Late Prehistoric Fortifications in Europe: Defensive, Symbolic and Territorial Aspects from the Chalcolithic to the Iron Age

Proceedings of the International Colloquium 'FortMetalAges', Guimarães, Portugal

Edited by

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Cover image: Entrance way in the first wall of Citânia de Briteiros, Guimarães, Portugal

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Excavations at Caerau Hillfort, Cardiff: Towards a narrative for the hillforts of south-east Wales

Oliver Davis and Niall Sharples

Abstract

The large-scale excavation of hillforts in Britain has tended to focus on sites in southern England, particularly Wessex. Understanding of hillfort use and function outside of these core areas of study is much less mature and often reliant on comparative analogy. This article draws upon recent open-area excavations at Caerau Hillfort, Cardiff, to explore one of these less well-known regions – Glamorgan in south-east Wales. Caerau is a large and architecturally complex hillfort, but like most in the region has seen little previous research. In this paper we demonstrate how targeted excavations of a single site, if of sufficient scale, can transform our knowledge of a region and challenge preconceived narratives.

Keywords: Caerau; Wales; Glamorgan; regionality; black-hole

Introduction

The interpretation of the role of hillforts has been a central focus for study of the British Iron Age for over 100 years. Over 4000 hillforts have now been identified in Britain (see Lock and Ralston 2017), but despite such large numbers, and their obvious importance to the societies that constructed and used them, surprisingly few have been excavated on a large scale. Those that have tend to be located in southern England, particularly Wessex (the modern English counties of Hampshire, Wiltshire and Dorset). Excavations in this core area of study, such as those at Danebury (Cunliffe 1984) and Maiden Castle (Wheeler 1943; Sharples 1991) have been highly influential, and central to our current understanding of Iron Age social, political, economic and religious systems throughout Britain. Yet, since the early 1990s many scholars have begun to question whether social and economic models derived from hillfort excavations in Wessex possess any currency outside of that region (see especially Bevan 1999). This has been a significant development which has led to the identification of important regional hillfort sequences in their own right, rather than reliance on a grand, national, narrative. Even so, the paucity of large-scale excavation of hillforts outside of central southern Britain means that our understanding of their function and social organisation remains almost a 'black-hole' in many regions (see Haselgrove et al. 2001; Davis 2017).

The aim of this contribution is to explore a region of south-east Wales, Glamorgan, which can be regarded as one of these 'black-holes'. The hillforts of this region, like in many areas of Europe, are an under-studied resource and our knowledge of their development and use is largely based upon comparative analogy with hillforts from better-explored regions. This seriously inhibits our ability to understand its regional character in relation to the significant technological and societal changes which occurred in the 1st millennium BC throughout Europe. By drawing from recent, and ongoing, excavations by the authors at one of the major hillforts in the region, Caerau Hillfort, Cardiff, we aim to demonstrate how targeted excavation of even a single site, if undertaken on a suitably extensive scale, can significantly advance our understanding of hillforts, and the societies who constructed them, in such blackhole regions.

Hillfort study in Wales

The Iron Age in Wales is characterised by a dense concentration of well-preserved hillforts (over 1000 according to the Hillfort Atlas, see Lock and Ralston 2017), but our understanding of their construction, use and function is poorly developed and uneven across the country (Figure 1). Many hillforts have been the subject of field survey, particularly by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW), which has resulted in an excellent corpus of detailed topographic plans. However, only a handful of these sites have subsequently been explored by extensive open-area excavation. A review of the state of hillfort research in Wales has recently been provided by Graham Guilbert (2018). He highlighted the paucity of large-scale excavation in the country and considered that '...viewed en masse, their study remains immature' (Guilbert 2018: 4). That is not to say that important regional sequences do not exist. In west Wales (the modern counties of Pembrokeshire, Carmarthenshire and Ceredigion, collectively known as Dyfed) large numbers of small (<0.5 ha), hillforts are known. A few,



Figure 1: Hillforts in Wales (data derived from Lock and Ralston (2017) with additions).

such as Castell Henllys (Mytum 2013), Walesland Rath (Wainwright 1971) and Woodside (Williams 1998), have been subject to expansive excavation so that their entire ground plans have been recorded. While artefacts, such as pottery, are almost completely absent, the structural evidence suggests intensive occupation, but by relatively small groups, perhaps only extended families. Systematic excavation of a number of hillforts along the eastern border (the Marches), and northern coastal fringe of Wales, has also taken place. The hillforts in this agriculturally rich area tend to be large (>6 ha) and the interiors of three, the Breiddin (Musson 1991), Dinorben (Gardner *et al.* 1964; Savory 1971; Guilbert 1979; 1980) and Moel y Gaer (Guilbert 1975; 1976), have been sufficiently excavated to indicate that they were ordered settlements of large communities. These, however, remain the exception and few hillforts in the rest of Wales have seen more than small trenches.

Glamorgan: patterns and problems

The county of Glamorgan, in south-east Wales, is an area of around 2100 km² and can be divided into two distinct landscape areas (Figure 2). The northern part of the region is mountainous and cut by deep natural valleys that were heavily exploited for their coal reserves in the 18th and 19th centuries. It is not agriculturally productive and is today largely dominated by uncultivated, rough grazing land for sheep. By contrast, in the south, the landscape is dominated by a gently undulating lowland plateau stretching from Cardiff in the east to the Gower peninsula in the west. These lowland areas are generally agriculturally rich, particularly along the coastal fringe. Glamorgan was heavily urbanised during the industrial revolution and around 1.3 million people live in the region today, which represents almost half of the population of Wales.

Iron Age hillforts in the area have been surveyed by the RCAHMW (1976) and are also considered in a County History volume (Savory 1984), but little effort has been given to understanding their development and use through extensive excavation. Unsurprisingly, Guilbert (2018) does not consider a single hillfort in Glamorgan in his review of Welsh hillfort research and understanding of the chronology, and interpretation of the function, of hillforts in the region is problematic. It was these issues that led the authors to begin a research project at Caerau Hillfort, Cardiff, which is one of the largest and most architecturally complex in the region. This contribution will provide an overview of the present state of knowledge of hillforts in the region and then demonstrate how our excavations at Caerau are beginning to change our understanding of the Iron Age in the region.

Hillfort size, distribution and morphology

Clear regional differences in hillfort size and distribution can be observed in Wales. Hogg (1972) highlighted the dominance of small, heavily enclosed, sites in the generally upland region of Dyfed, while the much larger



Figure 2: Map of Glamorgan showing topography and location of hillforts (refer to Appendix 1 for hillfort names).

hillforts, some in excess of 10 ha were distributed in the more agriculturally fertile Marches. The large hillforts imply the existence of large communities (and small hillforts, small communities), and their distribution has been taken to reflect the contrasting land capability of eastern and western Wales (Davies and Lynch 2000: 161; Jackson 1999). Glamorgan has a mixture of small and medium to large hillforts, although no very large sites (in excess of 10 ha). In total 94 hillforts (including inland and coastal promontory forts) are known, with almost all of them located close to the lowland coastal plain.

Their distribution contrasts sharply with the preceding Bronze Age. While few Bronze Age settlements have been located in Glamorgan, numerous burial monuments are known dispersed throughout the region. Large numbers of cairns, and by implication people, cluster in the uplands and the absence of Iron Age hillforts in these areas has been interpreted as an actual movement of population, around 600 BC, from upland to lowland areas, possibly as a result of climatic deterioration (RCAHMW 1976). Several authors (Davies and Lynch 2000: 146; Ritchie 2018) have even argued that the construction of hillforts was a response to increased conflict due to such demographic displacement and resulting competition over resources. This argument is not particularly satisfying since it gives primacy to the apparent martial nature of hillforts, a position which has been heavily critiqued in recent years (Bowden and McOmish 1987; Sharples 2010; Lock 2011). In addition, neither the cairns nor the hillforts are well dated, which means that a temporal relationship remains hypothetical.

In terms of size, the vast majority (84%) of hillforts in Glamorgan enclose an area less than 1.3 ha with only 15 sites enclosing more than 2.5 ha. The main concentration of these larger hillforts is in and around the gently undulating lowlands of the Vale of Glamorgan, but also includes the univallate hillfort of Twmbarlwm, which lies on the edge of the uplands to the north-east of Cardiff. This group of larger Glamorgan hillforts should be considered as the south-western extremity of a supra-regional grouping of large hillforts which extends eastwards through Monmouthshire and into the central and northern Marches.

Smaller hillforts are found throughout Glamorgan but tend to be dominant in the western areas of the region, particularly the Gower peninsula, where a distinctive concentration of small promontory forts dominates its southern coastline. While similar sites occur elsewhere in the region, particularly along the coast of the Vale of Glamorgan, they tend to be larger and less numerous, and the hillforts of the Gower peninsula seem to have more in common with those sites in Dyfed rather than the eastern parts of the region. Taken as a whole, hillforts in the region exhibit strikingly variable morphology (Figure 3). Several of the larger hillforts, such as Caerau Hillfort, Cardiff, and Caer Dynnaf, possess complex multivallate boundaries and in-turned entranceways. Others, like Twmbarlwm or Castle Ditches, Llancarfan, are univallate, although the latter may have developed from an earlier, smaller enclosure (Hogg 1976). The smaller hillforts demonstrate even greater variability in plan, ranging from univallate sites with simple or sometimes elaborate entranceways (e.g. Llwynda Ddu), bivallate sites with close-set, or more rarely wide-spaced, boundaries (e.g. Castle Field Camp, Bonvilston Gaer), to complex multivallate sites (e.g. Summerhouse Camp). In the western, more upland, areas of Glamorgan there is an unusual group of large, multiple-enclosure sites. Examples, such as Gaer Fawr and Y Bwlwarcau, are characterised by relatively small inner enclosures with concentric, widely spaced, outer boundaries. The Bulwark, Llanmadoc Hill, on Gower can also probably be added to this group. They have been interpreted as specialised sites for livestock management (Davies and Lynch 2000: 176) with settlement, presumably only a single extended family, restricted to the small inner compounds. Unfortunately, none have been sufficiently excavated to elucidate the situation, but the character of their boundaries suggests long histories of development.

The large number of hillforts in Glamorgan which use the natural topography to augment their boundaries should also be noted. Part of the boundary circuit of around 65% of sites is defined by either a cliff or a steep slope. Some of these sites are coastal, but many inhabit inland locations atop natural promontories or along the edge of a plateau.

Ramparts and interiors

In the region 22 hillforts have been subject to some form of excavation. This number appears sufficiently high to provide us with a good sample of data for interpretation, but most of these represent antiquarian diggings or small-scale trenching in the mid-20th century. Excluding the authors' work at Caerau there have been only four excavations at hillforts since the 1970s using modern methods of recovery (Evans 2001; Lane and Seaman 2013; Wellicome and Connolly 2011; Yates 2002), although none of these can be considered to have been on a sufficient scale to talk in much confidence about hillfort construction and use.

The earliest recorded excavation was by Iolo Morgannwg at the large promontory fort of Dunraven, Southerndown in 1813. A small cutting was made through the rampart, which was described as formed of stone and clay (Waring 1850). The use of stone as a structural element within hillfort ramparts appears



Figure 3: Simplified plans of selected hillforts mentioned in text.

relatively common, particularly in the west of the region. A stone-revetted earthen rampart was revealed by small-scale diggings at the Bulwark, Llanmadoc Hill, on Gower (Davies 1964), while similar dry-stone faced banks were identified during Audrey Williams' (1939; 1940; 1941) campaign of excavation at the promontory forts of The Knave, Bishopston Valley and High Pennard in the 1930s and 1940s. Although nothing remained *in situ*, large stones contained within the fills of the exterior ditches suggest that a stone breastwork or revetment may also have been present at Harding's Down West (Hogg 1973) and Cil Ifor Top (Morgan 1911), also on Gower.

Small-scale, but important, excavations by A.H.A. Hogg on behalf of the RCAHMW at the large (4.2 ha) univallate hillfort of Castle Ditches, Llancarfan, in the Vale of Glamorgan, also revealed the structural use of stone. The hillfort boundary was formed by a rock cut ditch, 11 m wide and 3 m deep, which was flanked by a substantial 9 m-wide earthen bank revetted with large limestone blocks on both the exterior and interior faces (Hogg 1976).

Timber was used as a structural element within the ramparts of some hillforts. A narrow cutting through the earthen rampart of the small hillfort of Castle Field Camp, north-east of Cardiff (Wellicome and Connolly 2011) identified a posthole at its front that may be part of a timber revetment.

This meagre collection of narrow cuttings through hillfort ramparts in Glamorgan has revealed little about the potential complexities of their structure and sequence (for discussion about the shortcomings of small-scale sectioning of hillfort ramparts, see Guilbert 2018). However, the apparent preference for the revetment of ramparts with stone in the west of the region is interesting given that the pollen record suggests timber would have been plentiful in the surrounding landscape (Caseldine 2018). Toby Driver (2013) has recently argued that hillfort architecture and the deliberate choice of specific building materials may reflect 'cultural' preferences and the use of stone could be argued to provide a more durable and impressive façade to the hillfort boundary.

Our knowledge of the interiors of hillforts is poor. Surface evidence for internal features is rare, likely because many hillfort interiors have been cultivated in the Medieval period and later. However, roundhouse platforms are still visible in nine hillforts (Dunraven, Thurba Head, High Pennard, Harding's Down West, Cil Ifor Top, The Knave, Bishopston Valley, Maiden Castle, Oxwich, and The Bulwark, Llanmadoc Hill – see RCAHMW 1976: 9). Some of the platforms in the smaller hillforts have been explored by excavation. At The Knave, a platform excavated in the southwest of the interior revealed a possible post-built house with central hearth (Williams 1939), while platforms explored at High Pennard and Bishopston Valley revealed occupation debris, but no structural features (Williams 1940; 1941). The most informative excavations were probably by Hogg at Harding's Down West (1973). A small excavation over a levelled area within the centre of the hillfort, revealed a cluster of postholes argued to represent a roundhouse, around 10 m in diameter (hut 1), although recent reinterpretation (Walker and Davis, in prep.) suggests the presence of a more modest wall gully and post-defined structure, *c.* 6 m in diameter, which was replaced by a square four-post structure (most likely a granary or storage building) at a later phase.

It is difficult to use this evidence to estimate the total number of houses within any given enclosure. Surface evidence is easily destroyed by ploughing and erosion, or obscured by natural silting, particularly in the lee of ramparts (post-built structures showing no topographic relief were identified behind the ramparts at Bishopston Valley and High Pennard for instance). Nonetheless, some have argued that the apparent low density of occupation at the smaller sites is real and see them as elite family settlements, or places of refuge (RCAHMW 1976; Evans 2018). However, 21 house platforms are visible at Dunraven, and although the interior is unexcavated, a magnetometor survey in the 1990s of an area of 1600 m^2 in the northern area of the fort revealed the presence of at least two more houses that do not survive as earthworks (Barker and Mercer 1999a). Partial geophysical surveys at Castle Ditches, Llantwit Major, and Porthkerry Bulwarks also revealed concentrations of roundhouses, enclosures and pits (Barker and Mercer 1999b; 1999c), indicating that the larger hillforts may have been intensively occupied, probably by large communities.

The paucity of excavation means that it is difficult to assess with any certainty the economy and subsistence of hillforts in the region. Pottery is present, but not abundant; small assemblages representing a handful of vessels have been recovered from nine sites. Most sherds are small fragments of plain coarse wares which are not easily dateable, but vessels of South Western Decorated (Glastonbury) Ware are known from a few sites (The Knave, Castle Ditches, Llancarfan, Tyn-y-Coed and possibly Harding's Down West), which were probably deposited in the last two centuries BC. Iron working slags have been found at Castle Ditches, Llancarfan, Harding's Down West, Bishopston Valley and Castle Field Camp, and spindle whorls have been recovered from Castle Ditches, Llancarfan, The Bulwark, Llanmadoc Hill and High Pennard, but the quantities are modest and it is difficult to argue with any confidence that these hillforts were centres of metal or textile production.

Livestock management presumably played a significant role in the Iron Age economy at hillforts. The bones of cattle, sheep, pigs and horse have been recovered from a number of sites, but the only quantified assemblage is that from Castle Ditches, Llancarfan (Hogg 1976). This showed roughly equal proportions of cattle and sheep (c. 40-45%) and a relatively high proportion of pig (c. 10%) when compared to other areas such as Wessex (see Hambleton 1999 for comparative analysis of animal husbandry regimes in Iron Age Britain), but it is not necessarily representative of hillforts in the region as a whole. Wild resources were also exploited: red deer bone is recorded from Worm's Head, Bishopston Valley and Castle Ditches, Llancarfan, which indicates hunting; shellfish were also collected at coastal sites such as The Bulwark, Llanmadoc Hill, The Knave, Bishopston Valley, High Pennard, Worm's Head and Porthkerry Bulwarks, although fishbone is absent.

That animals were exploited as part of a mixed farming regime is highly likely, but evidence for arable cultivation is scant. Carbonised cereals (spelt, emmer and oats) have been recovered in small quantities from Castle Field Camp (Wellicome and Connolly 2011) and Castle Wood (Evans 2001), but most hillforts in Glamorgan were excavated before modern sampling methods and no other charred grain assemblages exist. However, proxy evidence such as quern stones from Castle Field Camp, Worm's Head and Llwynheiernin, and a potential four-post granary at Harding's Down West, indicate that arable farming may have been an important part of the agricultural economy.

The limited evidence from hillfort interiors means that the interpretation of their social and economic role is fraught with difficulty. Attention has tended to focus on the monumental character of their boundaries, which has been assumed to be related to the status of the inhabitants (Cunliffe 2010; Davies and Lynch 2000). Cunliffe (2010: 305) has argued that the hillforts in Glamorgan were the homesteads of elite families and their entourages, but there is little material evidence to support such a position.

Chronology

Unsurprisingly, given the dearth of excavation and the limited pottery assemblages, the chronological framework for hillforts in Glamorgan is poor. Only seven radiocarbon dates exist, derived from just three sites: Tyn-y-Coed, Castle Field Camp and Beech Court Farm (Table 1), but all are problematic. The radiocarbon samples from Castle Field Camp were from secondary ditch fills and so cannot be taken to date its construction, while Tyn-y-Coed and Beech Court Farm appear to be 'unfinished' hillforts. Some attempt has been made to assign dates based upon the limited ceramic evidence (summarised for the Vale of Glamorgan by Davis 2017), but there is little precision. In a few cases it has been possible to show sequences of construction. Two phases of rampart have been demonstrated, at Cil Ifor Top and Burry Holms for instance, while Castle Ditches, Llancarfan appears to have developed from an earlier, smaller hillfort, but all remain undated. Morphological characteristics such as mulitvallation or in-turned corridor entrances, such as at Caer Dynnaf, Caerau, Llantrissant, and Caerau Hillfort, Cardiff, appear to suggest, on analogy with other areas, a Middle Iron Age date for these sites, although there is little understanding of the chronological development of these features in the region. The period to which the smaller univallate hillforts belong and how they relate to the more complex sites is also unclear.

Despite the uncertain nature of the evidence some have argued that hillforts in Glamorgan were relative latecomers originating in the 4th century BC or later (Savory 1984; Davies and Lynch 2000; Howell 2009). This

					Calibrated a	age ranges	
Site	Lab ID	Sample Material	Context	Radiocarbon Age (BP)	1 sigma (68.3%)	2 sigma (95.4%)	
	GrA-27318	Prunus sp. Roundwood, charcoal	From layer above primary silts in enclosure ditch	2230 ± 40	369 – 210 cal. BC	388 – 202 cal. BC	
Beech Court Farm, Ewenny	OxA-14142	Prunus sp. Roundwood, charcoal	From layer above primary silts in enclosure ditch	2099 ± 26	169 – 61 cal. BC	190 – 50 cal. BC	
	NZA-21146	Fraxinus charcoal	From posthole just inside entrance	2500 ± 30	767 – 552 cal. BC	788 – 537 cal. BC	
	Beta-304092	Charcoal (undefined)	Secondary fill of enclosure ditch	2030 ± 30	88 cal. BC – cal. AD 20	156 cal. BC – cal. AD 53	
Castle Field Camp	Beta-304091	Charcoal (undefined)	Secondary fill of enclosure ditch	2060 ± 30	153 – 39 cal. BC	170 cal. BC – cal. AD 4	
*	Beta-304090	Charcoal (undefined)	Secondary fill of enclosure ditch	1850 ± 30	cal. AD 128 – 215	cal. AD 85 – 235	
Tyn-y-Coed, Southern Banks	UBA-35027	Organic residue	From residue on Glastonbury Ware sherd from primary fill of enclosure ditch		46 cal. BC - cal. AD 16	92 cal. BC – cal. AD 54	

Table 1: Published radiocarbon dates from hillforts in Glamorgan.

position seems difficult to sustain with any confidence. Late Bronze Age and Early Iron Age construction dates have been established for hillforts in the Marches (e.g. The Breiddin, Musson 1991) and Dyfed (e.g. Dale, Benson and Williams 1987) and it would be surprising if at least some hillforts in Glamorgan did not date to this period.

Excavations at Caerau Hillfort, Cardiff

Caerau Hillfort is one of the 15 larger hillforts in Glamorgan (enclosing more than 2.5 ha). It is located on a promontory projecting from the eastern escarpment of the Vale of Glamorgan that overlooks the valley of the river Ely. It is currently contained within the urban context of west Cardiff and is surrounded by modern housing (Figure 4). The promontory is a relatively flat plateau, c. 70-80 m OD, with steep drops to the west, north and south. The hillfort is distinctly triangular in shape and covers a total area, including the boundaries, of 8.8 ha. The steep north and south slopes are both enclosed by three closely-set earthwork banks with accompanying ditches. This system probably extends around the north east corner of the hillfort but in this area the earthworks were badly damaged by the construction of a Medieval earthwork castle, a church and an accompanying external settlement. The south eastern boundary where the promontory joins the main escarpment enclosure is defined by a substantial bank, around 10 m in height and 24 m in width, and accompanying ditch, fronted by a low counterscarp bank. This is morphologically very different to the other boundary earthworks, which suggests that it may relate to a different phase of enclosure construction (conceivably either earlier or later).

The earthworks are penetrated by four major entrances orientated to the cardinal compass points in the north, south, east and west. The eastern entrance is the most elaborate. The ends of the boundary earthworks on the eastern side were in-turned into the hillfort to create an elongated corridor *c*. 50 m in length. The southern entrance is flanked on one side by an in-turn of the eastern hillfort boundary, but the multiple ditches on the southern side of the entrance are not in-turned. A simple gap through the hillfort boundaries at the western tip of the promontory may be an original entrance. Geophysical survey in the north-east angle of the hillfort suggests a fourth entrance, consisting of a simple gap through the boundaries, existed in this location (Davis et al. 2015). A smaller gap through the boundaries, immediately to the south-east of this northern entrance, and adjacent to a springhead, may be another, small and narrow, entrance.

The hillfort is both the largest and most architecturally complex in the region, but before the outset of our work had received little archaeological attention except for a topographic survey undertaken by the RCAHMW (1976). In part this may be due to the hillfort's location – it is nestled within a deprived housing estate facing serious economic and social challenges, not least high



Figure 4: Location map of Caerau Hillfort showing 'urban' context.

unemployment and poor educational attainment. The site suffers from a range of anti-social behaviours and as such is not the conventional location for a long-term research project. However, Cardiff University's School of History, Archaeology and Religion has a strong tradition of community engagement and outreach and from the beginning our project was focussed on challenging stigmas that are associated with living in the area and developing educational opportunities for local people through the practical skills of excavation and archaeological science. Under the auspices of the project name 'CAER Heritage' four seasons of excavation on the hill have now been completed with more planned for the summer of 2019 (see Ancarno et al. (2016) and Davis *et al.* (2019) for evaluation and discussion of the community engagement aspects of the project).

Results of the excavations

The interior of the hillfort is currently given over to grassland for the pasture of horses and cattle although it has been repeatedly ploughed in the recent past, which has destroyed any upstanding prehistoric remains. A geophysical survey of the interior was undertaken (GSB Prospection 2012; Davis *et al.* 2015) and revealed a complex pattern of activity, with numerous linear ditches criss-crossing the interior and a scatter of obvious roundhouses and other anomalies indicating dense occupation (Figure 5). Our initial programme

of excavation set out to investigate these anomalies, attempting to characterise and date them, and explored around 0.15 ha of the interior (which equates to almost 50% of the area of all other excavations at hillforts in the region added together).

The rampart sequence

The inner rampart was explored in two places on the northern and southern sides of the hillfort. Further work on the middle and outer earthworks is planned, but they are heavily wooded and require intricate excavation. On the south side, a section of around 15 m of the rampart was exposed in an area excavation. At the base of the rampart was a line of postholes, presumably the remains of a timber fence. A posthole was also identified at the base of the rampart in a narrow 4 m-wide cutting on the northern side of the hill, suggesting that this fence wrapped around the hill (for *c*. 1000 m) and was part of the primary enclosure of the hilltop (Figure 6). This feature currently remains undated but is most likely Late Bronze Age or Early Iron Age.

The fence was sealed by a low earthwork bank, 5 m in width, and fronted by a timber revetment, which clearly represents a significant addition to the hillfort rampart. An articulated cattle pelvis from beneath this earthwork, possibly a foundation deposit, produced



Figure 5: Composite geophysical survey plan of the interior of Caerau (geophysical survey copyright GSB Ltd and GeoArch Ltd.). Location of trenches shown.



a date of 355-54 cal. BC (95.4%), but two carbonised cereal grains recovered from deposits building up against the back of it produced dates of 397-207 cal. BC (95.4%) and 536-381 cal. BC (95.4%), suggesting the bank was constructed in the early to middle 4th century BC. The middle and outer ramparts may also date to this period.

A second phase of rampart was built over the tail of this primary bank and comprised a dump of clay originally at least 4 m wide and 1.5 m high. This bank overlay a soil horizon and, on the western edge of the area excavation of the south rampart, a substantial Romanperiod midden. A barley grain from a dump of charred cereals sealing this bank produced a radiocarbon date of cal. AD 774-968, suggesting the bank was an Early Medieval refortification of the hillfort.

Occupation within the interior

Eight trenches have now been excavated within the interior of the hillfort (see Figure 5). Surprisingly,

several of the linear anomalies have proven to be the Early Neolithic ditches of a large causewayed enclosure. This is a significant discovery in Wales but will not be discussed further in this article (see Davis and Sharples 2017).

The nature of the Iron Age occupation was most thoroughly explored by a large 20 m by 30 m area exposed on the south side of the hillfort (Figure 7). It was positioned over an obvious circular geophysical feature which clearly represented a roundhouse. However, occupation activity here proved to be much more intensive than originally anticipated. The earliest occupation was represented not by one, but by two, roundhouses (CS1 and CS2) defined by conjoined, shallow circular gullies. The pair of penannular gullies are too wide to have been foundations for the house wall and such features are usually interpreted as drainage ditches designed to capture water from the eaves of the roundhouse roof (e.g. Harding 2009). No structural features from the construction of these two houses survived, probably because the wall supports were not



Figure 7: Simplified plan of Trench 3 showing roundhouses and other features.

dug into the soil but sat on the ground surface. A small assemblage of Early Iron Age pottery, probably dating to the 7th to 6th centuries BC, was recovered from the house gullies, while a particularly fine high-shouldered small ceramic cup or bowl of a similar date was found placed within a small pit immediately to the east of CS1. A radiocarbon determination from a single barley grain recovered from the gully of CS1 produced a date of 795-545 cal. BC (95.4%), indicating their possible Early Iron Age date. The geophysical survey suggests that a row of such houses runs along the line of the rampart on the southern side of the hillfort and this is likely to represent the earliest Iron Age occupation of the hilltop. Although currently unconfirmed, it is possible that the primary enclosure of the hill by a timber fence line dates to this phase.

Around the middle of the 4th century BC, when the first earthwork rampart was constructed on the north and south side of the hill, the organisation of the internal settlement was modified. The gully-defined roundhouses were replaced by a large post-built roundhouse which was rebuilt on the same spot at least four times. These houses do not show up at all on the geophysical survey, so it is difficult to estimate their density within the rest of the hillfort. However, other post-built structures were identified in some of the smaller trenches scattered around the interior, suggesting the hillfort was intensively occupied at this time.

This arrangement may have lasted for one or two centuries, but by the 1st century BC the interior of the hillfort underwent a fundamental change. Occupation on the south side of the hillfort ceased and it is possible that the hillfort was abandoned as a settlement by this time. An oval, ditched-defined enclosure, 45 m by 35 m, was subsequently constructed in the south-east corner of the hillfort. It is possible that this was the enclosed residence of an important family, suggested by the recovery of a colourless glass bead with a unique yellow glass spiral decoration from the enclosure ditch (Foulds 2014). Even if settlement continued in other areas of the hillfort interior as yet unexcavated, the construction of an enclosed space for occupation suggests a dramatic social change in the way some individuals distinguished themselves from the broader community. The enclosure ditch was deliberately backfilled at some point in the 1st century AD, possibly around the time of the Roman conquest.

After a short hiatus, in the late 1st or early 2nd century AD, a midden began to accumulate over the remains of the Iron Age roundhouses on the southern side of the hillfort. Although contemporary settlement structures have yet to be identified, clearly the hillfort was once again occupied at this time. The Romano-British ceramic assemblage suggests this occupation continued into the middle of the 4th century and it seems to have been associated with small-scale iron working. Interestingly, this occupation appears contemporaneous with that of Ely Roman villa, located c. 1 km to the east of the hillfort. The villa was abandoned in the mid to late 4th century (Peter Webster, pers. comm.) and it is intriguing that the hillfort rampart appears to be refurbished at some point after this date. While Wales was largely aceramic from the 5th to the 10th centuries, were Caerau to have been a major centre during the immediate post-Roman period (after c. AD 410), we might expect to see some continental imports, especially of fineware and amphorae. These are represented at the nearby Early Medieval hillfort at Dinas Powys (Alcock 1966), but are, so far, missing from Caerau. However, a pear-shaped pit, interpreted as a corn dryer, excavated on the southeastern side of the hillfort produced a radiocarbon date of cal. AD 428-637 (95%), suggesting the hillfort was occupied during this period.

The agricultural economy

Over the course of the excavations we have implemented an intensive sampling strategy of all archaeological deposits in order to recover palaeo-environmental remains. Over 440 samples have now been taken and floated. The resulting flots and coarse residues are still undergoing assessment by Wendy Carruthers, but such an intensive approach has rarely been undertaken at any hillfort in Wales and has the potential to tell us much about the agricultural economy of the site.

Initial results from Iron Age contexts indicate that the major cultivated crops were emmer and spelt wheat and barley. Chaff is scarce, but when processing waste has been identified it suggests that crops were being brought to the site already partially processed as spikelets, or semi-clean grain for storage (Wendy Carruthers, pers. comm.). The highest concentrations of charred cereal grains appear to derive from cut features located on the northern side of hillfort rather than adjacent to the occupation areas on the southern side. A number of these grain-rich features are likely to be part of four-post storage buildings and there is the tantalising possibility that the interior of the hillfort may have been divided into an area for occupation in the south and storage in the north, although more extensive excavation is required to confirm this pattern.

Although more than 6000 animal bones have so far been analysed, preservation is generally poor and only around 10% of these are identifiable to species (Jones 2014; Madgwick and Hodkinson 2015). Provisional patterns suggest an Iron Age faunal economy dominated by cattle (57%), with sheep representing only 25% of the assemblage and pig 18%. These proportions are unusual in comparison to other Iron Age hillfort faunal assemblages in southern Britain, where sheep tend to dominate. However, they are consistent with the findings from recent excavations at nearby Llanmelin Hillfort, Gwent (Jones 2013), and relatively high proportions of pig were also identified at Castle Ditches, Llancarfan (Hogg 1976). Only very few specimens from Caerau are complete enough to provide ageing data, but where this has been possible it appears to suggest animals in wide-ranging age categories. Although only tentative conclusions can be drawn from the small number of available animal age profiles, the presence of mature sheep could be indicative of wool production, and a single foetal sheep specimen may also suggest onsite breeding. The presence of mature and juvenile cows also hints at secondary product production, potentially milking, although with the current small dataset this is not possible to demonstrate convincingly.

The evidence suggests that the Iron Age occupants of the hillfort practised a mixed-farming regime with a focus on the cultivation of wheat and barley and keeping of cattle. The scarcity of chaff and comparative abundance of grains suggest that the earlier stages of crop processing, such as threshing and winnowing, were undertaken elsewhere prior to bulk storage at the hillfort. It is difficult, however, to assess the relative importance of arable and livestock within the farming system at Caerau. Van der Veen and Jones (2007) have argued that the presence of large quantities of grain on sites indicate large-scale production and consumption. The charred grain assemblage from Caerau is small, if compared to hillforts in southern England such as Danebury (Jones 1984), and in these terms suggests arable cultivation was small-scale. However, the majority of the crop evidence from hillforts like Danebury in southern England comes from the fillings of abandoned grain storage pits which act as artefact and ecofact 'traps' at these sites. Such pits are neither present at Caerau, nor throughout Wales, and their absence may bias against the recovery of charred grain assemblages.

Production and exchange

While intensive occupation of the hillfort in the Iron Age can be demonstrated, the material assemblage is meagre. Pottery, for instance, was clearly not widely made or used in the earlier parts of the Iron Age at Caerau (7th to 3rd centuries BC) and only 37 sherds have been recovered dating to this period. Their forms and decoration, which include carinated shoulders and fingertip impressions, can be paralleled at sites across southeast Wales and into southern England, but they are all made from locally available raw materials. Later Iron Age (2nd to 1st centuries BC) ceramics characterised by simple, burnished, handmade jars with beaded or short everted rims, are also present in small quantities (58 sherds). Again, they could all have been made locally, but several sherds were decorated in the 'Glastonbury' or 'South Western' style, which has a wide distribution along the Severn Estuary in southeast Wales and southwestern England. It is not correct to describe the Iron Age at Caerau or in southeast Wales as aceramic, but clearly pottery was not common, and a variety of wooden, leather and horn vessels must have served the role ceramic containers played in other parts of Britain. That the scarcity of earlier Iron Age ceramics is not a bias of recovery or preservation is evidenced by the large quantity of sherds (c. 1300) recovered from Caerau dating to the 1st century AD, and also from the Neolithic enclosure ditches. Clearly at these times pottery did form an important element of the domestic assemblage and provided a means for the community, family or individual to express themselves.

Other material culture, such as worked bone, metal or fired clay, are poorly represented at Caerau. Three spindle whorls (one of lead, one of fired clay and one of bone) have been recovered and attest to the production of textiles, but these were all from contexts of the 1st to 2nd centuries AD. The most common objects are those of stone. A range of hammerstones, rubbers, slingstones and querns (both saddle and rotary) have been recovered. The querns attest to processing of cereals, and slingstones are a common find on Iron Age hillforts throughout Britain. The hammerstones and rubbers must have had a variety of functions from dressing skins to polishing and sharpening metal tools.

The material assemblage, as with many sites in Glamorgan, is as notable for what is absent as for what is present. Few metal objects survive, except for small fragments of iron and iron slag, probably because iron was recycled (Crew 1995), and the range of domestic equipment made from organic materials, such as baskets and wooden and bone tools, must have been extensive. Personal ornaments at Caerau are also rare, but several fragments of shale bracelets have been recovered,

one of which was broken during manufacture, which suggests production on site. The shale has not yet been provenanced, but the raw material is available along the southern Glamorgan coastline (Neville George 1982: 118-119). A single glass bead, probably manufactured at Meare, Somerset (southwestern England) in the 2nd century BC has also been recovered (Foulds 2014).

Emerging narratives

How should we understand the social implications of the construction and occupation of Caerau Hillfort, and in what sense has our work contributed to answering some of the questions about hillfort chronology, economy and function in Glamorgan? As we have outlined, the sequence and dates for the construction, use and abandonment of hillforts in Glamorgan is very poorly understood. On current ceramic evidence, the vast majority of the excavated smaller hillforts appear to belong to the Late Iron Age (Davis 2017), but the evidence from Caerau suggests that some of the big hillforts in the region may have been constructed and occupied as early as the 7th or 6th century BC. This is interesting, as very few settlement sites have been identified which belong to this period (the Late Bronze Age/Early Iron Age transition), most likely because settlement at this time was unenclosed and dispersed. Field systems or other landscape boundaries are also unknown at this time and our evidence for people is largely restricted to funerary monuments, such as cairns and barrows, and bronze metalwork hoards, of which there are many. This situation is suggestive of relatively mobile communities in which the exchange and consumption of material culture (particularly bronze) played an important role in the negotiation of social relationships and access to land.

The hoarding of bronze metalwork around Caerau Hillfort is particularly intense, with 11 Ewart Park or Llyn Fawr hoards, or single finds (dating from the 10th to 7th centuries BC) known within 5 km (Figure 8). Hoarding activity has often been interpreted as ritual deposition of material acquired in gift exchange (Barrett and Needham 1988). As a result, the exchange and deposition of bronze may have possessed considerable symbolic value as a means to develop and maintain social relationships between communities (Sharples 2010). The hoarding of bronze appears to abruptly cease around 600 BC across south Wales. A variety of reasons for this has been offered, from a crisis in the supply of copper and tin to the conscious rejection of bronze for iron (see especially Needham 2007). Whatever the reason, it is clear that the social value of bronze was undermined, and groups sought new ways to build relationships. The construction of hillforts such as Caerau can be seen as a response to the bronze crisis, in which rampart construction events became the key arena for the negotiation of relationships between



Figure 8: Late Bronze Age metalwork finds recovered from around Caerau Hillfort.

groups (Sharples 2010). The initial boundary enclosing Caerau was a timber fence. This would have required considerable felling, preparation and transportation of timber, along with significant resources of food to sustain the construction team. Involvement in this exercise provided a means for creating new relationships and alliances between groups through the acquisition and control of the timber and food resources, and the provision of labour.

The initial creation of Caerau's boundary was an important act to establish social cohesion, but it was also an obvious claim to the control of land and provided a place where political power and social issues could be negotiated. Initially several houses contained within penannular ring ditches were built within the interior. These presumably represent the centralisation of households who had previously been dispersed throughout the surrounding countryside. It is interesting that these houses were contained within gullies. Such features are usually interpreted as drainage features (Harding 2009) but given that later roundhouses at Caerau did not possess them suggests that they may have had a social rather than a functional purpose (see Davis 2013; Davies 2017). If we consider gullies as a form of enclosure, then placing a house within one could be interpreted as an attempt to delimit space, and by implication a socially, independent unit within the hillfort. In this sense the rural settlement and social pattern had been translocated to Caerau. Such a situation has been observed in the early life of other hillforts throughout Britain and Europe (see Davis 2019; Fernandez-Gotz 2014).

In the Middle Iron Age (c. 350 BC) the ramparts at Caerau were significantly aggrandised and the internal organisation of the settlement was modified. The gully-defined roundhouses were replaced by post-built structures, and storage buildings may have filled much of the northern area of the interior at this time. The absence of gullies surrounding roundhouses may have been a conscious attempt by the authority controlling the hillfort to break down the social independence of households living at Caerau. Although pottery styles suggest the community had knowledge of a broader Iron Age world in western Britain, it was essentially self-sufficient. There is little evidence of marked social distinctions between households living within the hillfort, suggesting decisions may have been taken at a communal level. The power of this community was presumably derived from agricultural production, the control of land, and the centralised storage of agricultural surplus.

At the end of the 1st millennium BC the social system which produced hillforts like Caerau appears to have been in decline. The emergence of large numbers of small enclosures in the landscape surrounding Caerau suggests that households had moved back into the countryside and the hillfort was itself occupied by one of these small enclosed farmsteads. The creation of field systems appears to coincide with the emergence of these small enclosures, which could be interpreted as an attempt by individuals to claim ownership of previously communal land and resources. It is noticeable that this period also sees the increase in the production, exchange and deposition of all forms of material culture, particularly those associated with individual status, such as personal ornaments and decorated ceramics. The control of the resources required for the production of such material, as well as the exchange networks to acquire it, would be a source of power for some individuals with the potential to undermine the communal system of hillforts.

Although Glamorgan lacks the large material assemblages, the tentative narrative which is emerging from our work at Caerau Hillfort appears to suggest that the development of hillforts in the region shares remarkable similarities with that proposed for Wessex (Cunliffe 2006; Sharples 2010). This sees hillforts emerging in the Early Iron Age, possibly as a response to the breakdown of Bronze Age exchange relations. In the Middle Iron Age a few were aggrandised and occupied by large populations, before most were abandoned in the 1st century BC and the surrounding countryside repopulated with small, enclosed, settlements.

Cunliffe placed Glamorgan at the interface between his 'Central Southern' and 'South-Western' socio-economic zones in Britain (2010: figure 21.2). Interestingly, the larger, more material-rich hillforts, like Caerau, cluster in the east of Glamorgan, while the smaller sites are more densely distributed in the west of the region. The larger hillforts apparently have more in common with the hillforts of central and southern England and the smaller hillforts are more similar to those found in Dyfed. Where the boundary between the two actually lies is not clear and it is probably best to consider Glamorgan as a frontier zone between two socio-economic and settlement systems which merge imperceptibly into one another.

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No.	Name		Northing	Site Type	Internal Area (Ha)	Excava- ted?	Area Excavated (m ²)	References
1	Beech Court Farm, Ewenny	290472	176558	Inland Promontory Fort	0,78	Yes	Unknown	Yates 2002
2	Bishopston Valley	256930	187800	Inland Promontory Fort	0,1	Yes	270	Williams 1940
3	Blue Pool Bay	240780	192880	Coastal Promontory Fort	0,07	No		
4	Bonvilston Gaer	306350	174740	Hillfort	1	No		
5	Buarth y Gaer	276550	193600	Hillfort	1,1	No		
6	Burry Holms	239880	192580	Coastal Promontory Fort	1,2	Yes	20	Hague 1978
7	Cae Summerhouse Camp	286390	177980	Hillfort	0,9	Yes	Unknown	Davies 1966b
8	Caer Blaen-y-Cwm, Margam	283330	188070	Inland Promontory Fort	0,1	No		
9	Caer Dynnaf	298350	174250	Hillfort	3,8	Yes	80	Davies 1966a; 1967a; 1967b
10	Caerau Hillfort, Ely	313370	174980	Hillfort	5,1	Yes	1.344	
11	Caerau, Llantrisant	306450	183200	Hillfort	3,6	No		
12	Castell Moel	305390	173430	Hillfort	0,8	No		
13	Castell Morlais	305000	209500	Hillfort	0,8	No		
14	Castle Ditches, Llancarfan	305910	170030	Hillfort	4,2	Yes	250	Hogg 1976
15	Castle Ditches, Llantwit Major	296020	167420	Coastal Promontory Fort	2,5	No		
16	Castle Field Camp	320440	184020	Hillfort	0,41	Yes	39	Wellicome and Connolly 2011
17	Castle Wood	304460	168230	Inland Promontory Fort	0,48	Yes	30	Evans 2001
18	Caswell	258800	187560	Coastal Promontory Fort	0,2	No		
19	Chapel Hill Camp, Merthyr Mawr House	288870	178060	Inland Promontory Fort	0,4	No		
20	Cil Ifor Top	250580	192340	Hillfort	2,9	Yes	58	Morgan 1911
21	Cliff House Enclosure I	304880	168990	Inland Promontory Fort	0,16	No		
22	Cliff House Enclosure II	304900	169080	Inland Promontory Fort	0,34	No		
23	Coed Llancadle	303060	168330	Inland Promontory Fort	0,27	No		
24	Coed-y-Mwstwr	294340	180990	Hillfort	2,5	No		
25	Craig Ruperra	322300	186700	Hillfort	1,1	No		
26	Craig Tan-y-Lan	295860	179580	Inland Promontory Fort	1,29	No		
27	Craig-y-Dinas, Hirwaun	291500	208100	Inland Promontory Fort	2,67	No		
28	Crawley Rocks	251870	187960	Coastal Promontory Fort	0,1	No		
29	Cwm Bach	289720	171750	Coastal Promontory Fort	0,3	No		
30	Cwm Cewydd	290840	170360	Inland Promontory Fort	0,31	No		
31	Cwm Col-Huw Enclosure	295679	167643	Inland Promontory Fort	0,53	No		
32	Danish Fort, Sully Island	316870	166970	Coastal Promontory Fort	0,4	No		
33	Dinas Powys (Cwm George)	314830	172240	Inland Promontory Fort	0,23	Yes	850	Alcock 1966
34	Dunraven	288700	172710	Coastal Promontory Fort	6,5	Yes	Unknown	Waring 1850
35	East Orchard Wood	302780	167850	Inland Promontory Fort	0,49	No		
36	Fleming's Down	288920	176820	Inland Promontory Fort	0,57	No		
37	Fort At Craig Ty Isaf	275650	193380	Inland Promontory Fort	0,2	No		
38	Gaer Fawr Lower Camp, Mynydd y Gaer	276570	194250	Inland Promontory Fort	3,4	No		
39	Graig Fawr	261850	206850	Hillfort	0,5	No		
40	Gwersyll	302700	204030	Inland Promontory Fort	0,2	No		
41	Half Moon Camp, Margam	279960	186730	Inland Promontory Fort	0,2	No		
42	Harding's Down East	243700	190640	Hillfort	0,6	No		
43	Harding's Down West	243430	190780	Inland Promontory Fort	0,6	Yes	194	Hogg 1973
44	Hen Gastell	255430	195770	Coastal Promontory Fort	0,1	No		
45	High Pennard	256770	186620	Coastal Promontory Fort	0,4	Yes	348	Williams 1941
46	Horse Cliff	243490	186040	Coastal Promontory Fort		No		
47	Howe Mill	300490	172130	Inland Promontory Fort	0,12	No		

Appendix 1: Glamorgan hillforts.

No.	Name	Easting	Northing	Site Type	Internal Area (Ha)	Excava- ted?	Area Excavated (m ²)	References
48	Ilston Prish Enclosure	254880	189210	Inland Promontory Fort	0,05	No		
49	Kenson Wood East	304670	168760	Inland Promontory Fort	0,12	No		
50	Kingsland	302198	171908	Hillfort	2,61	No		
51	Lewes Castle	241430	187330	Coastal Promontory Fort	0,3	No		
52	Llancadle Gorse A	304070	168510	Inland Promontory Fort	0,14	No		
53	Llancadle South A	303770	168070	Inland Promontory Fort	0,82	No		
54	Llandough Enclosure	299440	173540	Inland Promontory Fort	0,41	No		
55	Llanfythin	305470	171810	Inland Promontory Fort	0,44	No		
56	Llanrhidian	248300	192800	Coastal Promontory Fort	0,2	No		
57	Lle'r Gaer	305010	187030	Hillfort	0,5	No		
58	Llwynda-Ddu	310870	181000	Hillfort	0,51	No		
59	Llwynheiernin (Kilvey Hill)	267370	194720	Hillfort	0,25	Yes	Unknown	Morris 1968
60	Maendy Camp	295730	195510	Hillfort	0,9	Yes	Unknown	Williams 1902
61	Maiden Castle	250920	185480	Coastal Promontory Fort	0,6	No		
62	Mew Slade	242130	187460	Coastal Promontory Fort	0,3	No		
63	Mill Wood West	307010	168750	Inland Promontory Fort	0,94	No		
64	Mynydd Twmpathyddaer	284050	180370	Hillfort	1,2	No		
65	Mynydd y Gaer	297350	184950	Hillfort	1	No		
66	Mynydd-y-Castell Camp, Margam	280610	186550	Hillfort	2,7	No		
67	Nash Point	291480	168490	Coastal Promontory Fort	0,4	No		
68	North Hill Tor	245300	193810	Coastal Promontory Fort	0,4	No		
69	Norton	286760	175790	Inland Promontory Fort	0,68	No		
70	Old Castle	240920	187980	Coastal Promontory Fort	0,6	No		
71	Paviland Manor	244810	186110	Hillfort	0,3	No		
72	Pen y Castell, Cwmafan	278850	191740	Hillfort	0,2	No		
73	Pen y Castell, Kenfig Hill	284220	182700	Hillfort	0,4	No		
74	Pennard Pill	253820	188510	Coastal Promontory Fort	0,2	No		
75	Pen-y-Gaer	253650	195520	Hillfort	0,9	No		
76	Porthkerry Bulwarks	308130	166320	Coastal Promontory Fort	4,1	Yes	222	Davies 1973
77	Rills Valley West	302620	168380	Inland Promontory Fort	0,24	No		
78	Stembridge Camp	246960	191450	Inland Promontory Fort	0,2	No		
79	Summerhouse Camp	299470	166450	Coastal Promontory Fort	0,36	No		
80	Tair-Cross Down	291600	176560	Hillfort	1,21	No		
81	The Bulwark, Llanmadoc Hill	244320	192750	Hillfort	0,9	Yes	18	Davies 1964
82	The Knave	243180	186370	Coastal Promontory Fort	0,1	Yes	309	Williams 1939
83	Thurba Camp	242140	187040	Coastal Promontory Fort	0,3	No		
84	Tor-Gro	246120	193530	Coastal Promontory Fort	0,4	No		
85	Twmbarlwm	324217	192611	Hillfort	4,14	No		
86	Tyn-y-Coed, Southern Banks	314910	172020	Inland Promontory Fort	0,2	Yes	130	Lane and Seaman 2013
87	Ty'n-y-Waun Camp	294850	185270	Inland Promontory Fort	0,4	No		
88	Warren Hill, Briton Ferry	273650	194100	Hillfort	0,8	Yes	Unknown	
89	Whitmore Stairs	289850	171480	Coastal Promontory Fort	0,4	No		
90	Windmill Lane	299500	174100	Hillfort	0,42	No		Cunnington
91	Worm's Head	239350	187570	Coastal Promontory Fort	0,6	Yes	Unknown	1920
92	y Bwlwarcau	283880	188550	Hillfort	4,1	No		
93	y Bwlwarcau, Eastern Enclosure	285162	188668	Inland Promontory Fort	0,25	No		
94	Yellow Top, Paviland	243750	186000	Coastal Promontory Fort	0,1	No		

Appendix 1: Continued.