

Church Hill, Penmaen, Swansea

Survey and trial excavation

May 2010

By Edith Evans BA PhD FSA MIFA

With contributions by Rowena Hart, Richard Lewis,
Martin Locock, Mark Lodwick, Eddie Owens and Peter
Webster

GGAT report no.2010/033

Project no.GGAT 93

NGR SS 536 898



The Glamorgan-Gwent Archaeological Trust Ltd
Heathfield House Heathfield Swansea SA1 6EL

CONTENTS

Summary	2
Introduction.....	2
Location, topography and geology.....	2
Previous work	3
The survey.....	4
The excavation.....	4
Trench 1	4
Trench 2	6
Trench 3	6
The finds	7
The Roman pottery	7
Copper alloy objects	9
Building materials.....	10
The lithic assemblage.....	12
The animal bone.....	13
Discussion.....	15
Roman occupation	15
The enclosure	16
The setting.....	17
Acknowledgements.....	18
Bibliography	18

FIGURES

Figure 1. Location plan.....	20
Figure 2. Contour survey of site with trenches.....	21
Figure 3. 3D survey of site looking north.....	22
Figure 4. Plan of Trench 1.....	22
Figure 5. Trench 1, section of area to east of wall 103.....	23
Figure 6. Plan of Trench 2 after removal of rubble.....	23
Figure 7. Section through bank.....	23
Figure 8. The pottery.....	24

PLATES

Plate 1. The bank on the north side of the enclosure photographed from the outside during the 2007 site visit.....	25
Plate 2. Initial cleaning of Trench 1, looking west. The wall is in the foreground.....	25
Plate 3. Trench 1 - the east face of the wall and its foundation.....	26
Plate 4. Trench 2 after initial cleaning, looking north.....	26
Plate 5. Trench 2 - the section through the bank.....	27
Plate 6. Trench 3 looking north.....	27
Plate 7. The fibula.....	28

Summary

The presence of a sub-circular enclosure on Church Hill at SS536898 within the boundary of the Park Wood in Gower, has been known for many years. Recently, following the discovery of Roman finds disturbed from the surface by Mrs H P F Grove (Grove 2008), it became clear that the enclosure and the area immediately to the south were the site of occupation in the Roman period. The site was scheduled as an ancient monument (GM603) early in 2008. A programme of survey and excavation was carried out in the summer of 2008 by the Glamorgan-Gwent Archaeological Trust, the Department of Classics, Ancient History and Egyptology of the University of Wales Swansea, and the Royal Institution of South Wales. The purpose of the work was to obtain more information about the site, both in terms of its archaeology and the extent of the damage that had been caused by the trackway crossing the site. An additional purpose was to provide training in archaeological field techniques for students from the university, and also the opportunity to participate for a wider section of the community. Structural remains of Roman date were discovered, and the finds assemblages, apart from a number of Neolithic flints, were exclusively of Roman date. However there is a mismatch between the building or buildings on the site, which would have been provided with painted plaster and hypocausts, and the pottery, which includes little high-status material. Roman finds present in the bank show that this cannot have been Iron age, and an Early-medieval date is favoured. The site may have been only one element of a more extensive and long-lasting ritual use of the area.

Introduction

Figure 1

Location, topography and geology

The site lies at a height of between 50m and 55m O.D., at the edge of the escarpment on the west side of Green Cwm (also known as Parc Cwm), Parkmill, within the historic parish of Penmaen in the middle of the Gower peninsula. Green Cwm is a valley cut through the local Carboniferous Limestone by fluvial erosion in the interglacial (Groom 1971, 35). The Lethrid stream now flows through it, partially underground; it disappears into a swallow hole at SS 5311 1918 a short distance south of Lethrid Bridge at the top of the cwm to emerge some 300m downstream of the site, on the site of the modern water-treatment works at SS 5394 8971, and flows a further 2km to Three Cliffs Bay where it enters the sea as Pennard Pill (Gillham 1977, 113-7). This leaves an approximately 1.8km section of dry valley, with a level base and very steep wooded sides, where there is now no trace above ground of a water-course. The Church Hill enclosure, at the top of the escarpment, lies almost directly above the Parc le Breos Neolithic chambered tomb in the base of the cwm (at a height of 20m O.D.), and 120m south of Cat Hole Cave, in the eastern escarpment, where Palaeolithic, Mesolithic, Bronze Age and medieval finds have been made (RCHMW 1976, 19 no.17, 34 no.36).

The enclosure is located within an area of semi-natural ancient woodland, growing on soils of the East Keswick 1 association. The wood is now owned and managed by the Forestry Commission, with SSSI status on account of broadleaved semi-natural

woodland and geology. For many years, the area in and around the enclosure was used for rearing pheasants. A north-south trackway runs across the site. This is shown on 1st-3rd editions of the OS 25" map as skirting the western side of the enclosure, but at some time since the 1920s it has migrated to run more or less across the middle. Use of this trackway by vehicles during wet weather when the ground is soft has led to erosion of the surface, particularly noticeable where the track crosses the banks.

Previous work

The 2nd edition OS 25" map marks as 'Chapel site of' a point immediately inside the western boundary of Park Wood 350m from the enclosure. The only recorded previous fieldwork work on the enclosure site consisted of a walk-over survey by R.E. Kay in 1957, and a measured survey by OS fieldworkers in the 1960s.

Kay interpreted the enclosure as a ruinous drystone wall, originally constructed of limestone rubble but now completely collapsed, estimating its greatest remaining height as 2'6" (0.74m). His published note includes a sketch plan dated 1957, and the following details about the interior:

The interior of the enclosure has a gentle slope from west to east. A large but levelled spread of debris exists adjacent to the western boundary of the enclosure and nearer its northern boundary are indeterminate traces of footings. (Kay 1971).

On the OS card (SS 58 NW 3) the enclosure was drawn in 1960 as a hachured plan (now reproduced in the OS MasterMap digital data), and was described as:

A D-shaped enclosure 46.0m long and 40.0m wide, situated on the brink of a dry river valley to the east [Green Cwm]. The enclosure consists of a stone bank up to 0.9m high and 5.0m wide, with no trace of an entrance or internal structures. The bank appears non-defensive, although it is strongest in the west where the natural defences are weakest'.

No detail is given about the interior. A second note of 1969 states:

There is insufficient evidence to assert categorically that the enclosure is the site of the chapel: nor has the chapel site as originally shown, been disproved.

From 1998, repeated visits to the site were made by the owner of the adjacent farm, Mrs H.P.F. Grove, during which numerous finds of Roman pottery and fragments of building material were noted where pheasant scratching had disturbed the surface of the ground (Grove 2006; 2008). These finds included fragments of Roman pottery, brick and tile (including a complete *bessalis*, *tegula* and box tile), together with fragments of building material (*opus signinum*/mortar with brick aggregate, one small fragment of painted plaster and one tessera), iron slag and oyster shell. They not only came from the interior of the enclosure, but also from the exterior at the south side, extending over an area of approximately the same size. At Mrs Grove's request, a number of site visits were made by staff from GGAT in 2006 and 2007 to assess the nature and condition of the site (Evans 2007).

An unpublished documentary search of the site has been carried out by Mrs Grove (2006). This failed to find any evidence of any ecclesiastical connections for the enclosure.

The survey

By Rowena Hart

Figures 2-3

The enclosure is D-shaped and approximately 44m across over the enclosure bank. Before the survey the standing remains of this bank were noted as being approximately 5m wide and 0.7m high. No clear traces could be seen of any ditch.

The survey was carried out using a Leica TC407 total station. Three interlinked datum points were set up, as the trees made it impossible to see all parts of the site from a single station. Readings were taken around the base and top of the exterior line of the bank and the base and top of its interior line. Within the enclosure a series of rough transects were taken, as regularly as the trees and other vegetation would allow, and this was extended outside the bank on the south side and to a lesser extent on the north. Readings were also taken on the west side to record the top edge of the Green Cwm escarpment. The results were processed using both Trimble Geomatics and Surfer, and transferred to AutoCad.

It had been hoped to link the survey to the National Grid via the floor of the cwm, but the woodland was so dense that this proved impracticable. However, it was possible to overlay this survey on the outline survey reproduced in the Ordnance Survey Landline data, which produced a good fit. This was felt to be a satisfactory alternative. Contours were also matched with OS data to provide heights OD.

The results of the survey showed the enclosure in three dimensions against the natural topography. A possible original entrance could be seen in the form of a simple break in the northern bank towards its eastern side. However, Kay's plan shows a second path running to north to south, crossing the bank at this point and then running just inside the eastern side of the enclosure, leaving it over the bank at the southeastern corner. It is therefore possible that the apparent entrance is a recent break. The modern trackway showed as a faint linear depression running across the monument.

The excavation

Figures 4-7, Plates 2-6

Three trenches were excavated. Trench 1, outside the enclosure, measured 2m x 19m and ran east-west, Trench 2 across the bank was 2m x 10m and ran north-south and Trench 3 in the interior was 2m x 10m and ran northwest-southeast.

Trench 1

Figures 2, 4 and 5, Plates 2-3

Trench 1 ran at right-angles to the track, which it cut 2.5m from its eastern end. The upper part of the topsoil, a dark brown silty clay loam (101), overlay a mid brown silty clay loam (102) which extended over the west end of the trench, becoming more clayey towards the west end. This merged gradually upwards into 101, and is

believed to be topsoil with a lower proportion of humus. Removal of these two topsoil layers revealed a wall (103) running north-south, situated 2m from the eastern end of the trench and partly on the line of the trackway. The wall was 0.60m wide and survived one course high. It was built of limestone blocks with a well-made face on the east side, but with the west side in the same smaller rubble blocks as the core. It stood on a foundation (110) of dressed limestone blocks, which was noted as projecting to a maximum of 0.35m from the base of the wall above on the eastern side. None of the wall was removed, so it was not possible to determine whether its apparent matrix of mid brown silty clay was original, or the result of the intrusion of topsoil: given the stratigraphic position, the possibility that an original mortar matrix may have been degraded by plant growth cannot be ruled out.

There was a deposit of rubble on either side of the wall. That to the west (105) extended patchily for most of the length of the trench, a total of about 14m. It consisted mainly of limestone rubble/fieldstone generally in small pieces no more than 0.4m across and generally less angular than that in the bank with some brick and tile. At its eastern end, it was continuous across the full width of the trench, but it became less dense as the distance from the wall increased. At the western end of the trench 105 was very patchy, and appeared to be embedded in 102 as well as underlying it. Around the middle of the trench it could be seen to overlie a surface of tightly packed limestone cobbles, some burnt (106), which did not apparently extend all the way to the west end of the trench, though time constraints prevented all but a small portion (a length of 3m) from being uncovered. In the middle of this cleared area of cobbles was noted an arrangement of three limestone blocks (109) which gave the appearance of possibly being the remnant of another east-west wall, possibly underlying the cobbles, but again it was not possible to explore this possibility further.

More extensive excavation was carried out to the east of the wall. Here the rubble layer (104), corresponding to 105, looked similar at the surface where the blocks were mainly rounded in shape, although they were more angular further down, where the deposit included a large water-worn boulder. There was also some iron slag. During removal of 104, the orientation of the rubble blocks suggested that they might be filling a pit, and a separate number (108) was therefore used for that part of the rubble that might have been pit fill. Although continued investigation revealed no trace of a pit cut within the confines of the trench, the fact that the rubble overlay the exposed foundation of the wall means that this hypothesis cannot be ruled out. The alternative would be that the foundation had been cut down through the rubble deposit: no clear signs of a foundation trench were seen, but a cut through rubble refilled with the same rubble is unlikely to have left clear traces. We feel that this second hypothesis is the more likely. An additional number (114) has therefore been used in the phase diagram in Appendix 2 to represent this possible cut.

Away from the foundation, the rubble layer 104/108 overlay a loose deposit of finely divided combustion products, probably from some industrial process, in a matrix of mid brown clay loam (107). Below this was a layer of clay burnt red and yellow and sloping away towards the east (111). Some patches of degraded *opus signinum* and sandstone occurred at its surface. A small area of what appeared to be a deposit of reddish brown silty clay with flecks of charcoal and burnt bone (112) at the extreme eastern end of the trench may represent the layer under 111. Small patches of

unburned yellow clay (113) were noted underlying 107, also adjacent to the east section, but it was not possible to determine how they fitted into the overall picture.

Trench 2

Figures 2,6 and 7, Plates 4-5

Trench 2 was cut north-south through the bank on the southern side of the enclosure at the point that the trackway ran across it, and confirmed its identity as a bank rather than a ruined wall as suggested by Kay (1971, 62). The uppermost layer was a dark brown silty clay loam topsoil (201). The top and sides of the bank were overlain by loosely packed rubble in a matrix of the similar, but rather less clayey soil (202), up to 0.5m thick. The bank (203) was about 4m wide altogether and up to 0.7m high. It was constructed from large rubble blocks/fieldstones laid as a 0.5-0.7m wide facing, apparently of drystone construction, on the south side (205) with an internal core of earth and uncut small to medium fieldstones/rubble blocks closely compacted together (206). There was no clearly recognisable face on the northern, inner side. From east to west across the trench on the crest of the bank was a line of regularly placed rubble blocks (207), abutting 205. Although these different components could be recognised within the bank's composition, the whole structure appeared to have been built as a single operation, presumably with the builders filling in with 206 behind 205 as they put it up, and finishing off with 207. At the point at which Trench 2 was dug, the bank overlain a deposit of reddish-brown clay (208), but this could not be further examined in the time available. The drawn plan assumes that this ran continuously for the full length of the trench, but without further excavation this could not be confirmed.

Excavation on the northern, inner side of the bank was limited to the removal of the rubble 202 and no other features were noted here. On the southern, outer side two other features were noted. Approximately 1m to the south of the south face of the bank and also underlying 201 there was a probable wall foundation, also of medium to large undressed pieces of rubble/fieldstones of about 0.8-1.0m in width (209). South again from this appeared a rubbish deposit including very large quantities of oyster shell in a dark brown loamy soil (204). This was excavated to a depth of 0.4m, but the full extent could not be determined within the time available for the excavation, and its relationship with the other features in the trench could not be clarified. It is possible that it may represent the fill of an external ditch.

Trench 3

Figure 2, Plate 6

Trench 3 (2m x 5m) in the interior contained very little in the way of structural information. The dark brown silty clay loam topsoil (301) was removed to reveal a similar combination of patchy rubble and cobble layers to Trench 1. The main area of cobbled surface (303) occupied the southernmost 5m of the trench, and a smaller area of densely packed cobbles (306) occurred at the north side extending beyond the limit of the trench in all directions. Between the two was a patchy deposit of rubble (304) partly overlying a soft orangey clay deposit (305), similar to the arrangement noted at the west end of Trench 1. The linear nature of 304 suggests that it might be the

remains of a wall, but there was no definite confirmation of this. Five flints were found in the topsoil of this trench along with Roman pottery and tile.

The finds

The Roman pottery

By Peter Webster

The site yielded approximately 1.75kg of pottery. This represents 119 sherds from about 68 vessels. These are all listed in the archive and quantified by weight and, where rims survive, by rim percentages. The total assemblage is clearly fairly small and it is not feasible, therefore, to draw more than the broadest of conclusions from it.

Chronology

The date range of this small collection is comparatively narrow. All diagnostic vessels fall within the period from the late first to the mid third century and it seems likely that the actual occupation is more restricted than this, perhaps early/mid 2nd to early 3rd century.

Sources of supply and social implications

The assemblage can be summarised in tabular form as follows (sherds which cannot be related to any specific vessel form have been omitted):

Fabric	Jar	Bowl	Cup/ beaker	Dish	Other	Total	%
Samian CG		6	1	1		8	13.79
Samian EG		1				1	1.72
S.Spanish Amphorae					2	2	3.45
Mortaria: Pas de Calais					1	1	1.72
Oxford					2	2	3.45
Caerleon					1	1	1.72
Wales					2	2	3.45
Black Burnished Ware	11	3		7		21	36.21
Greyware	7	1		1	2	11	18.97
Redware	3		1			4	6.90
Caerleon Ware			1			1	1.72
Other oxidised	3				1	4	6.90
Totals	24	11	3	9	11	58	100.00
%	41.38	18.97	5.17	15.52	18.97	100.00	

It would be unwise to draw too many conclusions from so few vessels. However, we may note that imports are restricted to samian, Spanish olive oil amphorae and a single Gaulish mortarium. Otherwise the pottery consists of Black Burnished ware from southern Britain, Oxfordshire mortaria and a variety of wares of fairly local origin. Fineware is restricted to the samian (eight of the nine vessels plainware) and a single Caerleon beaker. Overall, the assemblage appears to be of a fairly workaday character and is unlikely to signify any great social status. Kitchen wares predominate over tableware and we may note a preponderance of jars which may

signify a distinctive type of cooking. In summary, we would expect an assemblage like this to be representative of a rural site concerned more with work than fine living.

Catalogue

Very few vessels are complete enough to merit illustration. We have included these among a summary of evidence from all contexts.

Context 101. Both Central and East Gaulish samian is represented along with a straight sided dish in Black Burnished Ware. A mid 2nd to mid 3rd century date would cover all the pottery.

Context 102. Pottery includes a mortarium likely to be of Welsh origin.

Context 104. Pottery included two Central Gaulish samian sherds: a small fragment of form 37 with a double bordered medallion and a fragment of a figure; also a base which is probably from form 38 or its derivatives. Both are probably Antonine.

Context 105. With local grey and red wares was a base of a possible flagon and:

1. Flanged bowl in Black Burnished Ware. Gillam 1976, no. 54. Early to mid 2nd century.
2. Mortarium in white fabric burnt light grey in places. Probably an Oxfordshire product; cf. Young 1977, M21.3. c.A.D.240-300.

Context 107. The only ceramic find was a Black Burnished jar wall with acute angled lattice suggesting a 2nd century date.

Context 108. A worn fragment of Caerleon Ware beaker dates to the early to mid 2nd century. With local wares and a Dressel 20 amphora fragment was:

3. Straight sided dish in Black Burnished Ware; cf. Gillam 1976, no.76 (mid to late 2nd century).

Context 201. Finds include two Central Gaulish samian from different vessels (a bowl and a cup, form 33). An Antonine date is most likely.

Context 203. With at least two straight sided dishes in Black Burnished Ware, a Caerleon mortarium wall fragment and grey ware was:

4. Jar in Black Burnished Ware; Gillam 1976, nos.6-7. Early to mid 3rd century.
5. Probably five fragments of a large storage jar in local grey fabric; cf. Manning 1993, Fig.108, 8.1 (probably 2nd century).

Context 204. This context yielded the largest ceramic assemblage. Along with a fragment of mortarium from the Pas de Calais area (later 1st to early 2nd century) and a Dressel 20 amphora sherd were Black burnished wares and local wares including:

6. Jar in Black Burnished ware; Gillam 1976, no.4 (late 2nd century).

7. Jar in Black Burnished Ware; cf. Gillam 1976, no.8 (mid 3rd century).
8. Flanged bowl in Black Burnished Ware; cf. Gillam 1976, 39 (mid-late 2nd century).
9. Flanged dish in Black Burnished Ware; cf. Gillam 1976, no.56 (early-mid 2nd century).
10. Curved rim jar in grey fabric in the South Wales Reduced Ware tradition.
11. Narrow necked jar in red fabric, probably of local origin.
12. Mortarium in white fabric of Oxfordshire origin. The trituration grits are a mixture of white, grey and red and are quartz-like. The folded back rim is unusual, as Young notes (1977, 72-3, M16). C.A.D.180-240.

Context 301. Black Burnished Ware includes a jar wall with right angled lattice suggesting a 3rd century date and a straight sided dish with decoration of intersecting looped chevrons (cf. Manning 1993, Fig.130, 33.2-3, mid to late 2nd century) along with:

13. Flanged dish in grey ware in the South Wales Reduced Ware tradition. A form influenced by 2nd century Black Burnished ware forms is possible (cf. Manning 1993, Fig.116, type 67) a dish form designed to be the counterpart of the common Flavian to Trajanic flanged and carinated bowls seems more likely. A later 1st to early/mid 2nd century date would seem probable.
14. A small lid in dark grey fabric.

Copper alloy objects

By Mark Lodwick

1. (621/001; initially reported under the Portable Antiquities Scheme as NMWPA 2007.132) Roman copper alloy bow brooch of Polden Hill Type, dating to the 1st century AD. The brooch is near complete, missing the pin and catch only. The spring mechanism is still in place and was secured by a Polden Hill type arrangement, with pierced lugs at the terminals of the wings. A claw was employed to tension the chord on the head. The wings have a width of 20.5mm and have expanded circular terminals (8mm diameter), which are angled towards the rear. The sides of the bow have curved mouldings at the head and have a width of 10.5mm. The upper bow is of D-shaped section with straight sides converging towards the foot. The bow is decorated with a single central groove running from the claw at the head to the foot. The foot knob has a diameter of 6.1mm and is below a horizontal moulding. The catch-plate begins as a rib beneath the head and arcs out at the leg. The surface is generally well-preserved with a pale green to brown patina. Overall length – 53.7mm, weight – 10.3g.

2. (621/301 SF3) Copper alloy terminal fragment comprising a spherical knob of 11.9mm diameter and sub-rectangular sectioned plate (3.4mm thick). The spherical

terminal has numerous facets, presumably surviving from the finishing. The sides of the plate are concave and diverge to the break, where the fragment has a width of 11.7mm. At the break the plate has a gentle curve across its width.

Overall surviving length – 20.2mm, weight – 7.5g

The fragmentary nature of the object makes any identification speculative. It is possible that the fragment is from a horse pendant, similar to examples recorded from 1st or 2nd century AD contexts. (Not illustrated.)

3. (621/107 SF9) Copper alloy square section rod of uncertain function. The rod thins at one end from two opposite faces, as if to produce an edge. The edge is now lost. The other end appears to be unbroken. There is an irregular groove along one face. Overall surviving length – 80.0mm, width / thickness – 3-4mm, weight – 6.5g. (Not illustrated.)

4. (621/107 SF11) Copper alloy sheet, probably a stud fragment. The convex composite stud is circular and domed, missing the separate central rivet and part of one side. The stud is made of sheet metal (0.5mm thick) and has a central perforation to accommodate a missing rivet (3.9mm diameter).

Diameter - 22mm, height – 3.8mm, weight – 0.5g. (Not illustrated.)

5. (621/204 SF16) Copper alloy circular-sectioned wire, broken at both ends. The wire has the beginning of a turn on one end.

Surviving length – 14.8mm, diameter – 2.0mm, weight – 0.2g

While it is possible that the wire is from a brooch pin the fragmentary condition makes any identification inconclusive. (Not illustrated.)

Building materials

By Edith Evans

The brick and tile

A total of 46.67kg of Roman brick and tile was retrieved from the site. Two fabrics could be identified in the hand specimen. Most were in Fabric 1, but there were also examples of types in Fabric 2.

Fabric 1: typically salmon-coloured and appears fairly smooth to the naked eye.

Under x3 magnification it can be seen to contain many small sands.

Fabric 2: typically a lighter colour than Fabric 1, tending towards buff. To the naked eye, there are frequent inclusions of tiny flat platey mudstone pebbles, possibly of mudstone and some larger ones; very few sands are visible under x3 magnification. Platey pebbles were also noted used as releasing agent on under surface of an imbrex and a tegula.

Nearly half the tile was unidentifiable (identification criteria were as Evans 1997). There was 14.65kg of brick, 4.36kg of certainly identifiable tegula (although there was a considerable amount of technically unidentifiable tile in thicknesses that are usually associated with tegula), 0.88kg imbrex and 4.47kg boxtile. Full details can be found in the site archive. No complete tiles were found, and in most cases no dimensions other than thickness were noted: this was within the normal parameters

for the individual types, apart from one tegula which was unusually thin (17mm). Of the normal tile types only the boxtiles presented any points of interest. Both types known in South Wales were present, Type 1 made from a single slab of clay bent round a former, and Type 2 made from four slabs of clay assembled inside a mould with extra strips of clay reinforcing the corners (Evans and Stapenhorst 1984). In the best surviving fragment, the slabs were butt-jointed at the corners rather than bevelled. Both types had scored lattice, and there was also a fragment in Fabric 2 with a comb impression. One fragment had mortar adhering.

There were also four small fragments that might have come from an antefix, but they were so small and abraded that it is difficult to be certain. One has a slightly curved length of moulding projecting 55mm above the surface. Two others, possibly joining but too abraded to be certain, have one edge sharply hooked back as though it had been squashed back when wet. (Not illustrated)

Deliberate markings: On a large fragment of possible tegula there was a small signature consisting of a single deeply-scored arc 55mm long and 13 mm wide on edge of tile.

Daub

A few fragments of daub were noted from contexts 102 and 203.

Mortar and *opus signinum*

Context 108 produced some fragments of a rather powdery pinkish mortar from 108, in which the aggregate was too finely divided to make out individual fragments.

Context 203 produced a few fragments of a firmer mortar in which fragments of tile were clearly visible to the naked eye. This could be derived from an *opus signinum* floor.

Wallplaster

Context 204 produced three very small fragments of a wallplaster:

- (1) 32x30mm, greyish white with finely grooved surface, overpainted for most of its surface area in brown.
- (2) 25x15mm, greyish white with finely grooved surface.
- (3) 14x12mm max, greyish white with finely grooved surface.

Tesserae

There were a number of small angular pieces of stone, probably mostly the local limestone. Although 23 were initially retained as possible tesserae, 11 were discarded after further examination. Most were a brownish grey colour apart from one which was black.

Context 101 produced a small tessera, pale grey in colour and measuring 16x18x19mm

Context 201 produced the bulk of the presumed tesserae. Only two were well enough cut for the identification to be certain: these had sides of 15mm and 10mm.

The lithic assemblage

By Richard Lewis

A small assemblage of lithic material was recovered during an excavation at Church Hill, Gower. The assemblage is composed of medium to good quality flint and was examined rapidly under x10 and x30 magnification and recorded using a typological recording system (Andrefsky 2000). Brief details including raw materials, condition and pertinent technological information was also recorded, but no further technical analysis was undertaken.

The assemblage was found to consist of mainly medium quality pale grey flint and good quality translucent brown flint (66%); with one piece each of poor quality flint (chert) and quartz crystal forming the remainder. Retouched forms represent 50% of the assemblage and include a fine scalene knife/blade fragment (no.3) of Bronze Age type and a Neolithic leaf-shaped arrowhead (no.2) which been retouched extensively, possibly in an effort to repair the piece after a breakage. There was also a small lozenge-shaped piece of quartz with a flat bottom (its largest surface area), steeply sloping sides and a pitched (domed) top (smallest surface area). It is difficult to ascertain whether the sides are worked since quartz is naturally prismatic but they are regular in nature. The bottom shows evidence of numerous and very small flake scars, possibly indicating removal of obstructions to flatten this area. Worked quartz crystal is known in prehistoric contexts, as is attested at Ewenny Causewayed Enclosure (Bradley forthcoming). However, given its size and shape, and the fact it has been recovered from a Roman site, one cannot rule out a stone cut for setting in a piece of Roman jewellery, albeit unfinished.

Debitage (33%) and a core fragment (17%) make up the remainder of the assemblage. The former is entirely composed of pale-grey medium quality flint and the latter is of a poor quality dark-grey chert. The core appears to be bi-polar in form with evidence of narrow blade removal possibly indicating a Mesolithic origin.

Although the assemblage as a whole looks typical of those found in topsoil/ploughsoil and held to be probably the result of casual loss rather than evidence for settlement and occupation, the presence of all the prehistoric material in such a small area and in such close proximity to known Neolithic and Bronze Age funerary sites does raise the possibility of other interpretations.

Catalogue

1. 621/301 SF 7. Core (weight 4.1g). Mesolithic. Dark-grey low quality (chert) flint, possibly a bi-polar core. Evidence of narrow blade removal. Cortex present at one end, opposite end is patinated. Possibly Mesolithic.
2. 621/301 SF 5. Projectile point (weight 1.5g). Neolithic. Leaf-shaped arrowhead retouched extensively, possibly an effort to repair after a breakage. Pale grey flint with a blueish hue. End narrows to a fine point, opposite end retouched to waist.
3. 621/301 SF 6. Blade/ knife tip (weight 0.8g). Bronze Age. Narrow scalene blade/knife fragment of fine translucent brown flint from flake, with both proximal and distal end missing. Suggestion of missing bulb of percussion on ventral surface along with percussion ripples. Fine retouch along the thicker side of the dorsal surface.

4. 621/301 SF13. Flake (weight 1.7g). Prehistoric. Debitage flake of pale-grey flint with white mineral mottling. Narrow at proximal end with clear bulb of percussion and well presented platform. Distal end shows evidence of hinge termination and retouch on dorsal surface prior to flake removal. Dorsal surface also shows evidence of previous narrow blade removal. Mesolithic?

5. 621/301 SF 4. Flake (weight 3.8g). Prehistoric. Debitage flake of pale-grey flint with grey mineral inclusions occupying 75% of ventral surface and 30% of dorsal surface. Bulb of percussion present with crushed platform at proximal end. Small erailure facet present on ventral surface at proximal end.

6. 621/202 SF 8. Quartz crystal with retouch (weight 2.2g). Undated. Small lozenge-shaped piece of quartz crystal, flat bottomed with steeply sloping sides and a pitched (domed) top. Difficult to ascertain if sides are worked since quartz is naturally prismatic. Bottom shows evidence of numerous and very small flake scars, possibly indicating removal of obstructions to flatten bottom. Could be intended to be set as jewelry.

The animal bone

By Martin Locock

Introduction

A small assemblage of animal bone was recovered. It is presumed that all the material is of Roman date, in line with the radiocarbon-dated samples.

Method

The animal bone was inspected and identified by comparison with known specimens and atlases (Schmid 1972; Hillson 1992; Cohen and Serjeantson 1986; Amorisi 1989). Where species could not be established, elements were assigned to size classes (large mammal, medium mammal), based on Shackley (1981). No distinction was made between sheep and goat and rabbit and hare. Completeness was recorded using a code in which the parts of the bone were numbered from 1-5, from proximal to distal. Bone counts include all fragments larger than 10mm; joining parts within a single context were counted as one. Ribs and vertebrae were assigned to size class only. Metrical data was recorded using Driesch (1976) and compared to published data (University of Southampton 2003). Age classes follow Noddle (1977, 381) (N neonatal, A juvenile, B immature, C adult); tooth wear was recorded by Grant's wear stages as republished in Amorisi (1989). The bone count corresponds to NISP. Bone condition was assessed visually using the following definitions (based on Locock *et al.* 1992, 209):

<i>Group</i>	<i>Description</i>
I	Fresh, greasy surface
II	Surface dulled, no longer greasy
III	Some surface deterioration, pitting or powdering
IV	Severe surface deterioration; whole thickness of bone affected; cracking and splitting
V	Disintegration, losing cohesion when handled

Assemblage summary

The analysed assemblage comprises 374 bones, of which 18% were identified to species level (see Table 1), largely from presumed domestic sources, but with some wild contribution. One tooth was assumed to be human and has been excluded from the analysis.

Table 1: summary of analysed bone

Species	NISP	% identified mammal	% all bone
Cow	29	43.9	7.8
Deer	3	4.5	0.9
Pig	7	10.6	1.9
Sheep/goat	25	37.8	6.7
Dog	1	1.5	0.3
Horse	1	1.5	0.3
Large mammal	99		26.4
Medium mammal	208		55.6
Bird	1		0.3
<i>Total</i>	<i>374</i>	<i>100.0</i>	<i>100.0</i>

Condition and retrieval

The bone varies in condition from III to V and is generally light and friable with heavily eroded surfaces. There is no direct indication of recovery bias, but the high proportion of loose teeth, low representation of smaller animals, and poor condition of the bone suggests that the assemblage may have suffered differential decay post-deposition.

Butchery and craft evidence

The majority of the bone across all species is from 2nd class meat bones, implying that it was derived from primary butchery of carcasses. The presence of cut-marks on the dog bone implies meat recovery.

No craft evidence was noted.

Species present

The cattle present included one young and one immature individual, presumably bull calves. The deer are presumed to be Red Deer, and are also immature. The pig's M3 tooth is of a size that is taken to imply it from a wild individual rather than domestic. The bird bone is from fowl (chicken).

Conclusion

This small assemblage reflects a relatively diverse diet drawn from domestic sources and the surrounding countryside.

Radiocarbon dates

Two teeth, from contexts 203 and 204 respectively, were submitted to Beta Analytical for radiocarbon dating. The collagen from both was sampled, and the calibration made using the INTERCAL04 Radiocarbon Age Calibration database (*Radiocarbon* vol. 46 nr. 3, 2004). The results were as follows:

<i>Context</i>	<i>Ref number</i>	<i>2 sigma cal (95% probability)</i>	<i>1 sigma cal (68% probability)</i>
203	Beta - 276416	Cal BC10 - Cal AD 140 (Cal BP 1960-1810)	Cal AD 30-120 (Cal BP 120-1830)
204	Beta - 276417	Cal BC 30-cal AD 130 (Cal BP 1980-1820)	Cal AD 20-90 (Cal BP 1930-1860)

Discussion

By Edith Evans and Eddie Owens

The objectives of the excavation were:

1. To assess the state of preservation of the site, particularly with regard to erosion caused by the trackway cutting across it;
2. To introduce students and members of the community to archaeological survey and excavation techniques;
3. To produce a detailed plan of the enclosure in its topographic setting;
4. To examine the nature of Roman occupation both inside and outside the enclosure;
5. To examine the nature and date of construction of the enclosure boundary;
6. To determine the relationship of the enclosure boundary to the Roman deposits;
7. To see whether there is evidence for occupation or utilisation of other periods.

Objectives 1 and 2 will not be addressed in any detail here: Trench 2 showed that there had been less damage to the bank at the south side of the enclosure than feared, and the project was very successful in providing a short introduction to excavation and survey techniques to the students, although uptake by other members of the community was disappointing. Objective 3, the production of the plan, is dealt with above.

Roman occupation

Objective 4 was only partially successful. The presence of at least one masonry structure was demonstrated, but as only one definite wall was found (Trench 1), its nature and purpose were not clear. The presence of Roman brick and tile, including boxtiles, painted plaster and tesserae, already known as surface finds, confirmed that at least one well-appointed building must have been present. The fact that its foundation trench appears to have been dug through a pre-existing rubble deposit suggests that the excavated wall was not the first masonry structure on the site. The presence of two clearly defined tile fabrics indicates either a change of source over time, or that resources were mobilised from more than the immediate area. The results from Trench 3 are more equivocal. If there was a structure here, it was of much lower quality, and it was not certainly Roman. An interesting light is shed on

the site given the mismatch between the structural remains and the excavated finds assemblage. Whilst the former indicate that there was at least one building of some pretensions, the pottery assemblage is not consistent with villa-type occupation and is more suggestive of something closer to subsistence level. This could be a result of where the trenches were placed, but what we have seen of Mrs Grove's collection suggests that it is indeed typical.

The enclosure

Objectives 5 and 6 concerned the nature of the enclosure's perimeter. The section cut in Trench 2 clearly demonstrated that it was a stone bank, not a ruined wall as suggested by Kay. A possible entrance can be seen in the northeast corner. Given the limited time available for excavation and the initial lack of experience of the workforce, we were unable to determine whether there was also an external ditch. The survey is ambiguous in this respect: a slight depression can be seen, particularly at the southwest corner but it is too diffuse to be certain whether it is a ditch. The deposit with oyster shells (204) may represent a ditch fill, but as no edges were defined, this must at present remain speculative.

The relationship of the enclosure to the Roman material was successfully elucidated. The presence of Roman brick/tile and pottery within the structure of the bank demonstrates that it was not an Iron Age enclosure that later developed into a Romanised site, as at Whitton (Jarrett and Wrathmell 1981). On morphological grounds the Early-medieval period is preferred to a Roman date, enclosures of this type being more typical of the post-Roman period. In this context, the name Church Hill may be significant. Mrs Grove (2006) was unable to find any association with any known church, and the association of highly Romanised site with superimposed curvilinear enclosure, plus the name of Church Hill would, if the Roman material had been known at the time, have been enough to class it as a Grade A Early-medieval potential ecclesiastical site in the pan-Wales Early-medieval Ecclesiastical Sites survey carried out by the Welsh Archaeological Trusts for Cadw in the early 2000s (Evans 2009, 102-3; Morris 1989, 100-1; Thomas 1971, 50-68).

However, a possible context for an enclosure in the late Roman period is as a place of refuge for animals and local inhabitants at times of insecurity. Coastal raids became increasingly common in the very late-Roman and post-Roman periods. Although the evidence is not unequivocal, it can be noted that the location of the possible entrance overlooked the steep side of the cwm, and so access to the enclosure could only be achieved with difficulty directly up the slope. Furthermore, it is possibly significant that a quantity of smooth, round pebbles, including several large, cricketball-sized stones, was found immediately inside the inner face of the bank. They closely resembled sling bullets and, if so, their location might be regarded as a store of ammunition ready for use in case of attack. Whilst the enclosure would not deter an determined attack, it might at least offer a deterrence to the sort of small-scale marauding, which is described in classical documentary sources (e.g. Ammianus Marcellinus, 27.8.7-8), the object of which was the acquisition of slaves, booty and livestock with minimal effort.

The setting

It had been thought that one possible interpretation of the enclosure was as a predecessor to the pheasantry depicted on the 2nd edn OS 25" map: small circular enclosures are known to have been used for this purpose elsewhere in Glamorgan in the 19th century (Kilgour 2004). For this reason, Objective 7 was to look for evidence of utilisation in other periods. In the event, no evidence for post-medieval activity of any type was encountered. However, evidence was found for earlier use of the site, in the shape of the small assemblage of Neolithic flints. Flint assemblages do occur on sites of the Roman period (see for example Bear Field, Cowbridge: Hughes and Evans 1988). Given the generally small size of the excavated area and of the finds assemblage in general, this number of flints was something of a surprise.

Without further evidence, this interpretation remains speculative. It should be noted, however, that the site lies directly above the Parc le Breos chambered tomb, and it seems likely, therefore, that there was some connection between the two. Roman interest in prehistoric burial mounds can be demonstrated at other sites in South Wales, such as St Brides Netherwent (Buckley 1975, 48), Welsh St Donats (Ehrenberg *et al.* 1982, 811-812), and Pond Cairn, Bridgend (Fox 1959, 118-9).

This leads to a more extensive consideration of the site in its setting. As stated, it occupies a prominent position on the edge of steep-sided cwm. The stream that flows down the cwm disappears into a swallow-hole nearly 2km further up and emerges to continue flowing above ground a short distance downstream of the chambered tomb and of our site. An extensive cave system, the Llethryd Swallet, exists under the dry valley, and includes a very large cavern (the 'Great Hall') with stalactites and stalagmites (Gillham 1977, 116, Mullard 2008), although it is not known whether its existence was known in antiquity. Another cave, Cat Hole, utilised in the Palaeolithic, Mesolithic, Bronze Age and Medieval periods (RCAHMW 1976, 19 no.17; 34-5 no.36), also opens close to our site, the chambered tomb and the resurgence. It is possible that these natural phenomena helped to make Green Cwm a place of significance in antiquity (Bradley 2000). Certainly the use of Cat Hole for burials in the Bronze Age shows that the area was still ritually significant after the Neolithic. In the Roman period, the combination of high-status architecture with finds that do not suggest an equivalent standard of living might perhaps be explicable in terms of a temple site, and we have already noted the possible Early Christian connections of the enclosure, which could perhaps be interpreted as the Christianisation of a pagan sanctuary. There are gaps in the sequence: a lack of 4th century pottery suggests a late Roman hiatus, and there is nothing relating to the Iron Age. However, where similar sites have been excavated showing an extended sequence of occupation at least some of which has clear ritual connections, a certain amount of shift over time may occur, as for example at Parc Bryn Cegin, Llandegai near Bangor (Lynch and Musson 2001; Kenny 2005).

It is possible that there was another focus of activity near the swallow-hole in the north end of the valley, Llethrid Cwm. Tooth Cave, another cave system and the longest known in Gower, occurs in this section and was also used for burial in the Bronze Age (Gilliam 1977, 116; RCHAMW 1976, 18-9 no.16). An important coin hoard was discovered in a quarry at SS 5312 9111 close to the swallow-hole in 1823, consisting of about 200 coins from Nero to Marcus Aurelius (Morgan 1899, 196-7). There are no records of any structures here, but given the generally low levels of

activity known from Gower in Roman times, the presence of two significant Roman sites in such a relatively small area must give rise to some speculation. The only other possible comparable site is at Oystermouth, where fragments of mosaic have been found in the churchyard during the digging of graves, but again, give the absence of any other information, the nature of this site is uncertain. Otherwise, all that is known is a handful of pottery or a few coins, mainly from Iron Age forts. The largest group, similar in composition to the Church Hill pottery assemblage, is one from Barland Quarry at Bishopston, where no structural remains were recorded (Morris 1962). This leaves Gower quite unlike the Vale of Glamorgan and Monmouthshire, where a villa economy has been identified. How exactly the Church Hill site fits into the archaeology of Roman Gower can still not be determined, nor how the Green Cwm sites fit together through time.

Acknowledgements

The excavation was directed by Edith Evans (GGAT) and Eddie Owens (Swansea University). Rowena Hart (GGAT) was in charge of the survey and processed the results. Thanks are due to the other people who took part, through Swansea University and RISW: Hannah Brown, Rachel Cannon, Bernice Cardy, Lee Corsi, Carroll Davila, Bob Dean, Joanne Edwards, Ben Greenley, Ken Griffin, Meg Gundlach, Ann Jordan, Lauren Kirk, Rebecca Kelly, Jerrad Lancaster, Frances McMullan, Shaun Mudd, Tracy Rihll and Emily Rothwell. At the post excavation stage, Bob Dean, Joanne Edwards, Rebecca Kelly and Shaun Mudd assisted with finds processing, and Bob Dean, Ken Griffin and Meg Gundlach with finds cataloguing. Rosie Hunnam digitised the site records. The plans were drawn up by Joanne Edwards (Swansea University) and Paul Jones (GGAT); Paul Jones drew the finds.

We are grateful to the Forestry Commission for permission to excavate and to locate site facilities, particularly Darroch Lyon and Chris Tucker who provided liaison and arranged for scrub clearance to take place before the excavation and survey. Thanks are also due to Helen Grove and Mrs M.J. Roberts for their support. The project would not have been possible without Cadw who grant-aided the work and monitored the SMC: we would particularly like to thank Matt Ritchie and Rick Turner.

Bibliography

- Amorisi, T., 1989, *A postcranial guide to domestic neo-natal and juvenile mammals: the identification and aging of the Old World species*. BAR Internat Ser 533.
- Baker, J. and Brothwell, D., 1980, *Animal diseases in archaeology*. London.
- Balchin, W.G.V., 1971, *Swansea and its region*. Swansea.
- Bradley, R., 2000, *An archaeology of natural places*. London and New York.
- Buckley, D.G., 1975, The excavation of a Bronze Age barrow mound at St Brides Netherwent, Monmouthshire, *Archaeol Camb* 124, 36-51.
- H Clarke, H. and A Carter, A., 1977, *Excavations in Kings Lynn, 1963-1970* (Soc Medieval Archaeol Monog 7)
- Driesch, A von den, 1976, *A guide to the measurement of animal bones from archaeological sites*. Harvard University: Peabody Museum Bulletin 1, Harvard.

- Edwards, N. (ed), 2009, *The archaeology of the Early Medieval Celtic church*, Soc Medieval Archaeol Monogr 29 = Soc Church Archaeol Monogr 1.
- Ehrenberg, M., Price, J. and Vale, V., 1982, The excavation of two Bronze Age round barrows at Welsh St Donats, S Glamorgan, *Bull Board Celtic Stud* 29, 776-842.
- Evans, E.M., 1997, The brick and tile, in Marvell and Owen John 1997, 180-95.
- Evans, E.M., 2004, *Early Medieval ecclesiastical sites in southeast Wales: Rapid field survey of selected sites*. GGAT unpublished report no.2004/019.
- Evans, E.M., 2007, *Church Hill enclosure, Parkmill, Swansea: Site visit*. GGAT unpublished report no.2007/060.
- Evans, E.M., 2009, Continuity and renewal of monastic landholding in Wales before and after the Anglo-Norman conquest, in Edwards (ed) 2009, 85-103.
- Evans, E.M. and Stapenhorst, C., 1984, Roman Box-tile manufacture in South-East Wales, *Glamorgan-Gwent Ann Rep* 1983-84.
- Fox, C., 1959, *Life and death in the Bronze Age*. London
- Gillham, M.E., 1977, *The natural history of Gower*. Cowbridge.
- Gillam, J.P. 1976, 'Coarse fumed ware in north Britain and beyond', *Glasgow Archaeol J*, 4, 57-80.
- Groom, G.E., 1971, Geomorphology, in Balchin (ed) 1977.
- Grove, H.P.F., 2006, *Church Hill Enclosure, Penmaen, Gower*. Unpublished report.
- Grove, H.P.F, 2008, Church Hill Parkmill: In the footsteps of the old antiquaries, *Gower* 59, 7-12.
- Hillson, S., 1992, *Mammal bones and teeth: an introductory guide to methods of identification*. Institute of Archaeology, University College London, London.
- Hughes, E.G. and Evans, D.R., 1988, Cowbridge, Bear Field', *Archaeol Wales* 28, 52-3
- Kay, R.E. , 1971, Church Hill, Parkmill, *Gower* 22, 62-3.
- Kenny, J., Recent excavations at Parc Bryn Cegin, Llandegai near Bangor, North Wales, *Archaeol Cambrensis* 157, 9-142.
- Kilgour, A.C.A, 2004, *A geophysical and earthwork survey of the Duffryn enclosure, St Lythans, Cardiff*. Unpublished MA thesis, University of Bristol (academic year 2004-05).
- Locock, M., Currie., C.K. and Gray, S., 1992, Chemical changes in buried animal bone: data from postmedieval assemblage, *Internat J Osteoarchaeology* 2, 297-304.
- Lynch, F. and Musson., C 2001, A prehistoric and early medieval complex at Llandegai near Bangor, North Wales, *Archaeol Cambrensis* 150, 17-142
- Marvell, A.G. and Owen-John H.S., 1997, *Leucarum: Excavations at the Roman auxiliary fort at Loughor, West Glamorgan*, Britannia Monog 12.
- Manning, W.H. 1993, *Report on the excavations at Usk 1965-1976. The Roman pottery*, Cardiff.
- Morgan, W.Ll., 1899, *Antiquarian survey of east Gower*. London.
- Morris, B., 1962, Barland Quarry, Bishopston, *Gower Archaeol Wales* 2, 7 no.27
- Morris, R., 1989, *Churches in the landscape*. London.
- Noddle, B.A., 1977, The animal bone, in Clarke and Carter 1977, 376-389.
- Schmid, E., 1972, *Atlas of animal bones for prehistorians, archaeologists and Quaternary geologists*. London.
- Shackley, M., 1981, *Environmental archaeology: an introduction*. London.
- Thomas, C., 1971, *The Early Christian Archaeology of North Britain*. Oxford.
- University of Southampton, 2003, *Animal Bone Metrical Archive Project (ABMAP, accessed from <http://ads.ahds.ac.uk/catalogue/specColl/abmap/search.cfm>)*.
- Young, C.J., 1977, *Oxfordshire Roman Pottery*, BAR, Brit Ser 43. Oxford.

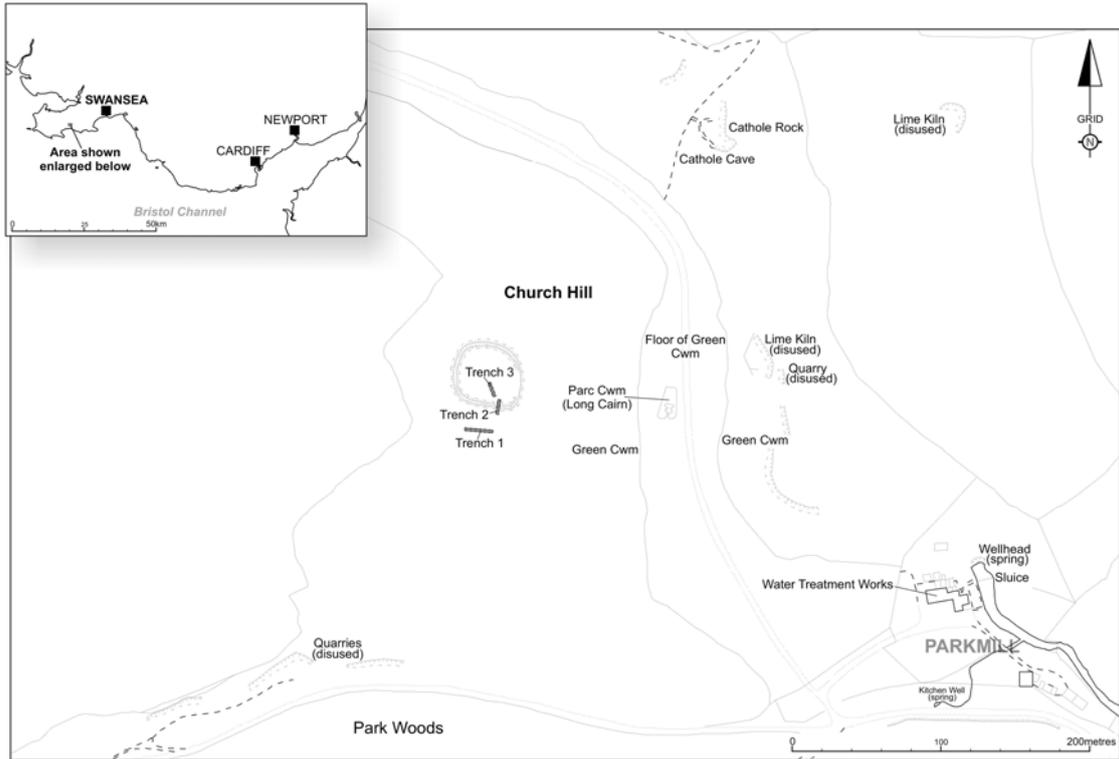


Figure 1. Location plan.

© Crown copyright and database right (2010). All rights reserved. Ordnance Survey Licence number (100017916).

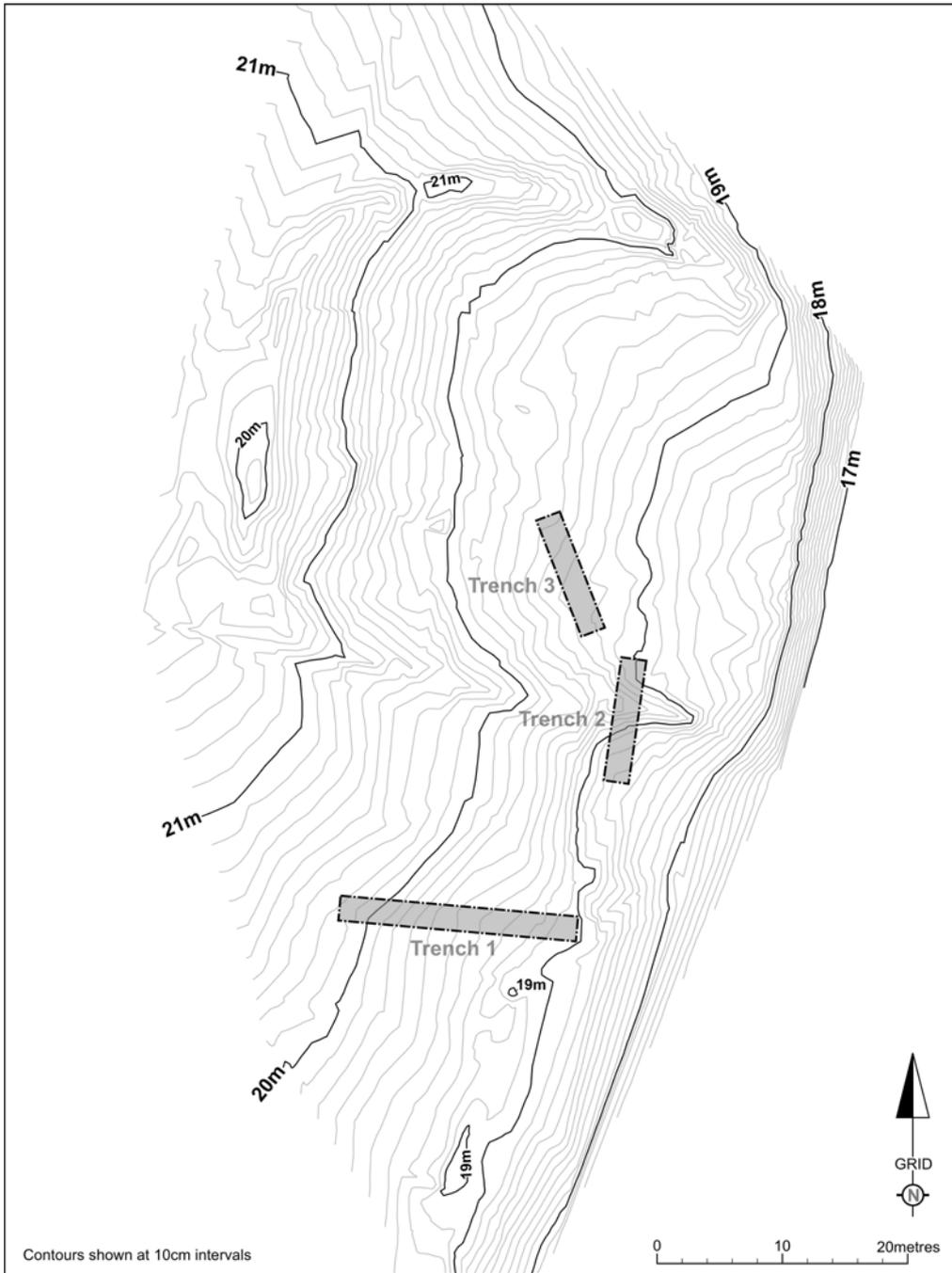


Figure 2. Contour survey of site with trenches.

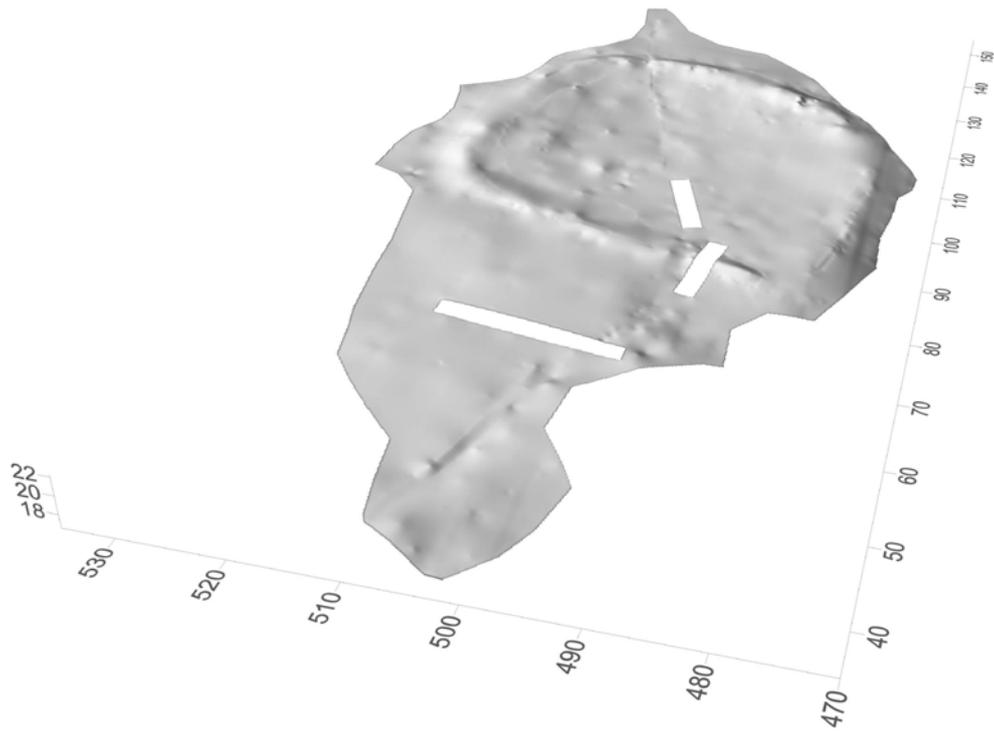


Figure 3. 3D survey of site looking north.

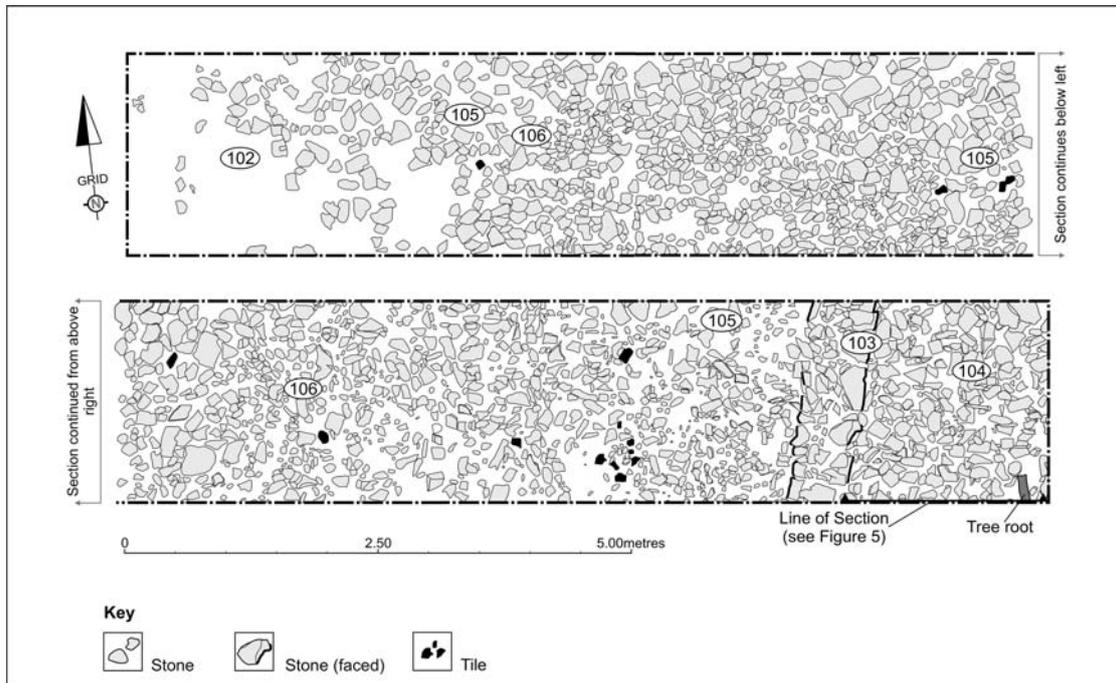


Figure 4. Plan of Trench 1.

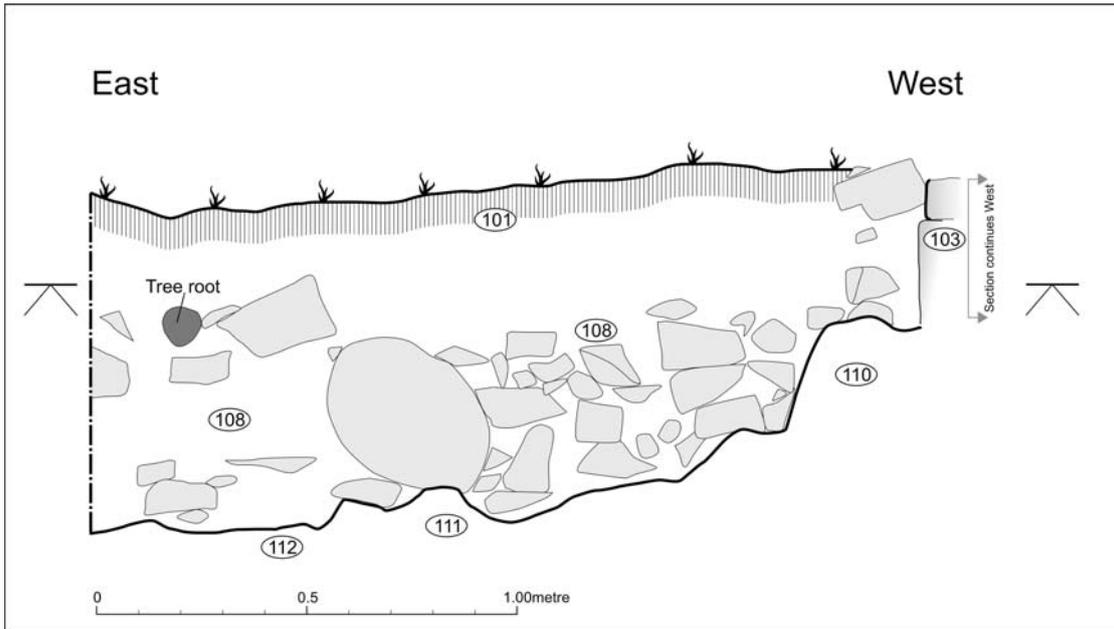


Figure 5. Trench 1, section of area to east of wall 103.

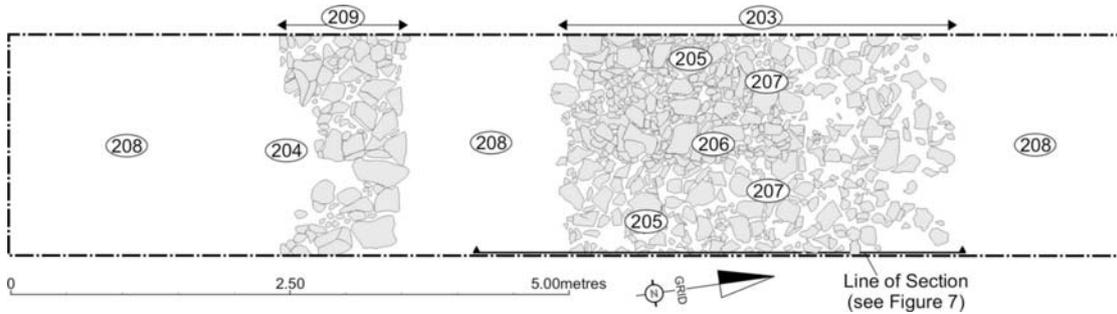


Figure 6. Plan of Trench 2 after removal of rubble.

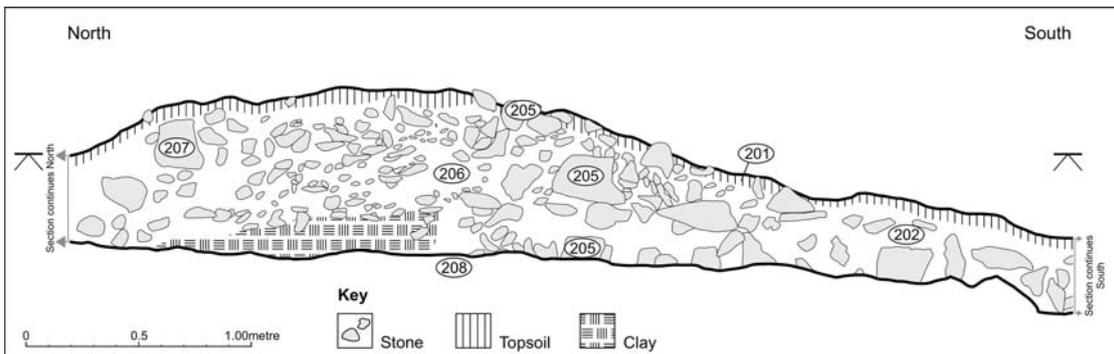


Figure 7. Section through bank.

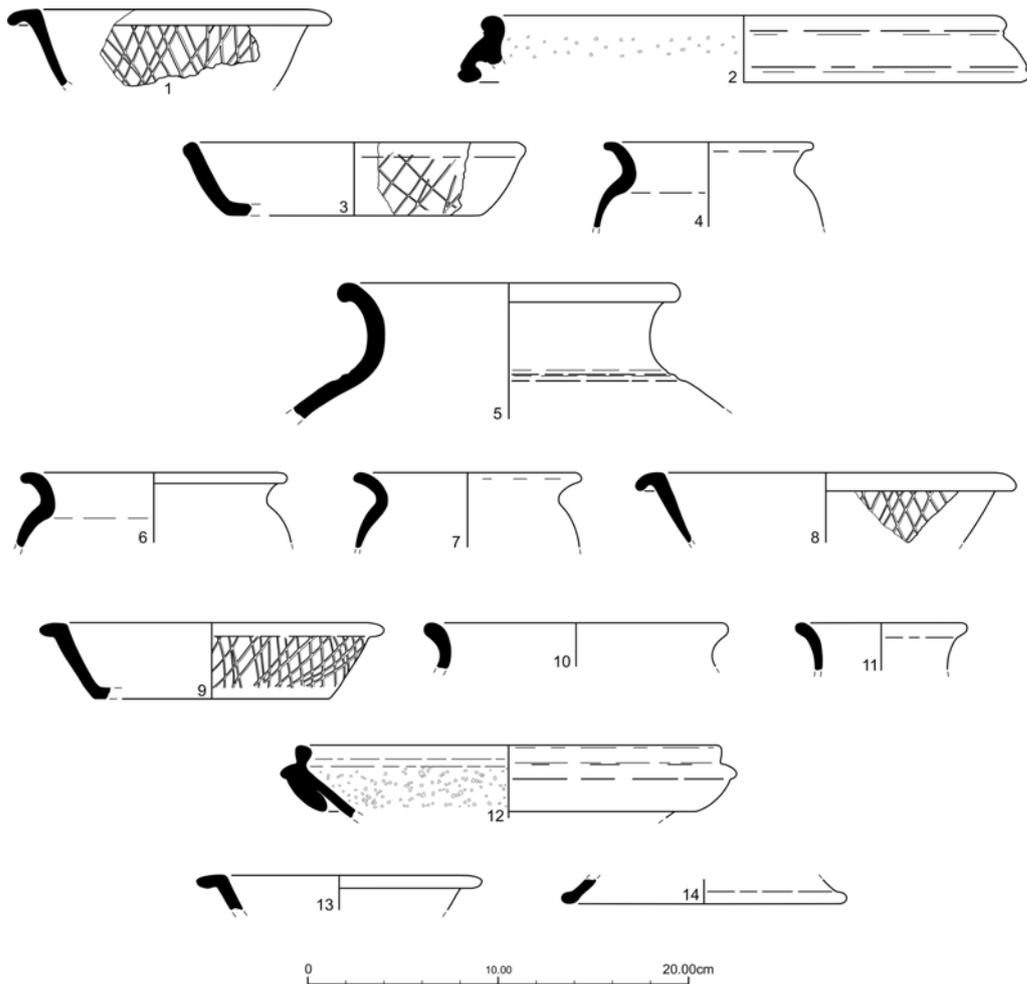


Figure 8. The pottery.



Plate 1. The bank on the north side of the enclosure photographed from the outside during the 2007 site visit.



Plate 2. Initial cleaning of Trench 1, looking west. The wall is in the foreground.



Plate 3. Trench 1 - the east face of the wall and its foundation.



Plate 4. Trench 2 after initial cleaning, looking north.



Plate 5. Trench 2 - the section through the bank.



Plate 6. Trench 3 looking north.



Plate 7. The fibula.