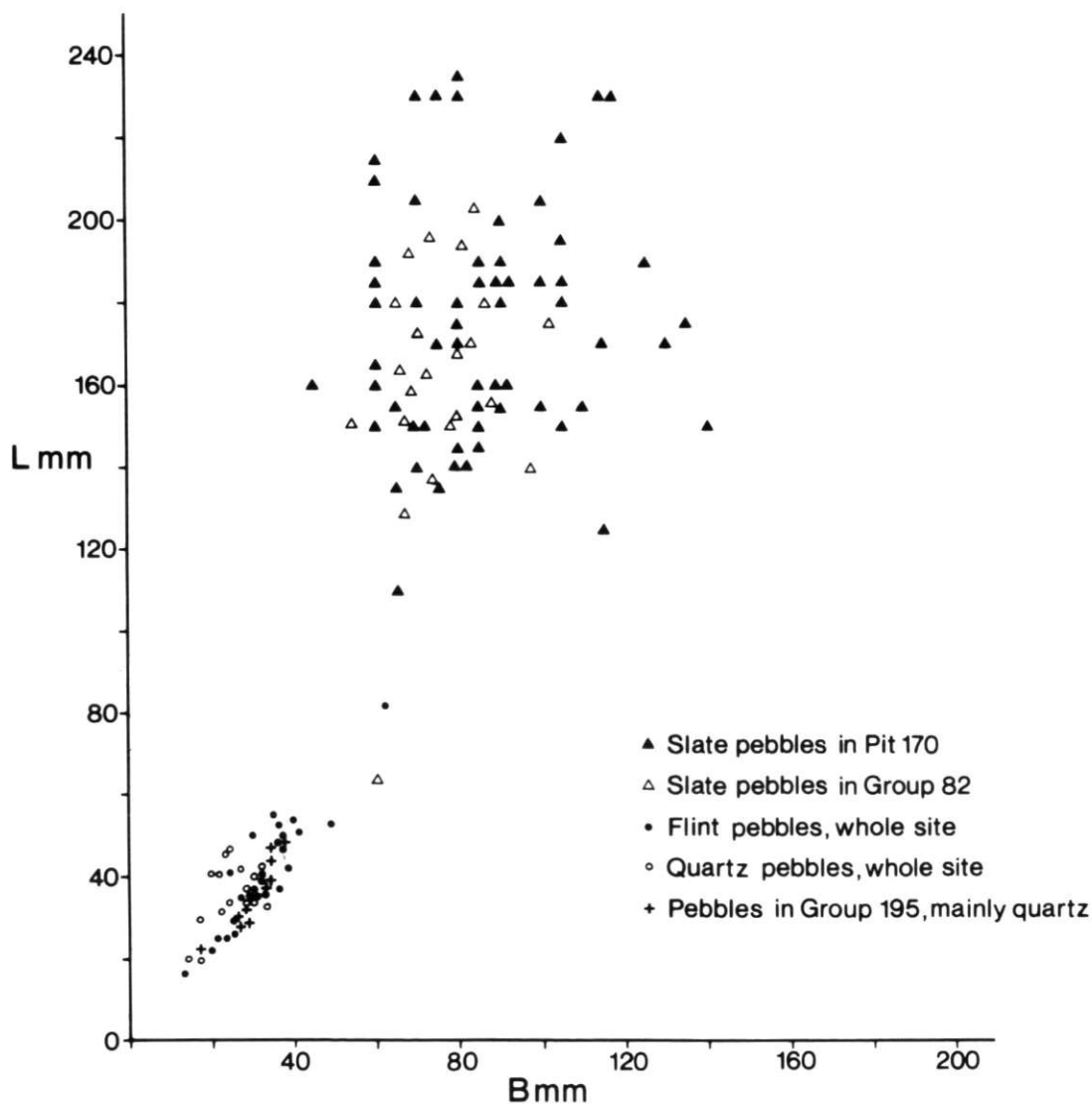


Fig 14
Dimensions of complete pebbles

between c. 500–1500 gm. The range of size and weight is similar to the chalk weights from Danebury, Hampshire (Brown, 1984) identified as vertical loom weights, which varied in length between 120–260 mm and most weighed between 1000–2000 gm. However, some small groups found in pits at Danebury did appear to be 'sets' in that their weights were very similar, much more so than those in Pit 170. However, much smaller numbers of weights were found in individual pits at Danebury than of the number of slate pebbles in Pit 170 at Penhale and although some of the latter could have been used for a loom it seems likely that some other activity, such as net making, was taking place.

Of other complete pebbles on the site, apart from slate, most were of flint, the rest quartz. Both flint and quartz pebbles were of a similar size range to that of Group 195 in the house (Fig 14) and centered around a size of c. 37 x 30 mm. These could have been collected for use as slingstones. Possible use of the flint as raw material for knapping is considered under discussion of the neolithic and mesolithic assemblages below.

Dating and Discussion

Two radiocarbon dates were obtained, both on samples from the roundhouse. One came from oak charcoal from the fill of Pit 170; this was 1990 ± 80 BP (OXA-823), calibrated range at one sigma (Stuiver and Pearson, 1986) cal BC 101–cal AD 83. The other was from small pieces of gorse-type charcoal, combined from the postholes of the house and thus less reliably stratified; this was 1980 ± 80 BP (OXA-824), calibrated range at one sigma (*ibid*) cal BC 96–cal AD 88 (charcoal identified by N.D. Balaam). The archaeological interpretation of the context of the samples is that both probably relate to the time of the last use of the house. Pit 170 was backfilled deliberately to store or hide the pebble group. The posts of the house were withdrawn as the packing was in disorder and the gorse-type charcoal was incorporated by chance at this time. Gorse is obviously not a structural wood but in historic times was widely used as a fuel wood. However, it may have derived here from clearance of the site prior to construction of the house. There are two problems with the interpretation of the dates, first that the wood species of the charcoal in the pit and in the post-holes are different, second the absence of charcoal of any kind in Pit 177, interpreted as a hearth (the absence of charcoal in probable hearth pits has also been noted at Trethurgy and other Cornish Iron Age sites, Quinnell, *pers. comm.*). The agreement between the determinations provides some assurance that they belong to a single episode or at least a fairly limited period. They also provide a useful contribution towards a chronology for the La Tène decorated South Western pottery. The pottery fragments at Penhale were found scattered in and outside the entrance of the house and were very well preserved, i.e. not subsequently abraded by further occupation trampling and so were probably deposited during the final use of the house. A single piece, almost certainly from the same pot, was found in the top fill of Pit 170, apparently altered by secondary burning. The dates fit in well with the currently suggested stylistic chronology and are valuable in defining a late use, presumably prior to the appearance of the Cordoned Ware style.

Although there are some thirty coastal promontory forts of various sizes and of styles of defence in Cornwall (Fig 1a) only four have previously been the subject of excavation, none very recently, and no radiocarbon dates have been obtained. A recent summary (Quinnell, 1986, 115) has stressed their diversity of design and period of occupation. Maen Castle (Crofts, 1955), seems to date to the early/middle Iron Age, Gurnard's Head (Gordon, 1940) to the later Iron Age (3rd–1st century BC) with some later use in the Roman period, The Rumps (Brooks, 1974) to the later Iron Age and Trevelgue (excavated 1939, unpublished)

possibly through the Iron Age with a probable gap in occupation marked by the absence of Cordoned Ware (Quinnell, *pers. comm.*) and then on into the Roman period. The Trevelgue records and finds are the subject of a current research project and a report will be published (CCRA, 1984, 10–11). The latter three sites are of more complex construction than Penhale or Maen Castle and it is tempting to see a correlation between quality of location and length and extent of occupation and complexity of defences (Cotton, 1959).

There are a number of other enclosures in the vicinity of Penhale which might have been inhabited over the same period. Within a radius of *c.* 15 km the CAU has identified four cliff promontory forts, five fortified inland sites and 58 'rounds' or 'farmstead' enclosures (Johnson and Rose, 1982). From excavated evidence elsewhere in Cornwall this type of settlement pattern continued through the Roman period. It is clear that Penhale had an agricultural hinterland containing at least several hundred inhabitants whatever its relationship with them was.

The finding of only a single pot at Penhale tends to suggest that occupation was very short-lived, particularly since the recent analysis of the pottery assemblage of similar period from the Mere Village East settlement has shown that the decorated pottery represents only a small part of the normal assemblage (Rouillard, 1987, 219). The discovery of only a single house and no other contemporary occupation evidence in the area excavated also gives the impression that the fort was not a centre for settlement. However, other houses can be expected to have been situated on the northern, lee, slope where their remains would have been destroyed or hidden by the mining works. In terms of location Penhale does seem unsuitable for settlement owing to its exposed position and isolation. A distinction could be made between simple cliff promontory forts which rely solely on use of a good defensive position and those which had further advantages and developed into more long-lived settlements. For the latter the coastal setting was in itself important for trade, being adjacent to sheltered landfalls as, for example, at Trevelgue, The Rumps or Hengistbury. It does not seem valid to regard the 'simple' coastal promontory forts as just a coastal variant of 'rounds'. The forts have more elaborate defensive work and rounds are often in relatively poor defensive positions. At Penhale there is an additional factor in that the headland is now isolated by an extensive dune field (Fig 1b). We know from excavations at Gwithian (Thomas, 1958) that periodic sand blows were taking place along this coast from at least the early Bronze Age and one such episode could have made Penhale headland a less suitable location, even destroying part of its agricultural hinterland.

Offset entrances are fairly rare on Iron Age multivallate defensive sites throughout Britain, whether hill forts or coastal promontory forts. In Cornwall, some offsetting of entrances can be seen at Trevelgue (CCRA, 1984) and The Rumps (Gordon, 1940), both possibly as late elaborations of defences. The best example of an offset entrance as an original design feature is to be seen at the inland site of Chun Castle (Leeds, 1927), occupied at the same time as Penhale, and where there were two close-set walled ramparts and an offset entrance corridor *c.* 20 m in length. Cunliffe (1978, 262) has suggested a sequence of development of design of hill fort entrances with simple, gated entrances being succeeded by inturned corridors at the end of the second or beginning of the first century BC and '... the addition of flanking outworks is generally a later development, quite possibly not appearing in the south-west until the first century AD' (Cunliffe, 1978, 262). The design of the Penhale defences can be seen as an outwork protecting a possibly corridorred entrance and in this respect quite sophisticated and the whole works possibly of a single very late Iron Age date.

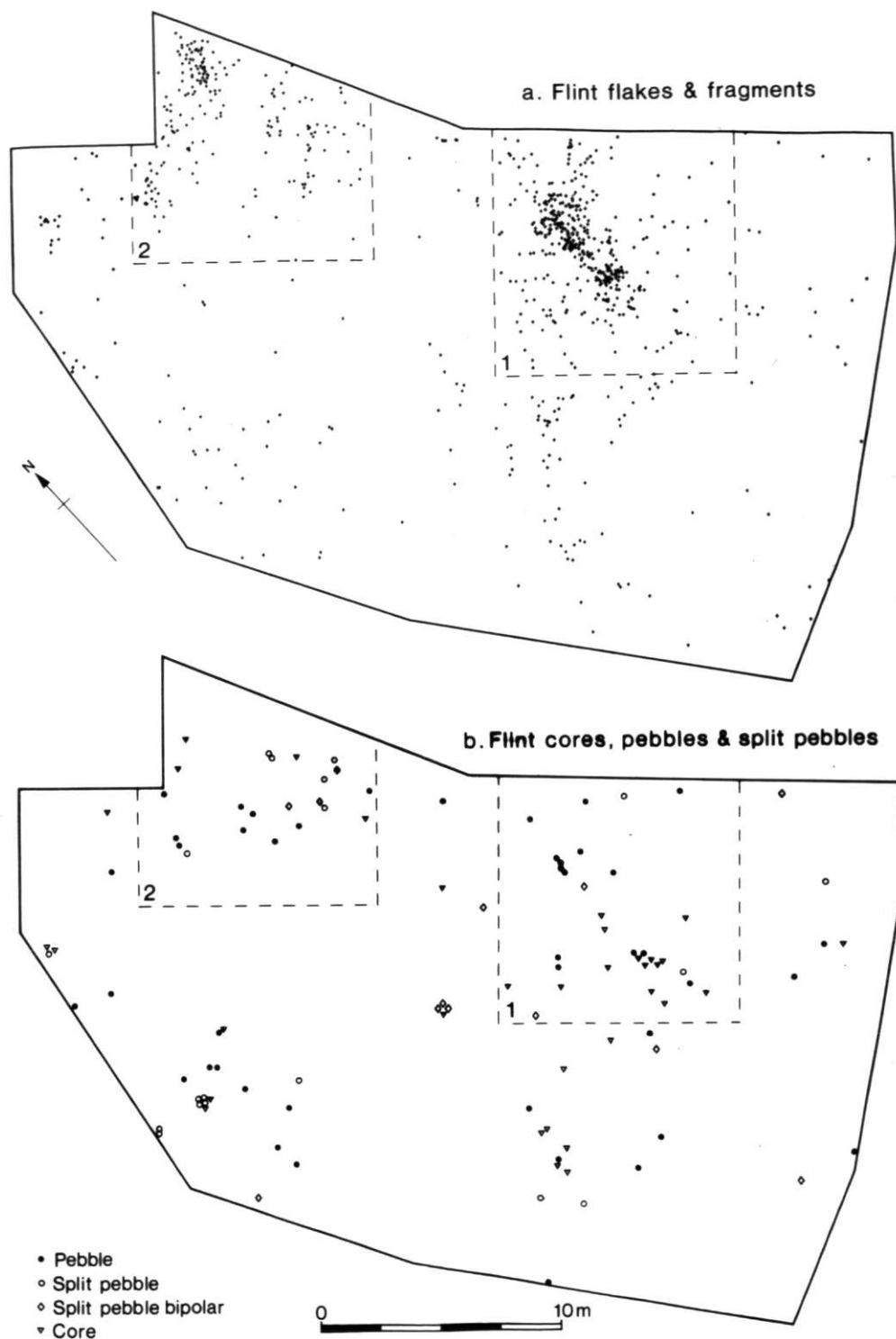


Fig 15
 Flint debitage distribution

2. THE NEOLITHIC AND MESOLITHIC FLINT WORKING AREAS

In the course of excavating the main area described above a quantity of flint-working debris was found of which some lay within the brown loam described above, but the largest amount lay directly on the bedrock surface or in its fissures. There were two concentrations within the general scatter of waste pieces (Fig 15a) referred to here as Areas 1 and 2. For purposes of comparison a 10 metre square area, as shown on the distribution plans, is used to define each concentration. All items occurring within this grid are included whether within the brown loam or within the bedrock weathering horizon. The various categories within the assemblage are broken down into quantities present in Areas 1, 2 and the rest of the site. It must be taken into account that a considerable amount of mining disturbance has taken place and that there are blank spots where there are recent pits or gulleys and where parts of the wall of the Iron Age house were left in situ. The density of distribution of flakes and fragments as shown in Fig 15a is not completely representative since in the densest parts of the scatter some single finds spots represent a number of pieces. Also, the number of individual items shown in Figs 15b and 17 is slightly less than the actual totals because a few pieces, located in loose soil, out of context, could not have exact finds spots recorded.

Raw Material

All the material is of quite fine flint except for one flake and one core, both of Greensand chert. All the pieces are derived from small, well-rounded beach pebbles (all but one of the complete flint pebbles found were less than 60 mm in length). The original colour of the flint was mid-grey, sometimes mottled in lighter patches, but mostly weathered to a light grey or off-white.

Penhale Point. Table 1

Flint and chert, unretouched flakes and fragments

	Area 1		Area 2		Rest of site		Total	
	Q	%	Q	%	Q	%	Q	%
Complete	168	25	136	32	92	37	396	30
Fragment	500	75	289	68	157	63	946	70
Total	668	100	425	100	249	100	1342	100

Penhale Point. Table 2

Flint and chert, complete unretouched flakes, cortex removal classes

	Area 1		Area 2		Rest of site		Total	
Class	Q	%	Q	%	Q	%	Q	%
1	20	12	18	13	19	21	57	14
2	88	52	68	50	49	53	205	52
3	60	36	50	37	24	26	134	34
Total	168	100	136	100	92	100	396	100

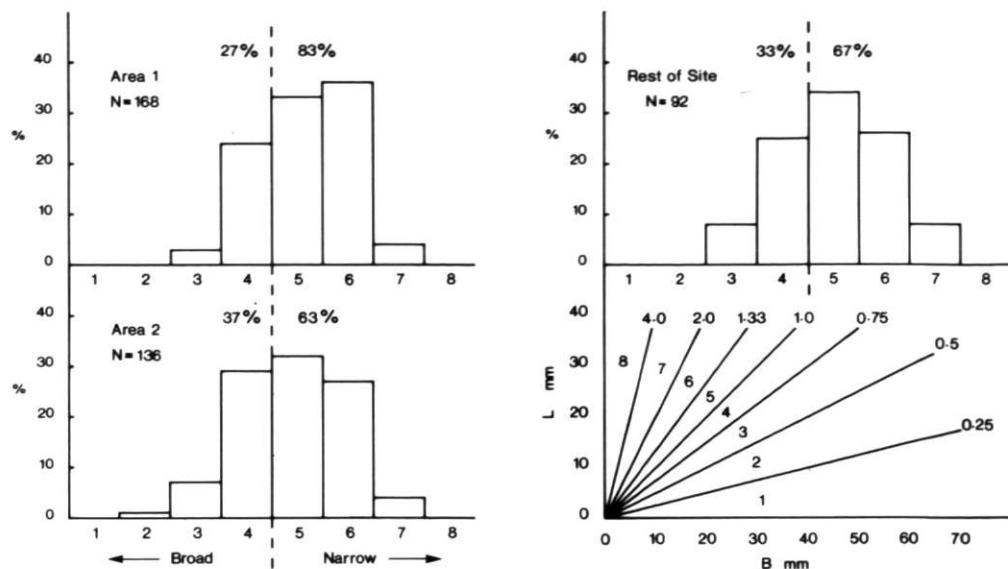


Fig 16
Length/breadth histograms of complete unretouched flakes

Unretouched Flakes

Of the total of 1342 flakes and fragments recovered 396 (30%) were complete (Table 1). Five 10 litre samples of soil from Area 1 were sieved through $\frac{1}{4}$ and $\frac{1}{8}$ inch mesh, as a control, but this produced only 42 small flakes and fragments which are excluded from the totals. The 396 complete flakes were recorded in terms of cortex removal class, length and breadth. Table 2 shows the sub-division of these by cortex class, i.e. 1, primary (dorsal totally cortical), 2, secondary (dorsal partly cortical), 3, tertiary (dorsal totally non-cortical). The measurements were converted into a length/breadth ratio and these were amalgamated into general classes to allow comparison between Areas 1 and 2. The classes were chosen to display the data as if a scattergram was divided into bands arrayed symmetrically around a middle ratio of 1/1 (i.e. where a flake is of the same length as breadth). Fig 16 shows that the complete flakes from Area 1 tend to be narrower than those from Area 2. This is made more notable in that Area 1 has a higher fragmentation rate than Area 2 (Table 1) and that where this is due to subsequent damage it is the broader flakes which would be expected to survive better. Table 2 shows that proportions of the three cortex removal classes are very similar in Areas 1 and 2.

Cores, Split Pebbles and Pebbles

The cores were classified according to a simple system, viz: 1, single platform; 2, two opposed platforms; 3, two platforms at right angles to each other; 4, multiple platforms; 5, keeled; 6, fragment unclassified. The length was also measured along the axis or axes of working. The majority (73%) are single platformed (Table 3). The other types of core seem to represent casual opportunism rather than specific methods of working. This view is supported by the fact that the average length of Class A cores over the whole site is 34 mm whereas that of the six Class C cores is 40 mm. It is curious that Area 1 contained 82% of

Penhale Point. Table 3

Flint and chert, cores, split pebbles and pebbles

Core Class	Area 1	Area 2	Rest of site	Total
1	13	3	20	36
2	—	1	—	1
3	2	—	4	6
4	1	1	—	2
5	—	—	1	1
6	—	—	3	3
Total	16	5	28	49
Split pebble	3	7	16	26
Split pebble, bipolar	3	3	11	17
Pebble, complete	14	10	19	43
Total	36	25	74	135

Penhale Point. Table 4

Flint, retouched pieces

Name	Area 1	Area 2	Rest of site	Total
Arrowhead fragment, bifacial	—	—	1	1
Casually retouched piece	1	3	—	4
Denticulate	2	—	3	5
Denticulate/core reject	—	1	—	1
Ecaille piece	—	—	2	2
Knife, bifacial	—	—	1	1
Nosed piece/core reject	—	—	1	1
Pick/fabricator	—	—	1	1
Scraper, convex	—	—	1	1
Truncated ? piece	1	—	1	2
Sub-Total	4	5	10	19
Microlith, broad	1	—	2	3
Microlith, broad, fragment	1	—	1	2
Microlith, narrow	14	1	14	29
Microlith, narrow, fragment	—	1	3	4
Microlith, fragment, unclass	—	—	1	1
Microburin reject ?	—	1	—	1
Sub-Total	16	3	21	40
Total	20	8	31	59

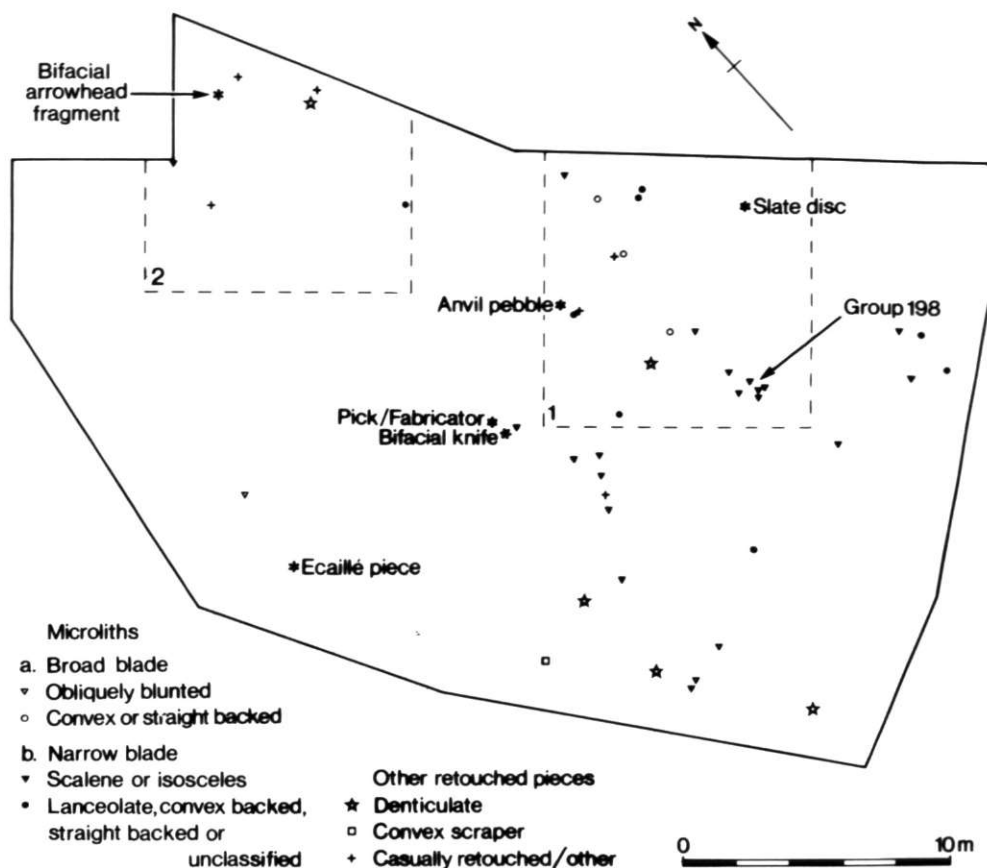


Fig 17
Distribution of flint retouched pieces and other stone objects

all the flakes and fragments found but only 43% of all the cores. Similarly, Areas 1 and 2 contained only 37% of the split pebbles (Table 3). Of the 43 split flint pebbles found, seventeen were bipolar, i.e. struck on an anvil.

43 unworked flint pebbles were found with a distribution similar to that of the flakes and fragments (Fig 15a) and of cores (Fig 15b). However, the size range (Fig 14), falls within that of slingstones so it cannot be assumed that all were brought to the site for tool manufacture. The flint and quartz pebbles have a similar size range and the distribution of both does seem to relate to the flake and fragment distribution rather than to the Iron Age house. The quartz pebbles may have been mistakenly brought to the site along with the flint for tool manufacture. One struck flake of quartz was found.

Retouched Pieces

The retouched assemblage (Table 4) is dominated by microliths of which the majority appear to be associated with the main concentration of flint flakes and fragments in Area 1 (Fig 17).

The larger retouched pieces (Fig 18, Nos 1–8) are few and show no clustering related to either of the two areas of knapping. In terms of typology the denticulates (Fig 18, Nos 1–5) could be associated with the mesolithic activity. There is also neolithic or early bronze

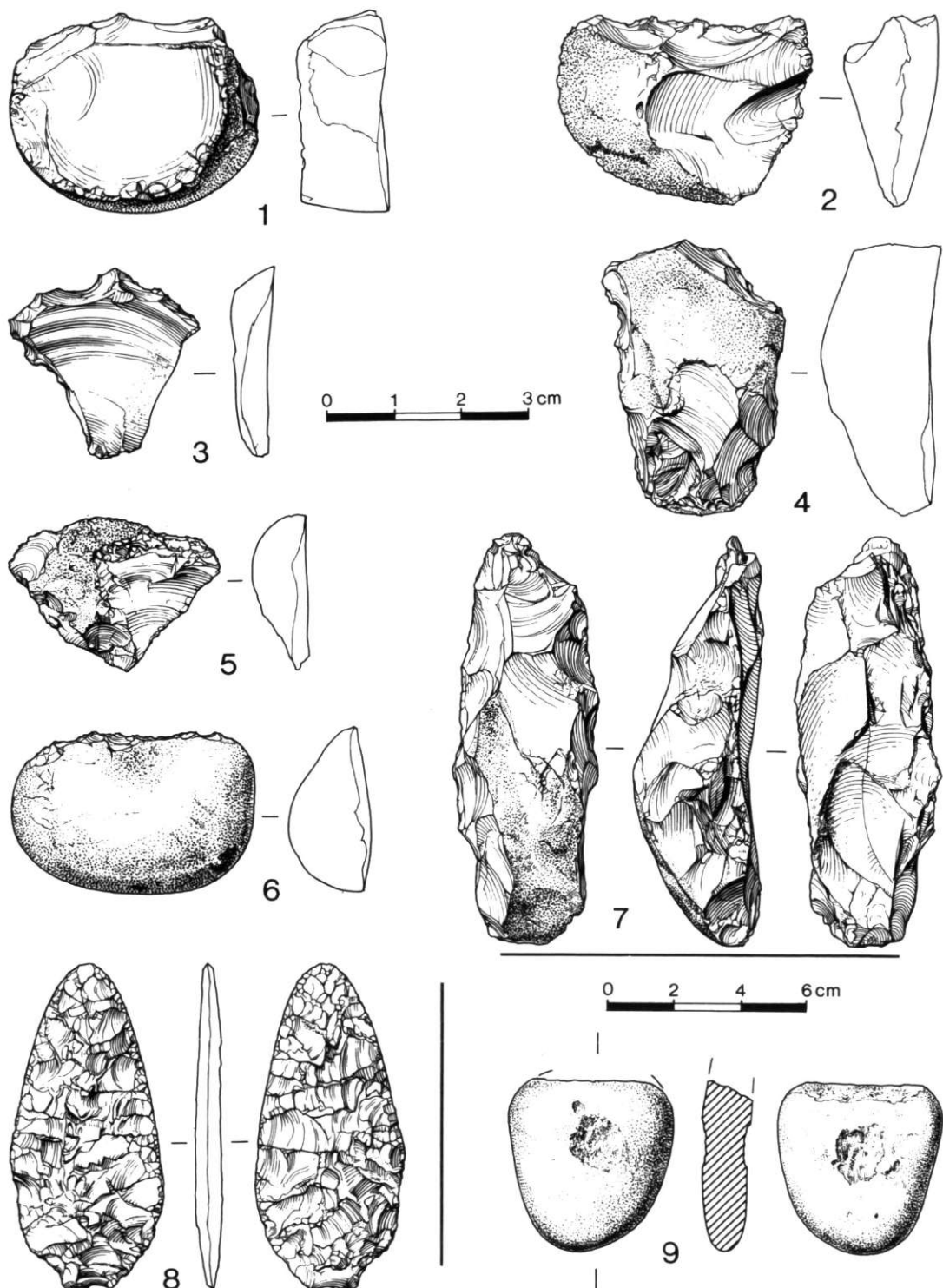


Fig 18

Flint retouched pieces: 1-5, denticulates, 6, convex scraper, 7, pick/fabricator, 8, knife. Greenstone: 9, anvil pebble. Key: On all lithic drawings + = position of bulb present, ● = position of bulb removed, 0 = probable position of bulb removed. Scale, 1-8. 1/1, 9, 1/2

age activity represented by the bifacial arrowhead fragment (not illus) in Area 2 and the fine bifacial knife (Fig 18, No 8). The pebble-backed scraper (Fig 18, No 6), the small (unused) pick or fabricator (Fig 18, No 7) found close to the knife (Fig 17) and the two flakes from scalar cores (not illus) could also belong to this phase. Also included in this phase could be the bipolar split pebbles (or scalar cores), considering the suggestion of a neolithic attribution for this type elsewhere in Cornwall (Smith, 1987). There are too few of these to give a meaningful distribution but a possible association is supported by the finding of three bipolar split pebbles in a group close to the bifacial knife (Figs 15 and 17). There are only four casually retouched flakes. Considering that the assemblage was in a context that was very vulnerable to damage from trampling etc, no attempt was made to distinguish evidence of utilisation on unretouched flakes.

Table 5 shows the nature of the assemblage of the 39 microliths. Five are broad forms (Fig 19, Nos 1–3) while the rest are narrower, geometric forms of which the majority are scalene triangles (Fig 19, Nos 4–20). There is also one isosceles triangle (Fig 19, No 21), as well as convex-backed (Fig 19, Nos 22–5), lanceolate (Fig 19, Nos 26–31) and straight-backed (Fig 19, No 32) pieces. Six of the scalene pieces (Fig 19, Nos 7–12) were found close together (Fig 17, Group 198) and could be associated in manufacture or in derivation from a single composite tool. This is supported to some extent by their similarity in size (Fig 20).

One of the broad microlith fragments (obliquely blunted ? on the left-hand side, not illus), one of the narrow convex-backed pieces (Fig 19, No 25), one of the narrow lanceolate pieces (Fig 19, No 31) and one of the narrow convex-backed (?) fragments (not illus) have burin-like impact spalls removed from their leading edges suggesting that some re-arming of projectiles was taking place. The one straight-backed piece (Fig 19, No 32) has its tip removed by a hinge fracture which could be a different type of impact damage.

Penhale Point. Table 5

Flint, microliths

Classification	Area 1	Area 2	Rest of site	Total
Broad oblique left	—	—	1	1
Broad oblique right	—	—	1	1
Broad oblique straight-backed	1	—	—	1
Broad, fragment, oblique left ?	—	—	1	1
Broad, fragment, convex-backed ?	1	—	—	1
Narrow convex-backed	2	1	—	3
Narrow lanceolate	3	—	3	6
Narrow scalene	8	—	9	17
Narrow isosceles	—	—	1	1
Narrow straight-backed	1	—	1	2
Narrow, fragment, convex-backed ?	—	—	2	2
Narrow, fragment, scalene ?	—	1	1	2
Microlith, fragment, unclassified	—	—	1	1
Microburin reject ?	—	1	—	1
Total	16	3	21	40

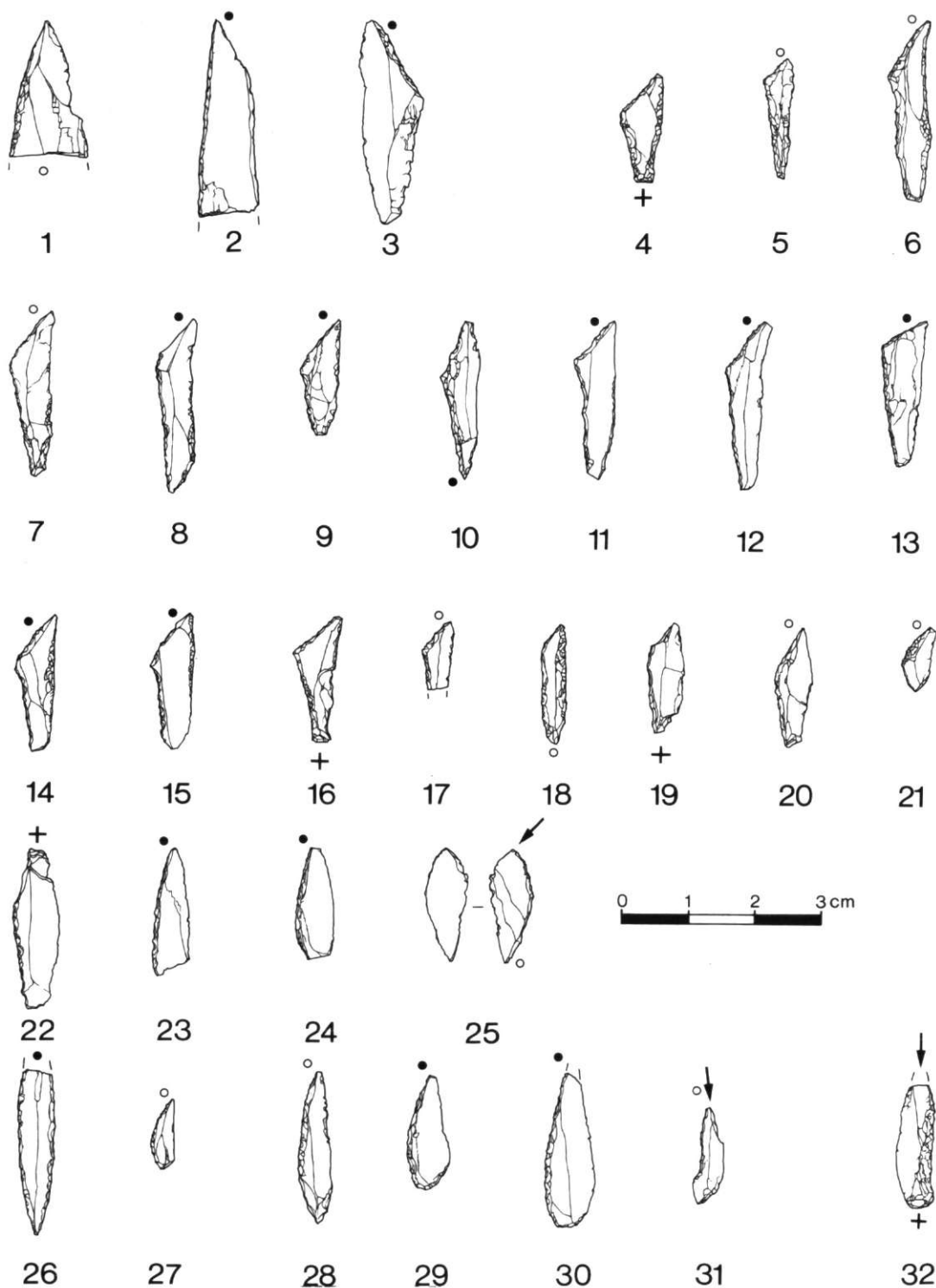


Fig 19

Flint microliths. 1-3, broad-blade pieces; 4-20, scalene triangles; 21, isosceles triangle; 22-25, convex backed; 26-31, lanceolate; 32, lanceolate. Scale, 1/1

It is curious that not a single microburin was found and this cannot be ascribed to the excavation method since experience has shown that (narrow blade) microburins and microliths have a similar recovery rate from hand excavation (Smith and Harris, 1982, 27). Despite sieving a sample of 50 litres of soil from Area 1 no microburins were found. There are later mesolithic sites where microliths seem to have been mainly manufactured directly from blades or blade segments with only occasional recourse to the microburin technique (e.g. Broomhill, Hampshire: O'Malley and Jacobi, 1978). While this could be the case at Penhale, only five of the microliths retain bulbs of percussion showing that they were made directly from flakes. It may be that the microliths were not being made on site. Certainly it can be seen that the distribution of narrow-blade microliths, while numerically associated with Area 1, is not directly coincident with the actual concentration of knapping waste (Figs 15a and 17).

Other Stone

One other artefact was found which should belong with the chipped stone assemblage and this is the 'cupped stone' (Fig 18, No 9), of hard, dense greenstone with shallow, pecked concavities on each face, the concavities not quite aligned.

Discussion

In terms of typological attribution the assemblage is dominated by later mesolithic, geometric, narrow blade microliths with lesser elements of earlier mesolithic and of neolithic type. Variable surface weathering or post-knapping cortication of the flint is no guide to age since it is very variable with, for instance, some of the microliths in fresher condition than the bifacial knife. Again, although there seems to be a 'broad blade' element among the microliths it is unclear to what extent this distinction is valid here. The difference in the

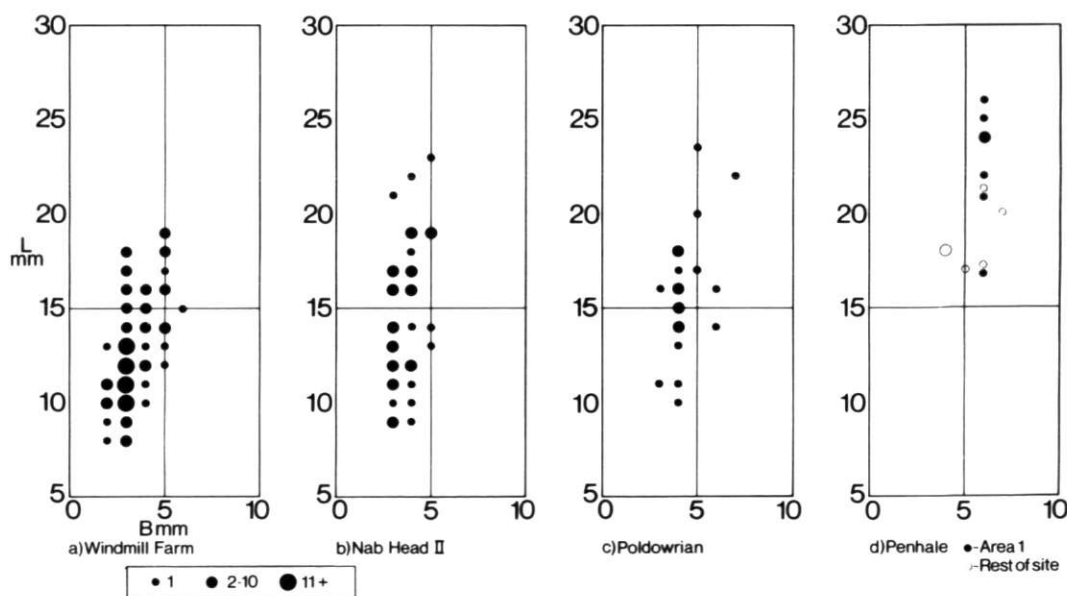


Fig 20
Dimensions of scalene triangle microliths, retouched on three sides

spatial distribution of 'broad' and 'narrow' microliths is perhaps the best evidence of a distinction but in terms of typology some of the 'narrow' microliths are quite large (e.g. Fig 19, Nos 6–13, 22, 26, 30). Comparison of these with the size of microliths from radiocarbon-dated later mesolithic sites demonstrates the larger size of the Penhale Area 1 pieces (Fig 20). Also, it seems likely that they were manufactured from flakes originally as broad as those of the 'broad' pieces.

In terms of the two centres of concentration (Areas 1 and 2) observed in the general scatter of flint debitage (Fig 15a), the assemblage from Area 1 is associated with later mesolithic narrow blade microliths while Area 2 is of uncertain attribution with only three diagnostic pieces (i.e. two narrow blade microliths and a bifacial arrowhead). Comparison of Areas 1 and 2 in terms of the length/breadth index of all complete unretouched flakes (Fig 16) shows a notable difference, with the flakes of Area 1 tending to be narrower than those of Area 2, and with 83% as against 63% respectively with proportions over 1/1. Considering the observations by Pitts and Jacobi (1979) on change in flint flake proportions through the Mesolithic and Neolithic it might be that Area 2 is later than Area 1 and so might be associated with the bifacial arrowhead and knife.

Looking at the cores, the average length of Class A cores from the whole site is 34 mm while that from Area 1 alone is 30 mm. The figure from Area 1 fits in with the observations made on length of cores from earlier and later mesolithic sites (Johnson and David, 1982) with the later sites having shorter cores e.g. Nab Head II average 28 mm, Poldowrian average 29 mm, Westward Ho! average 31 mm (*ibid*, 84). The three Class A cores from Area 2 at Penhale average 26 mm. There are too few cores to allow any comparison of core types between Areas 1 and 2 but it may be significant that there are more cores than split pebbles in Area 1 and vice versa in Area 2 (Table 3). In comparing surface flint assemblages from The Lizard, Cornwall, considered as later mesolithic with those considered as neolithic in terms of their tool types (Smith, 1987) it was demonstrated that the latter had more split pebble pieces as a proportion of all debitage.

Hammer-stones and pebble tools are absent from the site even though the latter are a common part of most later mesolithic coastal assemblages from Cornwall and Devon (Jacobi, 1979, 77–80). The large slate pebbles described with the Iron Age area at Penhale, above, which were shown by their context to be most likely part of the Iron Age occupation, were too brittle to use as hammers and lacked any wear signs. The other pebbles, of flint and quartz, are all too small to be hammers.

The small greenstone 'anvil' pebble (Fig 18, No 9) was found in Area 1 but there is no certainty that it is associated with the later mesolithic assemblage. The pecked concavities are not exactly aligned and are very shallow. Together with the small size of the pebble this makes it somewhat different from the 'cupped pebbles' described by Roe (1985) some of which had been used as hammers with the 'cups' probably being part of the hafting techniques. The Penhale pebble is very small and bears no traces of hammering although it would be a suitable material. However, it has a fragment broken from one end which could have removed a hammer facet. Similar flat pebbles with concavities have been reported from a site at Gwithian where they were interpreted as anvils for the splitting of pebbles by the bipolar technique (Roberts, 1987, 133). Certainly, casual experiment shows that the smaller flint pebbles are difficult to split by any other method than on an anvil. Hammers would be required whatever method was used to split the pebbles and it may be that because they were of a rarer material and size they were not discarded.

Two other flint working sites have previously been recorded from Penhale Point both on the cliffs further to the south (Fig 1b). Site P1 produced narrow blade microliths while Site

P2 produced 'numerous flint pebbles, broken and unbroken, flakes and occasional cores, all typical of a microlithic industry' (Harding, 1950). However, there were no actual implements and it seems likely that Site P2 was not mesolithic but perhaps neolithic as suggested for Area 2 at Penhale and for the collections with few cores and numerous split pebbles from The Lizard (Smith, 1987). Part of Site P1 is now a car park and is suffering severe erosion.

Jacobi (1979), saw the later mesolithic of Cornwall falling into a 'Southern English social territory' with microlith assemblages characterised by the predominance of convex backed and lanceolate forms. Recent finds have shown two assemblages in Cornwall which are dominated by scalene triangles, i.e. Penhale Point and Windmill Farm (Smith, 1984). Assemblages similar to the latter occur widely elsewhere in England and Jacobi (1981) has suggested that such assemblages might be early in the later mesolithic narrow blade microlith tradition. This has not been supported by the 'late' radiocarbon dates from Windmill Farm of 5920 ± 180 BP (Har-5667) and 5510 ± 150 BP (Har-5668). Comparison of the length and breadth measurements of scalene triangles retouched on three sides from Penhale with those from the radiocarbon dated later mesolithic sites of Windmill Farm, Poldowrian (Smith and Harris, 1982) and Nab Head II, Dyfed (David, *pers. comm.*), show that they have different size ranges (Fig 20). The assemblages can be arranged in a simple progression of increasing broadness, as shown. While the progression may not itself be of chronological significance there are clear differences and it seems reasonable to suggest that the Penhale microlith assemblage is earlier than the other three. However, the difference in size could be a result of raw material differences and although each of these coastal sites used similar beach pebble raw material it was suggested above that the Penhale microliths may not have been made on site. If so then there may have been access to larger sized raw material and if we compare the Penhale scalene triangles to those from the later mesolithic site of Wawcott III, Surrey (Froom, 1976), we find that they are of a similar size range. The upper layers at Wawcott produced a scalene triangle-dominated microlith assemblage associated with a date of 6120 ± 134 BP (BM-767). The difference in size of scalene triangles between Penhale and Windmill Farm/Nab Head II/Poldowrian could also be simply a result of collection bias in that the latter three sites employed fine mesh sieving. However, while this could account for the lack of smaller pieces at Penhale it cannot account for the lack of larger pieces at the other three sites. It can be seen that much more work needs to be done on mesolithic assemblages in the South West before any overall picture of chronology or affinity can emerge.

Despite the existence of a lower sea-level in the earlier post-glacial it is likely that Penhale Point was already coastal during the later mesolithic, with close similarities to Trevoze Head, another promontory on the same coast, also with widespread flint scatters (Johnson and David, 1982). The frequency of flint scatters around the cliffs of Cornwall compared to their relative rarity inland suggests that coastal resources were important. Whether these were fish, shellfish or seals (Jacobi, 1979), and whatever season was used, the status of the occupation at Penhale was minor and probably short-lived and specialised. There may have been a specialised microlith assemblage in use and the microliths were probably manufactured elsewhere. Evidence of a range of activities as might be expected at a 'home-base' site, in terms of a variety of flint or pebble tools, was absent.

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The archive of written records, drawings, photographs and artefacts will be stored in the County Museum, River Street, Truro. Microfiche copies of the archive will be stored at the National Monuments Record, 23 Savile Row, London and at the CEU, Fort Cumberland, Eastney, Portsmouth.

Bibliography

- Avery, M., 1971. 'Some aspects of the Iron Age in South-Western England', Unpublished thesis presented to Oxford University.
- Barton, R.M., 1969. *An Introduction to the Geology of Cornwall*, Bradford Barton, Truro.
- Brooks, R.T., 1974. 'The Excavation of The Rumps Cliff Castle, St Minver, Cornwall', *Cornish Archaeol* 13, 5–50.
- Brown, L., 1984. 'Objects of Stone', in Cunliffe, 1984, Vol 2, 7.1.11, 419–422.
- Coles, J.M., 1987. *Meare Village East, The Excavations of A. Bulleid and H. St George Gray, 1932–1956*. Somerset Levels Papers 13, Somerset Levels Project.
- Cornwall Committee for Rescue Archaeology, 1984. *9th Annual Report, 1983–4*, CCRA, Truro.
- Cotton, M.A., 1959. 'Cornish cliff castles: a survey', *Proc West Cornwall F C* 2:3, 113–21.
- Crofts, C.B., 1955. 'Maen Castle, Sennen: the Excavation of an Early Iron Age Promontory Fort', *Proc West Cornwall F C* NS 1:3, 98–115.
- Cunliffe, B., 1978. *Iron Age Communities in Britain*, Routledge and Kegan Paul, London.
- Cunliffe, B., 1984. *Danebury: an Iron Age hillfort in Hampshire*, Research Report 52, CBA.
- Cunliffe, B., 1987. *Hengistbury Head, Dorset. Vol 1. The Prehistoric and Roman Settlement, 3500 BC–AD 500*. Oxford Univ Committee for Archaeology.
- Elsdon, S.M., 1978. 'The Pottery' in Christie, P.M., 1978. 'The excavation of an Iron Age souterrain and settlement at Carn Euny, Sancreed, Cornwall', *Proc Prehist Soc* 44, 309–434.
- Froom, F.R., 1976. *Wawcott III, A Stratified Mesolithic Succession*, BAR 27, Oxford.
- Gordon, A.S.R., 1940. 'The excavation of Gurnard's Head, an Iron Age Cliff Castle in Western Cornwall', *Archaeol J* 97, 96–111.
- Harding, J.M., 1950. 'Prehistoric Sites on the North Cornish Coast', *Antiq J* 30, 156–169.
- Jacobi, R.M., 1979. 'Early Flandrian Hunters in the South West', *Proc Devon Arch Soc* 37, 48–93.
- Jacobi, R.M., 1981. 'A Late Mesolithic Rock-shelter Site at High Hurstwood, Sussex', *Sussex Archaeol Coll* 119, 1–36.

- Johnson, N.D. and David, A.E.U., 1982. 'A Mesolithic Site on Trevoze Head and Contemporary Geography', *Cornish Archaeol* **21**, 67–103.
- Johnson, N.D. and Rose, P.G., 1982. 'Defended settlement in Cornwall, an illustrated discussion', in Miles, D., 1982, *The Romano-British Countryside. Studies in Rural Settlement and Economy*, BAR 103, Oxford.
- Johnson, N.D. and Rose, P.G., 1983. *Cliff Castle at Penhale, Perranzabuloe, Cornwall; report to the Department of the Environment*. Cornwall Committee for Rescue Archaeology, Truro.
- Keeley, H.C.M., 1988. 'Soil at Penhale, nr Newquay, Cornwall', Ancient Monuments Laboratory Report No 158/88.
- Lamb, R.G., 1980. *Iron Age Promontory Forts in the Northern Isles*, BAR **79**, Oxford.
- Leeds, E.T., 1927. 'Excavations at Chun Castle, Penwith', *Archaeologia* **76**, 205–40.
- Miles, H., 1977. 'Excavations at Killibury hillfort, Eglosayle 1975–6', *Cornish Archaeol* **16**, 89–121.
- Morris, E.L., 1980. 'Petrological Report on the Pottery Fabrics', in McAvoy, 1980. *Archive Report, Carngoon Bank, Site 32*, CEU, Portsmouth.
- O'Malley, M. and Jacobi, R.M., 1978. 'The Excavation of a Mesolithic Occupation Site at Broomhill, Braishfield, Hampshire', *Rescue Archaeology in Hampshire* **4**, 16–38.
- Peacock, D., 1969. 'A contribution to the study of Glastonbury ware from South West Britain', *Antiq J* **99**, 41–61.
- Stuiver, M. and Pearson, G.W., 1986. 'High-Precision Calibration of the Radiocarbon Time Scale, AD 1950–500 BC', *Radiocarbon* **28**, 805–38.
- Pitts, M.W. and Jacobi, R.M., 1979. 'Some Aspects of Change in Flaked Stone Industries of the Mesolithic and Neolithic in Southern Britain', *Journal of Archaeol Sci* **6**, 163–77.
- Quinnell, H. and Harris, D., 1985. 'Castle Dore: the chronology reconsidered', *Cornish Archaeol* **24**, 123–32.
- Quinnell, H., 1986. 'Cornwall during the Iron Age and the Roman Period', *Cornish Archaeol* **25**, 111–34.
- Reynolds, P.J., 1982. 'Substructure to superstructure' in P.J. Drury, ed, *Structural Reconstruction, approaches to the interpretation of the excavated remains of buildings*, BAR **110**, 173–98.
- Roberts, A.J., 1987. 'The Later Mesolithic Occupation at Gwithian: Preliminary Results' in Rowley-Conwy, P., Zvelebil, M. and Blankholm, H.P., eds, *Mesolithic Northwest Europe: Recent Trends*, Univ of Sheffield.
- Roe, F., 1985. 'Report on the Cupped Pebble', 56–9, in Christie, P.M., 'Barrows on the North Cornish Coast: Wartime Excavations by C.K. Croft Andrew 1939–1944', *Cornish Archaeol* **24**, 23–124.
- Rouillard, S.E., 1987. 'The Iron Age Pottery from Meare Village East', in Coles, J.M., 1987. *Meare Village East, The Excavations of A. Bulleid and H. St George Gray, 1932–1956*. Somerset Levels Papers **13**, Somerset Levels Project.
- Smith, G.H., 1987. 'The Lizard Project: Landscape Survey, 1978–1983', *Cornish Archaeol* **26**, 13–68.
- Smith, G.H. and Harris, D., 1982. 'The Excavation of Mesolithic, Neolithic and Bronze Age settlements at Poldowrian, St Keverne, 1980', *Cornish Archaeol* **21**, 23–66.
- Thomas, A.C., 1958. *Gwithian: Ten Years Work (1949–1958)*, Camborne.
- Thomas, R., 1842. *Thomas R. of Perranworthal*, manus, Museum of Penzance Antiquarian Society.

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Backed Flint Blades from Bodwannick, Lanivet

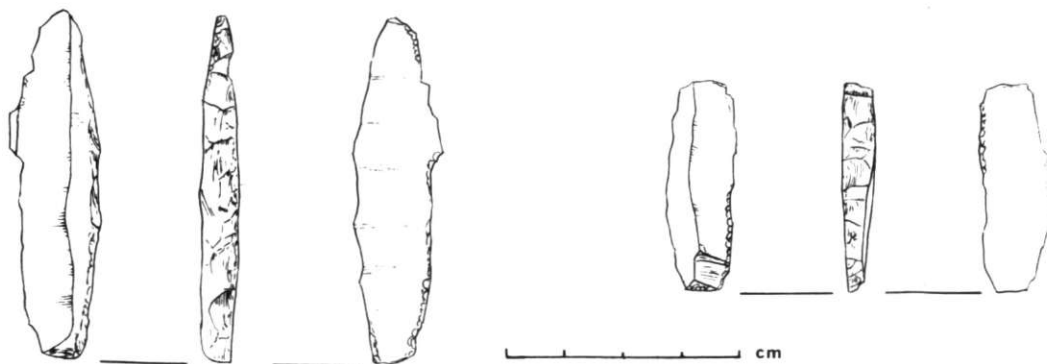
PHILIP STEELE

Two backed-blades were recovered from the surface of a ploughed field, on the crest of a gentle east-facing slope at Bodwannick, Lanivet. Situated to the south of the Camel River Valley, the field is on a low lying spur between the confluence of two north flowing streams. The blades are manufactured from good quality, light grey flint. The larger blade, found at SX 03566605, is patinated, and has a length of 59 mm and maximum width of 15 mm (No.1). Light abrasive wear occurs on the flake-scar ridges of its backing retouch. Typologically the artefact is similar to the smaller, unpatinated blade, that was found nearby at SX 03536605 (No.2). Proximal and distal ends of the blade are retouched. The length of the implement is 36 mm, and its maximum width 12 mm. Both artefacts are convex-backed by steep blunting retouch and are also trimmed along the length of their cutting edges.

A scatter of eighteen small struck flint flakes and a truncated flint blade occurred within the field. In an adjoining field, at SX 03616603, eleven flint flakes, blades and implements were found, including a small convex end-scraper and a thumb-nail scraper. A barbed and tanged flint arrowhead was also recovered from a moderate to steep north facing slope, above a stream, at SX 03576630. In contrast to the backed blades, the two scrapers are made from poorer quality, dark grey pebble-flint, whilst the arrowhead is of dark-brown flint, patinated on one side.

An assemblage from a widespread flint scatter, centred at SX 03486616, has been recovered from the area by Linda Ball of Treleigh Farm. Pebble and nodular flint is present. Finds include thumb-nail scrapers and three small barbed and tanged arrowheads, suggesting Beaker or Early Bronze Age activity.

The two backed-blades found at Bodwannick are closely similar to implements recovered from Later Upper Palaeolithic contexts at the cave sites in South Devon and at other British locations. Evidence of probable Upper Palaeolithic activity in Cornwall is at present restricted to the recent discovery of a backed blade found at Stithians Reservoir (Berridge



1

2

and Roberts, 1986, Fig 2, No.1). The Bodwannick backed-blades therefore provide further evidence of a probable Later Upper Palaeolithic human presence in Cornwall.

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Reference

Berridge, P. and Roberts, A., 1986. 'The Mesolithic period in Cornwall; *Cornish Archaeol* 25; 7-34.

Luftwaffe Aerial Photographs of the Isles of Scilly

PAUL ASHBEE

At the end of the 1939-45 war much of the German aerial photographic archive fell into American hands and is now held by the National Archives, in Washington D.C. Most of the photographs were taken in daylight, sometimes from altitudes of between 2500-5000 ft. They are dated and comprise a remarkable record of England before intensive agriculture obliterated so much of the historic landscape and levelled so many earthworks and other ancient features.

The *Luftwaffe* photographed Scilly and a print, taken during June 1940, is preserved in the Hughtown Museum. A further nine aerial photographs of Scilly have most kindly been made available to the present writer by Dr Rowan Whimster, Head of the Air Photography Unit, Royal Commission on the Historical Monuments of England. I am greatly indebted to them for this preview of a new and significant source and it is hoped that further prints will become available in the fullness of time.

The photographs are 9 ins (22.5 cm) square, and of high definition despite being from prints, not negatives. They are from two sorties, flown on 17 October 1940 and 1 December 1940, respectively. All carry (top-left) a photographed numerical label from an automatic recording device which is sometimes supplemented by an adhesive strip upon which further details are written. Some blurred labels have been over-written in a non-German hand. A clock-face (bottom-left) records the time (*Luftwaffe* European time) when the photograph was taken and a target-ring (bottom-right) indicates objective aim. The three photographs taken on 17 October depict Treco, while those from 1 December show St. Mary's, but include the Eastern Islands, St. Helen's, Northwethel and the eastern shores of Treco. Although a sequence, the details suggest photography by two aircraft, one from a high altitude and another, seeking specifics, from about 3500 ft.

The principal details of the prints are as follows:—

17 October 1940

1. Nr. 5215, 149=200,45; F959b/40 v. 17.10.40; 10262; 0936; SSE of objective.

The western half of St. Mary's, most of St. Martin's, Tean, St. Helen's, Northwethel, Treco, Bryher and Samson, from high altitude, between cumulus clouds. It is just before or after high-tide and Shipman Head, Bryher, is the print's central point.

2. Nr.4106, 07/83, f=753.31; F959b v. 17.10.40; 0930.

Tresco, from a low altitude, N of a line Old Grimsby – New Grimsby, Northwethel, St. Helens and Bryher, N of a line Southward – Great High Rock. Tresco's Cork Porth is the print's central point. It is high tide.

King Charles Castle and its earthen outwork, and a small adjacent enclosure, are clearly visible. Traces of ancient fields line the W and S limits of Castle Down.

3. Nr.4106, 0 7/8 4, f=753.31; F9596/40 v. 17.10.40; 0931 .

Tresco from a low altitude, N and E of a line Pentle Bay – New Grimsby, Northwethel, Round Island, St. Helen's, Tean and the western end of St. Martin's. The S end of Northwethel is the print's central point.

On St. Helen's five discrete ancient enclosure systems are clearly visible.

1 December 1940

1. 041, f=200.47; F1069a/40v 1.12.40.

St. Mary's, the Eastern Islands, St. Martin's, Tresco, Bryher and Samson at low tide and from a high altitude. Toll's Island, St. Mary's is the print's central point.

Salakee Down before the aerodrome extension, an undeveloped McFarland's Down and an undeveloped Hughtown, clear of the Garrison Wall and Porth Cressa, are to be seen. On Halangy Down cultivation terraces are visible and there are circular cropmarks on the Golf Links.

2. 043, f=200.47; F1069a/40v. 1.12.40.

St. Mary's and the Eastern Islands, from a high altitude, are sun-lit and the details visible in (1) can be seen with greater clarity. Traces of a field-system line the S flank of the Garrison.

3. Nr.4120, 713, f=751.76; F1069b/40v. 1.12.40; 1030.

The Eastern Islands, from Hard Lewis Rocks to Little Ganilly, Little and Great Arthur, St Martin's Head and a small area of Chapel Down, from a high altitude at low tide.

4. Nr.4120, 716, f=751.76; F10696/40v. 1.12.40; 1035

St. Mary's, from a low altitude, E of a line Trenoweth – Porth Hellick Point and S of a line Little Porth – Trenoweth. Possible traces of an ancient field-system is visible on Porth Hellick Down. The Civil War breastworks N of Watermill are prominent, as is Pellow's Redoubt, on Toll's Island, approximately the centre of the print.

5. Nr.4120, 717, F=751.76; F1069b/40v. 1.12.40; 1050

St. Helen's, Northwethel, Tresco N of a line Rushy Point – Plump Rocks and Bryher, N of Watch Hill and E of Puckle's Carn, just before or after high tide. The ancient enclosures on St. Helen's are clearly to be seen as are traces of an ancient field-system on Northwethel. King Charles Castle, with its earthen outworks, and an enclosure, besides ancient boundary banks can be seen on Tresco's Castle Down and another on Bryher's Shipman Head Down. Gimble Porth, Tresco, is the approximate centre of the print.

6. Nr.4120, 718, f=751.76; F1069b/40v. 1.12.40; GX12043, F1069, b/SD.

Round Island, St. Helen's, Northwethel and the NE part of Tresco; the conditions and details are those of (5).

These aerial photographs are, as far as can be seen, a few from an archive spanning the war years. If this is so, a full range would be a considerable and important source for all aspects of Scillonian studies. The nine photographs, so generously made available by Rowan Whimster, are a unique record of the flower industry at its pre-war peak, as is shown by the many fields in use that are now abandoned. St. Mary's is free of the development of the past three decades which has masked the Garrison Wall and broken its skyline, swamped Porth Cressa, enveloped Old Town and blighted McFarland's Down. Salakee Down is almost as it was when seen by O.G.S. Crawford and Hugh Hencken in the 1920s (Ashbee, 1976), before the modest landing strip, opened in 1938, was sited on the high plateau. The enclosures upon St. Helen's are particularly clear, because the island's vegetation had been burned by incendiary bombs in August 1940 (Radford, 1941), as are cropmarks in various grassed fields. Known sites and chambered cairns are probably unapparent because of bracken. However, were a detailed examination of a larger series of prints possible there would undoubtedly be many additions to the lists of Scilly's early monuments.

This note is a convenient place to record, by way of a postscript, that in 1944–45 the Army Photographic Research Unit applied various techniques to photographic recognition of beach gradients and off-shore underwater obstacles. Scilly was the venue for much of the work and the use of infra-red sensitive film, although producing variable results, was seen as suitable for the survey of submerged ancient land-surfaces (Moore, 1947, 214). Recently, conventional low-level aerial photography has also given us spectacular effects (Thomas, 1985, 57–60, illust. 20, 21, 22). The present-day successors to these, now historic, wartime developments could well produce even more unexpected and impressive manifestations of the drowned landscape.

Norwich

Bibliography

- Ashbee, P., 1976. 'The Archaeology of Cornwall and Scilly' by H. O'Neill Hencken. A Jubilee Appreciation, *Cornish Archaeol* 15, 5–6.
- Moore, J. Grange, 1947. The Determination of the Depths and Extinction Coefficients of Shallow Water by Air Photography using Colour Filters, *Phil Trans Royal Society*, series A, No. 816, 240, 163–217.
- Radford, C.A.R., 1941. Celtic Monastery on St. Helen's, Isles of Scilly, *Antiq J* 21, 344–346.
- Thomas, Charles, 1985. *Exploration of a Drowned Landscape*, London.

More Ancient Crosses

A.G. LANGDON

Wayside Cross at Hendra, Menheniot (Fig 1)

The writer is indebted to Miss Alyson Cooper of Architecton Listing (consultants to English Heritage) who told him of this previously unknown monument. Miss Cooper visited Hendra Farm, Menheniot, in 1984, and examined the wayside cross lying on the driveway to the farm, listing it under the parish of Menheniot.

The writer visited Hendra Farm in November 1987 and met the farmer, Mr Ford, who discovered the old stone in use as a gatepost in April 1984. He stated that the granite post had become fractured and was removed and replaced. It was then that he discovered that the gatepost was an ancient round-headed cross, buried head downwards in the ground. Many wayside crosses have been subjected to a similar incongruous practice over the years.

The stone was situated about one hundred yards to the south of the farm, close to an ancient church path (SX 2697 6545). The footpath led south-east via Tregartha and Trewelland towards the churchtown. The wheel-headed cross is of an unusual style and displays a double line incised Latin cross on each face, the lower limb of which extends the whole length of the shaft. There is also a bead running around the head and down the sides of the shaft, but instead of being in relief it is rebated.

Unfortunately the monument is today in two pieces, with a third portion containing the tenon missing. The base stone has yet to be discovered, and may in the future give us a clue to its original site. Mr Ford has removed the cross to his garden for preservation, and hopefully in the future the stone may be joined and re-erected.

Mary Henderson, in her work on Cornish crosses, recorded many field names, taken from the Tithe Apportionment map and schedule of 1840, under the parish of Menheniot, including 'Cross Park' No. 705 at Hendra. The only similar cross stands in Landewednack churchyard as a tombstone, and was discovered at Merthen, Constantine.

Dimensions:	Height (complete) 5 ft 7 ins (1.7 m)
	Width of head 1 ft 4½ ins (420 mm)
	Width of shaft (at neck) 11½ ins (293 mm)
	Width of shaft (at base) 13 ins (330 mm)
	Thickness 8 ins (203 mm)



Fig 1
Wayside cross found at Hendra Farm, Menheniot



Fig 2
Trelights cross base, St Endellion

Trelights Cross Base, St Endellion (Fig 2)

This apparently unrecorded cross base is situated in the parish of St Endellion, near the village of Trelights. It was recently shown to the writer by Mr George Cowling, president of the Wadebridge Old Cornwall Society, who has known of its existence for many years. The stone is built into the foot of a hedge in a lane leading down to Trelights, close to a junction with the B3314 road (SW 9902 7876).

The writer has searched the immediate area in the hope of finding the remains of a cross, but this has proved unsuccessful.

Dimensions:	Length 3 ft 9 ins (1.143 m)
	Width to ground level 2 ft 5 ins (737 mm)
	Thickness unknown
	Mortice 12½ ins by 10 ins (318 by 254 mm)
	Mortice depth 8 ins (203 mm)

Cross Head at Tregonning, Luxulyan (Fig 3)

On 21 August 1988 a cross head was discovered on the Saint's Way footpath, 1¼ miles south of Luxulyan churchtown (SX 0539 5702), by Mr and Mrs Turner of Bodwen, Luxulyan.

The stone, which displayed a Maltese style cross on each face, was removed from the hedge by Mr and Mrs Turner and the writer. It had been built into the foot of the hedge 'side on', and it was amazing that Mr Turner noticed it. The site of the discovery is only three metres from two stiles, where the church path splits, one track leading south via Trevanney

farm to Prideaux, the other leading south-west to Methrose farm.

Many visits to Luxulyan to search for the missing shaft and base stone proved unsuccessful, and it was later decided to re-erect the cross head by the stile for immediate preservation. Permission was obtained from the landowner and the stone was re-erected on a new base by the writer, Mr Turner and Mr Burrows on 22 October 1988.

The writer is indebted to Mr Harris of Tregonning Farm and Mr Higman of Trevanney for permitting searches of hedgerows to be carried out, and the erection of the cross head on the hedge, which acts as the boundary between their two farms.

Dimensions:	Width of head 2 ft (610 mm)
	Height of head 1 ft 10 ins (559 mm)
	Thickness of head 7 ins (178 mm)
	Probable width of shaft 1 ft 4 ins (406 mm)
	Thickness of shaft 9 ins (229 mm)



Fig 3

Tregonning cross head, removed from hedge on Saint's Way footpath

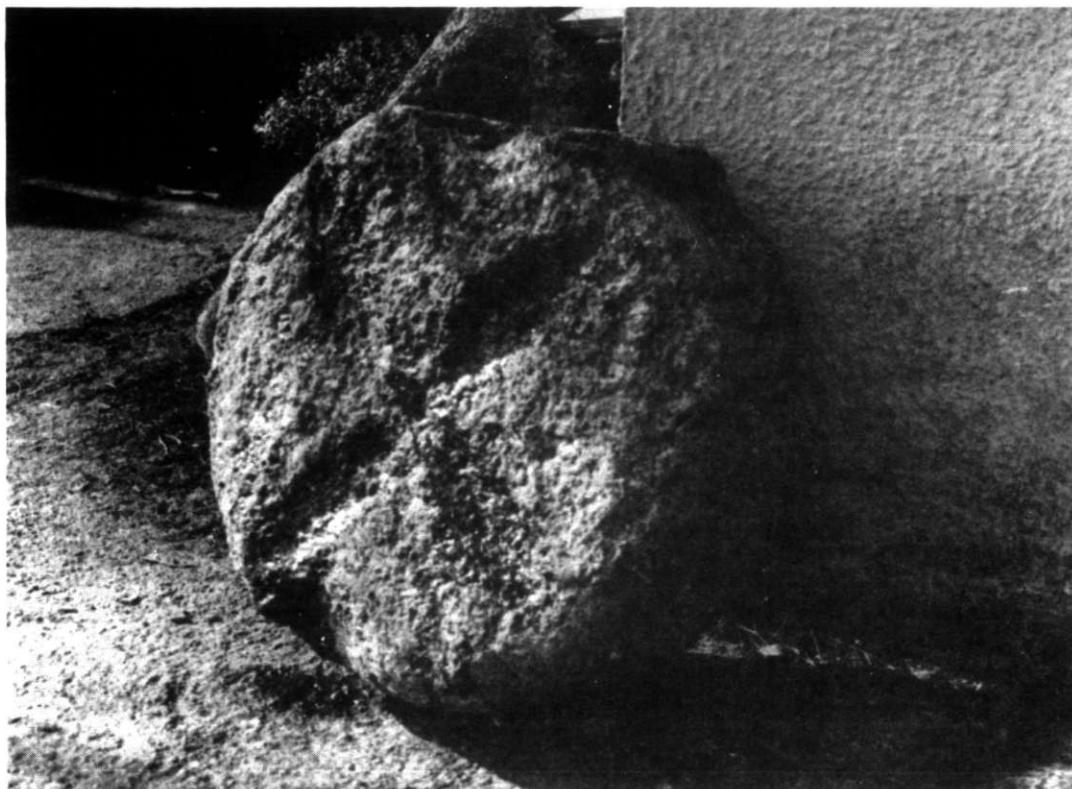


Fig 4
Cross head from Tregurtha, St Wenn

Cross Head at Tregurtha, St Wenn (Fig 4)

In December 1988 the writer was invited to examine a stone at Tregurtha farm, St Wenn, the home of Mr W.G.V. Bennallick (SW 9586 6447). On visiting the farm he was surprised to find a cross head similar to the Luxulyan example. The Tregurtha cross head had been lying in a ditch on the farm for many years, but was not closely examined by Mr Bennallick until recently, when it had to be removed so that new drains could be laid. Both faces display a Maltese-style cross, one face being disfigured by a socket-type hole. This appears to have been used as a pivot for some kind of mechanical purpose.

The writer is indebted to Mr and Mrs Bennallick of Tregurtha and Mr Bennallick of Lower Polmorla for their help. It is hoped that in the future the monument may be re-erected on a new shaft.

Dimensions:	Width of head 1 ft 9½ ins (546 mm)
	Height of head 1 ft 8 ins (508 mm)
	Thickness of head 6½ – 7½ ins (165 – 190 mm)
	Probable width of shaft 12½ ins (317 mm)
	Thickness of shaft 8½ ins (216 mm)

Rostigan Cross, St Wenn (Fig 5)

The late Mr Charles Henderson recorded many of the Terriers of Cornish parishes in his vast collection of documents and transcripts known as Henderson's Calendars. One of the terriers quoted, for the parish of St Wenn in 1601, mentions a stone cross as a bound stone for the glebe:

The glebe is bounded by Rechigian crosse in the highway till it cometh to Polgrene (Braban's land) then to Cruqe Magye and then to Skewes in to house of Jo Perkins Gent. and so back to Rechigian the land of one Moyle of St Austell and back to the said crosse.

On reading this the writer decided to search for this ancient monument, and was surprisingly rewarded by finding the lower portion of a cross shaft. The stone had been built into a stile, where the church path intersects the boundary of the glebe. It had been used as the



Fig 5

Cross shaft built into stile near Rostigan, St Wenn

second step, on the field side of the stile, and consisted of the lower section of shaft and the tenon, with a bead running up each side. The stile is situated at SW 9718 6468, and the three adjoining fields are known as Cross Park and Higher Cross Park under Rostigan and Cross Park under Lancorla. These field names refer to the monument as there are no crossroads in the area. A search for the remaining portions of the cross has proved unsuccessful, although local interest may lead to additional discoveries in the future. The writer is indebted to Mr R. Retallick of Glebe Farm for allowing him access to search his land.

Dimensions: Length 2 ft 5½ ins (750 mm)
 Width 1 ft (305 mm)
 Thickness 7½ ins (190 mm)
 Length of tenon 6 ins (150 mm)
 Width of tenon 7 ins (175 mm)

References

- Henderson, C. *Calendars*, no. 110, MS in RIC, Truro.
Henderson, M. *Cornish Crosses*, MS in RIC, Truro.
Langdon, A.G., 1896. *Old Cornish Crosses*, 262.

Recent Work: Excavations

Reawla, Gwinear

The site (SW 605363), a defended farmstead, recognised since the mid-19th century, lies at 79m OD on the NW crest of a SW-NE ridge. Surface features indicated an oval enclosure of slightly over 1 ha, with the rampart preserved as a hedgeline to a height of 2.0m in the SE quadrant. It first came under threat in the mid 1970s and the results of a magnetometer survey then undertaken showed a previously unsuspected inner ditch encompassing 0.4 ha. A fresh application in 1987 for 33 starter homes again threatened the site and English Heritage provided funding for a sample excavation mounted by Cornwall Archaeological Unit in October 1987. A trench, 65m by 16m, opened in the NE quadrant, was positioned to incorporate the area of maximum activity within the smaller enclosure and some of the anomalies identified by the magnetometer survey between the two ditches. The latter proved to be the only activity between the ditches within the trench and was a series of large post-medieval pits.

Excavated material indicates that the main phase of activity fell within the 2nd and 4th centuries AD.

The outer ditch, 6.0m wide, 3.0m deep, of classic defensive 'V' profile with a rampart, possibly of box construction, standing in 1851 over 3.6m high, produced no secure dating evidence. The silting suggested the presence of a counter-scarp bank indicating repeated clearings.

The inner ditch, again 'V' profiled, 2.0m wide, 1.6m deep, contained a quantity of stone in its upper filling, suggesting that the associated internal rampart may have been faced. This ditch was apparently back-filled when partially silted, presumably when the outer ditch was dug. Continued use of the site after back-filling is shown by the cutting of a shallow drainage gully into the top fill. An extended life and possible thickening of the rampart is indicated by a parallel pair of drainage gullies within the line of the ditch. These both respect a ring gully, the earliest feature on the site, which is sub-circular with a diameter of 13m, has a 'U' profile 0.6m wide, 0.5m

deep, and is situated within the lee of the inner rampart. Its entrance faces directly upslope, slightly north of east. There are no associated internal features; it may have been an animal pen.

The western half of the area enclosed by the ring gully was re-used as an industrial area in a period spanning the dismantling of the inner rampart; associated finds were recovered from both the bottom of the inner ditch and the upper filling of the parallel gullies, in the first instance a broken burnt clay mould with slag inclusions, and in the second a lead 'ingot' cast in a nearby clay mould. A central furnace surrounded by a large number of short-life, possibly single use, pits containing charcoal fragments formed the focus of this area. The lower stone of an unused rotary quern, possibly broken in manufacture, was found near the furnace. Defined on the eastern side by a shallow gully draining into the inner ditch, the associated activity layers containing pieces of slag and charcoal spread over the fully silted ring gully.

These layers were in turn cut by hut scoops, three of which were investigated although of the easternmost so little fell inside the trench that identification must be doubtful. Generally they consisted of shallow depressions 0.4m deep. In only the southern hut was any structural evidence found, a post ring and a two-phase gravelled entrance-way. All were filled with a humic layer containing the bulk of the pottery recovered. This layer spread over the whole of the industrial area, suggesting that it is a midden deposit from occupation areas beyond the limits of the trench. A geophysical survey is being undertaken in an attempt to pinpoint these areas, supplemented by a watching brief when construction actually begins.

I would like to thank Farkestral Ltd for providing the machine stripping and all members of the Society who helped in various ways during the excavation.

Nic Appleton

Recent Work: Survey

Bodmin Moor Industrial Survey

To conclude the RCHM/CAU Bodmin Moor Survey a 3-month sketch survey of all industrial remains was undertaken by CAU on those parts of the moor not already covered by the Minions Survey and Sandy Gerrard's PhD thesis on streamworks. Lack of time meant that the surveys were sketched, working from base-maps compiled from aerial photographs and historic maps, although detailed notes were taken. The principal industries studied were metal mining (tin, copper, wolfram, manganese etc), from streaming to deep mining, granite quarrying and china clay working. Several new industrial sites were discovered, usually small-scale: tinnerns' shelters, streamworks, reservoirs etc. Looking at these industrial sites took the survey into remote parts of the moor, rarely visited by archaeologists and several valuable new discoveries of prehistoric sites were made: a possible tor enclosure above De Lank Quarry, a 'tailed-cairn' at Shallow Water Common, and impressive menhirs at De Lank Quarry and Tregune.

Peter Herring

Duchy

A consultancy undertaken for the Duchy of Cornwall brought about the evaluation through rapid survey of a number of derelict mining sites in the east of the county.

Adam Sharpe

Isles of Scilly Archaeological Management Plan

Early in 1988 the Cornwall Archaeological Unit was commissioned by English Heritage to compile the archaeological input to an Environmental Management Plan for the Isles of Scilly Environmental Trust, which now has the leasehold of all the untenanted land in the Islands. The compilation of the archaeological report was preceded by fieldwork carried out over five and a half months from April to September 1988. During this period a team of three fieldworkers (Cathy Parkes, Carl Thorpe and Andy Waters) visited, photographed and recorded the character and dimensions of the majority of extant sites and monuments. In each case the condition, survival and degree of threat to the archaeological remains were assessed, and recommendations made as to their future management. The management plan was completed by December 1988 and has subsequently been accepted by the Environmental Trust as the basis for the practical management of its landholdings and an articulation of Trust policy toward the archaeology of Scilly as a whole.

Jeanette Ratcliffe

Beaker Burial at Harrowbarrow, Callington

Machine excavation for a house extension in Harrowbarrow (SX 3974 6980) disturbed a slate lined cist. The contractors emptied it, believing it was part of an old drain and discovered a pot in one corner. CAU were then informed. The cist is of blue slate slabs 0.75 m long, 0.4 m wide and 0.5 m high, constructed in a pit cut into the natural shillet. There is no indication of a barrow.

The pot discovered by the contractors was found to be the complete base, body and shattered rim of a beaker, decorated with bands of comb imprints and incised marks made with a wooden or bone tool.

The beaker will be conserved at the RIC and the cist structure will be retained in situ at Harrowbarrow.

Nigel Thomas

Wheal Langford, Callington

Following planning approval for conversion of Wheal Langford engine house into a dwelling, CAU made recommendations regarding the re-instatement of architectural features of the building. The engine house was built c. 1835 and for a short while housed the sister engine to the well-documented Austen's engine at Fowey Consols. After a long period of disuse ivy covered the building and had weakened large sections of walling, which were in danger of collapse. The vegetation has now been removed (May 1989) and the cylinder arch and window apertures have been re-instated. Machine excavation in the boiler house foundations revealed a short length of stone-lined tunnel which had been used to clear ash from the fireboxes. A similar system of ash removal is used in boiler houses at Welsh collieries.

Nigel Thomas

Cape Cornwall

In the west of the county, the National Trust requested a detailed archaeological assessment for management purposes of one of its more recent acquisitions: Cape Cornwall and the Nancherrow Valley, recently purchased for the Trust by H.J. Heinz Ltd. The survey illustrated something of the character, former extent and potential survival of early mining features in the West Penwith coastal strip, and demonstrated the extensive use of water power on mines in this area.

Adam Sharpe

Halangy Porth, St. Mary's, Isles of Scilly

A radiocarbon date, HAR-1313 310 ± 90 bc, has been obtained from charcoal recovered from the dark loam infill of the internal dispositions of the circular stone-built house remnant dramatically exposed in the Halangy Porth sea-cliff during 1975 (Ashbee, 1983, 11, P11, Fig 6, lower, layer 3). Although this date, perforce, pertains to the charcoal, and takes account of neither its possible biological age nor its incorporation into the deposit in which it was found, it accords well with what has already been observed regarding Scilly's blown-sand blanket and possible settlement relocation (Ashbee, 1983, 32).

Halangy Porth was sanded by Roman times as cist-graves have been found dug into the level sand-blanket (Ashbee, 1979, 74-6). However, sand need not have covered the ancient Bar Point fields until as late as 600-700 AD since a post-Roman imported E-ware rim and lid (Thomas, 1981, 20) were found upon a plough-scarred surface. The examination of a field-system close by, deemed Iron Age, found charcoal, in a lens of black sandy loam, which yielded the date HAR-3483 190 ± 70 bc, and littoral sand, beneath N-S walls (Evans, 1983, 22, 27).

As Scilly's sanding (Lousley, 1971, Fig 2) appears to have been largely from SW prevailing winds, it has been thought of as providing a crude time-scale and that similar settlement traces, northwards from Halangy Porth, may denote moves from its advance (Ashbee, 1983, 32). However, such sanding, an outcome of sea-level changes (Thomas, 1985, 17-34), may have been modulated by topographic considerations. Moreover, the low-level and high-

level sand systems of today (Lousley, 1971, 12) are clearly only the most recent manifestations of an unremitting process. Furthermore, the Scillonian equivalent of machair soils (Ranwell (ed), 1977) could have emerged and, because of their calcareous shell content, the evolved pastures of such areas could have afforded particularly favourable grazing. Indeed, in many ways, the dating of Scilly's remaining sand-blankets could be more fundamental to its prehistory than has hitherto been thought.

Paul Ashbee

Bibliography

- Ashbee, P., 1979. The Porth Cressa Cist-Graves, St. Mary's, Isles of Scilly: A Postscript, *Cornish Archaeol* 18, 61-80.
- Ashbee, P., 1983. Halangy Porth, St. Mary's, Isles of Scilly, Excavations 1975-76, *Cornish Archaeol* 22, 3-46.
- Evans, J.G., 1983. Excavations at Bar Point, St. Mary's, Isles of Scilly, 1979-80, *Cornish Studies* 11, 7-32.
- Lousley, J.E., 1971. *The Flora of the Isles of Scilly*, Newton Abbot.
- Ranwell, D.S.(ed), 1977. *Sand Dune Machair 2*, Institute of Terrestrial Ecology, Norwich.
- Thomas, C., 1981. A Provisional List of Imported Pottery in post-Roman Western Britain and Ireland, *Institute of Cornish Studies Special Report No. 7*.
- Thomas, C., 1985. *Exploration of a Drowned Landscape*, London.

New radiocarbon dates from Medieval and Bronze Age monuments on Goonhilly Downs, The Lizard

Two ploughed out earthworks on Goonhilly Downs were investigated in 1980 (Smith, 1984). The work was part of a project carried out by the Central Excavation Unit of the DOE, now English Heritage, assessing the archaeology of the Lizard heathlands in relation to threats from agriculture.

1. Trelan 1 (Site 40) was an oval ring ditch overlaid by a slightly later and smaller sub-circular ring ditch, the latter enclosing the possible remnants of a turf stack. The site was interpreted as a turf drying platform of possible 13th to 15th century AD date (Quinnell, 1984). At a level in the larger ring ditch representing an episode when the smaller ring ditch was created were two finds, one a pot fragment of probable medieval fabric type and the other a small hearth (Smith, 1984, 9, Fig 3, Context 14). The charcoal from the hearth was submitted to the small

sample facility at Harwell which produced a determination of 650 ± 70 BP (HAR-9018) with a calibrated (Stuiver, Minze and Reimer, 1986) range at 68% confidence of cal AD 1270 to cal AD 1370 and at 95% confidence of cal AD 1230 to cal AD 1420.

This determination is very useful because it is the first real confirmation of date for this type of monument, examples of which occur widely on the heathlands of The Lizard, Bodmin Moor and Dartmoor. It agrees with previously suggested dating which in turn suggests that these earthworks were associated with the main phase of activity of the medieval tinning industry and therefore probably for industrial rather than domestic turf drying.

2. Trelan 2 (Site 41) was a two phase round barrow apparently deliberately aligned on and built over a pre-existing post-line. Only one radiocarbon date (HAR-4540) was available for the original report and was published without calibration (Smith, 1984, 24). There are now four dates and these are published here

in full with calibrations according to Stuiver, Minze and Reimer (1986). All were from charcoal. HAR-4540 and HAR-4538 were large samples while HAR-5280 and HAR-5510 were measured on the small sample facility. HAR-5280 came from one of the post-holes of the pre-barrow post-line. This produced a determination of 3970 ± 120 BP with a calibrated range at 68% confidence of cal BC 2670 to cal BC 2340 and at 95% confidence of cal BC 2880 to cal BC 2050. HAR-4540 and HAR-5510 came from the primary fill of the phase two barrow ditch. These produced the following determinations. HAR-4540, 3740 ± 110 BP with a calibrated range at 68% confidence of cal BC 2330 to cal BC 1990 and at 95% confidence of cal BC 2470 to cal BC 1880. HAR-5510, 3530 ± 80 BP with a calibrated range at 68% confidence of cal BC 2010 to cal BC 1750 and at 95% confidence of cal BC 2130 to cal BC 1680. HAR-4538 came from a backfill layer at the top of the fill of the phase two ditch. This produced a determination of 3040 ± 90 BP with a calibrated range at 68% confidence of cal BC 1400 to cal BC 1180 and at 95% confidence of cal BC 1520 to cal BC 1010.

These dates provide support for the interpretation that the post-hole line pre-dated the barrow with interesting implications for Bronze Age use of the heathland. Their sequence accords with their stratigraphic position and their general range fits in well with the span of radiocarbon dates from barrows elsewhere in Cornwall.

George Smith

References

- Quinnell, N., 1984. 'A Note on the Turf Platforms of Cornwall' in Smith, 1984, 11–13.
- Smith, G.H., 1984. 'Excavations on Goonhilly Downs, The Lizard, 1981'. *Cornish Archaeol.* 23, 3–48.
- Stuiver, M., Minze and Reimer, P.J., 1986. 'A Computer Program for Radiocarbon Age Calibration', *Radiocarbon* 28, No. 2B, 1022–9.

Castle Field, St Mawes

A radiocarbon date, GU-2329 1640 ± 60 bp, was obtained from charcoal found in one of the hearths of a slate-stone hut (SW 84183312) excavated in the summer of 1985. The excavation took place during a watching brief on the laying of a water pipe from Tregony to St Mawes. The date (given as 'before present') has been calibrated by Dr A.J. Clark PhD FSA at AD 340–440, which is not inconsistent with the pottery and oyster shells found during the excavation, and reported in *Cornish Archaeology* 24, 22. We are grateful to the Lloyds Bank Dating Fund, which by awarding a grant made this dating possible.

Peter Trudgian

WILLIAM BORLASE by P.A.S. Pool. The Royal Institution of Cornwall, Truro, 1986. x + 314 pp; frontispiece + 12 pl. Price £14.95, hardback.

It needs an effort to remember that William Borlase was born in the last decade of the seventeenth century, for his acute perceptions of Scilly's changing sea-levels, and its characteristic chambered cairns, have endured to this day. Essentially it is only the elegance of his prose that reminds us that his visit took place in 1752. To recall that his stay on Scilly, which led to his letter to the Royal Society and his renowned book, was only two weeks long and that this and his other books were produced in a single decade, emphasises the singular qualities inherent in a man who spent his life in the quiet of Ludgvan Rectory, three miles from Penzance. Here he propounded a clear philosophy of antiquarian endeavour and devised various presentations and innovations, almost all in advance of their age. However, although he made a unique contribution to embryo prehistoric studies, extending the criteria set by John Aubrey in his *Monumenta* and establishing standards of observational accuracy which have excited the approbation of succeeding generations, William Borlase's pioneer work in climatology and geology were of equal distinction. He was still in an age when a broad spectrum of scientific activity could be conveniently subsumed beneath the baldachin of *Natural Philosophy*. How then, one might ask, is it that this unusual and distinguished scholar has never been numbered among the father figures of our discipline? And this despite his repute in Cornwall and the preservation to this day of his papers! There is no easy answer, but, nonetheless, the advance of Cornish archaeology during the past three decades, to a point where its ideas and approaches are setting the pace for much that is coming to pass elsewhere, has made an authoritative biography of William Borlase necessary although perhaps not inevitable.

For many years now, Peter Pool has been immersed in William Borlase's life and work, and we are indebted to him for the stimulating paper that appeared in 1966 (JRIC). Now he has put a biography before us, saying, modestly, that it is mainly for Cornish readers. It is undoubtedly a signal contribution to the history of archaeology (besides other disciplines) and all who pursue this vital dimension will find pleasure in its pages besides profiting from the insights that it imparts.

As a demonstration of simplistic clarity in the ordering of material, the book is unsurpassed and therein is its strength. The complexities inherent in

the consideration of one whose contacts were all by letter are given order while the observations that prompt the discerning reader are balanced, conveying neither too much nor too little. Indeed, as with all well-wrought academic books, he puts it down wanting to know more about its subject. Thus *Background and Youth* delineates the unique world of the Cornish gentry from which our hero emerged, *Preparation* is notable for the marshalling of the many factors that made the man, *Achievement* chronicles the astoundingly concentrated circumstances surrounding the publication of the famous books (*Observations on the Ancient and Present State of the Islands of Scilly* (1756); *The Antiquities of Cornwall* (1754 & 1769); *The Natural History of Cornwall* (1758) and the many papers. *Latter Years* followed by *Last Days and Posterity* complete the quintet. These last provide a rounded view of the established scholar at work and a perspective of his descendants which includes the gifted, but unfortunate, William Copeland Borlase (*Naemia Cornubiae* (1872); *The Dolmens of Ireland* (1897)), his great-great-grandson, frequently confused with his forbear. An appendix lists the Borlase manuscripts which are happily numerous in Cornwall. Also included is the *Parochial Queries* of 1752, a searching questionnaire which, were it updated, could be used even today! All things considered, the book is refreshingly free from the constant and irritating misprints which, despite stringent proof corrections mar so many present-day publications, while the index is easy to use.

In the last year of his life William Borlase wrote a measured retrospection, in a sense a personal stocktaking, an extended letter to William Huddesford of Trinity who became Keeper of the Ashmolean Museum in 1766. This detached and percipient observer, who had set in motion the delicate process which led to the Oxford Convocation conferring upon William Borlase the degree of Doctor of Civil Law in 1766, planned the biographies of leading antiquaries of his own times and those previous to them, in which this was to be included. In the event, Huddesford, who also died in 1772, was to produce only the first

volume (*John Leland, Thomas Heame and Anthony à Wood* (1772)) and this remarkable undertaking, which would have given Borlase his rightful place among England's antiquaries, was never continued. When it appeared in the *Gentleman's Magazine* (Dec 1803) and in Nichols' *Literary Anecdotes* (1812) the climate had changed and its impact was lost. Undoubtedly this narrative showed how he wished posterity to remember him and it is the basis of Peter Pool's chapters one to four. Comparison with the assembled material that has been brought to bear, demonstrates Borlase's objectivity, yet it is thought by many that a biographer must bare the man behind the mask. Moreover, in this account, which primarily treats the remarkable antiquarian work, it could be considered that there might have been greater cognizance of the intellectual and literary world of the earlier eighteenth century of which such studies were an important component. Correspondence within a circle, such as with Charles Lyttleton, Jeremiah Miles, Thomas Pennant and the like, was the usage of the times and has been superseded by the sending of offprints. Borlase's correspondents, antiquarian and otherwise, were distinguished and influential and thus some of his ideas may, indirectly, have gained wider currency. Tracing them would be a complicated task, beyond the bounds of the book's intention, but substance could have been given to the names via, perhaps, a biographical appendix or some such device. Recourse to the Dictionary of National Biography is necessary at times and that is not always readily available!

Manipulatory consideration apart, enjoyable consideration of the life, times, and works of William Borlase, is greatly enriched by reading Peter Pool's book. The reader's feelings are moved by the glimpses of pleasant domesticity with his family, its tragedies and problems. The illustrations match the theme and Borlase's own sensitive and skilful portraits of his wife Anne and their son Christopher provide a fitting and sympathetic complement to the text.

Paul Ashbee

Devon's Past, an Aerial View

By Frances Griffith. £9.95 paperback
Devon Books, 1988, 127 pp.

Frances Griffith is the Sites and Monuments Officer in the Archaeological Section of Devon County Council. For the past few years she has been engaged in a programme of aerial photography in her county, and many members of our Society will have heard rumours of the remarkable results she has been achieving. This book provides the opportunity to present some of the fruits of this work to a wider public. Those who braved the storms to attend her lecture to the Society in Truro last winter will be aware that Ms Griffith can back up her images with an in-depth knowledge of the history and evolution of the Devon landscape; this book is far more than just a collection of pretty pictures.

It begins with an introductory section consisting of a short history of aerial photography, and an account of recent flying in Devon. This is followed by a concise and useful account of the techniques used by aerial archaeologists, and the ways in which sites reveal themselves as cropmarks, soilmarks and shadow sites.

The photographs are largely the work of Ms Griffith herself, all taken since 1983, but this has been augmented with photographs by J.K. St. Joseph of Cambridge University, and by fliers from the RCHM for the National Monuments Record. They are arranged broadly chronologically and thematically, taking account of the difficulty presented by many of the photos which include features from several periods in a single image. The first plate illustrates well the author's technique – an atmospheric colour shot of the narrow promontory of Start Point in hazy evening sunlight is accompanied by a caption which manages to encompass, in a brief essay of 300 words, a discussion of Devonian geology, mesolithic occupation as indicated by flint scatters, and an account of the construction of the lighthouse which adorns the tip of the promontory! This exemplifies the amount of information packed into this little book, and its readers will be impressed by the breadth of the author's research, backing up the images with fact, discussion, and anecdote.

The book moves through the prehistoric period by way of Hembury and the Henge at Bow, barrows and ring ditches, ritual monuments, reaves, and the

various forms of prehistoric enclosures. A section on Roman sites is followed by medieval settlements and field systems, defended sites, the evolution of towns and the later landscape, great houses, parks, bridges, and industrial sites. Most of the photos have a page to themselves, and each is accompanied by a brief essay; in addition to the information contained in these captions each has a bibliography, for 'further reading' consisting usually of two or three sources, but running to ten or more entries for some of the sites.

Within this format a number of sections deal in slightly greater detail with such 'difficult' subjects as the ceremonial landscape, ring ditches, and cropmark enclosures, each section consisting of a longer text accompanied by additional photographs, including ground photographs where these help to illuminate the discussion. Towards the end of the book is a fascinating series of photos under the heading 'Devon Villages', and the book closes with a brief account of work at Roadford in advance of the construction of the reservoir.

The text throughout is concise and well written, managing to accommodate a great deal of detail whilst remaining unencumbered with unnecessary jargon. This reviewer particularly liked the 'then and now' pictures of Plymouth and the use of maplets accompanying the photos of Lydford and Barnstaple, for example, to show the 'skeleton' of earlier settlement features which predetermine the street plans of our modern day towns and villages. I have to admit to two very minor criticisms of this otherwise excellent book. I disliked the practice of printing a photo on two pages across the central spine of the book, which inevitably results in a discontinuity in the image which can be particularly annoying, tempting one to bend back the pages severely with the risk of damaging the binding of the book. Also, the overall quality of reproduction is high, so that one or two of the colour prints which are slightly less than perfect rather stand out by comparison.

This fascinating book will appeal particularly to archaeologists and local historians (professionals and enthusiasts), but can also be highly recommended to anyone with even a passing interest in the world around them. For the images themselves, the clear text and the breadth of its coverage this book will be enjoyed by all who like to be well informed.

Steve Hartgroves

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