# EXCAVATIONS AT CAERAU HILLFORT, CARDIFF, SOUTH WALES, 2014

# An Interim Report



By O. Davis & N. Sha<u>rples</u>



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by O. Davis & N. Sharples

with contributions by M. Allen, P. Hodkinson & R. Madgewick





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Four weeks of excavation at Caerau Hillfort (NPRN 94517; SAM GM018) were carried out from 30 June to 25 July 2014 and involved the excavation of four trenches. This work is the second season (see Davis and Sharples 2014 for detailed discussion of the 2013 excavations) of an initial proposed first-stage evaluation to characterise the occupation of the hillfort. It is intended that this work will provide significant new information about the nature of Iron Age occupation and daily life within hillforts and establish a chronological framework for their occupation in south-east Wales. In addition, the investigation of Romano-British features at Caerau, some of potential 'invasion period' date, as well as Medieval features, will significantly add to our knowledge of these important periods in south-east Wales. Significantly, this year's excavations have revealed complex Neolithic activity on the hill with the identification of a possible causewayed enclosure defined by four lines of ditches. Such a discovery is of national significance - only five other causewayed enclosures are known in Wales, three in the Vale of Glamorgan (Norton, Corntown, Flemingston), one in Powys (Womaston) and one in Pembrokeshire (Banc Du). There are also four other 'possibles' known from aerial photography, Dryslwyn (Pembrokeshire), Marian Ffrith (Denbighshire), Weaver's Plantation (Powys), Little Norton (Vale of Glamorgan), but these are far from certain and could well be later prehistoric.

The project was directed by Dr Oliver Davis, Professor Niall Sharples and Dr David Wyatt of Cardiff University. The core project team consisted of 13 staff and 21 student archaeologists from Cardiff University. From the outset the Caerau excavations have linked nationally significant research with a broad mission to engage with the public, particularly the local communities of Caerau and Ely. The engagement strategy this year was again to raise the public's awareness of, and participation in, local heritage and archaeological fieldwork, providing educational opportunities and widen access to further education. The aim was to challenge stigmas and unfounded stereotypes ascribed to this part of Cardiff. The excavation also provided an excellent opportunity to involve 21 undergraduate students and numerous volunteers in knowledge transfer and community engagement activities that will provide them with significant employability skills.

The interior of the hillfort is privately owned and we are very grateful to the David family of Penylan Farm for permission to carry out the investigations. The wooded boundary earthworks of the hillfort are owned by Cardiff Council and our thanks are extended to Nicola Hutchinson and her colleagues at Cardiff Council Park Services for allowing us to extend Trench 3 and Trench 9 into this area. The area is a Scheduled Ancient Monument and Scheduled Monument Consent was granted by Cadw and we are grateful to Jon Berry and his colleagues at Cadw for their continuing support. Funding for the excavations was provided by the Arts and Humanities Research Council and Cardiff University.

This report summarises the results of the excavations and includes the stratigraphic sequences recorded in each of the four trenches, and a discussion of the excavation's significance for understanding hillforts and causewayed enclosures in south-east Wales. The animal bone report was undertaken by Dr Richard Madgwick and Ms Poppy Hodkinson, Cardiff University. A detailed analysis of the Caerau glass bead, recovered from Trench 4 during the 2013 excavations has been completed by Dr Elizabeth Foulds, Durham University. The other specialist finds and palaeo-environmental reports are currently in preparation and only brief summaries are provided here. All of the drawings were completed by Katie Sutton and Alice Bertini under the guidance of Ian Dennis and Kirsty Harding and we are extremely grateful to them all.

A selection of radiocarbon samples is currently pending an application to NERC in April 2015. Mike Allen, AEA, undertook further environmental assessment of the soils and we are pleased to include a summary of his second report in this interim. We would also like to thank Tim Young, Ian Dennis, Rob Thomas and Sue Virgo for their logistical support. Particular thanks should go to Dave Horton, Taela-May Hindle and all their colleagues at Action Caerau and Ely for their support and encouragement.

Finally, we would like to thank the numerous members of the local community who gave their time and demonstrated amazing passion and interest for their local heritage – none of this work would have been possible without their help and support. A summary of the community engagement activities is provided here.

# 2.1 Background of CAER Heritage Project

A summary of the CAER Heritage Project was provided in the 2013 interim report (Davis and Sharples 2014) and an analysis of the impact of the project has been undertaken (Ancarno et al. forthcoming). However, a more reflective summary is offered here.

Funded by the Arts and Humanities Research Council, the Caerau And Ely Rediscovering (CAER) Heritage Project is a collaborative project begun in 2011 between Cardiff University, Action in Caerau and Ely (a charity that runs the Community First Programme), local schools and local residents. The project is based around one of Cardiff's most important, but little-known, archaeological sites, Caerau Hillfort, and seeks to engage local people and school children in their shared history and challenge marginalisation.

In synergy with the practices of our partner community development organisation, Action in Caerau and Ely (ACE), the CAER Heritage team are committed to involving community members actively in the coproduction of research; valuing the contribution of all participants and partners in a mutually beneficial and reciprocal relationship. To date, the project has involved a myriad of non-HE partners (primary and secondary schools, community groups, youth workers, community development workers, local residents, the National Museum of Wales, Cardiff Story Museum, Glamorgan Archives, Cardiff Council etc.) alongside academics, undergraduates and postgraduates from a range of disciplines at Cardiff University (e.g. history, archaeology, social sciences).

Excavation at Caerau Hillfort has been an incredibly important aspect of the project's success, as it provides the focus for intensive and wide-ranging engagement with local communities. However, it should only be considered as a single part of a suite of activities and strategies employed to ensure meaningful co-production and mutual benefit between the wide range of academic, heritage sector and community partners involved. These include: community consultation and involvement in funding bids; the embedding of an academic member of staff (Oliver Davis) within ACE; the development of a close partnership with local secondary schools; the establishment of community-based adult learners courses; the creation of partnerships with a local youth centre and the National Museum of Wales to involve young people facing exclusion in creating a heritage themed art; community outreach opportunities for university students working closely alongside community participants.

The wide ranging nature of the project's impacts, partnerships and the embedding of academics and a professional artist within a community context resulted in multifarious, often 'organically' nurtured forms of engagement and co-production. This included the embedding of research co-production within the curricula of participating secondary schools with pupils undertaking geophysical surveys, archaeological excavation, creating museum exhibitions, performances and artwork, heritage trails and participating in a Timeteam programme in April 2012. The involvement of professional artist, Paul Evans, in all stages of the project proved a particularly successful strategy in this respect. Paul designed and facilitated creative forms of engagement with local heritage themes including large eco-graffiti art installations, puppet shows, heritage trail design and the creation of an Iron-Age themed mural with both local pupils in mainstream secondary education and young people excluded from school. Furthermore, the embedding of research within a series of free accredited adult-education courses in practical archaeology, in association with Cardiff Centre for Lifelong Learning, proved successful in engaging long term unemployed males in co-production - with clear benefits in terms of progression and confidence building for a number of individuals (Davis and Sharples 2014, 59-60)

The CAER Heritage Project has also sought to establish new social and professional partnerships thereby creating a new 'community of practice' (Hart et al. 2012). A crucial ingredient in this creation was the equal value placed on the contributions and 'knowledge base' of all partners, whether trained professional or community volunteers (Hart et al. 2012, 6). From the outset, community members, secondary schools and community development agencies have been integrated in the project's development. This includes the establishment of a 'Friends of Caerau' community group which continues to meet bi-monthly and organises litter picks, trail clearances and heritage events. It also includes the establishment of a special partnership with the management team at two local secondary schools, Glyn Derw and Michaelston Community College, who embedded aspects of local heritage into the curriculum.

Moreover, the CAER Heritage Project has grown from relatively humble beginnings in 2011 to become one of the key community projects of partner organisation ACE. ACE is a community based organisation which aims to support the social, economic and environmental regeneration of Ely and Caerau. ACE staff worked with the university staff, every step of the way, to plan the development of the CAER Heritage Project; providing access to a network of local community groups enabling the involvement of local residents in project activities. ACE facilitated further funding grant successes (e.g. HLF All Our Stories) and ensured that CAER was integrated into, and benefited from, 'Timeplace' (Ely and Caerau's timebank). ACE therefore brings incredible assets to the project, most notably the trust and networks that they had built up over years with local people and community groups, but also a deep knowledge of the area and an insightful understanding of the challenges faced by these communities.

An important aspect of the project has been to maintain participation in the research process by non-academics beyond the end of the excavation. Indeed, studies on coproduction and community partnership have identified the need for 'continuing involvement' and 'the sustained pursuit of a shared enterprise' (Boyle and Harris 2009, 16; Hart et al. 2012, 4). For the 2013 and 2014 excavations this was achieved through the ongoing involvement in the analysis of the finds recovered - for example adult learner's courses entitled 'Conserving Caerau's Finds' provided the opportunity for community members to conduct their own guided research into the artefacts derived from the excavation. They then produced posters which have been displayed at CAER events and incorporated into a published booklet on the excavations. Community participants have also been at the forefront of a 'roaming museum' - this has involved the presentation and display of artefacts recovered from the excavations at locations throughout Caerau and Ely and wider Cardiff. This has provided people with a 'hands-on' opportunity to engage with their heritage and, importantly, to engage with their fellow residents who have been involved in the project, helping to build confidence and encourage peerto-peer learning.

The impact of the work of the CAER Heritage Project was recognised in June 2014 when it was declared the overall winner out of 230 entries in the National Coordinating Centre for Public Engagement's (NCCPE) UK-wide 'Engage Competition', which celebrates public engagement projects.

# 2.2 Description of the site

Caerau Hillfort is situated at NGR ST13377489 and is a multivallate hillfort covering a total area, including the hillfort boundaries, of 88,400 m<sup>2</sup>. The hillfort occupies

the western tip of an extensive plateau, now cut through by the A4232, in western Cardiff (Figure 1). The northern and southern boundaries are defined by three banks and ditches, whereas the east side is defined by a single massive bank and ditch, which is penetrated by two inturned entrances; these enclose a triangular area of 51,000 m<sup>2</sup>. The parish church, St. Mary's (13th century), and a small ringwork, are located in the north-eastern corner of the hillfort and have resulted in a substantial modification of the earthworks. The entire area is a Scheduled Ancient Monument, apart from the church, which is a Grade II Listed Building. The OS 2nd edition map also shows a vicarage or small farmhouse to the south-west of the church, which is now largely destroyed (Figure 2).

The site is situated c. 70-80 m OD at the western end of a broad ridge of land that drops off steeply to the west, north and south. The highest point of the ridge is actually c. 1,800 m east of Caerau Hillfort on Cock Hill. To the south of the hillfort, a small stream (Bullcroft Brook) winds its way to Dinas Powys. To the north of the fort is a flat lowland plain leading to the banks of the river Ely. Land to the south-west is slightly steeper, and the remains of a possible prehistoric field system are evident here on Twyn Bwmbegan at NGR ST 1229 7417.

The earthwork boundaries defining the site are some of the largest and most complex in south Wales and a detailed analysis of the surviving structural remains is available in the 2013 interim report (Davis and Sharples 2014).

### 2.3 Geology of the site

The solid geology is Triassic in age and formed of Mercia Mudstone (New Red Sandstone). The geology is essentially arranged horizontally – the lower part of the hill is made up of undifferentiated Mercia Mudstone Group dominated by reddish claystones and siltstones (Keuper Marl), whilst the upper part is the Blue Anchor Formation, dominantly grey-green claystone and siltstones (Tea-green marls). The weathering of these Tea-green marls provides the sticky grey clays apparent within the western and northern areas of the hillfort. The top of the hill has a small, thin, capping of boulder clay deposited during the last glaciation and draped over the Blue Anchor Formation. The junction of this boulder clay and Blue Anchor Formation is the location of a spring line on the hilltop.



Fig. 1. Location map of Caerau Hillfort



Fig. 2. Ordnance Survey 2nd Edition map (c. 1900)

# 3. Previous Archaeological Work

# 3.1 Earthwork, LiDAR and geophysical surveys

A topographic earthwork survey of the hillfort was conducted in 1976 by the RCAHMW for their Glamorgan Inventory (RCAHMW 1976). Further archaeological investigation was not then conducted until 2011 when a LiDAR survey, commissioned by Cadw, RCAHMW and National Museum Wales, was undertaken as part of the St Fagans Historic Landscape Project led by Mark Redknap, National Museum Wales. Subsequently, in March 2012, a magnetometry and resistivity survey was undertaken within the interior of the hillfort (Young 2012) as part of a community engagement project organised by the CAER Heritage Project. Further geophysical survey was carried out over an approximate area of 50,000 m<sup>2</sup> using a fluxgate gradiometer by GSB Prospection Ltd in April 2012 as part of the Time Team investigations. All of these surveys were discussed in detail in the 2013 interim (Davis and Sharples 2014) and will not be repeated here.

### 3.2 Excavations

In April 2012 Channel Four's Time Team undertook a small archaeological evaluation of the hillfort (Wessex Archaeology 2013). Six small trenches were opened (Figure 3) and revealed evidence for a range of Iron Age, Romano-British and Medieval/post-Medieval activity on the hill. In particular, this included occupation and iron working activity.

In June and July 2013, the CAER Heritage Project opened three trenches directly overlying Time Team's trenches 3, 4 and 5, in order to recover a large assemblage of finds material to further date and characterise the identified features. The results of those excavations are described in detail in the 2013 interim report (Davis and Sharples 2014). Combined with the excavations in 2014, a total area of 1,130 m<sup>2</sup> has now been excavated within the interior of the hillfort and a further 30 m<sup>2</sup> across the hillfort boundaries. This represents a sample of 1.3 % of the entire monument.



Fig. 3. Location of all trenches (2012-2014)

# 4. Project Aims & Objectives

### 4.1 Research aims summary

The recent LiDAR and geophysical surveys, combined with the Time Team excavations, although of considerable research value, have provided us with only a very small dataset on which to base our interpretation of the site. Furthermore, the Time Team excavations were by their nature time restricted not allowing the full excavation or understanding of features and structures partially identified. This has left many unanswered questions concerning the nature, use and duration of activity at the site. No aspect of the medieval story of the hill has so far been explored by invasive or non-invasive methods.

#### 4.1.1 Research context

Strong regional variations in hillfort sizes have long been recognised in Wales and the Marches (Hogg 1972). Iron Age and Roman settlement within the old county of Glamorgan has been subject of a RCAHMW survey (1976) although Gwent has not. More recent surveys by the Glamorgan and Gwent Archaeological Trust (Evans 2001; 2002; Evans et al. 2006) have identified more than 130 hillforts within the region of south-east Wales and further defined their morphological diversity. However, it is one thing to be able to locate hillforts and describe their morphology, yet quite another to fix their construction, development and occupation through time.

Previous accounts have tended to see the hillforts of south-east Wales as late arrivals (Davies and Lynch 2000; Savory 1976) in contrast to Late Bronze Age beginnings in north and west Wales. Yet, too few have been excavated on a sufficient scale to support a credible picture or chronology for the region. Only Twyn-y-Gaer, in northern Gwent (Probert 1976) has seen large-area excavations of boundaries and interior, although the full report remains unpublished. Small-scale excavations have established local sequences and recovered finds assemblages at Llanmelin, Monmouthshire (Nash-Williams 1933), Sudbrook, Monmouthshire (Sell 2001), Lodge Wood Camp, Newport (Howell and Pollard 2000), Castle Ditches, Llancarfan (Hogg 1976) and Caer Dynnaf, Llanblethian (Davies 1967). Only eight radiocarbon dates from three hillforts in the region exist in the literature (Gwilt 2007, 298). This leaves a weak chronological framework, dependent upon comparative hillfort architecture and associated material culture, which needs to be addressed.

The lack of substantial assemblages of environmental remains from hillforts is also problematic and means that questions about Iron Age agricultural regimes – how the daily work schedule was arranged and how it varied with the seasonal cycle – are not clear. Work by Martin Bell on the Severn Levels (Bell et al. 2000) has identified temporary camps connected with seasonal movements of people and animals, but how these wetland sites relate to the dryland occupation of hillforts is not well understood.

Most of our knowledge of Iron Age daily life therefore comes from excavations at smaller, non-hillfort, settlements. Large area excavations at Mynydd Bychan (Savory 1954; 1955), Coed y Cymdda (Owen-John 1988), Whitton (Jarrett and Wrathmell 1981) and Cae Summerhouse (Davies 1966) have revealed coherent interior plans, although the latter remains unpublished. Yet the relationship of the occupation and use of these settlements with the occupation and use of hillforts is not clear. In particular, the construction of Late Iron Age rectilinear enclosures such as at Cae Summerhouse (Davies 1966), Whitton (Jarrett and Wrathmell 1981) and possibly Ely (Young 2001) hint at the emergence of a class of high-status settlement at a time in the first century AD when the continued use and elaboration of hillforts is not well understood. Some non-hillfort sites were continuously occupied from the Iron Age into the Roman period (e.g. Biglis; Robinson 1988, xi) and more than half of the excavated hillforts have produced some evidence for Romano-British activity (Gwilt 2007, 299-300) although this may have been due to reoccupation rather than continuous use.

The excavations at Caerau Hillfort therefore provide the opportunity to explore these issues through coproduced research with the community. In particular, an important chronological framework will be established and questions about the nature of Iron Age occupation and daily life addressed. In addition, the investigation of Romano-British features at Caerau, some of potential 'invasion period' date, will significantly add to our knowledge of this important time in south-east Wales. The subjugation of the Welsh tribes, particularly the Silures, took about thirty years in the face of stubborn resistance and is well documented by the Roman author Tacitus (Annales XII). These excavations will therefore allow for the examination of interesting questions about power relations, Roman control and native-Roman acculturation in this region during the first century AD.

The ringwork at Caerau is an oval bank and ditch enclosure, 52 m by 34 m, sited in the north-east corner of the hillfort. It is not historically documented but has been identified as a 'castle-ringwork' of early Norman date on typological grounds (Cathcart, King and Alcock 1969; Spurgeon 1987), an identification restated by the RCAHMW in their volume on the Early Castles of Glamorgan (1991, 86-9). As such it fits into a substantial and interesting group of such monuments in the southern Vale of Glamorgan (RCAHMW 1991, 31-46, figs 9-11). The presence of the adjacent church of St Mary's contributes to the identification and, on the basis that the church was originally a chapel of the bishops of Llandaf, the earthwork is suggested to have been an Episcopal castle (RCAHMW 1991, 87-9).

The only apparent dating evidence for the ringwork is a sherd of '12th century' pottery (RCAHMW 1991, 87) and recent work at Llanfor, Gwynedd has raised the possibility of a pre-Norman date for some such earthworks (Burke-Davies 2011). Confirmation of the date of the Caerau site and its Norman attribution would be a valuable exercise in itself. Geophysics might reveal evidence of timber or masonry structures comparable to those known from excavations at Penmaen, Pennard, Llantrithyd, all Glamorgan, and Rumney, Gwent (RCAHMW 1991, 43-6). The possibility of a gate tower in the entrance as known from Penmaen could also be a target for geophysics or excavation (Alcock 1966).

St Mary's church is set south-east from, and adjacent to, the ringwork. The church is first documented in the 13th century as a chapel of Llandaf, though it became a parish church after the Reformation (RCAHMW 1991, 86-9). The building includes elements of early 14th century and 16th century date. There is no evidence of a pre-Norman church on the site. Brook identified the church enclosure as nearly circular in its earliest 1841 Tithe plan (Brook This might support the idea of a pre-Norman 1992). foundation with a reported holy well - 'saint well' southwest of the church - though this suggestion is tentative. There is good evidence from both Cornwall and Wales that circularity is a feature of many pre-Norman churchyards though not all curvilinear churchyards are of this date (Brook 1992). In the absence of correlating evidence such as pre-Norman sculpture or a Welsh church dedication any suggestion of a pre-conquest origin must be regarded as tentative. The acquisition of dating evidence for the church or its enclosure would be desirable.

The identification of a Neolithic enclosure on the hill in 2014 was unexpected and is of considerable interest. The

vast majority of Neolithic causewayed enclosures are located in southern England and our knowledge of these has been significantly advanced in recent years through an intensive program of radiocarbon dating (Whittle et al. 2011). However, in Wales fewer than ten causewayed enclosures are known or suspected and our understanding of their dating and use is very limited. Small-scale excavations at Banc Du, Pembrokeshire, produced no cultural material (Darvill et al. 2007) while excavations by GGAT at Norton, Vale of Glamorgan, produced post-Medieval radiocarbon dates (Lewis and Huckfield 2009). Only excavations at Womaston, Powys, have produced cultural material in association with early Neolithic radiocarbon dates (Jones 2009), although the pottery assemblage was very small (14 sherds). Therefore, the dating of radiocarbon samples from Caerau, combined with the analysis of the pottery and flint assemblage will significantly enhance our understanding of these early Neolithic monuments in Wales.

#### 4.1.2 Overall research aims

At the start of the 2014 season the long term aims of this research were:

- To understand the development of a mulitvallate hillfort from the Late Bronze Age to Roman period in south-east Wales
- To understand the pattern of occupation and organisation of activities within the interior of a hillfort and how this changed over time
- To better understand the social and economic life of the inhabitants of the hillfort and the region
- To understand the significance of the Romano-British occupation of the hillfort
- To confirm the date of construction of the ringwork and the survival of internal features including a gatehouse
- To understand the chronological and structural relationship, if any, between the ringwork and St Mary's church
- To establish a chronological framework for the later prehistoric, Roman and Medieval activity on the site
- To understand how Caerau relates to the surrounding settlement landscape

These aims directly address three of the research themes identified in the Later Bronze Age and Iron Age Research Framework for the Archaeology of Wales (www2): Chronology, Settlement and land-use and Processes of change, and two in the Medieval Research Framework for the Archaeology of Wales (www3): Settlement and Land-use.

With the identification of the Neolithic activity, the overall aims will also now need to address the research themes identified in the Neolithic and Early Bronze Age Research Framework for the Archaeology of Wales (www4): The development, role and use of monuments and the Later Mesolithic to Early Neolithic transition. This would include:

- The analysis of palaeo-environmental remains to establish environmental context
- To establish a chronology for the construction, use and abandonment of the Neolithic enclosure
- To understand the nature and use of Neolithic material culture

# 4.2 Research objectives of 2014 excavations

In order to realise these overall aims there is a twostage research plan (see Davis and Sharples 2013 for full research plan and objectives). The excavations in 2013 and 2014 form part of Stage 1 designed to meet the following objective:

Objective: Further examine and characterise the features identified by the Time Team excavations (Wessex Archaeology 2013).

Six trenches were excavated by Time Team all within the interior of the hillfort (see Section 3.4). Due to time restraints, many features were not fully characterised, dated or were left partially or completely un-excavated. It was also considered that further features may become more apparent after a period of exposure to the elements. The principal identified issues to be resolved are:

Trench 1 – The ditch was not satisfactorily dated with the only chronological indicator being a possibly residual quern fragment.

Trench 2 – The features identified were interpreted as a four-post structure. A larger area could be opened here to ascertain whether this structure was correctly characterised.

Trench 3 – The excavations revealed the existence of a well-defined house but not enough was exposed to characterise and understand the construction, use and abandonment of the house. The discovery of Early Iron Age ceramics is very important and further work needs to be done to assess the extent of the activity of this date and its relationship to the use and occupation of the house.

Trench 4 – The area opened was not large enough to understand the gateway into the enclosure. The ditch terminals contained dateable ceramics and the full excavation of both terminals should provide sufficient material to accurately date the creation of this Late Iron Age or Early Roman enclosure.



Fig. 4. Location of 2014 trenches showing geophysical survey (Copyright GSB Prospection)

Trench 5 – The feature interpreted as a large enclosure ditch was not bottomed and so no dating material was recovered from the primary fills, although later Roman material (pottery) was recovered from the secondary fills).

Trench 6 – The area opened was too small to fully understand the nature of the metalworking activity.

In 2013, three of these locations were selected for largerscale trenching (Trenches 3, 4 and 5) in order to recover a large assemblage of finds material to date the features, combined with a program of radiocarbon dating of stratigraphic sequences to confirm chronological phases, and also to recover environmental remains.

This year (2014) a further four trenches were opened in an attempt to complete the evaluation (Trenches 3, 7, 8 and 9 – see Figure 4). The southwest corner of Trench 3 was re-opened to continue the excavation of a large post-built roundhouse, while Trench 7 was designed to examine five linear features (probably ditches) cutting across the western end of the hill. Trench 8 was planned to examine the feature identified by Time Team in Trench 1 further around its circuit and also to evaluate the survival of occupational material on the northern side of the hillfort. Trench 9 was designed to examine the northern hillfort inner boundary. A fifth trench was also intended to be opened this year - Trench 10 - to examine the hillfort boundaries on the eastern side of the hill. However, after cutting back vegetation in this area it was decided not to open this final trench during this season's work (see section 6).

# **5. Excavation Methodology**

All excavations were conducted in compliance with the standards described in the Institute for Archaeologist's (IfA) Standard and Guidance for Archaeological Excavations (www1), except where they are superseded by statements made in the research design (Davis and Sharples 2013).

Mechanical excavators were on-site for the removal and re-instatement of clearly identifiable topsoil and redeposited material. All machine-excavated trenches were carried out under archaeological supervision and ceased when in situ archaeology was revealed. Remaining invasive investigations were conducted by hand.

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# 5.1 Treatment of Finds

Finds were treated in accordance with the relevant guidance given by the IfA's Standard and Guidance for Archaeological Excavations (www1).

All artefacts were retained from excavated contexts, except features or deposits of undoubtedly modern date. In those circumstances sufficient artefacts were retained to elucidate the date and function of the feature or deposit. The excavated spoil was examined for artefacts and these were retained and recorded. Material of undoubtedly modern date from the spoil heaps was noted but not retained.

Conservation and post-excavation analysis of finds is currently being undertaken by the staff of Cardiff University and National Museum Wales. The landowner has generously agreed to donate all finds from the excavations to National Museum Wales.

# 5.2 Sampling strategy

#### 5.2.1 Topsoil sampling

The interior of the hillfort has been ploughed in the medieval and post-medieval periods which has resulted in an overlying deposit of topsoil and relict ploughsoil ranging in depth from 0.4 to 0.5 m (Wessex Archaeology 2013, 5). It was clear during the Time Team excavations that this overburden contained a mixed assemblage of unstratified ceramics and other small finds. Therefore, before mechanical excavation of this deposit, 1 x 1 m test pits were dug by hand to the top of surviving archaeology at a density of 1 test pit every 25 m2 in the location of each proposed trench except for Trench 3, which had been test-pitted in 2013. This has provided a 4 % sample of the artefacts contained within the overburden. Metal detectorists from Cardiff Scan Club were invited to scan the spoil heaps and a variety of corroded iron, copper alloy and lead artefacts were recovered.

### 5.2.2 Radiocarbon sampling

Radiocarbon dates will be obtained from suitable well contexted single entity samples (articulated animal and human bone, discrete and distinctive carbonised plant samples and carbonised residues from diagnostic and stratified ceramics). These are currently subject of an application to NERC.

#### 5.2.3 Environmental sampling

Bulk soil samples for plant macro fossils, small animal bones and other small artefacts were taken from appropriate well sealed and dated/datable archaeological contexts or features associated with clearly defined structures (see Appendix 3). Samples of between 40-60 litres were taken or 100% of smaller contexts. Samples were not taken from the intersection of features.

Bulk samples will be processed by standard flotation methods at St Fagans National History Museum in February and March 2015 as part of an Adult Learner's course for local people. The flot will be retained on a 0.5 mm mesh, with residues fractionated into 5.6 mm, 2 mm and 1 mm fractions and dried. Coarse fractions (>5.6 mm) will be sorted, weighed and discarded, finer residues will be retained until after analysis.

Flots will be assessed to define the presence and preservation of environmental material and to address the project aims and research questions. Assessment will be conducted under a x 10 - x 40 stereo-binocular microscope at Cardiff University and the presence of environmental material; charred remains quantified to record the preservation and nature of environmental material, e.g. charred plant remains, wood charcoal, small animal and mollusc remains.

# 5.3 On-site recording

The standard Cardiff University recording systems were used: all contexts and features were recorded using standard pro-forma context record sheets; a record of the full extent in plan of all archaeological deposits encountered were made (1:20); appropriate sections were drawn (1:10); the OD of all principal strata and features were indicated on appropriate plans and sections. Complex structured deposits were planned in greater detail (1:10 or even 1:5). A full photographic record was maintained.

# 6. Excavation Results

Four trenches (3, 7, 8 and 9) were opened within the hillfort (see Figure 4). Trench 3 revisited an area explored in 2012 and 2013 while trenches 7 and 8 evaluated the western and northern areas of the hillfort respectfully. Trench 9 explored the northern, inner, hillfort rampart. The excavation conditions were in general extremely dry and hot which baked the natural clay subsoil and made excavation difficult. Fortunately, a brief period of wet weather at the beginning and in the middle of the excavation allowed for the easier identification of archaeological features.

The entire hilltop has clearly been ploughed in the Medieval and Post-Medieval periods and this has largely destroyed archaeological contexts above the natural geology and resulted in a c. 0.3 m thick ploughsoil. The exception to this is in the immediate lee of the inner hillfort rampart where silty deposits, considered to be aeolian and colluvial in origin (see section 8.1), have blown and washed against the back of the rampart bank sealing some archaeological features. There are also a series of shallow periglacial features scattered across the site cut into the natural clay subsoil.

A machine was used to strip the overburden to the top of surviving archaeology over the area of Trenches 3, 7 and 8. Trench 9 was located in woodland and all excavation was by hand. The initial intention was to open 5 trenches (Trenches 3, 7, 8, 9 and 10), however, after stripping back vegetation over the area of Trench 10 it was decided not to open this trench. Trench 10 was intended to explore the hillfort ramparts on the eastern side of the hillfort (north of the eastern entrance), but the inner rampart was shown to still be a substantial earthwork here and test pits in this area (Figures 5 and 6) identified archaeological deposits immediately below the topsoil. An assessment of the proposed area for the trench concluded that the work would be difficult to complete in four weeks with the number of field staff available this year and it was decided to not open the trench.

All archaeological features were excavated by hand. Bulk soil samples for plant macro fossils, small animal bones and other small artefacts were taken from appropriate well sealed and dated/datable archaeological contexts or features associated with clearly defined structures. Samples of between 40-60 litres or 100% of smaller contexts were taken.

### 6.1 Trench 3

An area 15 m by 15 m was opened up by machine (Figures 7 and 8) directly overlying the south-west corner of Trench 3 excavated in 2013. The aim of revisiting this trench was to fully characterise the stratified deposits around the periphery of the hillfort. These demonstrated excellent preservation and indicated a historical sequence of boundary construction which is of considerable significance. Three sondages were cut through the deposits in 2013 which had built up against the back of the rampart, but there was insufficient time to fully explore the deposit in Sondage C where there appeared to be a midden deposit under the secondary rampart. The objectives were

- To fully characterise the midden deposits identified in Sondage C
- To examine and characterise the perceived 'gap' in the secondary rampart observed in the western half of the trench
- To fully expose and excavate any surviving floor surfaces of CS3 which may be sealed by the colluvial deposits building up against the rampart

In order to characterise the 'gap' in the rampart it was proposed that two cuttings of 1.5 m by 3 m should be extended from Trench 3 into the wooded area of the boundaries to the south, although in the end time only allowed for one (Sondage E).

After stripping by machine, all remaining backfill (3071) was removed by hand from features excavated in 2013 (Figure 9). A brief period of wet weather at the start of the dig and after the first week revealed a number of postholes in the northern half of the trench that had not been identified in 2013. These all cut the natural geology (3003/3175) which was a compact yellowy-orange clay. Two postholes (3306, 3314) were also noted at the base of Sondage B, which, when plotted on the overall plan suggested that the circular structure (CS3) was much larger than had been projected in 2013 and whose outer wall extended beyond the eastern limits of the trench. Therefore, a request to extend the trench by 1.5 m (east to west) and by 11 m (north to south) into the area previously opened in 2013 was granted by Cadw.

In the southern half of the trench there were a series of archaeological deposits running in parallel linear bands



Fig. 5. Cutting back vegetation across the eastern hillfort rampart



Fig. 6. Test pit 1, Trench 10, showing a laid surface of stones beneath the topsoil



Fig. 7. Stripping backfill from Trench 3

across the width of the trench. Four cuttings (Sondages A, B, C and D) were excavated through these deposits in 2013 to understand their nature, although excavation in Sondage C had stopped at the identification of the midden deposit. Sondages B, C and D were fully, or partially, exposed within Trench 3 in 2014. The excavation strategy decided was:

- To widen Sondage B to expose the outer wall of CS3
- To extend Sondage D to the southern edge of the trench in order to identify any surviving house floor deposits
- To excavate Sondage C to the natural geology

# 6.1.1 Sondage B

3180, 3181, 3182, 3192, 3194, 3196, 3198, 3215, 3217, 3219, 3248, 3301, 3302, 3306, 3307, 3308, 3309, 3311, 3312, 3313, 3314, 3315, 3316, 3317, 3319, 3323, 3324, 3330, 3331, 3335

This cutting was positioned in the centre of the trench in 2013, and was 10.7 m north to south by 1.6 m east to west. This year, it was widened to 2 m in order to identify the post-ring of CS3.

A number of postholes and other cut features were identified (3301, 3306, 3308, 3311, 3314, 3316, 3323, 3330) which form part of the structural remains of CS3 and are discussed below (see section 6.1.5.1). Postholes

3301, 3306, 3311, 3316, 3323 and 3330 were sealed by a metalled surface (3248, excavated as 3119 in 2013) and a layer of trample (3219). Posthole 3314 appeared to be sealed by the remnants of another, earlier, metalled surface (3319) not excavated in 2013.

In the area where the sondage was extended (to the west), the sequence of deposits could be seen to broadly match those identified in 2013 (Figure 10). The earliest deposit above the natural clay was a dark brown, clayeysilt (3198) which contained charcoal flecks and handmade pottery sherds. This is clearly a deposit derived from occupation, equivalent to 3164 from the 2013 excavations. This was overlain by a compact, greyishgreen, clay (3196, equivalent to 3163) which represents the primary hillfort rampart. A thin band of dark-brown, clay (3194, equivalent to 3121) overlay the primary rampart and is likely to be a turf horizon. This was in turn sealed by a greyish-green clay (3192, equivalent to 3134) which is presumably the secondary hillfort rampart (Figure 11). In the north-facing section this layer could be seen to decrease in thickness from east to west, but then increase in thickness at its western extent. It could be that this is a terminal end of the secondary rampart, or that the rampart construction may be quite patchy along its line (Figure 12).

Overlying the secondary rampart were a series of silty deposits likely to be aeolian and colluvial in origin. Sealing 3192 was a mid reddish-brown clayey silt (3180,

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Fig. 8. Post-excavation plan of Trench 3

Excavation Results



Fig. 9. General excavation shot of Trench 3, looking west



Fig. 10. Sondage B showing primary and secondary ramparts (green clay) and features cutting the natural

equivalent to 3162). This was cut by a circular posthole (3181), 0.50 m in diameter and 0.10 m in depth, which was filled by a greyish-green, clay (3182). The function of this shallow feature is not clear but it may be a posthole for a Medieval or post-Medieval field boundary. It was sealed by a dark reddish-brown clayey silt (3215, equivalent to 3105). In the middle of the sondage a thin dark brown layer of trample (3335) was noted at the junction between 3180 and 3215. Deposit 3215 was overlaid by a firm brownish-red silt (3217, equivalent to 3038).

#### 6.1.2 Sondage C

3176, 3178, 3186, 3188, 3190, 3203, 3204, 3226, 3227, 3253, 3254, 3275, 3277, 3292, 3291, 3293, 3303, 3304, 3310, 3318, 3334, 3336, 3338, 3339

This cutting, parallel with the western edge of the trench, was 11.80 m north to south by 2.00 m east to west (Figures 11 and 12). At the southern end of the sondage the earliest feature identified was a rectangular-shaped feature (3334) cutting the clay natural (3175). Not all of it was exposed as it ran into the southern trench edge. The sides and base of the feature were irregularlyshaped suggesting that it was likely to be a natural feature rather than of anthropogenic origin. It was filled by a dark reddish-brown sandy silt with frequent small subrounded and sub-angular stones (3318). Since the fill did not contain animal bone, charcoal or pottery, it suggested that the feature was likely to be either geological or the remains of a tree throw (Figure 13). It was sealed by a brownish-red, sandy-clay (3291) which is probably a dump of material to level the area for the construction of the hillfort rampart. Overlying this deposit was a compact, greyish-green, silty-clay (3292/3277) which is presumably the primary hillfort rampart. Sealing this was a dark-brown clayey-silt that contained very frequent animal bone, pottery and metal artefacts. This is clearly a midden deposit (excavated as 3137 in 2013). It was excavated in 0.10 m spits, the lower deposit being 3275 and the upper 3190 (Figure 14 and 15). The lower deposit (3275) contained more frequent black pottery sherds with bead rims characteristic of the 1st century AD, while the upper deposit (3190) contained more Roman Greywares. This suggests that this deposit was slowlyformed, perhaps over several centuries. It was overlain by a compact, greyish-green, clay (3178) which is likely to be the secondary hillfort rampart and must date to the late Roman or post-Roman period. Overlying this was a reddish-brown, compact, clay (3188) with yellow mottling which is presumably a naturally accumulating colluvium. This was in turn sealed by the ploughsoil (3174) and modern topsoil (3173)

In the centre of the cutting the earliest feature was a pit (3303) cutting the clay natural. This was oval in plan, 1.15 m by 1.55 m and 0.45 m in depth, with steeply-sloping

sides and a flat base. Its primary fill was a reddishbrown, clayey-silt (3310), containing charcoal flecks, presumably representing the natural accumulation of silty deposits. Overlying this was a dark greyish-brown, clayey-silt (3304) that contained charcoal flecks and sherds of hand-made, prehistoric pottery. The function of the pit is not clear, but it may have been for storage, before being deliberately back-filled. The pit was sealed by a brownish-grey deposit containing very frequent small sub-rounded and sub-angular stones (3293). This is clearly a deliberately laid metalled surface at the back of the primary hillfort rampart, equivalent to 3278 in Sondage D. It was not present in Sondage B, but a similar metalled surface was identified in Trench 8 (8017 - see below). 3293 was sealed by the midden (3275, 3190) and colluvium (3188). Interestingly, in the east-facing section a V-shaped feature (3338) with a flat base was noted cutting 3188 and 3190. This was not recognised in plan as its fill (3339) was very similar to 3188 in colour and texture. This must be a relatively recent feature, possibly defining a post-Medieval field boundary or plough-headland.

At the northern end of the cutting three further features were identified this year cutting the clay natural (3203, 3226, 3254). Feature 3203 was probably a posthole. It was circular in plan, 0.30 m in diameter and 0.18 m in depth, and filled by a reddish-brown, clayey-silt (3204). Adjacent to 3203 was a kidney-bean-shaped pit (3226), 0.60 m by 0.20 m and 0.10 m in depth, with vertical sides and a flat base. It was filled by a yellowish-brown, siltyclay (3227). The final feature was also probably a posthole (3254). This was circular in plan, 0.72 m in diameter and 0.23 m in depth, with vertical sides and a flat base. It was filled by a dark brown, sandy-clay (3253) that contained medium-sized (< 0.15 m) stones, presumably postpacking. It is not clear what structure(s) these features form part of, but it is likely that the remains of any such building exist to the west of the trench. Overlying these features, where the sondage had been slightly widened, was a metalled surface (3186) sealed by a layer of dark grey, clay trample (3336) and a light-grey, clay (3176).

#### 6.1.3 Sondage D

3212, 3214, 3234, 3232, 3236, 3268, 3278, 3279, 3280, 3281, 3295, 3321, 3322

In 2013 a small cutting (Sondage D), 3 m by 2.5 m, was located west of the centre of the trench in order to ascertain whether the ring gully of CS1 extended to the south. This year it was decided to extend this section to the southern trench edge in order to obtain both an east and west facing section through the deposits that had built up against the back of the hillfort rampart and expose any surviving floor surface of CS1 (Figures 11 and 12).

At the southern end of the cutting, the earliest features



Fig. 11. East facing sections through Sondages B, C and D and west facing section through Sondage E

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*Fig. 12.* North facing sections through Sondages *B*, *C* and *D* and south facing section through Sondage E



Fig. 13. Possible tree-throw, southern end of Sondage C



Fig. 14. Excavating the midden, Sondage C



Fig. 15. East-facing section showing midden (black) in Sondage C



Fig. 16. Postholes beneath the primary rampart, Sondage D

identified were a line of four postholes, cutting the clay natural (3175) and set up against the southern edge of the trench (Figure 16). These were only exposed on the final day of the excavation and so there was only time to excavate one of these features (3321). They are likely to be part of the post-ring wall of CS3 and are discussed below (see section 6.1.5.1).

The postholes were overlain by a compact, dark brown, sandy-clay (3279/3295) which contained flecks of charcoal and hand-made, prehistoric pottery. This deposit spread for about 4.50 m into the cutting from the southern trench edge, and is likely to be a slowly-formed deposit derived from occupation, equivalent to 3198 in Sondage B. Overlying this deposit at the southern end of the cutting was a very compact, grevish-green, clay (3232) which increased in thickness from north to south to a maximum of 0.40 m. This presumably represents the primary hillfort rampart. Overlying the northern extent of 3279/3295 was a dark reddish-grey deposit containing very frequent sub-angular and sub-rounded stones (3278 - not shown in section). This is clearly a deliberately laid metalled surface, possibly associated with the construction of the rampart (3232). A similar surface was identified in Sondage C (3293) and in Trench 8 (8017 - see section 6.3.1 below). This metalled surface was covered by a brownish-grey, sandy-clay (3236) which is probably a trample layer. Accumulating over this layer of trample (3236) and against the rampart (3232) was a series of silty deposits. The earliest was a pale reddishyellow clayey-silt (3234) which was in turn sealed by a reddish-brown, clayey-silt (3214). These are equivalent to 3180 and 3217 from Sondage B.

At the northern end of the sondage the earliest feature identified was a large pit (3280). This was irregularlyshaped in plan and 1.70 m in length (north to south). It was only partially exposed as it extended right across the width of the cutting (Figure 17). The base was flat, but the sides were slightly undercut. It was filled by a red, silty-sand (3281) which contained charcoal flecks. It is possible that this feature is geological, or the remains of a tree throw, but the regularity of the sides and base suggest an anthropogenic origin and the most logical interpretation is that this is a quarry pit to win clay for rampart, or house construction. It was overlain by a dark grey-brown cobbled surface (3268) of sub-rounded and sub-angular small pebbles, up to 0.10 m in size, contained within a sandy clay matrix (Figure 18). This deposit was spread 2.00 m east to west and 4.00 m north to south. At its northern extent it appears to have slumped into pit 3280. This metalled surface is equivalent to 3119 in Sondage B and 3130 in Sondage D suggesting it is a pathway running east to west across the trench, likely post-dating metalled surface 3278. Above this layer was a greyish-brown silty-clay (3212) containing charcoal, wheel thrown pottery sherds and a small fragment of shale bracelet (SF08). Presumably this represents a layer



Fig. 17. Quarry pit, Sondage D



Fig. 18. Metalled surface, Sondage D, looking south

of trample from people walking over the metalled surface in the Roman or post-Roman period. This trample layer was sealed by a relict ploughsoil (3174) and modern topsoil (3173).

No evidence of a floor surface for CS3 was identified. The most likely explanation for this is that it has been destroyed by the digging of pit 3280 and the construction and use of the metalled surface 3278.

### 6.1.4 Sondage E

3173, 3174, 3175, 3290, 3294, 3326, 3327, 3328, 3329

An area 1.5 m by 3.0 m was opened beyond the southern edge of the trench in order to further elucidate the construction of the inner hillfort rampart on the southern side of the site, and to recover dating material (see below). The earliest deposit identified above the natural clay (3175/3003) was a dark brown, clayey-silt (3294), which contained charcoal flecks, a fragment of shale bracelet (SF23), and an articulated right cow forelimb (radius and ulna) (Figure 19). This is clearly a slowly formed deposit derived from occupation, equivalent to 3128 (Sondage A) and 3164/3195 (Sondage B), and pre-dating the construction of the hillfort rampart. The articulated bone group should give an informative radiocarbon date from this layer. Within this layer was a lens of friable, green-grey, clay (3329) which contained very occasional flecks of charcoal. Sealing 3294 was a greenish-brown, compact, clay (3328), extending 2.50 m from the northern edge of the sondage. This is presumably the primary hillfort rampart, equivalent to 3196 in sondage B. Above 3328 was a narrow band, up to 0.10 m thick, of compact reddish-brown silty clay (3327) also observed in Sondage B (3194). This is clearly a soil horizon forming above the primary rampart suggesting a period of stabilisation and turf formation. On top of this layer was a very compacted deposit of greenish-grey clay (3290) equivalent to 3192 in Sondage B. This represents the secondary hillfort rampart (Figures 11 and 12).

Overlying this layer was a reddy-orange, silty deposit (3326) likely to be aeolian and colluvial in origin, which had accumulated against the back of, and over the top of, the secondary hillfort rampart (equivalent to 3180 in Sondage B). This layer was in turn overlaid by the modern subsoil (3273) and topsoil (3325).

### 6.1.5 Circular structures

The remains of at least four circular structures (CS1-4), presumably Iron Age roundhouses, were exposed in Trench 3 in 2013. The surviving structural evidence suggests that two basic constructional methods were employed: CS3 and 4 were post-built structures (recognisable from the ring of postholes that represents the wall of the building), while CS1 and 2 were stake-built structures (identified by the presence of external drainage gullies). The stratigraphy of the circular structures could be broken into two blocks which are listed below:

Phase 1 Ring gully (stake-built) houses Phase 2 Post-built houses

The objective this year was to more fully explore CS3. This was defined by an arc of six postholes (3073, 3084, 3088, 3110, 3132, 3141) which represent the northeastern section of the circular structure (CS3), and which suggested a building around 9.2 m in diameter (see Davis and Sharples 2014, figure 10).

#### 6.1.5.1 CS3

3165, 3201, 3202, 3207, 3208, 3209, 3210, 3213, 3222, 3223, 3237, 3238, 3251, 3252, 3263, 3264, 3269, 3270, 3271, 3272, 3284, 3285, 3288, 3289, 3301, 3302, 3306, 3307, 3308, 3309, 3311, 3312, 3313, 3314, 3315, 3316, 3317, 3317, 3321, 3322, 3323, 3324, 3337, 3338

A further ten postholes were identified (3210, 3251, 3263, 3269, 3271, 3306, 3314, 3321, 3323, 3337) which form part of the structure of CS3 (Figure 20). The structural remains of the western and southern areas of the house were not identified as these areas remained unexcavated. Unfortunately a preserved in situ house floor was not identified (see discussion in Sondage B and D sections above) and is likely to have been largely destroyed, although surviving remains may still exist in the unexcavated areas of the trench.

In the northern area of CS3, to the west of the arc of postholes identified in 2013, was a complex of four postholes arranged in a line, north to south (3210, 3263, 3269, 3271). The earliest feature was posthole 3269. This was oval in plan, 0.70 m by 0.47 m and 0.10 m deep, with steeply-sloping sides and a flat base. It was filled by a mid-brown, friable, clayey-silt (3270) which contained a small sherd of hand-made, probably prehistoric, pottery. Cutting this feature was another posthole (3263) which was circular in plan 0.47 m in diameter and 0.14 m in depth, with shallow-sloping sides. It was filled by a dark brown silty-clay (3264) which contained frequent flecks of charcoal. This feature was in turn cut by another posthole (3210). This was circular in plan, 0.50 m in diameter and 0.30 m in depth, with steeply sloping sides leading to a flat base. Its basal fill was a deposit of medium-sized stones (<0.10 m in size) which probably represents post-packing (3209). Sealing this was a greyish-brown, friable, clayey-silt (3208) which contained occasional charcoal flecks. Overlying this was a greyish-green, silty-clay (3213) which was in turn sealed by a greyish-brown, clayey-silt (3207). To the south of these three features was a fourth posthole (3271). This was circular in plan, 0.33 m in diameter and 0.23 m in depth, with almost vertical sides and a flat base. It was



Fig. 19. Articulated cattle bones beneath primary rampart, Sondage E

filled by a mid-brown, friable, clayey-silt (3272) which contained six sherds of hand-made, prehistoric, pottery. The simplest interpretation for this line of intercutting postholes (3210, 3263, 3269) is that they either represent successive repairs to the house wall, or they demarcate an entrance into the house (see below).

To the east of this line was posthole 3251. This was roughly circular in shape, 0.30 m in diameter and 0.10 m in depth, with gently sloping sides and a convex base. It was filled by a brown, silty-clay (3252).

To the south of the curve of postholes identified in 2013, five other postholes could be traced continuing this arc (3306, 3314, 3321, 3323, 3337). Located to the south of posthole 3132 was feature 3337. This was oval in plan, 0.35 m by 0.23 m and 0.30 m deep, with steeply sloping sides and a convex base. It was filled by a reddish-brown, sandy-clay (3338). Posthole 3323 was circular in plan, 0.25 m in diameter and 0.21 m in depth, with steeplysloping sides and a flat base and filled by a red-brown silty-sand (3324). Posthole 3306 was oval in plan, 0.59 m by 0.35 m and 0.18 m deep. It had shallow sloping sides leading to a flat base and was filled by a loose, yellowy, silty-clay (3307). Posthole 3314 was circular in plan, 0.46 m in diameter and 0.30 m deep with steeply sloping sides and a convex base. It was filled by a dark brown, silty-clay (3315).

Approximately 4.00 m west of posthole 3314 was a line of four features. These were identified at the base of Sondage D on the final day of the excavation and so there was only time for one to be excavated (3321). This was oval in plan, 1.10 m by 0.70 m and 0.30 m in depth. It had steep sides and a flat base and was filled by a reddishbrown sand (3322) which contained frequent flecks of charcoal. It is likely that this line of features represents the continuation of the wall of CS3. Therefore, it is clear that in plan CS3 is much larger than originally thought, up to 11.5 m in diameter (Figure 21). Houses of this size are rare and those that have been identified usually date to the Late Bronze Age-Iron Age transition (Sharples 2010). Crucially, posthole 3321 was located below the inner hillfort rampart which suggests occupation before the hilltop was entirely enclosed (see section 9 for more discussion).

The location of the entrance into the house is not clear. The entrance may face to the north – the cluster of six postholes (3141, 3210, 3251, 3263, 3269, 3271) could conceivably define a threshold into the house. Alternatively, two postholes (3301, 3311) set 1.0 m east of postholes 3132 and 3337 on the eastern side of the house were originally considered to represent a porch entrance. However, it is clear that they are actually part of an arc of eight postholes (3165, 3201, 3222, 3237, 3284, 3301, 3308, 3311) all set around 1.00 m from the house wall. This may represent an outer structural ring of CS3. The northern-most posthole identified was 3284. This was

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Fig. 20. CS3 posthole sections



Fig. 21. Plan of CS3

circular in plan, 0.28 m in diameter and 0.07 m deep, with shallow-sloping sides and a convex base. It was filled by a yellow-brown, silty clay (3285). To the east of this was posthole 3237. This was also circular in plan, 0.20 m in diameter and 0.27 m in depth, with steeply-sloping sides, and it was filled by a light brown sandy silt (3238). Both of these postholes cut through the browny-red clay fill (3288) of an irregular-shaped feature (3289) which is likely to be natural (periglacial) in origin. Posthole 3222 was circular in plan, 0.20 m in diameter and 0.25 m in depth. It was filled by a greyish-brown, clayeysilt which contained occasional charcoal flecks (3223). Posthole 3201 was oval in plan, 0.70 m by 0.49 m and 0.27 m in depth, with steeply sloping sides. It was filled by a dark brown, silty clay that contained several subangular post packing stones, up to 0.10 m in size (3202). Posthole 3311 was oval in plan, 0.40 m by 0.20 m and 0.45 m deep, with steeply sloping sides and a flat base. It was filled with a dark brown sandy silt that contained some charcoal flecks (3312) and sub-angular packing stones (3313). Directly to the south was posthole 3301. This was circular in plan, 0.38 m in diameter and 0.28 m deep with steeply-sloping sides and a flat base. It was filled by a dark brown, sandy-silt (3302). Approximately 5.00 m to the south-west was posthole 3308. This was only partially exposed as it ran into the eastern edge of the trench, but is likely to be circular in plan, 0.40 m in diameter and 0.15 m in depth. It was filled by a dark brown silty-clay (3309). The final posthole in this arc was 3165 - this was excavated in 2013 at the base of Sondage B.

If this is accepted as an outer post-ring then this is a very substantial roundhouse, around 13.5 m in diameter, which would make it one of the largest ever identified in Wales (Figure 22). To confirm the size and nature of the structure, the entire ground-plan would need to be revealed by excavating the overlying deposits in the western and southern areas of the house.

#### 6.1.5.2 CS4

3259, 3260, 3261, 3262

To the north-west of CS3 and wholly contained within the area of CS2, but not running concentrically with the gully, were three postholes (3091, 3102, 3122) identified in 2013. These were arranged in an arc, possibly representing the southern portion of a circular structure (CS4), suggested to be 9.2 m in diameter. Two further postholes were identified this year (3259, 3261) which may be a continuation of this arc (Figure 23). Posthole 3261 was circular in plan, 0.17 m in diameter and 0.24 m deep, with steeply-sloping sides and a flat base. It was filled by a brown clayey-silt (3262) which contained occasional charcoal flecks. To the west of 3261 was posthole 3259. This was not fully exposed as it ran into the western trench edge. It was likely circular in plan, 0.25 m in diameter and 0.15 m in depth with gently-sloping sides and a convex base. It was filled by a brownish-grey, clayey-silt (3060).

If these are the continuation of the post-ring of CS4 then the house must be substantially larger than previously imagined with a diameter of up to 11.5 m. This would be similar to CS3.

#### 6.1.5.3 Other postholes and cut features

3245, 3246, 3249, 3250, 3257, 3258, 3282, 3283, 3286, 3287, 3316, 3317, 3330, 3331, 3305

A number of other postholes and features were identified cutting the clay natural in the northern part of the trench (3245, 3249, 3257, 3282, 3286, 3316, 3330) and may be related to CS1 and CS2 (Figure 24).

Posthole 3245 was identified in the north-western area of the trench, along the line of the projected gully of CS2, and may be related to that structure. It was roughly circular in plan, 0.38 m in diameter and 0.27 m in depth, with steep sides and a concave base. It was filled with a greyish-brown, clayey-silt (3246) that contained charcoal flecks and small angular stones.

In the north-eastern area of the trench were four postholes (3249, 3257, 3282, 3286) all within the area proposed for CS1 and they may be related to that structure. Posthole 3249 was oval in plan, 0.35 m by 0.26 m and 0.15 m in depth, with steeply sloping sides and a convex base. It was filled by a greyish-brown silty-clay (3250). Posthole 3257 was circular in plan, 0.49 m in diameter and 0.19 m in depth, with vertical sides and a flat base. It was filled by a yellowish-brown, clayey-silt (3258) in which were medium-sized packing stones (< 0.20 m in size) (3305). Posthole 3282 was circular in plan, but small. It was 0.10 m in diameter and 0.18 m in depth, with steeply sloping sides, and filled by a yellowy-brown silty-clay (3283). Posthole 3286 was circular in plan, 0.29 m in diameter and 0.07 m in depth, with gently sloping sides and a flat base. It was filled by a greyish-brown, clayey-silt (3287).

Two other cut features (3316, 3330) at the northern end of Sondage B may also be part of the structural remains of CS1. Both were amorphous in shape with shallowsloping sides. 3316 was filled by a reddish-brown sandysilt (3317) while 3330 was filled by a greyish-brown silty-sand (3331). Their exact function is not clear, but they may be heavily disturbed postholes forming part of the wall of CS1.

# 6.2 Trench 7

An area 40 m by 4 m was opened up by machine in the western half of the hillfort to examine five features (A-E), presumably ditches, revealed by the Time Team



Fig. 22. Figures stand in the postholes of CS3 showing its large size







Fig 24. Posthole sections from CS1 and 2


Fig. 25. Location of Trench 7, showing Ditches A-E (Copyright GSB Prospection)



Fig. 26. Test pitting over the area of Trench 7 before stripping of topsoil



Fig. 27. Stripping topsoil in Trench 7

geophysical survey (Figure 25). In particular, the objectives were:

- To confirm whether the features were archaeological
- To identify any stratigraphical relationship between features D and E
- To obtain dating material, including radiocarbon samples, from each of the features

Below the modern turf and topsoil (7001) was a moderately compacted light brown, silty, clayey deposit up to 0.4 m in depth (7002). Before stripping by machine, seven 1 m by 1 m test pits were excavated by hand over the area of the trench stopping when surviving in situ archaeological deposits were identified (Figure 26). The deposits (7001, 7002) were sieved using 10 mm sieves and were found to contain highly fragmented pottery sherds, predominantly Roman and Post-Medieval, flints and corroded metal . Test pit 4, located broadly over feature 'B' produced a small fragment of Neolithic polished stone axe (see section 7.4.4).

After stripping by machine (Figure 27), it was clear that there was no surviving stratigraphy above the natural geology (7003) which was a compact greyish-green clay. However, cut into the clay natural (7003) were a large number of archaeological features including five ditches, and numerous postholes and pits/scoops (Figure 28). There were also several linear features running broadly north to south through the trench, which when tested by excavation (e.g. 7022) were shown to be of relatively recent origin, and likely to be plough-marks.

#### 6.2.1 Ditches

The remains of five ditches cut into the natural clay (7003)were identified. Four of these ditches (ditches A-D) ran across the trench on a north to south alignment. Ditch 'A' was interpreted as a possible natural feature by the Time Team geophysics team (Wessex Archaeology 2013, 4) although it appears to cut off the western tip of the promontory on which the hillfort is located (cf. Davis and Sharples 2012). Ditch 'D' was considered by Time Team to be possibly natural in origin (Wessex Archaeology 2013, 4) although re-evaluation by Davis and Sharples (2014, 36) suggested it may be related to the Romano-British 'pit' boundary identified in Trench 5 in 2013. The central ditches (B and C) were thought to be part of a double linear, possibly a trackway (Wessex Archaeology 2013, 4). Upon excavation, ditches A, B and D all produced Early Neolithic pottery and flint. Ditch C did not produce cultural material, but its similar alignment to the other three ditches suggested that they were all part of an Early Neolithic enclosure that cut off the western tip of the Caerau hill promontory. Although no terminal ends to the ditches were excavated, the geophysics suggests that the ditches are not continuous, but interrupted this would indicate that this is a Neolithic causewayed enclosure. The fifth ditch (E) ran through the eastern end trench north-west to south-east and forms a roughly rectangular enclosure 36 m by 160 m attached to the southern rampart. It could be seen to cut through Ditch D and is clearly of much later date.

Excavation Results



Fig. 28. Post-excavation plan of Trench 7

#### 6.2.1.1 The Neolithic enclosure ditches

#### 6.2.1.1.1 Ditch A

7010, 7011, 7022, 7023, 7042, 7045, 7051, 7058, 7059, 7063, 7066, 7067, 7080, 7081, 7082, 7083, 7084, 7085, 7086

A 2 m wide cutting was excavated across Ditch A (7010). The ditch was shown to be V-shaped, 1.35 m deep, with a rounded bottom (Figure 29). It varied in width from 2.8 m on its northern edge to 2.3 m at its southern extent. This narrowing of the ditch may suggest the presence of a terminal within the unexcavated southern section. No external bank survived.

The primary fill of the ditch was a friable, greyish-brown, silty clay that contained charcoal flecks - to the north this was excavated as 7086 and to the south it was 7085. This presumably represents the initial silting of the ditch. Cutting through this deposit were two postholes (7081, 7083). Posthole 7081 was oval in plan, 0.16 m by 0.20 m and 0.17 m deep. It was shallow-sloping and filled by a mid-yellowish-grey sandy clay containing flecks of charcoal (7082). Posthole 7083 was also oval in plan, 0.24 m by 0.22 m and 0.07 m deep. The sides sloped gradually to a flat base. It was also filled by a mid-yellowish-grey sandy clay containing flecks of charcoal (7084). Since both postholes cut through the base of the ditch (7010) they presumably represent posts inserted into the bottom of the ditch soon after construction around which the initial natural silts (7085, 7086) accumulated.

Sealing these postholes was a green-grey clay (7080) containing charcoal flecks and medium-sized stones (< 0.10 m in diameter). This deposit was very similar to the natural clay and is likely to represent redeposited natural eroding from an external bank. Overlying this was a thick layer of dark-grey clay (7063) containing large irregularly-shaped stones (< 0.20 m in size) (Figure 30). This is likely to have been a deliberate placement of material and contained 11 sherds of Neolithic pottery and a fragment of an Early Neolithic polished stone axe (SF27, see section 7.4.4).

This layer was sealed by a number of deposits which appear to have slumped in from either side of the ditch, largely in-filling it. On its eastern side, 7063 was overlain by a friable, red, sandy-clay (7059) while on its western side it was sealed by a thick deposit of green-grey, sandyclay (7051). Both 7051 and 7059 contained numerous flint fragments and Early Neolithic pottery sherds including a diagnostic sherd from a carinated bowl with 'lug'. Sealing both of these deposits was a greeny-grey clay containing charcoal flecks (7066).

After the ditch had become largely in-filled, a fairly shallow recut (7058) was excavated to a depth of around 0.75 m.

A thin layer of grey-black clay with frequent inclusions of charcoal (7045) was identified on the base of the recut. This deposit contained a large number of Neolithic pottery sherds, although none particularly diagnostic, and flints including two leaf-shaped arrowheads (SF10 and 11). Overlying this was a thick deposit of greenygrey clay (7067) with charcoal inclusions, which was in turn sealed by a grey clay with yellow and red mottling (7042). Deposit 7042 also contained a leaf-shaped flint arrowhead (SF03). Sealing all of these fills was a dark brown-green clay (7011) which contained flints and Neolithic pottery. On its western edge 7011 was cut by a shallow linear feature with an irregular profile running broadly north to south through the trench (7022). It was filled by a reddish-brown sandy-clay (7023) with inclusions of charcoal and small stones. Its purpose is not clear, but it may be a scour left by the plough or even an animal burrow.

The deposits excavated in this 2 m wide cutting produced 63 flints, 3 flint arrowheads, 1 polished-axe fragment and 200 sherds of pottery.

## 6.2.1.1.2 Ditch B

#### 7030, 7031, 7039, 7079

Approximately 12 m east of Ditch A, a second ditch cut (Ditch B) was identified also running north to south through the trench (7030). Again, a 2 m wide cutting was excavated across the feature, although the ditch was quite different in morphology to ditch A (7010). The ditch (7030) was shown to be U-shaped, 1.0 m wide and 0.30 m deep, with a flat bottom (Figure 29). No external bank survived, but one probably existed.

The primary fill was a browny-grey clay with charcoal inclusions (7031) and large stones (< 0.30 m). Also contained within this deposit were 11 sherds of probable Neolithic pottery and a flint awl (SF01). Overlying this layer was an orangey-brown, sandy-clay with charcoal inclusions (7039). Four flints and a pecked stone (SF28) were recovered from this context. The final fill was a dark-brown clay with charcoal flecks (7079) (not in section).

#### 6.2.1.1.3 Ditch C

#### 7071, 7072

Around 5.6 m to the east of Ditch B the geophysics showed another feature which could be interpreted as a third ditch (Ditch C) running north to south through the trench on a similar alignment to Ditch B. Despite the clear magnetic anomaly, a period of very dry weather baked the exposed surface and it was difficult to distinguish the ditch cut (7071) and fill (7072) from the natural geology (7003)

## Excavation Results



Fig. 29. Sections through ditches A-E

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Fig. 30. Layer of deliberately placed stones in Ditch A. This layer also produced a large amount of Neolithic pottery and a fragment of polished stone axe



Fig. 31. North-facing section through Ditch D after excavation

in plan. Therefore a 5 m by 1.5 m sondage was cut east to west through the trench in order to locate the feature.

The ditch (7071) was shown to be U-shaped, 2.0 m wide and 0.90 m deep, with steeply-sloping sides and a rounded base (Figure 29). It was filled with a greeny-grey clay with red mottling when wet (7072). No cultural material was recovered from the ditch fill.

## 6.2.1.1.4 Ditch D

#### 7054, 7055, 7060, 7075, 7076

At the eastern end of the trench, approximately 6.8 m east of Ditch C was a fourth ditch (Ditch D), also running north to south through the trench (7054). A 1 m wide cutting was excavated across the ditch, which was shown to be V-shaped, 2.80 m wide and 0.80 m deep, with a flat bottom (Figure 29). No external bank survived.

The primary fill of the ditch was a soft, reddish-brown, sandy-clay (7060) that contained 12 sherds of Neolithic pottery and two flints. Sealing this layer was a thick reddish-grey, silty-clay with charcoal inclusions (7076) which also contained Early Neolithic pottery and flints. Overlying this was a thin band of greyish-black, sticky, clay with frequent charcoal inclusions (7075) which was in turn sealed by a dark-grey, sticky, clay with charcoal inclusions (7055).

This ditch contained 40 sherds of Early Neolithic pottery and eight flints (Figure 31).

## 6.2.1.2 Later ditches

## 6.2.1.2.1 Ditch E

7040, 7041, 7065

Ditch E ran through the eastern end of the trench northwest to south-east. The geophysical survey shows it as part of a roughly rectangular enclosure 36 m by 160 m attached to the southern hillfort rampart.

In plan, Ditch E (7040) could be seen to cut through Ditch D (7054) and must therefore post-date the Neolithic enclosure (Figure 32). Two 1 m wide cuttings were excavated through Ditch E at its north-western and south-eastern extremities. Both showed the ditch to be U-shaped, 1.30 m wide and 0.28 m deep, with gently sloping sides and a flat bottom (Figure 29). No associated bank survived, but one may have existed. It was filled with brown, silty-clay with orange and grey mottling (7041/7065) which contained a single sherd of oxidised, red pottery, possibly Roman, suggesting a Roman or post-Roman date for this enclosure ditch, although earlier or later phasing is possible.

## 6.2.2 Cut features

Contained within the trench were 22 postholes and pits/ scoops. The majority cut through the natural geology, but a small number cut through the various ditch fills and so must post-date those features. Due to the narrow nature of the evaluation trench, only at the eastern end of the trench was a possible structure identifiable.

## 6.2.2.1 Cut features at the eastern end of the trench

7020, 7021, 7032, 7033, 7034, 7035, 7043, 7044, 7049, 7050, 7052, 7053, 7061, 7062, 7073, 7074

Four postholes (7049, 7032, 7073, 7043) are set around 1.60 m apart in a roughly square arrangement (Figure 33). Posthole 7049 was circular in plan, 0.72 m in diameter and 0.13 m in depth with steeply sloping sides leading to a flat base. It was filled with a dark-brow, sandy-clay (7050) that contained small stones (< 0.10 m in size). Cutting 7050 was a circular feature (7061) 0.30 m in diameter and 0.12 m in depth, presumably the remains of the post-pipe. This was filled with a dark-browny-grey, sandy-clay with charcoal inclusions (7062). Approximately 1.4 m northnorth-east of 7049 was posthole 7032, which cuts Ditch E (7041) and so must post-date that feature. Posthole 7032 was also circular in plan, 0.65 m in diameter and 0.24 m in depth, with steeply sloping sides and a flat base. It was filled with a reddish-brown silty-clay with charcoal flecks (7034). This deposit was cut by a circular feature (7033) 0.27 m in diameter and 0.05 m deep with steep sides and a flat base. It was filled by dark-grey silty-clay with charcoal inclusions (7035). Again, this was presumably the remains of the post-pipe. Around 1.60 m east-southeast of 7032 was posthole 7073, which cut through the upper fills of Ditch D (7054) and Ditch E (7041). This was oval in plan, 0.31 m by 0.39 m and 0.21 m deep, with steeply sloping sides and a flat base. It was filled by a brownish-yellow silty-sand (7074). Finally, around 1.40 m south-south-west of 7073 was posthole 7043, which also cut through the upper fills of Ditch D (7054) and Ditch E (7041). This was oval in plan, 0.62 m by 0.45 m and 0.24 m in depth, with vertical sides and a flat base. It was filled by a reddish-brown silty-sand (7044). Given that these postholes form a square shape in plan, it is possible that they represent a four-post building (PS2) which post-dates Ditch E.

Around 3.40 m to the west of Ditch D were two other postholes or shallow scoops (7020, 7053) (Figure 33). Feature 7053 was roughly circular in plan, 0.80 m in diameter and 0.16 m deep, with a steeply sloping eastern side, but much more shallow and irregular western side. It was filled by a reddish-brown silty-sand with flecks of charcoal (7052) that contained 17 flints. This may be a shallow Neolithic pit or scoop associated with the use of the Neolithic enclosure. Adjacent to 7053 was an oval feature (7020) although it was not fully exposed as it ran



*Fig. 32. Overhead view of the eastern end of Trench 7 after rainfall showing Ditch E cutting Ditch D (Photo: Viv Thomas)* 



Fig. 33. Sections of cut features from Trench 7

into the section in the south. It was filled by a yellowybrown clay (7021). not large enough to determine what kind of structure(s) they were part of (Figure 33).

#### 6.2.2.2 Cut features in the central area of the trench

7024, 7025, 7026, 7027, 7028, 7029, 7056, 7057, 7064, 7068

In the central area of the trench are five cut features (7024, 7026, 7028, 7056, 7068) (Figure 33). Posthole 7028 was roughly circular in plan, 0.33 m in diameter and 0.12 m in depth, with steeply-sloping sides and an uneven base. It cut through the upper fill (7072) of Ditch C (7071) and so must post-date that feature. It was filled by a dark browny-grey sandy-clay (7029) and contained small stones (< 0.10 m in size). North-north-west of 7028 was posthole 7026, which was set immediately to the west of Ditch C (7071). This posthole was also circular in plan, 0.30 m in diameter and 0.20 m in depth, with steep side and a flat base. It was filled by a dark browny-grey sandy-clay (7027) and contained small sub-angular stones (< 0.10 m in size).

Located immediately to the east of Ditch B (7030) was a shallow scoop or pit (7056). This was roughly oval in shape, 0.30 m by 0.41 m and 0.08 m in depth with steeply sloping northern sides and more gently sloping on the southern side. It was filled with a reddish-brown sandyclay (7057). Around 1.40 m north-west of 7056 was pit 7024, which cut through the upper fill (7079) of Ditch B (7030). It was oval in plan, 0.60 m by 0.35 m and 0.26 m in depth, with steeply sloping sides and a flat base. It was filled by an orangey-brown clayey-silt (7025) which contained a large sub-angular rock (0.40 m by 0.20 m by 0.30 m). The rock almost filled the entire pit and it is difficult to understand its function.

Finally, 2.70 m south-west of 7024 was pit 7068. This was oval in plan, 0.92 m by 0.42 m and 0.42 m in depth, with gently sloping sides, but it was only partly exposed as it ran into the southern section of the trench. It is located on the western edge of Ditch B (7030) and could be seen partly clip and to cut through the primary fill (7031) of that ditch. It was filled by dark, reddishbrown clay (7064) which contained charcoal flecks and 13 sherds of possible Neolithic pottery. It is possible that this represents a Neolithic pit dug soon after Ditch B had begun to silt up, although there may have been some mixing of fills here (with 7031).

#### 6.2.2.3 Cut features at the western end of the trench

7004, 7005, 7006, 7007, 7008, 7009, 7012, 7013, 7014, 7015, 7016, 7017, 7018, 7019, 7036, 7037

Seven small cut features (7004, 7006, 7008, 7014, 7016, 7018, 7036), probably postholes, were identified at the western end of the trench although the area excavated was

Mid-way between Ditches A and B was posthole 7018. This was oval in plan, 0.44 m by 0.34 m and 0.22 m in depth, with steeply sloping sides and a flat base. It was filled by a light, yellowish-grey silty-clay (7019) and contained packing stones (< 0.20 m in size). To the west of 7018 was a line of three postholes (7036, 7014, 7016). Posthole 7036 was oval in plan, 0.69 m by 0.32 m and 0.14 m in depth, and was filled by an orangey-brown, silty-clay (7037) that contained charcoal flecks and burnt bone. Around 0.70 m west of 7036 was posthole 7014. This was circular in plan, 0.40 m in diameter and 0.14 m deep, and filled by a reddish-brown, silty-sand (7015). To the west of 7014 was posthole 7016, which cut the upper fill (7011) of Ditch A (7010). This was also circular in plan, 0.42 m in diameter and 0.08 m deep, with steeply sloping sides. It was filled by a reddish-brown, siltysand (7017). These three postholes are equally spaced and form a line which may have been part of a fence or building, the rest of which exists beyond the limits of the excavation.

To the west of Ditch A were three postholes arranged in an arc. Posthole 7006 is on the same east to west alignment as postholes 7036, 7014, 7016 and may be a continuation of that line. It was oval in plan, 0.25 m by 0.41 m and 0.15 m deep, with steeply sloping sides and an irregular base. It was filled by dark reddish-brown silty-sand (7007). Immediately to the south of 7006 was posthole 7004. This was oval in plan, 0.25 m by 0.16 m and 0.10 m deep, with steeply sloping sides, and filled by light reddish-brown silty-sand (7005). To the northwest of these two features was posthole 7012 which was circular in plan, 0.20 m in diameter and 0.07 m deep. It was filled by a dark greyish-black clay (7013) with frequent charcoal inclusions.

## 6.3 Trench 8

An area 30 m by 4 m was opened up by machine on the northern side of the hillfort (Figure 34). The specific objectives were:

- To examine the ditch feature excavated by Time Team in Trench 1 further around its circuit
- To characterise the nature of the survival of remains in the presumed quarry hollow behind the rampart
- To examine the inner lip of the inner hillfort rampart and to confirm the sequence identified in Trench 3 in 2013
- To further characterise and obtain dating material, including radiocarbon samples, from Ditches B, C and D examined in Trench 7

Below the modern turf and topsoil (8001) was a moderately compacted light brown, silty, clayey deposit up to 0.5 m



Fig. 34. Post-excavation plan of Trench 8

	Test Pit 1	Test Pit 2	Test Pit 3	Test Pit 4	Test Pit 5	Test Pit 6	Total fragments
Pottery	2	5	3	5	2		17
Worked stone	2					2	4
Fe Object				1			1
Slag		1	5	2		1	9
Objects of clay	2						2

Table 1. Finds from Trench 8 test pits



#### Fig. 35. Trench 8 after removal of topsoil

in depth (8002). Before stripping by machine, six 1 m by 1 m test pits were excavated by hand over the area of the trench stopping when surviving in situ archaeological deposits were identified. The deposits (8001, 8002) were sieved using 10 mm

sieves. The quantity and distribution of finds was surprising. Our initial assumption was that the northern area of the hillfort, in the lee of the ramparts, would be rich in occupation evidence (similar to the internal activity identified in trench 3). We also considered this to be an area with potential for the accumulation of ploughsoil finds since the earthwork bank located mid-way through the trench was likely to be a ploughheadland that would be an area for artefacts within the ploughsoil to accumulate. However, the six test pits produced very little material (Table 1) and nothing that could be identified as prehistoric.

After stripping by machine, it was clear that in the southern half of the trench 8002 directly overlay the natural geology which was a compact, greeny-grey clay (8062). Cut into the clay natural (8062) were a small number of archaeological features including several

postholes, scoops, pits and a ditch (Ditch D) (Figure 35). By contrast, in the northern half of the trench, 8002 overlay a series of archaeological deposits running in parallel linear bands across the width of the trench (8006, 8007, 8013), presumed to be the tail of the inner hillfort rampart and deposits which had accumulated behind it.

#### 6.3.1 The hillfort rampart

8002, 8004, 8006, 8007, 8008, 8009, 8010, 8011, 8013, 8016, 8017, 8019, 8021, 8022, 8030, 8032, 8033, 8036, 8037, 8041, 8043, 8050, 8051, 8053, 8054, 8055, 8056, 8057, 8058, 8063

At the northern end of the trench more than 2.20 m of surviving stratigraphy was identified (Figure 36). A similar, but not identical sequence of activity to that observed at the southern end of Trench 3 was recorded. The earliest deposit identified was a dark brown, siltyclay (8050) that contained small angular stones and a single sherd of possibly Neolithic pottery. This overlay the natural clay (8062) and may represent a buried subsoil (B horizon). Overlying this deposit was a dark



Fig. 36. West and south facing sections of Trench 8

8050

brown clayey-silt (8051) with frequent charcoal flecks, which may represent an A horizon – soil samples were taken from these deposits for further analysis (see section 8.1). Both of these deposits were only observed for around 0.50 m at the very northern end of the trench as the natural contour of the hill begins to dip down.

Approximately 1.00 m from the northern edge of the trench was posthole 8057, which cut through the natural clay (8062). This was circular in plan, 0.30 m and 0.24 m in depth, with vertical sides and a concave base (Figure 37). The primary fill was a browny-grey silt (8058) which was sealed by a dark brown clay (8056) containing a medium sized angular stone (< 0.20 m in size). Overlying 8057 and 8051 was a brown, silty-clay (8043) with charcoal flecks, a slowly-formed occupation deposit pre-dating the construction of the hillfort rampart. Above this layer was a mid-brown, silty-clay (8041) that contained small angular stones (< 0.10 m in size) and charcoal flecks, as well as a single flint and eight sherds of probable prehistoric hand-made pottery. The easiest interpretation of this layer is that it represents a levelling deposit prior to the construction of the inner hillfort rampart (8037).

Overlying 8041 at its southern extent was a dark greybrown cobbled surface (8017) of sub-rounded and subangular small pebbles, up to 0.10 m in size, contained within a sandy clay matrix (Figure 38). A similar metalled surface was recognised in Trench 3 (3278, 3293). It was overlain by a dark-brown deposit (8016).

Overlying 8041 at its northern extent was a green-grey clay (8037), which is likely to represent the primary, inner, hillfort rampart. This extended 2.60 m into the trench and rose up steadily to a height of 0.40 m at the northern edge of the trench. Seven sherds of prehistoric pottery, two flints and a possible slingstone were contained within the deposit. The selection of green-grey clay is clearly deliberate and similar to the primary rampart encountered in Trench 3 (3196/3292/3328). Above this layer was an orangey-brown clayey-silt (8055) which contained very frequent charcoal flecks and may represent an in situ burning event, possibly of the primary hillfort boundary. At its northern extent this was overlain by a thin greyish-brown, silty-clay (8036), which may be a topsoil formation over the primary rampart. Sealing this were a series of layers which presumably represent the accumulation of soil behind the rampart through colluvial and aeolian processes. Above 8036 was a yellowy-orangey-brown, silty-clay (8030), which was in turn sealed by an orangey-brown, silty-clay (8033). This deposit (8033) also overlaid the metalled surface (8117, 8016) which suggests that it was possibly contemporary with the primary rampart (8037).

Above 8033 was an orangey-brown silt (8008, 8011) which contained a single sherd of Roman pottery. On

its western side 8033 was cut by two irregularly-shaped features (8019, 8022) (not in section). Feature 8019 was filled by a dark browny-black clay (8009), while 8022 was filled by a browny-red clay (8021). Their irregular shape in plan and profile suggests they are tree-throws and indicates that woodland or scrub may have encroached onto the northern hillfort ramparts at this time. Sealing this was a reddish-brown silty colluvium (8007, 8010) that contained five sherds of probable Roman pottery, and was overlain in the south by a mid-brown, clayey-silt (8013), presumably hillwash.

A thick deposit of greenish-grey clay (8006) also overlay 8010 and is likely to represent the secondary hillfort rampart. This suggests a substantial remodelling of the northern hillfort inner boundary which reflects the sequence of boundary construction encountered on the southern side of the hillfort. Since the secondary rampart seals layers containing Roman material, it must date to the Roman period or later.

The secondary hillfort rampart (8006) was overlain by a relict ploughsoil (8002) in which there was a lens of dark brown silty-clay (8004, not in section). However, its northern extent was cut by a shallow hedgerow ditch (8063), filled with a browny-grey clay (8054), and whose construction was presumably used to create an adjacent bank (8053). This is a relatively recent agricultural feature, probably dating to the early part of the 20th century (Figure 39).

## 6.3.2 Neolithic enclosure ditch

## 8034, 8035, 8042, 8044, 8045, 8059, 8060

A linear feature running through the south-east corner of the trench north-east to south-west (8045) was identified cutting through the natural geology after removal of the relict ploughsoil (8002) overburden. The ditch ran into the edge of the southern and eastern trench section and so it was not possible to excavate a complete profile, but it was interpreted as a continuation of Ditch D, excavated in Trench 7. The ditch was likely to be U-shaped, 0.80 m deep with a flat bottom (Figure 40). It was not possible to measure its width. No associated bank survived (Figure 41).

The primary fill of the ditch was a greeny-brown clay (8044). This deposit was very similar to the natural clay and is likely to represent redeposited natural eroding from an external bank. Overlying this deposit was a firm, dark brown, clay (8042) containing a dense concentration of angular and sub-angular rocks (< 0.20 m in size). This is likely to have been a deliberate placement of material into the ditch. Sealing this layer was a brownish-grey, clayey-silt (8035) which contained eight flints, 22 sherds of probable Neolithic pottery, and a fragment of Neolithic polished stone axe (SF22). It is likely that these artefacts

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Fig. 37. Possible Neolithic posthole underneath primary rampart, Trench 8



*Fig. 38. Metalled surface behind primary rampart, Trench 8* 



Fig. 39. West-facing section through ramparts, Trench 8



Fig. 40. North facing section through Neolithic enclosure ditch, Trench 8

were placed directly onto the stoney fill (8042) around which silty material accumulated through erosion – this placement of axe fragments is similar to that identified in Ditch A in Trench 7 (see section 6.2.1.1.1). Overlying 8035, the final fill was a greyish-brown, silty-clay (8034) which is likely to represent a stabilisation deposit formed over a considerable period of time.

Another cut feature (8060) was identified adjacent to the eastern edge of the trench immediately to the north of 8045. Not enough of the feature was exposed to ascertain its form, but it is possible that it was a continuation of Ditch D. It was filled by a browny-grey, silty-clay (8059) which contained a large angular stone (up to 0.20 m in size).

The geophysical survey tentatively suggested that Ditches B and C may also continue into this trench, but definite ditch cuts were not identified in the central area of the trench where the ditches should have been located. It is possible that Ditches B and C were not continuous, or even that they never existed in this area. Alternatively they may have been removed by later activity (see section 6.3.3.1).

## 6.3.3 Cut features

Contained within the trench were a number of postholes, ditches and pits/scoops. They all cut through the natural geology (Figure 42).



*Fig. 41. Excavation of Neolithic Ditch D in south-eastern corner of Trench 8. Note the posthole (containing large stone in-fill) on the ditch's inner side* 



Fig. 42. Sections through cut features, Trench 8

#### 6.3.3.1 Cut features in the central area of the trench

8012, 8015, 8018, 8020, 8023, 8029, 8038, 8039, 8040, 8052, 8061, 8062

The earliest feature identified was an irregularly-shaped feature (8061), running broadly east to west through the trench, and cutting the clay natural (8062). Feature 8061 was about 3.80 m in width (north to south), with an uneven base ranging in depth from 0.08 m to 0.30 m. The primary fill was a browny-grey clay (8020) containing small stones and above this layer was a grey clay (8018) containing a flint and possible whetstone. Although irregular in form, the feature appears too large to be considered a tree throw and the simplest interpretation therefore would be that it is a quarry, probably to win clay for rampart construction - in doing so, such quarrying activity may have destroyed evidence of potential Neolithic ditches (Figure 43). However, one other possibility should be offered. The Time Team investigations (Wessex Archaeology 2013) identified a shallow boundary ditch in Trench 1 (Feature 103) and the LiDAR survey indicated that it may continue around the northern side of the hillfort (Davis and Sharples 2014, fig. 5). It is possible therefore that 8061 is the continuation of that ditch, although its irregular nature suggests that this is unlikely.

Cutting through 8018 in its south-western extent were two shallow postholes or pits (8038, 8039). Feature 8038 was roughly circular in plan, 0.75 m in diameter and 0.17 m in depth, with gently sloping sides and a flat base. It was filled by a greyish-brown clay (8040) that contained frequent medium-sized stones (< 0.20 m in size), presumably packing for a post. Immediately to the west was feature 8039. This was oval in plan, 1.12 m by 0.75 m and 0.10 m in depth, with gently sloping sides leading to a flat base. It was filled by a greyish-brown clay (8052). No artefacts were recovered from either feature.

A series of brownish-grey clayey-silts, presumably hillwash deposits in-filled the quarry hollow. In the south, 8018 was overlain by 8029 and 8023, while in the north it was overlain by 8012 and 8015.

It was clear from the LiDAR survey that an earthwork feature ran through the centre of the trench parallel with the hillfort rampart, immediately to the south of where the quarry hollow (8061) was located. To the north of this bank was a very clear 'hollow-way' that can also be traced running parallel with the hillfort rampart. There was no clear cut to the hollow-way or evidence for deliberate construction of the bank. The most logical interpretation therefore is that the bank has been formed by an accumulation of ploughsoil – apparently the result of a plough headland – whose limit was defined by a depression caused by the quarrying of material from

feature 8061 (presumably in the Iron Age). The hollowway still visible to the north of this bank may have been subsequently exaggerated by the movement of traffic across the hilltop beyond the boundary of ploughed land.

#### 6.3.3.2 Cut features in the southern area of the trench

8003, 8005, 8014, 8024, 8025, 8046, 8047, 8048, 8049, 8060

Three cut features (8025, 8047, 8049), probably postholes, were identified at the southern end of the trench (Figure 42). None were visible after removal of 8002 by machine as they were covered by two greyish-brown clayey-silt deposits (8005/8003, 8014) which presumably represent hillwash.

Approximately 2 m from the southern edge of the trench was posthole 8047. This was circular in plan, 0.78 m in diameter and 0.28 m in depth, with steeply sloping sides and a convex base. It was filled by a greyish-brown, silty-clay (8046), which contained frequent mediumsized stones (< 0.20 m in size), presumably post-packing. Around 3.00 m north of 8047 was posthole 8049, which cut linear feature 8060. This was also circular in plan, 0.65 m in diameter and 0.20 m in depth, with steeply sloping sides and an irregular base. It was also filled by a greyish-brown, silty-clay (8048), which contained frequent medium-sized stones (< 0.20 m in size), presumably used as post-packing. The similarity of form of these two postholes suggests that they may have been part of the same structure, but the area excavated was not large enough to determine what that may have been.

A third cut feature (8025), possibly a posthole or small pit, was located about 7.00 m north of 8049. This was oval in plan, 0.44 m by 0.32 m and 0.16 m in depth, with gently sloping sides and a flat base. It was filled by a greyish-brown, silty-clay (8024) which contained an Early Neolithic flint awl (SF17).

## 6.4 Trench 9

9001, 9002, 9003, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9011, 9012, 9013, 9014, 9015, 9016, 9017, 9018, 9019, 9020, 9021, 9022, 9023, 9024, 9025, 9026, 9027, 9028, 9029, 9030, 9031, 9032, 9033, 9034, 9035, 9036, 9037, 9038, 9039, 9040, 9041, 9042

Two trenches (9 and 10) were planned to examine the structural sequence of the hillfort boundary architecture. Trench 9 was designed to examine the hillfort boundaries on the northern side of the hillfort in an area of dense woodland owned and managed by Cardiff Council, while Trench 10 is located on the east side, to the south of St Mary's, across an area where the banks and ditches of the hillfort are free of woodland but not very well preserved.



Fig. 43. Quarry area, Trench 8, looking south-east (Photo: Paul Kemble)

An existing gully on the northern side of the hillfort, presumed to be an erosion scar caused by a spring, was chosen as a suitable location for Trench 9 as it provided an opportunity to cut back (1.00 m) and clean a section through the inner hillfort rampart and ditch with minimal disturbance to in situ archaeological remains (Figure 44). An informative section through the inner rampart was obtained, although the sequence of construction was difficult to understand as the area had been heavily disturbed, probably in relatively recent historical times. The 'scar' appears to not be a direct product of erosion at all, but rather a deliberately excavated trench that was designed to access the spring head.

The gully chosen for the location of Trench 9 is 'U'shaped, varying in width from 3 to 5 m at the top, and with a flat bottom 0.50 to 0.75 m wide. The gully is not straight, but rather sinuous whichmade it impossible to cut back a continuous straight section without removing a considerable amount of material. It was decided to cut back a series of straight sections that followed the existing curves of the gully and was approximately 15 m in length. The west-facing section was chosen to be cut back and cleaned largely because there was less vegetation on this side (Figure 45). Nevertheless, significant scrub was encountered and removed, and Cardiff Council's Park Ranger Service cut and removed a fallen, dead tree which sat on top of the bank. Access into the gully was difficult and all work was undertaken by hand using trowels, mattocks, hand shovels and buckets. Approximately mid-way along the trench was the spring head from which water flowed and made conditions extremely muddy.

The earliest feature identified at the northern end of the trench was a ditch (9014) which cut through the natural green-grey clay (9003) (Figure 46). Only part of the ditch cut was exposed - it began approximately 3.80 m from the northern end of the trench section and ran into the section edge and presumably represents the inner hillfort boundary ditch. It has shallow sloping sides and was 0.86 m deep although its width was not fully determined. The primary fill was a mid brownish-grey clayey-sand with reddish-brown mottling (9011). Two abraded sherds of black-burnished pottery, possibly Roman, were recovered from this fill, but significant root damage and slumping may have contaminated this fill. It was sealed by a dark reddish-brown, silty-clay (9010) with occasional flecks of charcoal. Above this layer was a mid-reddish-brown, sandy-clay (9009) which contained very frequent large sub-rounded and sub-angular stones (up to 0.20 m in size). This could be slump from the Excavation Results



Fig. 44. Removing vegetation from Trench 9



Fig. 45 Trench 9 west facing section after removal of vegetation and cleaning. Note its rather sinuous nature

Davis & Sharples



Fig. 46. West facing section through Trench 9

#### Excavation Results

inner rampart, but the regular-sorted stones suggest that it is more likely to be a deliberately laid surface, possibly even a metalled path (Figure 47). Sealing this surface was a mid-brown sandy-clay (9008). An extremely abraded Neolithic leaf-shaped arrowhead (SF13) was recovered from this layer suggesting that it had formed as a result of hillwash or slumping. There was no stratigraphic relationship between the ditch cut and the hillfort rampart which suggests that a berm of approximately 4.50 m was left between the rampart and ditch.

At the southern end of the trench the earliest deposit identified above the natural clay (9003) was a greyishbrown, clay with blueish-grey mottling (9016). This stretched for 7.30 m from the southern end of the trench into the middle of the trench and presumably represents the primary hillfort inner rampart. At its northern end it contained a lens of mid grey-brown silty-clay (9026) which contained small angular stones and charcoal flecks. Overlying 9016 at its northern end was a greenish-brown, silty-clay (9027) which is likely to represent part of the body of the inner rampart. This was presumably dumpconstructed as no outer revetment was identified. Above this layer was a mid-greyish-brown, sandy-clay (9028), which contained small angular stones and charcoal flecks, and spread for approximately 3.00 m down the slope. This is likely to be part of the original hillfort rampart that has slumped down the slope, or may have been deliberately slighted. At its northern end it sealed a greyish-brown, sandy-clay (9024) which in turn lay above a dark-brown, silty-clay (9025). These both likely to have been slump from the rampart which has moved down slope.

In the centre of the trench the earliest feature was an L-shaped cut into the slope (9035/9023). This was filled by a greyish-brown, silty-clay (9019/9034) into which a number of large (up to 0.50 m in size), sub-angular and sub-rounded, stones had been laid flat (9013, Figure 48). Six large sherds of fresh, unabraded Roman Grey-ware pottery sherds were recovered from beneath one of the stones. Initially it was thought that the stones (9013) were part of a revetment to the hillfort rampart which had slumped downslope, but it became apparent that they were in fact a deliberately laid surface or path which led to the springhead emanating from the hillslope at this point. To the north, this path was covered by a compact, reddish-brown, silty-clay (9012) while its southern extent was covered by 9025. All of these deposits are presumably rampart material which has slumped downslope. Cutting through 9012 and 9025 was a V-shaped feature (9022). The basal fill was a deposit of compacted stone rubble (9021) presumably the packing for a post. This was sealed by a greyish-brown, friable, clayey-silt (9020) from which two very abraded sherds of handmade, prehistoric, pottery were recovered. The feature is clearly the cut for a post, possibly a palisade, but its date is uncertain, although likely to be post-Roman or Medieval.

The southern end of the rampart was heavily disturbed and cut by four features, all confused by plant and tree roots. The earliest was 3.50 m from the southern edge of the trench and had gently sloping sides leading to a flat base (9030). It was filled by a mid-brown, sity-clay (9032) which was sealed by a dark-brown, silty-clay (9031). These deposits were cut by a shallow-sided elongated feature (9033) which ran from the southern edge of the trench for around 4.00 m. The primary fill was a blackish-brown, silty-clay (9005) which contained two sherds of probable Roman pottery. This was inturn sealed by a brownish-grey, clayey-silt (9017). At its northern end, the final fill was overlain by a reddishbrown, silty-clay (9037).

These deposits were sealed by a reddish-brown, siltyclay with brown mottling (9006) which is presumably hillwash. This layer was cut by two V-shaped cuts with flat bottoms. The most northerly was 9018, which was 1.20 m wide and 0.70 m deep. The primary fill of this cut was a mid-brown, silty-clay (9040). This was sealed by a greyish-brown, silty-clay (9039) which was overlain by a light, yellowy-brown, silty-cly (9038). The southerly cut (9041) was only partially exposed as it ran into the section edge. It was at least 1.00 m in width and 0.72 m in depth and filled by a mid-brown, silty-clay (9042).

The purpose of these cuts is not clear. Features 9018 and 9041 are probably relatively recent and could be pits dug to plant tree saplings – the woodland covering the ramparts has clearly been planted with a variety of both deciduous and coniferous species, possibly in the 19th century (paths can be seen on the 2nd edition OS map – see Figure 2). Features 9030 and 9033 are more difficult to account for and could be of some antiquity. Roman pottery from the fill of 9033 may indicate they were a result of remodelling of the ramparts in the late/post Roman period, but this area has been heavily disturbed and artefacts may have been moved around through bioturbation.

All of these deposits and features were covered by a reddish-brown, clayey-silt. At the southern end of the trench this was excavated as 9029, in the centre 9015, and at the northern end 9008. This is presumably material which has slumped into the cutting from the surrounding area. Modern topsoil (9001) and subsoil (9002) sealed these deposits.



Fig.47. Infill of the hillfort rampart ditch at the northern end of Trench 9. Note the layer of small stones, probably a metalled surface



*Fig. 48.* A possible laid path of flat stones leading to a spring-head, Trench 9. Roman pottery was found beneath the stones

## 7. Finds

The specialist finds and palaeo-environmental reports are currently in preparation, but brief summaries are provided here.

Finds were recovered from all four of the trenches excavated. Pottery in particular was recovered in an appreciable quantity. No human bone was identified, but animal bone did survive, although preservation varied dramatically across the trenches and only very little was recovered from Trench 8. The chronological focus of material is in the Neolithic, Iron Age and Romano-British periods, although there are also a few items of Medieval and Post-Medieval date.

Condition of the material is generally poor; ceramic material (pottery, ceramic building material, fired clay) has suffered high levels of surface and edge abrasion, and the ironwork in particular is heavily corroded. This has hampered initial identifications.

## 7.1 Pottery

A cursory initial assessment of the pottery assemblage was provided by Peter Webster, National Museum Wales. The overall yield of pottery from sealed archaeological contexts was large, made up of 1,069 sherds. Of these, 326 were Neolithic, 173 were later prehistoric (mainly or wholly Iron Age), and 570 were Roman, making Roman pottery by far the most prolific find. Indeed, Roman was the only period represented in all four areas investigated.

## 7.1.1 The Neolithic Pottery

An assemblage of 326 sherds was retrieved entirely from contexts in Trench 7 and 8. These were from mainly thick-walled vessels with angular quartz temper and small vesicles. Two sherds were diagnostic of the early Neolithic (c. 3,600 BC) and derived from two different carinated bowls with additional 'lugs' (Figure 49).

## 7.1.2 The Later Prehistoric Pottery

An assemblage of 173 sherds was retrieved, mainly from Trench 3 and 8. Of these, the following fabric variations were noted: 1. Sherds with angular quartz temper, are from thickwalled vessels and look to be earlier in tradition than the predominantly thinner-walled sherds of Late Iron Age tradition, with small vesicles, grog and quartz grains as tempers.

2. Small to medium sized globular bowls, with everted and rounded rims and horizontal burnishing may best be paralleled with Late Iron Age to transitional 1st AD ceramic assemblages. The fabric with small angular vesicles would be consistent with a wider south Wales tradition of calcite and limestone tempered wares during the Later Iron Age, also present on early Roman military sites here, and continuing until around AD60/70.

## 7.1.3 The Roman Pottery

As already stated, Roman pottery was the most prolific ceramic find, making up 537 of the 1,069 sherds found from secure archaeological contexts, and were represented in all four areas investigated. Of these, the following fabric variations were noted:

1. Samian. Only three small fragments of samian were found.

2. Black-burnished Ware (BB1) is the most common cooking fabric imported into Wales in the Roman period. Most or all that at Caerau is derived from Dorset. Importation into South East Wales appears to have started with the conquest, but Black-burnished ware does not appear in quantity before the early second century. Here, diagnostic pieces span the second to the fourth centuries.

3. South Wales Reduced Ware. This grey sandy fabric is ubiquitous in South East Wales throughout the Roman period and it is unsurprising that this is the most common Roman fabric from Caerau. Kilns are likely to have been in rural locations and scattered, making this a local tradition of potting, rather than the product of a single centre. Jars seem to predominate. The restricted distribution area of the ware tends to make dating somewhat generalised but it may be significant that most diagnostic pieces at Caerau seem to be second or third century.

4. Severn Valley Ware. This occurs in Wales throughout the Roman period, but on the coast plain there are more early examples than later.



Fig. 49. Neolithic pottery sherd from a carinated bowl – note the 'lug'

5. Other fabrics have been given a more generalised description and most will be local in origin. Most common are oxidised fabrics and it is likely that many of these are products of the same kilns as the South Wales Reduced Wares.

## 7.2 Objects of glass

## 7.2.1 The Caerau Glass Bead (CH13, SF13 (4025)) by Elizabeth Foulds

Glass bead. Diameter 10.2mm, Height 8.2mm, Perforation Diameter 3.8x4.1mm (non-tapered), Weight 1.0 grams

## 7.2.1.1 Description

A globular colourless glass bead decorated with opaque yellow glass. The decoration consists of three continuous spirals around the circumference of the bead. The bead is in very good condition and is only missing a small chip at the perforation on one side. This chip cuts through the opaque yellow decoration and may be recent. The surface of the bead is only very lightly weathered and has a dull luster. The perforation is slightly oval in shape and it appears that the mandrel was of a consistent sized (i.e. did not taper).

#### 7.2.1.2 Interpretation

The colour combination exhibited would traditionally place this bead in Guido's 2415 Class 11 'Meare variant' types. This class, along with Class 10 (spiral beads), are thought to have been manufactured at Meare Lake Village, Somerset, due to the large numbers found during excavations at the site. These two classes are tied together by the use of colourless glass to form the body of the bead, while the decoration is formed by the linear application of opaque yellow glass. The decoration of the Meare variant beads is extremely variable, although the most common design is the chevron (Class 11a), which have been found primarily at Meare Lake Village in Somerset (Bulleid and Gray 1966; Coles 1987). Other sites within Somerset where Class 10 and 11 beads occur at include: Glastonbury Lake Village (Bulleid and Gray 1917), Ham Hill (Guido 1978, 190), South Cadbury (Guido 1978, 188), and Clevedon (Gray 1942). Outside of this area they have been found at Wetwang Slack in East Yorkshire (Dent 1984), St. Buryan in Cornwall (Guido 1978, 191), Great Chester in Cambridgeshire (Guido 1978, 191), and recently in Tyne and Wear (Hodgson, McKelvey et al. 2012). These types of beads have also been found in Wales at Anglesey (Guido 1978, 189), Caerwent (Nash-Williams 1930), Moel Trigarn hillfort (Gould, Burnard et al. 1900), Pen Dinas Fort (Forde, Griffiths et al. 1963).



Fig. 50. Broken fragment of a rolled lead sheet (SF09)

However, Guido suggests that the 'heyday' of the Class 10 bead falls within the period from 250 BC - AD 50, while Class 11 occurs either earlier or later. For both classes, the number of known and datable examples outside of the Meare Lake Village excavations is very limited. However, the dichotomy between these two classes creates a false distinction. Guido considered the Class 10 to exhibit a high degree of sophistication and refinement, while Class 11 was less so. However, there is no reason why Class 10 beads could not be one of the many sub-types together with Class 11. As a result, it is difficult to sustain an argument for one Class to be earlier than the other. Assuming that these beads had something to do with the main period of activity at Meare Lake Village, whether they were manufactured there or not, they probably relate more to the period between 300 -50 BC (Foulds 2014, 158). However, they are found at sites dated to later periods, and it is not unusual to find them in Roman contexts, for example at South Shields Roman fort (Allason-Jones and Miket 1984) and Blagdon Park 1 (Hodgson, McKelvey et al. 2012). This suggests that, assuming all 'Meare' type beads were made within a relatively short period of time at one location in Somerset, many examples had a very long use period.

In Britain, Iron Age beads made from colourless glass with opaque yellow linear decoration are not unusual and are one of the most iconic types attributed to this period that were potentially made in Britain. However, the Caerau example is particularly small when compared to other Class 10 and 11 beads and falls at the smaller end of the spectrum in terms of its height and diameter. Furthermore, the continuous linear design that meanders and doubles back on itself to create the spiral motif is not common. The only comparable bead is G15 from Meare Lake Village (Bulleid and Gray 1966). However, this is very small (D: 7.2 mm, H: 5.3 mm, PD: 2.9 mm) and made out of blue glass with an opaque white spiral decoration. The Caerau bead is the only example of a colourless and opaque yellow bead with this type of spiral.

The Caerau bead was found in the upper fill (4025) of the enclosure ditch in Trench 4. Although the lower fill is considered to be the natural silting of the ditch, the upper layer may have been formed by the deliberate act of filling in the enclosure. It may be that the bead was accidentally lost or intentionally deposited during this activity. Most glass beads are found in burial contexts, or as stray finds, a small number are recovered from settlements. Where detailed context is known, there does not appear to be a strong pattern in the types of features they are found in (Foulds 2014). However, it may not be the type of feature that is significant; rather it may be the act of deposition in features, such as roundhouse postholes, former grain storage pits, or enclosure ditches, which was more important.

## 7.2.1.3 Conclusion

This bead appears to be unique, although the colours used are highly comparable to those seen on beads from Meare Lake Village, Somerset. The bead was probably manufactured in the 3rd-2nd century BC along with the other Meare beads, although these beads can be found in later contexts. It is not unusual to find glass beads in settlements and there are a growing number of examples that suggest single beads may have been intentionally deposited within features.



Fig. 51. Copper alloy pennanular brooch (SF14)

## 7.3 Metalwork

The metalwork includes objects of lead, copper alloy and iron. Conservation of the metalwork is currently being undertaken by Cardiff University, but an initial overview is provided here by the authors.

#### 7.3.1 Objects of iron

The iron objects are all heavily corroded, but after x-raying a number of nails and other small objects can be recognised. Other objects are unidentifiable. At least some of the iron objects came from contexts dated as Romano-British or prehistoric on pottery grounds.

#### 7.3.2 Objects of lead

A single lead object (SF09) was recovered from a secure sealed archaeological context (3219). This was a flat tablet of lead which had been rolled into a tube, approximately 5 cm in length, and broken. The lead was heated and partially un-rolled to ascertain whether there was any description inscribed on the tablet, but none was identified (Figure 50).

#### 7.3.3 Objects of copper alloy

Two objects of copper alloy (SF07, SF14) were recovered from secure archaeological contexts both from Trench 3.

SF07 (3188) Above midden, Sondage C Copper alloy tube, 4 cm in length, tapering to point. Probably the pin of a Roman brooch. SF14 (3190) Upper spit of midden, Sondage C Pennanular brooch with flattened terminals. Possibly late Roman/early Medieval (Figure 51).

## 7.3.4 Slag

Approximately 0.373 kg of material identified as slag was collected, almost all of which comes from Romano-British contexts and is likely to derive from iron smithing.

## 7.4 Objects of stone

An initial assessment of the objects of stone is provided here by the authors as no specialist report is currently available. The most recognisable stone objects comprise 3 whetstones, 10 rounded river pebbles, probably slingstones, 158 pieces of flint, as well as several shale artefacts and three stone axe fragments.

#### 7.4.1 Worked stone

#### 7.4.1.1 Whetsones

Three worked stones with distinct flat edges were recovered, likely to represent whetstones. The stones varied in size from 5 cm to 14 cm, but all appeared to be fine-grained calcareous sandstones.

#### 7.4.1.2 Querns

One fragment of quern was recovered (SF05) from a

posthole in Trench 3 (3259). This was 11 cm by 23 cm by 5 cm with a convex surface. It is broken, probably in half.

## 7.4.1.3 Pecked stone

An irregularly-shaped stone approximately 11 cm by 8 cm was recovered from 7039, Ditch B (SF28). On one side a small hole, around 5 mm in diameter had been pecked or drilled into the stone.

#### 7.4.2 Slingstones

Ten rounded river pebbles were recovered from across all the trenches. These were all around 3-7 cm in size and weighing from 0.04 kg to 0.08 kg. They are likely to be slingstones.

## 7.4.3 Flint

In total 158 pieces of struck flint artefacts were recovered from across all four trenches. The majority were small flakes or scrapers. The material recovered from the Neolithic enclosure ditches was relatively fresh and unabraded. Two piercers (awls) were identified (SF01 and SF17). SF01 was recovered from the upper fill (7039) of the western central enclosure ditch (Ditch B) in Trench 7. SF17 was recovered from the fill (8024) of a small pit or scoop located between the eastern central enclosure ditch (Ditch C) and the outer ditch (Ditch D) in Trench 8.

Four distinctive leaf-shaped projectile points were found (SF03, SF10, SF11. SF13) (Figures 52 to 55), to complement the single fragment (SF58) recovered in 2013 from Trench 3. Three (SF03, SF10, SF11) were recovered from the upper fill of the inner Neolithic enclosure ditch (Ditch A), while SF13 was found in Trench 9 and was very abraded. Only one was complete (SF03). All of the others were broken: SF10 and SF13 were broken at tip and base while SF11 was broken at base.

#### 7.4.4 Polished Neolithic Axes

Three fragments of Neolithic polished stone axe were recovered from the excavations (SF22, SF27, SF29). An initial assessment of the (SF27) polished axe fragment was provided by Vin Davis, University of York.

SF22 (8035) Outer enclosure ditch (Ditch D) Fragment of face of large axe, pale whitish-grey in colour. Cutting edge has been reworked with removal of several flakes (Figure 56).

SF27 (7063) Inner enclosure ditch (Ditch A), by Vin Davis

Fragment from butt end of an axe. The flaked and ground surface is comparatively fresh, with weathering apparently restricted to a slight enrichment of iron

mineral leached from the surface above. In profile, the axe tool is relatively thin, which could be a diagnostic feature. The fabric consists mainly of a banded fine to medium grained matrix with rounded lithic and mineral inclusions. The relatively pale colour may suggest a possibly original rhyolitic composition. Alternatively, the rock could have been burnt after it was broken, or it may have been uniformly weathered by acidic groundwater. Possibly an altered banded tuff from a possible source in south-west Wales, unlikely to originate from the same geographical area as SF22 (Figure 57).

#### SF29 (7002) Test Pit 4

Small fragment from the side of an axe, white in colour. Recovered from a test pit located over the western central ditch (Ditch B)

#### 7.4.5 Shale

Four objects of shale were recovered, all broken fragments of bracelets.

SF18 (3275) Midden, Sondage C. Roman.

Two small worked fragments of bracelet, approximately 2.5 cm in length, and 7 cm in diameter. Undecorated and irregular profile, possibly unfinished.

SF08 (3212) Trample covering metalling, Sondage D. Roman?

Small fragment of bracelet, 3.1 cm in length and approximately 7 cm in diameter. Undecorated and circular in profile (Figure 58).

SF23 (3294) Occupation soil under primary rampart, Sondage E. Prehistoric.

Large fragment, approximately one third of a complete circular bracelet, 7 cm in diameter. Circular in profile, undecorated.



Fig. 58. Fragment of shale bracelet (SF23)



*Figs.* 52-55. *Leaf-shaped arrowheads. Ogival, type 3B (r), Kite, type 2C (a), Ogival, type 3B (q) and Kite, type 2C, (a, broken). (Green, BAR 75(i), 1980).* 



*Fig. 56. Broken and re-shaped face of an early Neolithic polished stone axe (SF)* 



*Fig. 57. Butt end of an early Neolithic polished stone axe (SF)* 

## 8. Palaeo-Environmental Summary

## 8.1 Geoarchaeological Report by Mike Allen

The excavations at Caerau Hillfort were visited on 23 July 2014 for Dr Oliver Davis and Professor Niall Sharples, with a view to examining a series of deposits including:

- Red deposits behind and over the rampart in Trench 3
- The Neolith ditch, base and recut/charcoal layer Trench 7
- Buried soil and red deposits Trench 8
- Soils and spring-related deposits Trench 9

The site lies on typical argillic pelosols of the Worcester Association (Findlay et al. 1984) over Mercian Mudstone Group.

#### 8.1.1 Specific Aims

- To examine the 'red' deposits inside the rampart (Trench 3) with a view to determining its origin and formation process of this accumulation against the southern rampart
- Examine the palaeo-environmental and geoarchaeological potential of the Neolithic causewayed ditch profiles (Trench 7)
- To provide comment on the spring (Trench 9)

## 8.1.2 Descriptions and samples

Profiles in three trenches (Trenches 3, 7 and 8) were described and sampled (or tins left with instructions to sample), and the deposits in one further trench (Trench 9) were discussed on site with N. Sharples. Field descriptions follow pedological terminology outlined by Hodgson (1976; 1997), and Munsel colours were recorded moist.

## 8.1.3 Geoarchaeology

## 8.1.3.1 Rampart (southern) deposits and buried soils (Trench 3, sondage 1) – profile 4

Two profiles were examined in Trench 3, Sondage B; describing and sampling the 'red' deposits behind and over the rampart (profile 4), and the buried soil beneath it (profile 5) – see Tables 2 and 3. Undisturbed samples were taken from the upper and lower portions of the red

deposit (3215 and 3180; samples K14/1 and K14/2) and the rampart below (3266; K14/3) (Figure 59). The two samples were augmented by small bulk samples (c. 100 g) for consideration for particle size analysis and soil chemistry. A further sample was taken from the buried soil (K14/4) to augment that taken in 2013 (S2 and S3; Allen 2013).

## 8.1.3.2 Rampart (southern) and buried soils (southern end Trench 3) – profile 5

The primary rampart is characterised by common small and medium stones and green siltstones. The secondary rampart, in contrast, is essentially stone-free. A buried soil survives beneath the rampart and is that described in 2013 (profile 1).

The 'red' deposits against the rampart (profile 4) require consideration (Figure 59). They are fine-grained and massive and typical of colluvial / aeolian deposits that may derived from the mudstones and mudstone soils. However, their accumulation seems, visually, to extend high up the existing rampart and above the surrounding ground level negating these as entirely colluvial. Is this deposit colluvial and aeolian, or is there an anthropogenic component of dumping (no evidence noted in the sections examined in 2013 or 2014), or could this be exacerbated by ploughing – ie, being at the headland of the plough/fields edge? The undisturbed kubiena samples here, and those taken in 2013 may allow this to be addressed.

The buried soil (profile 1 and 5) is a disturbed brown earth or argillic brown earth (forest soil) developed over Mercian Mudstone. No clear turf horizon is obvious. This may have been removed in the process of construction by continuous footfall, or biotic been reworked subsequent to shallow burial under the primary rampart.

## 8.1.3.3 Neolithic causewayed ditch (Trench 7) – profile 6

A series of 4 Neolithic causewayed ditches were sectioned in Trench 7. Those in Ditch A were described and sampled (Table 4 and Figure 60).

The inner ditch (Ditch D) was about 1.8m deep and contained a charcoal-rich lenses half-way up the section and most finds were reported above this layer

## Davis & Sharples

Depth	sample	description
(cm)		
0-34		Backfill
34-58		Brown (7.5YR 4/4) drying to light brown (7.5YR 62) coarse silt, very little clay of coarse sand, stone-free (?aeolian), medium blocky prismatic to weakly columnar
		structure, abrupt boundary
	K14/1	(3215) – upper red deposit - ?aeolian/colluvial
58-66		Dark brown (7.5YR 3/3-4) (?humic) silt loam (little clay and coarse sand), stone-
		free, weak small crumb structure, abrupt boundary (no evidence of weathering
		to horizon below)
		(3215) Trample/stasis
66-80		Strong brown (7.5YR 5/6) silty clay loam [won't make a ring] , stone-free, large
		blocky prismatic structure, abrupt boundary
	K14/2	(3180) Colluvial/ploughwash
80-88		Dark brown (7.5YR 5/6) ?humic silty clay loam blocky structure, rare small
		stones
	K14/3	(3266) top of rampart tail 1
90+		Olive brown (2.5YR 4/4) silty clay mudstone

Table 2. Profile 4, main rampart deposits (including red deposit), Trench 3



Upper 'red' deposits against rampart

Stasis – ? trample horizon

Lower 'red' deposits against rampart

Rampart

Fig. 59. Trench 3, profile 4 showing the 'red' rampart deposits and samples K14/2 and K14/3 in position

Depth (cm)	sample	description				
0-14		Brown (10YR 4/3) humic silt loam, stone-free, medium blocky to large crumb				
		structure, common fine fleshy and some woody roots, clear to abrupt boundary				
		Ah and A horizon (topsoil)				
14-38		Brown (10YR 4/4) stone-fee silt, medium blocky structure, homogeneous with				
		abrupt to sharp boundary over rampart				
		(3125) A horizon				
38-58		Dark olive brown (2.5Y 3/3) with rare small of olive yellow (2.5Y 6/6) firm silty				
		clay loam, clear medium prismatic structure, rare small stones, abrupt boundary				
		Rampart 2				
58-66 Olive (5Y 4/3) stone-free fi		Olive (5Y 4/3) stone-free firm silty clay – silty clay loam (?humic), clear regular				
		small-medium blocky structure, stones on contact; at 64-66 many fine grits, and				
		very small stones, abrupt boundary				
		?Trample / stasis				
66-78		Olive brown (2.5Y 4/3) to olive grey (2.5Y 4/2) silty clay to silty clay loam with				
		many fine inclusions and rare small stones, mottled of olive and yellowish olive				
		unlike rampart 2, abrupt boundary				
		Primary rampart				
78-95	K14/4	Very dark greyish brown (2.5Y 3/2) silty clay loam, stone-free (very rare medium				
		stones), massive				
		Buried soil beneath rampart				

Table 3. Profile 5, rampart and buried soil, Trench 3

Depth sample description			description			
(cm)						
0-24			Dark greyish brown (10YR 4/2) humic silt loam, stone-free, fine weak			
			medium crumb structure, clear to abrupt smooth boundary			
			(7011) A horizon (topsoil)			
24-38			Dark greyish brown (10YR 4/2) silt loam, stone-free, weak small to medium			
			blocky structure, clear to abrupt smooth boundary			
			(7011) A horizon (topsoil)			
38-55			Olive brown (2.5Y 4/3) stone-free massive silt, clear boundary			
			(7011) Iower A/B horizon / Upper tertiary fill			
55-84			Dark greyish brown to greyish brown (2.5Y 5-6/2) compact silt, stone-free			
			and massive, few very fine Mn and Fe distinct mottles; evidence of local			
			groundwater gley			
			(7024) main tertiary fill			
84-98			Mixed horizon with dark greyish brown (2.5YR 6/2) compact silt and			
		-	charcoal-rich deposit – not a continuous charcoal deposit – but lenses of			
		92cm 96cm	charcoal, abrupt and locally sharp smooth boundary. (note many medium			
	K11/5		stones in 7067 opposite and adjacent to this layer)			
	K14/5	K 14/3	500111	(7051) charcoal-rich layer		
98-120		100cm	Olive brown (2.5Y 4/5) dense homogeneous silt loam, stone-free			
			(7066) primary / secondary fill			
		108cm				
		112cm				
	M14/1	116cm				
120-130		124cm 128cm	Dark grey (2.5Y 4/1) compact silt loam to silty clay loam, essentially stone-			
			free matrix and massive, but and rare large stone (117-125cm)			
			(7063) primary wash			

Monolith (25cm) M14/1 at 105-130cm; and K14/5 90-102cm

Table 4. Profile 6, Neolithic ditch 'A' (7010), trench 7



Fig. 60. Neolithic ditch 'A' (7010), Trench 7, with monolith (M14/1) and kubiena sample (K14/5) in position

Ditch C was more V-shaped, but with a narrow at bottom. It reportedly had no finds or charcoal-rich layers.

Ditch B was a broad shallow ditch with finds present and stones in the base.

Ditch A was 1.5m deep and U-shaped, again with a charcoal-rich lens about half way up the section and stones (rubble packing) on the base. Finds had included arrowheads and pot, with the majority of the material at the base, but most finds from the charcoal lens and above as with Ditch D.

Questions addressed are:

- Is pollen preserved in these deposits?
- Does the charcoal lens in the ditch represent a recut?

A monolith of undisturbed soils 25cm long (M14/1) was taken from the base of Ditch A (7010) (Figure 60) and subsampled for pollen. A kubiena sample (K14/5) immediately above it sampled the lower junction of the charcoal layer with the ditch fills (possible recut). This small sample was also subsampled for pollen providing a potential sequence of 380 mm at the base of the Neolithic ditch.

## 8.1.3.4 Rampart profile (trench 8) – profile 7

The rampart and buried soils in Trench 8 was examined (Table 5). These largely replicate those seen in Trench 3.

Full descriptions were made and a pre-labelled kubiena sample left for sampling the deposits here.

## 8.1.3.5 Trench 9: spring and hillside flushes

Excavation in Trench 9 produced clear evidence of natural spring issuing from the geological start on the hillside. Springs tend to weep and sap. On steeper sloes a clear pointy of water issue can be seen, but in order to make a clear flow that point of issue needs to be exaggerated and enhanced to create a clear water flow. Possible evidence of this was seen in both the trench and historically around the hillside.

The presence of springs is obviously important to settlement, occupation ad activity on the hilltop. This is demonstrable in the fact that the last of the Neolithic enclosure 'circuits' is clearly displaced to enclose and include the spirng (Trench 9) within the wider enclosed area.

## 8.1.4 Palaeo-environmental (pollen) subsampling

Two of the six undisturbed samples (K14/5 and M14/1) from the Neolithic ditch (7010) in Trench 7 were examined in the AEA laboratory facilities. The sample surfaces were cleaned, described, and pollen samples removed prior to storage and possible soil thin section manufacture. Samples were removed at 10 mm band-width and at 40mm intervals (Table 6, and see descriptions above). The remaining 4 samples (K14/1-4)

Depth	sam	ple	description
(cm)			
0-7			Very dark brown loose humic silt loam, many roots, abrupt boundary
			Ah
7 <b>-</b> 46			Brown (10YR 5/6) coarse silt, massive, essentially stone-free, but a few patches
			of small and medium stones, clear to abrupt boundary
			В
46-79			Strong brown (7.5YR 5/6) stone-free silt loam, large block structure, common
			vertical macropores (8-14mm diameter), common fine fleshy, fibrous and some
			woody roots, some voids to 5cm
			(8010)
798-101			Yellowish red (7.5YR 6/6) very compact, stone-free silty clay loam, sharp
			boundary
			(8030)
101-103			Very dark greyish brown to dark greyish brown (10YR 4-3/2) silty clay loam with
			rare small green siltstones, abrupt boundary
			(8036) Rampart 2
103-151			Olive brown (2.5Y 4/3) silty clay loam, essentially stone-free, but many common
			very small green siltstone fragments, abrupt boundary
			(8036) Rampart 1
151-167			Dark greyish brown (10YR 4/2) to dark grey (10YR 4/1) greasy silt loam,
			compact and stone-free, many very fine flat greenstone pieces and fine charcoal
			flecks
			(8041) bA horizon material (?upcast)
167-183			Dark greyish brown (10YR 4/2) moist silt loam to silty clay loam, stone-free,
			massive, many charcoal fragments
	K14/	6	(8051) bA horizon / ?turves
183-221			Dark greyish brown (10YR 4/2) silty clay loam, common small green siltstones,
	-		abrupt boundary over parent material
			(8050) bB horizon
221+		K14/7	Olive brown 92.5Y 4/4) silty clay massive siltstone
			bRw – parent material



K14/7 - straddles boundary of 8051 and 8050 (Neolithic subsoil?) Both taken by Nick Wells

 Table 5. Profile 7, rampart and buried soil, Trench 8

and that taken by Nick Wells from Trench 8 and yet to be received (K14/5) will be cleaned and described and those information added to the records here.

## 8.1.5 Geoarchaeological Interpretation

The site visit allows additional interpretation to be presented for some sequences, and sampling has provided the potential for examining the precise origin and formation of others (rampart deposit) and palaeoenvironmental potential (pollen) of others (Neolithic ditch 7010 in Trench 7). A series of observations interpretations are presented below in chronological order.

## 8.1.5.1 Neolithic Ditch; Trench 7 (CH14)

The charcoal-rich horizon in Ditch A was examined and seen to be a mixed anthropogenic layer contain charcoalrich background matrix, but also a series of very fine charcoal washes or dumps. The contact with the main ditch silts below was variably abrupt to sharp which may suggest a recut of material deposited on a firm nonbiotically reworked surface. The soil micromorphological analysis of this section will define this, and provide information about the cultural activity associated with the charcoal-rich layer.

Trench/cut	Kubiena sample	Deposit	Pollen sample
	S1	bAh1	50cm
2013		bA2	52cm
Profile 3			54cm
Trench 3, cut 3	51		56cm
			58cm
			60cm
			6 samples
			80cm
			82cm
	S2	?bA	84cm
2013	52	?DA	86cm
Profile 1			88cm
Trench 3, cut 1			90cm
			104cm
	S3	?bB	106cm
			108cm
			110cm
			112cm
			11 samples
		7051	92cm
2014	K14/5	7001	96cm
Profile 5			100cm
Trench 7, outer		7066	108cm
$(1^{st})$ ditch 7010	M14/13		112cm
Neolithic		7063	116cm
			(stone)
			124cm
			128cm
			8 samples

Table 6. List of pollen samples removed from the three profiles in 2013 and 2014

## 8.1.5.2 Buried Soil; Trench 3, profile 5 (CH14) & profile 1 (CH13)

This is a brown earth or argillic brown earth (forest soil), with no evident turfline. The latter may have been removed as a result of construction traffic and footfall.

## 8.1.5.3 Possible Midden/Occupation deposit; Trench 3, profile 3 (CH13)

Beneath the soil in Sondage C there is a distinct occupation of midden layer containing charcoal, pottery and bone. This is reminiscent of occupation debris/midden. It is sealed by soil material suggesting either dumping of a horizon material ('topsoil') or the development of a soil over this deposit prior to the emplacement of the rampart.

## 8.1.5.4 Soil within the rampart (between rampart 1 and rampart 2)

A clear soil horizon was recorded between rampart 1 and 2 (Trench 3, profile 1) indicating a period of stasis between the two constructional phases. It was examined in the field over a length of approximately 5 m. This horizon was not a simple turf-line but a complex of admixed different soil and parent material ('natural') elements. It lay on, rather than was developed in the

surface of, rampart 1. This is not an in situ soil or turf, but a mixed and probably trampled deposit comprising topsoil material possibly cut as a consequence of the start of construction of the enlarged rampart, and mixed and dropped in the process of its initial emplacements prior to the excavation and deposition of large massive deposits of parent material (natural).

#### 8.1.5.5 Material accumulating against the rampart; Trench 3 profile 2 (CH13) and 4 (CH14)

Accumulating against the back of the rampart were silty deposits which were slightly stonier in cutting 1. These are considered to be aeolian and colluvial in origin having blown and washed against the back of the rampart bank. The well-sorted silty nature may indicate aeolian (windblow) as a contributing factor, however all of the deposits and the parent material are predominantly silty. The few stones and nature of the deposits may also suggest some small-scale colluvial contribution as a result of activity, occupation, trampling, pit-digging, and building construction etc. These are sampled in profile 4 (K14/1, K14/2)

8.1.5.6 Humic horizon within the rampart deposits, and rampart deposits; Trench 3, profile 2 and 4

A clear humic horizon occurs within the red rampart deposits (profile 2 and 4), indicating distinct phases of the accumulation of this 'red' colluvial/aeolian etc deposit. The significance of this layer was whether this represented an in situ turf/soil horizon developing on the rampart deposits, or whether this was a trample horizon can be addressed by sample K14/1 in profile 4.

#### 8.1.6 Summary and site history

#### 8.1.6.1 Neolithic

The Neolithic activity involved a succession of four ditch elements. The woodland and any vegetation would have had to have been cleared to enable this construction (but see Allen and Gardiner 2012) and the nature of that woodland (cf. Allen and Gardiner 2009), and the timing of its clearance are important; was the woodland removed for, or well before the causewayed ditch construction and associated activity?

## 8.1.6.2 Iron Age

The pre-rampart activity is indicated by the 'occupation' or midden deposits beneath the rampart (Sondage C, profile 3) suggesting occupation prior to rampart construction or rampart enlargement at least. The soil over this deposit indicates a moderate lapse of time between the occupation deposit and the overlying phase of rampart material. This occupation/midden activity seems to be localised or sporadic as it was recorded in Sondage C, but not noted in Sondage D where an undisturbed typical brown earth soils was preserved beneath the rampart.

Construction of the rampart is at least in two distinct phases (Sondage A, profile 1), but as this does not represent in situ pedogenesis (soil formation) there is no necessity to argue for a long time period between the two phases of rampart construction.

Occupation activity in the interior and adjacent to the ramparts destabilised the surface by trampling and creation of bare soil, and digging leading to shallow but extensive windblown deposits and colluvial deposits accumulating against the rampart. The formation process of these deposits can be examined in samples K14/1 and K14/2).

## 8.1.7 Potential and Significance

## 8.1.7.1 Geoarchaeology and Soils

The buried soil under the rampart (Trenches 3 and 8) were described (profiles 1, 4 and 7) and sampled as undisturbed sediments in kubiena tins (S2-3, K14/4 and K14/6 and/ or 7) and provide the opportunity of examining the pre-rampart activities and environment, as well as examining the construction.

The midden deposits were examined, described and sampled in trench 3 (profile 3, kubiena sample S1).

The trample layer (3121) and base of 3215 was described (profiles 2 and 4) and sampled (K14/1) but field observations and descriptions provide a basic interpretation.

There is the potential to examine points such as:

1. Buried Soil – trench 3, profile 1, S2 and S3:

- What is the pre-rampart history and vegetation?
- Is there evidence of pre-rampart soil disturbance, deforestation or cultivation?
- Is there evidence of tramping, stock corralling or other activities prior to rampart construction?
- Was the turf removed before hillfort construction, or is its loss a result of pre-construction occupation and activity?

2. Midden deposits – trench 3, profile 3, sample S1:

- What is the nature of the pre-rampart midden/ occupation?
- Does this include just human activity or animal waste, trampling and stabling (see Lawson 2000, Macphail 2000; Allen 2000)

## 8.1.7.2 'Red' rampart deposits – Trench 3, profile 4, samples K14/1, K14/2

The origin and formation of 'red' deposits against the southern rampart (Trench 3) continue to be problematic. They are considered to be colluvial and aeolian, but slope against the deposits above the surrounding ground.

The descriptions combined with the samples taken from this can:

- Characterise the deposits
- Define the formation processes
- Is this colluvial, aeolian, anthropogenic, plough headland etc?
- Is its accumulation bipartite? Is there any differences between the two phases of accumulation?
- Is the stasis horizon just trample, or is there evidence of pedogenesis?

## 8.1.7.3 Neolithic recut – Trench 7, profile 6, sample K14/5

The interpretation of a recut followed by associated occupation debris and charcoal-rich horizons is considered an important archaeological question for the interpretation of the Neolithic activity history (Sharples pers. Comm.). The sample here (K14/5) can address the following:

• Is the contact below the charcoal-rich layer a recut?

Or is this material deposits on a firm, bon-biotally reworked surface?

- What is the character of the charcoal-rich deposits? Is this a charcoal matrix or a series of washes and dumps or both?
- Can any other activities be discerned from this deposit?

## 8.1.7.4 Pollen and Vegetation History

To augment the soil information there is the real possibility that soil pollen survives in the sampled deposits. If present this can provide a Neolithic vegetation history and land-use history as well as one immediately prior to the construction of the hillfort ramparts. Pollen samples from the base of the Neolithic ditch (K14/5 and M14/1), and from the buried soil under the rampart (S2 and S3) and from the midden (S3) can address questions such as:

- Is there evidence of the former Neolithic woodland, and what was its nature?
- Was the Neolithic woodland cleared for, or before, the Neolithic enclosure an activity?
- Is there evidence of woodland management?
- Was the woodland cleared for, or well before, the ramparts were constructed?
- Is the environment associated with occupation/ midden deposit different to that immediately prior to the rampart construction?
- Is there evidence of land-use and cereal cultivation before the hillfort?

## 8.1.8 Recommendations

The two main areas of assessment are soil micromorphological slide manufacture, and pollen assessment.

1. It is recommend that the six of the ten samples taken are sent for thin section manufacture (a process that takes 3 months) and this is undertaken now within the excavation/assessment budget. The samples are then rendered archive stable and suitable for immediate analysis.

2. It is recommend that a selection of pollen samples from Neolithic ditch (profile 5) the buried soil sequence (profile 1) and the midden (profile 3) are considered for formal pollen assessment

3. On commissioning assessment AEA will compile an edited and integrated report

4. On commissioning any subsequent analysts AEA will commission and manage any further work, edit the reports and provide an archaeological non-technical palaeo-environmental over-view

# 8.2 The Animal Bones by Richard Madgwick and Poppy Hodkinson

The faunal material from Caerau spans phases from the Neolithic to the post-Roman period. Currently phasing for the site is not fully established and therefore the phases assigned to this material are generally broad (see Table 9). Additionally, some contexts currently remain unphased. Animal remains were recovered from trenches 3, 7, 8, 9, and 10. Although much of the assemblage comprises unidentifiable fragments, a modest number of identifiable specimens were recovered from Trench 3, and one identifiable specimen was recovered from Trench 9.

#### 8.2.1 Excavation and recovery

During the 2013 excavations, 40-60 litre soil samples were taken for floatation, 25% of which was dry sieved through 10 mm and 2 mm sieves. Material was recovered by hand from the 2014 excavations, and then sieved with a 10 mm mesh. Flotation of the 2014 samples is currently underway, but the data is not yet available.

#### 8.2.2 Methods

The material was assessed by the authors in the Osteoarchaeology laboratory at Cardiff University following Cardiff Osteoarchaeology Research Group (CORG) protocol (see Mulville 2005). Identification was aided by the CORG comparative collection and reference library. Every fragment was examined and recorded as identifiable to taxon, to taxon size (e.g. large (cattle-size), medium (sheep-size) or small (hare-size) mammals) or as unidentifiable. Fragments were considered identifiable if they comprised at least 50% of one zone (following Serjeantson 1996). Rib fragments with surviving vertebral articulations were recorded to taxon size, as were vertebral centra. Of cranial specimens, only occipitals, zygomatics, maxillae with at least two teeth and nasals were recorded. Non-articulating carpals and tarsals (except for the calcaneum, navicular-cuboid and astragalus) were not recorded. Data on dental age (following Grant 1982; Payne 1973), epiphyseal fusion (Silver 1969) and sex was recorded. Measurements of teeth and postcranial elements were taken according to Von den Driesch (1976). Burning, butchery and other taphonomic processes (such as gnawing or mould staining) were also recorded.

#### 8.2.3 Dry and wet sieved samples from 2013

Bones derived from wet sieving the soil samples from the 2013 excavations were analysed. The samples recovered contain highly fragmented specimens of less than 20 mm in length. Identifiable specimens were very rare, mainly comprising mammal tooth fragments; no bird or fish bones were present within the samples. A large proportion of the specimens were calcined, indicating burning at high
Trench	Cattle	Caprine	Pig	Small Mammal	NISP	Unidentified	Total
3	4	2	2	1	9	897	906
4						324	324
5						162	162
No Phase						27	27
Total	4	2	2	1	9	1410	1419

Table 7. All recorded specimens from wet and dry sieved samples from the 2013 excavations



Fig. 61. Percentage of charred and/or calcined and unburned bone in 2013 samples

temperatures. There was also a small amount of mould staining present on some fragments.

The nine identifiable specimens recorded in these samples were tooth fragments of the three main domesticates and the humerus of a small mammal (Table 7). Although the size of this sample is far too small to provide any reliable data, it is worth noting that the representation and proportion of the mammals in these results are consistent with the findings from the wider site. This is indicative of a poorly preserved assemblage that has been subject to a complex taphonomic history, with dense dental enamel fragments surviving most frequently.

A high proportion of the sampled faunal material displays evidence of burning at high temperatures: 59% (see Figure 61) of the specimens were calcined, compared to only 1% that were just charred. A large amount of this calcined bone appears to come from Trench 3 (Table 8), which may reflect a specific burning or waste disposal practice on that part of the site. However, it is more likely to relate to preservation conditions and suggests that most Caerau deposits inhibited bone preservation, as calcinied bone is more resistant to subterranean degradation.

### 8.2.4 Assemblage Summary

The hand-retrieved and dry-sieved Caerau assemblage comprises 891 specimens, of which 80 (9%) are identifiable. The faunal material spans from the Neolithic to the post-Roman period; with the majority of specimens recorded from Roman contexts. The greatest taxonomic diversity is also found within Roman phases (see Table 9). The assemblage is dominated by domestic taxa; no wild mammals, birds or fish were recorded. Although samples are small, there is some evidence for varying taxonomic representation across phases: the appearance of pigs and the relative increase in caprines during the Roman period is noteworthy.

The assemblage exhibited a small number of butchery and gnawing marks. A small quantity of specimens displayed burn marks; in almost all cases, this took the form of high temperature calcination. The fragmented state of the assemblage meant that the potential for analysis of fusion and metric data was very limited.

### 8.2.4.1 Preservation

The site's sedimentology and topographical setting has affected the quality of bone preservation. Soil acidity and fluctuations in hydrology have created a mosaic pattern of preservation, with poorly preserved deposits dominating. The substantial quantity of teeth (the densest and best preserving skeletal element) and calcined bone (which preserves well due to recrystalisation) provide evidence for this. Despite the conditions, Caerau also exhibits some excellent instances of preservation (including one instance of a juvenile individual), often in the same contexts as bone that are beyond recognition. Therefore this indicates that a complex pre-depositional taphonomic history is also partially responsible for the poor preservation of the remains, as supported by the evidence of degrading processes such as gnawing and mould staining.

### 8.2.5 Results

#### 8.2.5.1 Taxon composition

Domestic mammals dominate Caerau's faunal assemblage; there is no evidence for any bird or fish remains aside from one small piece of marine mollusc shell (Figure 62). None of the Neolithic material was identifiable to taxon. The Iron Age contexts mostly comprise of cattle ('large mammal' remains are also likely to represent cattle) with a small proportion of caprine remains.

Roman phases at Caerau display the most diverse range of taxa: cattle, caprines, pig and horse are all present, as well as a number of unidentified mammals. There is also a single instance of marine mollusc shell. In contrast to the Iron Age contexts, caprines appear to be more abundant in this phase, and the high frequency of 'medium mammal' is suggestive of further caprine remains.

Roman – post Roman contexts yielded only 12 identifiable specimens, consisting of both cattle and caprines. Once again, cattle remains are in the majority, although the broad time span of the phase and the small number of specimens means that there is little interpretive value to these results.

### 8.2.5.2 Body part representation

Results are not presented by trench, as no discernible inter-phase variation in the distribution of skeletal elements was observed. Data is only presented for Trench 3, as this produced all faunal material except for a single cattle radius from Trench 9. The sample size is very small and consequently no confident interpretation can be derived from the data. Body part representation in cattle is clearly biased towards dental elements (Figure 63). This is certain to result from the poor preservation of the assemblage reducing the survival rate of post-cranial elements. There is also a slightly higher frequency of skeletal elements from the rear of the animal, although the limited number of fragments means that no interpretative emphasis should be placed on this pattern.

The caprine (Figure 64) and pig skeletal elements are also dominated by tooth fragments; again certain to relate to poor preservation conditions. Aside from tooth fragments the caprine remains are widely representative of the

70 60 50 Cattle Caprine 40 Pig % NISP Horse 30 Marine mollusc Large Mammal 20 Medium Mammal Small Mammal 10 0 Iron Age (n=20) Roman(n= 43) Roman - Post Roman(n=12)

Fig. 62. Representation of taxa by phase (NISP)

Trench	Charred	Calcined	Charred & Calcined	Unburned	Total
3		590		316	906
4	10	134	24	156	324
5		109	39	14	162
Unknown			27		27
Total	10	833	90	486	1419

Table 8. Burned and unburned specimens from 2013 samples

Phase	Cattle	Caprine	Pig	Horse	Marine mollusc	Large Mammal	Medium Mammal	Small Mammal	NISP	UNID	Total
Neolithic										69	69
Iron Age	13	4				3			20	310	330
Roman	12	14	4	1	1	1	9	1	43	289	332
Roman - Post Roman	8	4							12	83	95
Unphased	2	1					2		5	60	65
Total	35	23	4	1	1	4	11	1	80	811	891

Table 9. All specimens recorded by phase from the 2014 excavations



Cattle

Fig. 63. Representation of all cattle elements (n=34) from Trench 3

whole skeleton. Pig remains are extremely scarce: only four specimens were recorded for the entire site, of which three are tooth elements. The only postcranial element present is a single scapula.

### 8.2.5.3 Ageing

Despite the large volume of tooth fragments recorded from Caerau, very few specimens are complete enough to provide dental ageing information. Only one set of teeth from the assemblage was associated with a mandible and the majority of others were ambiguous M1s or M2s; which in isolation can reveal little about the age of an animal. Of the teeth that can give data on dental age, four were cattle specimens and one was a caprine specimen (Table 10). Tooth wear analysis of the cattle teeth shows that three of the individuals were 'mature adults', and one was 'senile'. The caprine individual was also a 'mature adult'.

The poor state of preservation of most bones resulted in a lack of epiphyseal fusion data. Only three cattle, three caprine and one horse specimen produced fusion evidence. The information revealed by this analysis

Taxon	Element	Age
Cattle	3rd lower molar	Senile
Cattle	4th lower pre-molar	Mature Adult
Cattle	5th lower pre-molar	Mature Adult
Cattle	Mandible	Mature Adult
Caprine	1st/ 2nd lower molar	Mature Adult

Table 10. Dental age data for cattle and caprines

is very limited but data are presented in Tables 11 and 12 for convenience. Three caprine specimens (Table 11) were from individuals that did not reach maturity, though this cannot be considered representative. A single foetal caprine radius was also recovered, suggesting onsite breeding. The cattle fusion data (Table 12) shows that two specimens were from individuals that were at least 13-18 months old at death and a third was from an individual that was slaughtered prior to the age of 4. Once again such minute samples cannot be considered representative, particularly as results from analysis of dental attrition and epiphyseal fusion are not in accordance. The horse specimen (a metacarpal with a fused distal epiphysis) indicates that the individual was at least 15-18 months of age. There is insufficient evidence to make any assumptions concerning husbandry regimes or subsistence strategies.

### 8.2.5.4 Burning, butchery and gnawing

The remains displayed a small amount of burning, butchery and gnawing. The majority of burnt bone was calcined, although a few fragments also displayed some charring (Table 13). Overall, burnt fragments make up 9% of the assemblage. Two identifiable specimens showed evidence of butchery (half a vertebra and the distal epiphysis of a metapodial, see Table 14), both of which exhibit chop marks. One specimen (a horse metacarpal) showed clear evidence of dog gnawing on its distal end Table 14).



### **Caprines**

Fig. 64. Representation of all caprine elements (n=23) from Trench 3

Caprines	F	UF	%F
Scapula			
Total 6-8 Months	0	0	0%
D. Humerus			
P. Radius			
Phalanx 1		1	100
Phalanx 2			
Total 12-18 Months	0	1	0%
D. Tibia			
D.Metapodia			
Ulna			
Total 1.5-2.5 Years	0	0	0%
D. Radius		1	0
P. Humerus			
P. Femur		1	0
D. Femur			
P. Tibia			
Total 3-3.5 Years	0	2	0%

Table 11 . Epiphyseal fusion data for caprine remains

Cattle	F	UF	%F
Scapula			
Total 7-10 Months	0	0	0%
D. Humerus			
P. Radius	2		100
Phalanx 1			
Phalanx 2			
Total 13-18 Months	2	0	100%
D. Tibia			
D.Metapodia			
Total 2-3 Years	0	0	0%
P. Humerus			
Ulna			
D. Radius			
P. Femur		1	0
D. Femur			
P. Tibia			
Calcaneum			
Total 3-4 Years	0	1	0%

Table 12. Epiphyseal fusion data for cattle remains

### 8.2.6 Discussion and interpretation

#### 8.2.6.1 Changes to taxonomic composition over time

Despite the provisional phasing being rather broad, it is possible to recognise a change in taxonomic representation across time. There is a clear shift in focus from cattle to caprines from the Iron Age to the Roman period. While cattle are the more prominent taxon during the Iron Age, they are superseded by caprines during the Roman period. The common occurrence of cattle is

Trench	Calcined	Charred/ Calcined
3	29	
5	1	
7	51	1
8	2	1
9		
10		
Total	83	2

*Table 13. Number of specimens with evidence of burning* 

Trench	Chop	Gnawed	Mould Stained
3	2	1	35
5			
7			1
8			
9			
10			
Total	2	1	36

*Table 14. Number of specimens with chop/ gnaw marks or mould staining* 

typical of Iron Age sites in southern Britain (Hambleton 1999); and is also seen at Llanmellin (Jones 2013). If the 'medium sized mammal' remains are assumed to contain a substantial proportion of caprines, then there appears to be a much higher volume of caprines than cattle during the Roman period at Caerau. This is in direct contrast to another Welsh site, Caernarfon: a Roman military site, which displays a high dependency on cattle throughout its occupation (King 1999, 142).

There is reasonable evidence to suggest that low volumes of pig remains are common across British Iron Age sites, as is the case at Caerau (Hambleton 1998, 79; King 1991, 16). By the Roman period, pigs become more widely seen on sites across the country, especially on military sites and those with a high Roman influence (King 1991, 16). Pig remains are fairly sparse at Caerau during the Roman period. Combined with increased caprine remains this might hint at limited Romanisation in terms of economic practice (see King 1991, 17) but samples are too small to interpret with confidence.

### 8.2.6.2 Subsistence and economy

Due to the small quantity of recovered remains at Caerau, only superficial comments can be made concerning subsistence strategies and the faunal economy. Skeletal element representation and analysis of butchery provide no clear patterns of processing. Similarly limited data means that age profiles cannot be reconstructed and therefore husbandry regimes cannot be established, but evidence suggests that animals in wide-ranging age categories were present on site.

### 8.2.7 Conclusion

Evidence is limited and therefore interpretations must remain provisional, but patterns suggest a faunal economy with a focus on cattle in the Iron Age shifting towards a more balanced focus on cattle and caprines in the Roman period. However, this pattern is based on very small numbers of specimens and therefore may result from chance sampling. The substantial proportion of caprine remains, coupled with a low frequency of pig bones provides weak hints that the occupants did not take on a Roman model of animal husbandry. However, this is an oversimplification of the diversity of the Romano-British rural economy and a larger assemblage from future excavations has the potential to clarify the validity of this pattern.

The structural remains and artefactual assemblages indicate that Caerau hillfort has an exceptional sequence of activities that span the Neolithic through to the Medieval period, although occupation is likely to be episodic rather than continuous.

## 9. Summary

### 9.1 Neolithic activity

The identification of a Neolithic causewayed enclosure defined by four lines of ditches is hugely significant since only five others are known in Wales and our knowledge of the early Neolithic period is not well understood. Its location is not particularly striking, except from the northwest where the hill dominates the approach for 2-3 km along the dry valley through which Cowbridge Road now extends. It is therefore likely to be significant that it is at the north-western tip of the Caerau hill promontory that the enclosure is situated since this is the most visible when approaching from the west.

Caerau represents the most easterly causewayed enclosure yet discovered in Wales and adds to a small, but growing, corpus of these monuments in south Glamorgan. Such a concentration may be in part related to the first introduction of agriculture into Wales and the subsequent clearance of woodland by the early pioneer farmers. The soil samples taken from the inner ditch (A) provide a strong possibility that pollen survives which would allow some of the questions concerning Neolithic woodland clearance, land-use and exploitation to be better understood. This could significantly enhance our understanding of the later Mesolithic-early Neolithic transition in Wales.

The finds assemblage is also of exceptional significance. The recovery of more than 200 sherds of early Neolithic pottery from the sections across the enclosure ditches is unparalleled at any of the other excavated causewayed enclosures in Wales and there exists good possibilities for lipid analysis. The flint assemblage, from secure archaeological contexts, shows good preservation and possibilities for use-wear analysis while further macro and microscopic analysis of the polished axe fragments will add to our knowledge of inter-regional patterns and relationships.

Finally, careful selection of radiocarbon samples from the enclosure ditches should allow for a coherent chronology to be established allowing us to consider in detail when the Neolithic in Wales actually started.

### 9.2 Later Prehistoric, Roman and post-Roman activity

The continued excavation of Trench 3 has revealed a complex and intensive sequence of occupation on the hilltop in the later prehistoric and Roman periods. Interestingly, intense occupation was not identified on the northern side of the hillfort (Trench 8). This may indicate that activity within the hillfort was tightly managed with specific areas designated for occupation, livestock management or storage etc. Alternatively, the trench may simply have been too narrow to identify the structural remains of houses, although the lack of finds from this area is suggestive of limited activity.

Although an in situ house floor was not identified, CS3 was shown to have potentially been of extremely large size. If the interpretation of an inner and outer ring of postholes is accepted, the house would be 13.5 m in diameter - one of the largest roundhouses ever identified in Wales. Roundhouses of this size are usually dated to the Late Bronze Age and since several of its structural postholes are sealed by the hillfort's primary inner rampart it suggests that there may have been later prehistoric occupation on the hilltop prior to the construction of the ramparts. This may indicate that the multivallation is in fact a very late feature of construction or that the circuit of boundaries encircling the hill are not of the same phase. One possibility is that the eastern ramparts were the earliest, effectively creating an inland promontory fort, and the ramparts on the northern and southern sides only later additions. Alternatively, the whole rampart circuit may be a late feature meaning that any Early or Middle Iron Age settlement was unenclosed. A radiocarbon sample from the articulated bone group recovered beneath the rampart in Sondage E should provide a useful terminus post quem for the rampart on the southern side, while excavation of Trench 10 across the eastern hillfort boundaries would help clarify the date of their construction.

The rampart sequence, where investigated, appears complex. Three of the sondages cut through the rampart in Trench 3 appear to show a primary and secondary rampart, separated by a dark, humic rich soil. This has been interpreted by Mike Allen (see section 8.1.6.2) as a trample layer rather than in situ turf formation – the implication being that the two phases of rampart are not separated by any length of time. This seems difficult

to accept since the secondary rampart contains Roman Greywares while the primary rampart does not. Also, in Sondage C the ramparts are separated by a midden deposit containing 2nd to 4th century Roman material. It would seem logical then to interpret the primary rampart as Iron Age and the secondary as Roman or post-Roman. The story is further complicated because only a single rampart phase was identified in Sondage D. It may be therefore that the rampart circuit was only ever very patchy, or indeed this is a deliberate gap or entrance left in its circuit. Only a complete section along the southern edge of Trench 3 could hope to resolve this.

The sequence of rampart construction is interesting and challenges our understanding of hillfort construction and use in south Wales. It was hoped that the investigation of the rampart in Trench 9 would give a clear and informative section through the inner hillfort rampart to help clarify some of these issues. Unfortunately, the area chosen has been shown to be a deliberately excavated trench, rather than an erosion scar, which has resulted in considerable disturbance. The sequence shows a primary rampart and ditch separated by a 4.5 m berm. The bank appears to be dump constructed as no external revetment was noted. At some point after the rampart had collapsed, probably in the Roman period, a deliberate cutting was made to access and enhance a spring head in order to create a clear water flow. A deliberately laid path of limestone slabs was laid creating a path to the spring, under which some large sherds of Roman Greyware pottery were deposited. Subsequently, the area was heavily disturbed and a number of cuttings made. Some of these may date to the Medieval or post-Medieval period, but it is likely that cut features at the southern end of the section are more recent, possibly associated with the establishment of formal paths and parkland woodland of the hill in the 18th and 19th century.

A more informative section through the inner tail of the inner rampart was identified in Trench 8. The rampart sequence here appears to confirm the sequence identified in Trench 3 with primary (Iron Age) rampart construction followed by a period of stabilisation and then secondary (post-Roman) rampart construction. The rampart here is clearly better preserved than in Trench 9 and it would be desirable to obtain a complete profile through the rampart by extending this cutting around 11 m to the north into the woodland to confirm the constructional sequence. The identification of a secondary rampart on the northern side of the hill suggests that the remodelling of the boundaries, probably in the post-Roman period, was continuous around the entire hilltop and that Caerau was a large and important centre at this time. This would be a major discovery, which would challenge our understanding of post Roman occupation of south Wales.

The artefact and ecofact assemblage is also of considerable

interest. The analysis of animal bones recovered from the 2014 excavations appears to show a change through time with the Iron Age dominated by cattle and a greater proportion of sheep in the Roman and/or post-Roman phases. This confirms the pattern observed from the 2013 animal bone assemblage and is similar to the exploitation of livestock at Llanmelin. The presence of at least one neonate caprine suggests on-site breeding. By contrast the cattle assemblage appears dominated by mature animals suggestive of dairying.

### 9.3 Medieval and post-Medieval activity

No structures have been identified which can be shown definitely to be Medieval or post-Medieval. However, pottery sherds recovered from the test pits in Trench 8 have been dated to the 14th century (Alice Forward pers. comm.). Four-post structure (PS2) identified at the eastern end of Trench 7 is stratigraphically later than Ditch e (which contained a single sherd of Roman pottery) as so could potentially date to this period.

## 10. Community Impact

### 10. COMMUNITY IMPACT by Dave Wyatt

CAER Heritage is not a straightforward community archaeology research project. It is underpinned by objectives forged at a series of initial meetings involving local residents, local schools representatives, the local community development agency, local heritage institutions and a small team of academics. Importantly, these objectives are not focussed upon archaeological or historical research but rather how such research might be employed to address negative views associated with these local communities and the broader challenges which they face. From its outset, the project sought to utilise rich and untapped heritage assets and local expertise to develop educational and life opportunities: building confidence, challenging negative stereotypes and realising the positive potential of the process of research co-production. To date, the project has involved community members (including school pupils, young people facing exclusion, the long term unemployed and retired people) in a variety of co-produced initiatives including: geophysical surveys, museum exhibitions, adult learners courses, art installations, creative writing, dance performances, banner processions, history projects, film-making and the creation of heritage trails. At the heart of these wider heritage-themed initiatives have been two major community excavations at Caerau's magnificent Iron Age hillfort. These have involved a whole range of local community members and school children in the coproduction of archaeological research (figures 65 and 66). This evaluation report focuses upon the 2014 excavation which took place over 4 weeks, between 23rd June 2014 and 18th July 2014, and which involved 239 local volunteers and local school pupils.

### 10.1 Methods

Despite the importance of evaluation in co-produced research, there appears to be little agreement over what evaluation of community co-production looks like and little debate over the fact that evaluation 'outcomes and outputs' are often aimed at very different people/ organisations (e.g. funding bodies, community members/ partners, academic institutions) and little recognition that there are many types of evaluation (e.g. quantitative, qualitative and participatory evaluation methods). In many respects, CAER's evaluation approach evolved 'organically', like the project, from an ad-hoc and widespread 'separate approach' to an 'integrated' approach in which an evaluation plan was built into project activities and co-produced with project participants. It is contended here that the latter approach is the most worthwhile both for community members/partners and academics; with evaluation activities being tailored to clearly identified evaluation aims. Evaluation was therefore regarded as an ongoing process. Adopting this integrated approach led the CAER team to develop and employ an evaluation plan which addressed the following key factors: aims, objectives, people involved, indicators and methodology. From this standpoint, evaluation was not seen as a feedback gathering activity but rather, as suggested by Bhasin as a 'reflection on action' (Jackson and Kassam, 1998). The approach to evaluation was therefore embedded within the project design and upheld the principles of co-designed evaluation: i.e. it involved local residents and partner organisations in all aspects of the evaluation process (e.g. design, implementation). For example, evaluation questions were designed in collaboration with local residents and partner organisations and local residents acted as interviewer, cameraman and film producer (see qualitative analysis below).

As during the 2013 excavation, the CAER evaluation strategy was framed around the project's core objectives:

- To foster a positive 'sense of place' for Caerau and Ely
- To create educational opportunities
- To promote skills development
- To challenge stigmatised perceptions of the Caerau and Ely district
- To raise local, regional and national interest in archaeology
- To break down barriers to academia

Evaluation of a project of this nature is particularly challenging owing to the multiple events, aims, target audiences and deliverers of the project. This specificity means that a diverse range of qualitative and quantitative evaluation methods and thus a complex evaluation plan were required. Tools used to evaluate included: films, photos, audio & video interviews, artwork, crafts, creative postcards, accredited courses and evaluation forms.



Fig. 65. A group of guides from Fairwater help to wash pottery



Fig. 66. School children at the heart of the excavations

### 10.2 Results of evaluation

Over 1,200 people visited the 2014 excavations while they were in progress and 313 of these were directly involved in the archaeological work. Many volunteers returned on a regular basis and in total 156 volunteers contributed 888 hours. Participating school pupils who were involved in finds processing, excavation and sieving contributed an additional 332 hours. While 13 adult learners involved in formal learning activities contributed a further 366 hours. The total time contributed by volunteers was over the course of the four week excavation was an impressive 1,586 hours. As in 2013 excavation, the visitors and volunteers represented a diverse crosssection of the local community with all ages and genders represented from primary and secondary school children, 6th formers, young people excluded from education, long-term unemployed people, people with health and mental issues, retired people, and working parents. The following sections provide an overview of the range of evaluation strategies employed during the course of the 2014 excavation.

### 10.2.1 Evaluation form

Visitors to the site were asked to complete an evaluation form which asked them four questions about whether their visit had changed their attitudes (Figure 67).

Whilst a critically reflective approach to evaluation is useful the evaluation forms produced only positive responses. All respondents agreed that the excavations had increased their interest in archaeology and their understanding of the importance of the site. This incredibly positive response to the questions was reinforced by accompanying written comments made on the reverse of these forms. A small sample of written feedback comments follow:

'Came up to the dig with my 17 year old daughter who is considering archaeology and ancient history at university. Firstly, we were given an extremely helpful explanation of the site. Secondly, we were given a wonderfully explained and illustrated tour. Thirdly, J. was given the opportunity to be "hands on" for a short while. Marvellous!'

'My nieces and I were shown round the site and told about all the interesting periods and items found. I found this very interesting as we visit this area a lot and had no idea this stuff was here.'

'This is an amazing place and you are all doing a fantastic job to preserve history and get people involved.'

'I think it is essential that this project continues to investigate this UK important site. Also, I would like to praise the team for the impact of volunteering on the confidence and skills of my teenage son.' 'My visit clarified the importance of Caerau to the area and the archaeology of Wales and Britain.'

'Would be nice to have a permanent visitor centre here one day, amazing interesting site. More signs needed both to help people navigate their way and to provide information around the site. Great project, staff doing a brilliant job. Thankyou!'

### 10.2.2 Live Local Learn Local course

Ten adults from the Caerau and Ely communities undertook an accredited archaeological fieldwork Live Local Learn Local course (Learn to be an archaeologist) assessed at CQFW Level 3 and delivered in partnership with Cardiff University's Centre for Lifelong Learning. The course proved very successful, 50% of those enrolled completed and gained accreditation while also contributing 126 hours to the excavation (Figure 68). Informal student feedback was very positive and highlighted the acquisition of a range of new skills and confidence.

### 10.2.3 Exploring the Past Adult Learners

Six adult learners from the Cardiff area who are studying on the Exploring the Past Foundation Pathway (an open access route on to history & archaeology degrees at Cardiff) undertook 1 week assessed field placements (240 hours in total contributed) at the excavation as part of an unaccredited curriculum enrichment volunteer placement programme (Figures 69 and 70). A number of these individuals face significant barriers to returning to learning including disabilities. While participation was not accredited, informal feedback indicated that these adult learners had a positive experience of the excavation as is evidenced in a detailed blog on the project's web site (August 11th): http://caerheritageproject.com/caer-blog/ page/2/

### 10.2.4 Postcards to the Iron Age.

Visitors and dig participants were asked to send postcards to their Iron Age ancestors as a fun creative exercise to make people think about what was important to Iron Age people and about temporal changes in lived experience. Sixty postcards were completed over the range of the dig and outreach events. There follows a representative sample of some creative responses:

- 'Dear Iron Age, I found something that belonged to you the other day!'
- 'In the Iron Age what food did you have? Today we have things like KFC and for entertainment we have Xboxes and Ipads. I would like to know what you had?'
- 'How did you survive in many kinds of weathers? Was war terrifying? Where did you go to the toilet?

Davis & Sharples



*Fig.* 67. *Visitors' evaluation questionnaire answers* (n=34)



Fig. 68. Adult learners on the Live Local Learn Local course in archaeological skills

Did you have calendars? Goodbye from the future...'

- 'What was life like in the Iron Age? My life is good, we have more medicines and better houses. What did children learn? I am 12 years old and my name is H.'
- 'Dear Iron Age friends, iron rules like mad. Yours sincerely, R.'
- 'To the Iron Age 600BC. You are where it all started. Well, maybe not. Maybe it was the Bronze Age. Or maybe the Neolithic. You aren't where it started are you?!'

### 10.2.5 Teacher feedback

Three local secondary schools, Glyn Derw High School (35 pupils from years 7-11), Mary Immaculate High School (24 pupils from year 9) and Fitzalan (11 Pupils from years 7-9), were directly involved with the excavations with pupils from several classes from each school involved. Teacher feedback was captured through informal contact and email and was very positive. Summed up by feedback from Edward Watts deputy head teacher and key contact at Michaelston/Glyn Derw High:

"The whole project has gone up another level - it is fantastic." Email, 19th July 2014.

Community Impact



Fig. 69. Student from the Exploring the Past Pathway helps out with the excavations



Fig. 70. A student with protected characteristics from the Exploring the Past Pathway

### 10.2.6 Participant interviews: qualitative analysis

As alluded earlier, the CAER evaluation approach was (and continues to be) participatory, i.e. that evaluation must emerge primarily from 'within' to be authentic. For reasons of space, focus here is on evaluation data concerning a small number of local residents' experiences over the course of both community excavations. The interviews used to explore the impacts of the excavations and evaluation-related issues are derived from video and audio recordings (on average 2-5 minutes long) obtained respectively by a community member and trained filmmaker, Vivian Thomas, and CAER team member Dr Clyde Ancarno, both of whom worked in close collaboration.

Responses from four community members have been selected for this brief analysis. All have been involved in CAER since the start of the project in 2012 and all participated in both excavations. They are Mary, Sam, George and Tom (all local residents' names have been changed). Their ages range from 35-55 and all are long term unemployed. Working on the premise that insights into negative impacts are potentially more valuable for evaluation than those of positive impacts (Elliot et al. 2012), the community members were encouraged to be truthful and to contribute negative/critical/questioning views on the project should they wish to. What ensues is a summary of the qualitative analysis of the discourse of these interviews (based on transcripts of relevant sections).

Insofar as they were explicitly probed for critical perspectives on the project, the interviewees expressed clear views that the project had been largely beneficial for both themselves and for the communities of Caerau and Ely more broadly. The few criticisms voiced, however, were directly related to issues concerning continuity of involvement and project sustainability. For example, a key issue which was raised on a number of occasions by several interviewees related to funding. In this respect, concerns were raised about financial constraints which in the past have significantly restricted the scope and longevity of community projects in the area. Within this context, one of the local residents' frustration about the periods of time when things were not moving fast enough is particularly relevant:

Things from my point of view could be moving quicker, but I think that's more on the lines of the fundraising and getting the politicians to pull their fingers out if they can but I think we're getting there. (George, 2014)

The desire for project continuity (and thereby implicit concerns that it would not continue) were evident from a number of interviewees both in 2013 and 2014:

Hopefully the same thing will happen next year because

there's lots to be done up here, it's obvious. (Mary 2013)

The desire for continuity, beyond the 2013 and 2014 excavations was also made clear:

*I'm already hoping that next year they'll be coming back to do it again, get involved again.* (Tom 2014)

I was up here all last year and again this year and hopefully next year <laughter>. I hope so I really keep my fingers crossed. (Mary 2014)

The interviews also indicated that the project allowed for a new or revived sense of 'ownership' to emerge in relation to both local heritage and the project itself. Indeed, the community members' sense of ownership of the project repeatedly permeates the interviews – a factor which, it has been argued, is critical for the success of co-produced community research projects (Durose et al. 2012b, 5-6; Hale 2012, 5; Hart et al. 2012, 5-6; Needham 2008, 223):

I happened to help get the whole thing off the ground I suppose. The initial meeting with Olly Davis and the Friends of St Mary's and I popped up to have a go with the Time Team (George, 2014).

To be actually involved myself and get out and sort myself out. I can say it's such a privilege to me. You'd have never think you'd be sort of trusted or allowed to do such things like you know. It's been excellent, really good. (Tom, 2013)

Views regarding improved attitudes towards local heritage and community cohesion also emerged as well as stories of personal transformation:

It's a lot more looked after since they've started <inaudible>. It does definitely look a lot better up here. It was going to decline. It was quite bad up here at one stage so. Yes it's definitely helping what they're doing for sure. (Sam 2013)

I don't usually sort of interact with many people so it's been great really to meet different people, good people you know and have a focussed interest you know so it's been+ for myself it's been excellent so. (Tom 2013)

The interviewees also all stressed the ways in which CAER allowed for alternative and positive narratives about the community to emerge, hence offering a much needed counter discourse to the systematic negative framing of the area. This was best summed up by Tom:

Yes we've sort of been as an area we're pushed to the back a lot and have been for years so all of us we're at the forefront for something you know which is pretty amazing really. (Tom 2013) The interviews also provided unforeseen insights into the way the project has benefited the health and wellbeing of some of the community members interviewed. This included Tom's ongoing fight against long-term depression:

I suffer quite a bit from depression so it's given me drive to get out of the house, get involved, become part of a team. You know I sort of stick to myself a lot so+ I've talked to more people here in the last two weeks than I have in a long time so it's pretty+ for me it's cool like you know. It's given me a bit of drive you and picked myself up, given me a boost, which I'm really grateful for. (Tom 2013)

Interestingly, these stories of significant personal transformation echo claims regarding the therapeutic nature of co-produced research (Needham 2008, 223). All interviewees also commented how the project allowed them to gain new skills including practical excavation skills, teamwork and confidence building and a better understanding of archaeological research and interpretation. Indeed, archaeology is a recurrent theme in the interviews (and other sources of evaluation too). Community members' expressed an avid interest in finding out about archaeology, particularly the archaeology of an 'historic environment' which means something to them. Their deep sense of enjoyment (despite frequent allusion to how much physical hard work it was too) while digging physical remains of the past in their own community was clearly evident.

### 10.2.7 Media Interest involving community members

A key objective of the project is to address negative stereotypes of Caerau and Ely, particularly within the media, and to involve local people in this process. The 2014 excavation, with its Neolithic finds, generated intense media interest including 2 prime time TV news reports (BBC Wales & HTV Wales), two BBC Radio Wales features (Jason Mohammed Show) as well as local newspaper stories (South Wales Echo). The TV reports featured local community participants of all ages. The HTV report can still be viewed at:

http://www.itv.com/news/wales/2014-07-18/caerproject-the-secrets-of-cardiffs-iron-age-hill-fort/

### 10.2.8 Digging Caerau Outreach events.

A whole range of events and activities surrounded the 2014 excavation promoting interest in local archaeology, heritage and the excavation. These included:

### Glyn Derw High School Garden Party, 18th June 2014

A team of CAER project staff and undergraduates attended Glyn Derw High School's summer garden party on 18th June to promote interest in the excavation prior to its commencement. Visitors to the roadshow learned about Caerau's archaeology, handled artefacts from the 2013 excavation and make Iron Age pots. The team engaged with @ 70 local pupils and residents and 20 Iron Age pots were manufactured (Figure 71)!



Fig. 71. The CAER team at Glyn Derw high school



Fig. 72. Action in Caerau and Ely Learning Showcase

## Action in Caerau & Ely, Learning Showcase Event, 26th June 2014

A team of CAER project staff and undergraduates and community members delivered a roadshow at this community learning event. Visitors to the roadshow learned about Caerau's archaeology and the excavation finds, handled artefacts and were encouraged to visit the site. The team engaged with around 80 local people at this event (Figure 72).

### School Assembly Presentations at Glyn Derw High and Michaelston Community College, 7th July 2014

CAER project co-director Dave Wyatt visited both Glyn Derw High School and Michaelston Community College and delivered two school assemblies raising awareness of the excavation and its finds to over 250 pupils.

### Caeraustock Films March- 2nd July 2014

During the 2013 Digging Caerau excavations, an unemployed local filmmaker, Viv Thomas, filmed every aspect of this community dig and interviewed many participants and visitors. Viv collected many hours of footage and, together with the CAER Project team, he established a collaborative collective involving a local school, Michaelston College, and local production company LightTrap Films to edit this extensive footage. In the Spring 2014 this collective co-produced and screened a series of four interlinked 'viral' short films with 12 pupils from the college (six year 7s and four year 12s) and 4 local residents. These films present a range of creative interpretations of Viv's extensive footage from different perspectives and represent an insightful and effective evaluative perspective (Figure 73).

Once produced, this series of four interlinked shorts, entitled collectively as 'Caeraustock', were screened simultaneously during the 2014 excavations to widely diverse audiences across three locations: at the excavation site within Caerau hillfort, at St Fagans National History Museum and at the St David's Conference Centre. The film production and screening thereby linked these locations across Cardiff and their audiences, providing a powerful example of CAER project themes coproduction, valuing community heritage and presenting the communities of Caerau and Ely in a positive light. The films were screened once again a few weeks later during the Big Lunch open day event at the Digging Caerau 2014 excavation on 19th July (see below). They have subsequently been uploaded onto a CAER TV channel on Youtube for all to view. http://www.youtube. com/channel/UCyyMkWA1VAprve4xOyHXtow

### Photos and Iolo Exhibition, 1st-2nd July 2014

Designed to coincide with the commencement of the 2014 excavation, Photos and Iolo was a CAER Heritage Project exhibition format that was developed and coproduced by artist Paul Evans with pupils from Glyn Derw High School, National Museum Wales staff and CAER Heritage Project directors Dave Wyatt and Oliver Davis. Consisting of a series of re-usable pop-up banners Photos and Iolo was an interactive experience that encouraged viewers to get involved with the images on display by searching for the bard Iolo (or Ian Daniel, the Museum's Celtic demonstrator) – photo-shopped into images of Caerau and Ely that were taken by local residents. Once the participants have found Iolo then they are encouraged to take part in a riddle competition. These Riddles were created by pupils from Glyn Derw High School. The images featured came from a Barnardos project which took place in Ely and Caerau in the 1980s. Visitors who successfully solved the riddles were rewarded with an exhibition photo-booklet (Figure 74).

The co-creation of riddles with Glyn Derw High facilitated working with a class of 30 year 9 English pupils and their teacher for the first time at the school. The exhibition at St Fagans took place over 2 days at the start of the 2014 excavation, it was attended by around 60 visitors engaging museum visitors co-produced heritage research and highlighting local skills and showcasing community heritage assets. The exhibition was then subsequently transferred to the Caerau excavation site and exhibited during the Big Lunch open day on 19th July 2014 (see below) to around 100 visitors, mostly local residents. For further details see CAER blog (November 3rd entry) for details: http://caerheritageproject.com/caer-blog/

### Banner Procession (Cardiff Bay) 1st July 2014

This event was organised by academic and community partners from two Cardiff University based community projects (Representing Communities and the CAER Heritage Project) and was designed to coincide with the commencement of the 2014 excavation. The CAER element consisted of the co-creation of two community banners by twenty year 7 pupils from Glyn Derw High and around 20 retired community members from Healthy, Wealthy and Wise and project artist Paul Evans. Once created the banners were marched down the embankment of the Taff with street dance performance from a class of year 10 pupils from Michaelston Community College who had undertaken dance workshops to train for this performance. The procession also showcased banners made by pupils from Merthyr Tydfil who also took part in the procession. The procession ended in a public performance of song and dance by both sets of pupils at the Millenium Centre in Cardiff Bay to celebrate the history, identity and future imaginings of the people living in these places. This event was attended by the Healthy, wealthy and Wise group from Caerau and Ely (Figure 75). The banners were subsequently exhibited in the Pierhead Building, Cardiff Bay along with the By'ere Tapestry - an embroidery created by members of Healthy, Wealthy and Wise which features important places in the history of Caerau and Ely and which took 7 years to construct.



Fig. 73. Showing the Caeraustock films on-site



Fig. 74. Photo exhibition at St Fagans



Fig. 75. Banner procession at Cardiff Bay

Banner Bright provided an opportunity to showcase the ways in which communities have used and are currently using banners, as well as other forms of artistic expression, to speak to people in power. It represents the CAER project's objectives in relation to valuing community identity, talent, heritage and co-production strategies; bringing together inter-generational groups in a celebration of their communities on a very public stage. See CAER Blog (November 17th entry): http:// caerheritageproject.com/caer-blog/

### Digging Caerau Roadshow at the Ely Festival, 12th July 2014

A team of staff, students and local participants took a Digging Caerau roadshow to the vibrant Ely Festival on July which is attended by hundreds of local residents and professionals (Figure 76). 150 people visited the roadshow and undertook a range of interactive activities including making Iron Age Pots, postcards to the Iron Age. The roadshow was also attended by Kevin Brennan MP for Cardiff West who later tweeted about the excavation: "@CAERHeritage doing great archaeology in the community"

See CAER Blog (16th July entry) http:// caerheritageproject.com/caer-blog/page/2/

### The Big Lunch, 19th July 2014

On 19th July, in partnership with community development organisation ACE, the Digging Caerau team organised the Big Lunch, a community picnic involving a whole range of activities including tours at the excavation site. Over 180 local residents and children attended this event and undertook a range of activities including finds processing, making Iron-Age pots, designing tribal logos, writing postcards to the Iron Age, interacting with the Photos and Iolo Exhibition (see above), viewing screenings of the Caeraustock Films (see above) and Celtic face painting (Figure 77). Feedback from the event was overwhelmingly positive and is clearly evidenced from the photographic evidence and comments from the day, see CAER Facebook album:

https://www.facebook.com/media/set/?set=a.723603011 019684.1073741910.340199539360035&type=3

### Visit from Friends of Wincobank Hill, 16th-19th July

4 community members from CAER sister project at Wincobank Hill in Sheffield visited and participated in the excavation over the course of three days contributing 28 volunteer hours in that time (Figure 78). An evaluation of their experience is captured in a published blog, see CAER blog (October, 7 entry) http://caerheritageproject. com/caer-blog/



Fig. 76. CAER team at the Ely Festival



*Fig.* 77. *The Big Lunch – local communities come to the site to share stories and food!* 



Fig. 78. A visit from the Friends of Wincobank Hill

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# Appendix 1 - Context Lists

TRENCH	CONTEXT NO.	TYPE	DESCRIPTION	
3	3171	U/S	Backfill of 2013 trench	
3	3172	U/S	Cleaning	
3	3173	Deposit	Topsoil	
3	3174	Deposit	Subsoil	
3	3175	Deposit	Natural	
3	3176	Deposit	Top layer of sondage C extension	
3	3177	Cut	VOID	
3	3178	Deposit	Fill of [3177]	
3	3179	Cut	VOID	
3	3180	Deposit	Fill of [3179]	
3	3181	Cut	Cut of 'green' posthole in sondage B extension	
3	3182	Deposit	Fill of deposit [3181]	
3	3183	U/S	General unstrat	
3	3184	U/S	Unstrat - sondage C	
3	3185	Cut	VOID	
3	3186	Deposit	Fill of metalled surface [3185]	
3	3187	Cut	VOID	
3	3188	Deposit	Fill of yellowy clay [3187]	
3	3189	Cut	VOID	
3	3190	Deposit	Fill of midden [3189]	
3	3191	Cut	VOID	
3	3192	Deposit	Fill of second rampart in sondage B	
3	3193	Cut	VOID	
3	3194	Deposit	Fill of tread layer [3193]	
3	3195	Cut	VOID	
3	3196	Deposit	Fill of first phase rampart [3195]	
3	3197	Cut	VOID	
3	3198	Deposit	Fill of occupation deposit [3197]	
3	3199	Cut	VOID	
3	3200	Deposit	VOID	
3	3201	Cut	Cut of pit - North of sondage B	
3	3202	Deposit	Fill of pit [3201]	
3	3203	Cut	Cut of pit- under edge of sondage C	
3	3204	Deposit		
3	3205	Cut	VOID	
3	3206	Deposit	VOID	
3	3207	Fill	Secondary fill of posthole [3210]	

3	3208	Fill	Primary fill of posthole [3210]
3	3209	Deposit	Posthole 'packing' stones
3	3210	Cut	Cut of posthole
3	3211	Cut	VOID
3	3212	Deposit	Fill of spread [3211]
3	3213a	Cut	VOID
3	3213	Deposit	Clay dump/deposit in posthole [3210] over (3208)
3	3214	Deposit	Fill of clay [3213a]
3	3214b	Cut	VOID
3	3215	Deposit	Fill of dark red band [3214]
3	3216	Cut	VOID
3	3217	Deposit	Fill of [3216]
3	3218	Cut	VOID
3	3219	Deposit	Fill of spread [3218]
3	3220	Cut	VOID
3	3221	Deposit	VOID
3	3222	Cut	Cut of posthole - NW trench corner
3	3223	Deposit	Fill of pit [3222]
3	3224	Cut	VOID
3	3225	Deposit	VOID
3	3226	Cut	Cut of pit - edge of sondage C
3	3227	Deposit	Fill of pit [3226]
3	3228	Deposit	VOID
3	3229	Cut	VOID
3	3230	Deposit	VOID
3	3231	Cut	VOID
3	3232	Deposit	Fill of Rampart [3231]
3	3233	Cut	VOID
3	3234	Deposit	Fill of yellow-red clay [3233]
3	3235	Cut	VOID
3	3236	Deposit	Fill of grey stoney layer [3235]
3	3237	Cut	Cut of posthole in complex area (vicky)
3	3238	Deposit	Fill of posthole [3237]
3	3239	Cut	Posthole cutting another similar feature
3	3240	Cut	Pit being cut by a posthole
3	3241	Deposit	Fill of [3239]
3	3242	Deposit	Fill of [3240]
3	3243	Cut	VOID
3	3244	Deposit	VOID
3	3245	Cut	Cut of posthole (east of sondage D)
3	3246	Deposit	Fill of posthole [3245]
3	3247	Cut	VOID
3	3248	Deposit	Metalled surface in sondage D (first)
3	3249	Cut	Posthole (large) in sondage D
3	3250	Deposit	Fill of posthole [3249]

[	1		
3	3251	Cut	Cut of small posthole in sondage D
3	3252	Deposit	Fill of posthole [3251]
3	3253	Deposit	Fill of unexcavated posthole Photo: 2063
3	3254	Cut	Cut (posthole) [3253] - just east of sondage C
3	3255	Cut	VOID
3	3256	Deposit	VOID
3	3257	Cut	Posthole south of complex area/spread [3288]
3	3258	Deposit	Fill of posthole [3257]
3	3259	Cut	Cut of D-shaped posthole - NE corner of trench
3	3260	Deposit	Fill of [3259]
3	3261	Cut	Posthole - NW corner of trench (meryn)
3	3262	Deposit	Fill of posthole [3261]
3	3263	Cut	Shallow pit cutting posthole [3210]
3	3264	Deposit	Fill of shallow pit [3263]
3	3265	Cut	VOID
3	3266	Deposit	VOID
3	3267	Cut	VOID
3	3268	Deposit	Metalled surface in sondage D
3	3269	Cut	Shallow pit adjacent to, intercutting [3263] / [3210]
3	3270	Deposit	Sole fill of [3269]
3	3271	Cut	Small posthole that cuts (3270)
3	3272	Deposit	Fill of [3271]
3	3273	Deposit	VOID
3	3274	Deposit	VOID
3	3275	Deposit	midden
3	3276	Deposit	VOID
3	3277	Deposit	Green/grey primary rampart of sondage C
3	3278	Deposit	Second metalling in sondage D
3	3279	Deposit	Dark grey layer - sondage D - under first rampart and metalling
3	3280	Cut	Quarry pit in sondage D
3	3281	Deposit	Fill of [3280]
3	3282	Cut	Cut of small posthole in spread [3288]
3	3283	Deposit	Fill of [3282]
3	3284	Cut	Cut of small pit in spread [3288]
3	3285	Deposit	Fill of small pit [3284]
3	3286	Cut	Cut of small pit in spread [3288]
3	3287	Deposit	Fill of small pit [3286]
3	3288	Cut	Cut of natural feature
3	3289	Deposit	Fill of 3288

3	3290	Deposit	Top rampart sondage E
3	3291	Deposit	Red soil under brown (3275) of sondage C
3	3292	Deposit	Primary rampart underlying (3275)
3	3293	Deposit	Metalled surface above (3292) and intercutting midden (3190) sondage C
3	3294	Deposit	Brown occupation layer below rampart sondage E
3	3295	Deposit	Dark brown layer beneath primary rampart - sondage D
3	3296	Cut	VOID
3	3297	Deposit	VOID
3	3298	Cut	VOID
3	3299	Deposit	VOID
3	3300	Cut	VOID
3	3301	Cut	Cut of posthole - sondage B
3	3302	Deposit	Fill of posthole [3301]
3	3303	Cut	Pit below metalled surface sondage C
3	3304	Deposit	Fill of pit [3303]
3	3305	Deposit	Packing stones in posthole [3257]
3	3306	Cut	Cut of posthole in base of sondage B
3	3307	Deposit	Fill of posthole [3306]
3	3308	Cut	Cut of posthole against trench edge, sondage B
3	3309	Deposit	Fill of posthole [3311]
3	3310	Deposit	Lower fill of [3303] reddish/ brown
3	3311	Cut	Cut of posthole - north end of sondage B
3	3312	Deposit	Fill of posthole [3311]
3	3313	Deposit	Packing stones of posthole [3311]
3	3314	Cut	Cut of posthole - south end of sondage B
3	3315	Deposit	Single fill of posthole [3314]
3	3316	Cut	Cut of drip gully in sondage B
3	3317	Deposit	Single fill of drip gully [3316]
3	3318	Deposit	Fill of tree throw in sondage C
3	3319	Deposit	Second metalling (lower) in sondage B
3	3320	Deposit	VOID
3	3321	Cut	Posthole in sondage D
3	3322	Deposit	Fill of posthole [3321]
3	3323	Cut	Posthole in sondage B
3	3324	Fill	Fill of [3323]
3	3325	Deposit	VOID
3	3326	Deposit	Red/orange 'colluvium' layer below subsoil in sondage E
3	3327	Deposit	Brown band between rampart (3290) + (3328), sondage E

3	3328	Deposit	Primary rampart, sondage E
3	3329	Deposit	Thin green band within occupation deposit (3294)
3	3330	Cut	Drip Gully 2 in sondage B
3	3331	Deposit	Fill of [3330]
3	3332	Cut	VOID
3	3333	Deposit	VOID
3	3334	Cut	Cut of tree throw in sondage C
3	3335	Deposit	Trample on top of (3180) - (3215 interface) sondage B
3	3336	Deposit	Dark grey spread in W sondage C

TRENCH	CONTEXT NO.	TYPE	DESCRIPTION
7	7001	Deposit	Topsoil
7	7002	Deposit	Subsoil
7	7003	Deposit	Natural
7	7004	Cut	Posthole in SW of trench adjacent to ditch [7010]
7	7005	Fill	Fill of posthole [7004]
7	7006	Cut	Posthole in W of trench adjacent to ditch [7010]
7	7007	Fill	Fill of posthole [7006]
7	7008	Cut	Posthole in NW of trench
7	7009	Fill	Fill of posthole [7008]
7	7010	Cut	Ditch within NW of trench
7	7011	Fill	Fill of ditch [7010]
7	7012	Cut	Hole within the posthole [7004]
7	7013	Fill	Fill of hole within posthole [7004]
7	7014	Cut	Posthole in central west of trench adjacent to ditch [7010]
7	7015	Fill	Fill of posthole [7014]
7	7016	Cut	Potential posthole, opposite [7010]
7	7017	Fill	Fill of potential posthole [7016]
7	7018	Cut	Cut of possible posthole
7	7019	Fill	Fill of possible posthole [7018]
7	7020	Cut	Cut of possible posthole
7	7021	Fill	Fill of possible posthole [7018]
7	7022	Cut	Cut of linear feature in ditch [7010]
7	7023	Fill	Fill of linearl feature in ditch [7010]
7	7024	Cut	Possible posthole / pit
7	7025	Fill	Fill of pit [7024]
7	7026	Cut	Possible posthole
7	7027	Fill	Fill of possible posthole [7026]
7	7028	Cut	Posthole
7	7029	Fill	Fill of posthole [7028]

7	7030	Cut	Cut of ditch in centre of trench 7
7	7031	Fill	Fill of ditch [7030]
7	7032	Cut	Possible posthole
7	7033	Cut	Postpipe
7	7034	Fill	Fill of posthole [7032]
7	7035	Fill	Fill of postpipe [7033]
7	7036	Cut	Cut of posthole (SW corner Tr 7)
7	7037	Fill	Fill of posthole [7036] (SW corner Tr 7)
7	7038		VOID
7	7039	Fill	Fill of cut [7030]
7	7040	Cut	South section of ditch - running from SE/SW
7	7041	Fill	Fill of cut [7040]
7	7042	Fill	Fill of lower part of feature, ditch [7010]
7	7043	Cut	Posthole in SE side of trench, adjacent to cut [7040]
7	7044	Fill	Fill of posthole [7043]
7	7045	Fill	Lower fill of ditch [7010] (3rd lowest)
7	7046	Fill	Lower fill of posthole [7043] - overcut into ditch fill 7055
	7047		VOID
	7048		VOID
7	7049	Cut	Possible posthole
7	7050	Fill	Possible posthole fill of [7049]
7	7051	Fill	Fill of ditch [7010] (lower)
7	7052	Fill	Fill of posthole [7053] in east of trench
7	7053	Cut	Cut of posthole [7052]
7	7054	Cut	Possible ditche on N-S aligntment in east of trench
7	7055	Fill	Fill of ditch [7054]
7	7056	Cut	Cut of shallow posthole
7	7057	Fill	Fill of [7056]
7	7058	Cut	Recut in ditch [7010]
7	7059	Fill	Fill of [7010]
7	7060	Fill	Fill of ditch [7054]
7	7061	Cut	Cut of postpipe within posthole [7049]
7	7062	Fill	Fill of postpipe [7061] within posthole [7049]
7	7063	Fill	Lower fill ditch of [7010]
7	7064	Fill	Fill of [7068]
7	7065	Fill	NW of ditch [7040]
7	7066	Fill	Fill of ditch [7010]
7	7067	Fill	Fill of ditch [7010]
7	7068	Cut	Cut on edge of ditch [7030] possible small posthole
7	7069		VOID
7	7070		VOID

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7	7071	Cut	Cut of eastern central ditch on
			N side of trench
7	7072	Fill	Fill of ditch [7069]
7	7073	Cut	Cut of posthole
7	7074	Fill	Fill of posthole [7073]
7	7075	Fill	Charcoal fill of ditch [7054]
7	7076	Fill	Grey fill under charcoal fill (7075) in [7054]
7	7077		VOID
7	7078		VOID
7	7079	Fill	Burnt layer through (3039)
7	7080	Fill	Fill of [7010]
7	7081	Cut	Possible posthole in base of [7010]
7	7082	Fill	Fill of [7081]
7	7083	Cut	Possible posthole in base of [7010]
7	7084	Fill	Fill of [7083]
7	7085	Fill	Fill of 7010
7	7086	Fill	Primary fill of 7010

TRENCH	CONTEXT NO.	TYPE	DESCRIPTION
8	8001	Deposit	Turf line / top soil
8	8002	Deposit	Sub soil / reddish brown
8	8003	Deposit	Grey brown layer below (8002)
8	8004	Deposit	Black brown layer / black lens, north wes corner
8	8005	Deposit	Dark brown, silty sand, greenish grey natural clay at sides
8	8006	Deposit	Clay like greenish grey, northern side, top of rampart
8	8007	Deposit	Reddish brown, coarse grain, silty, coludial
8	8008	Deposit	base of rampart, northern side, brown silty sand
8	8009	Deposit	Clay like, solid, northern side of rampart,black, fill of [8019]
8	8010	Deposit	Greenish gray thick and clumpy, northern side
8	8011	Deposit	Similar to context 8010, possibly same
8	8012	Deposit	Natural green band, fill of clayish substance, brown
8	8013	Deposit	Mid brown clay-silt
8	8014	Deposit	Gray layer below 8005
8	8015	Deposit	Green clay
8	8016	Deposit Reddish brown silty sand, pebbly	
8	8017	Deposit	Metal surface related to [8016]
8	8018	Layer	Grey glungy layer

8	8019	Cut	Possible hearth- cut in layer (8011)
8	8020	Fill	Grey/brown clay beneath (8018)
8	8021	Deposit	Red clay - fill of cut (8022)
8	8022	Cut	Possible tree throw cutting (8011)
8	8023	Fill	Brownish clay layer south of (8020)
8	8024	Fill	Greyish brown of posthole 8025
8	8025	Cut	Possible posthole in centre part of Tr 8
8	8026	Layer	VOID
8	8027	Fill	VOID
8	8028	Cut	VOID
8	8029	Layer	Grey-green natural clay underlying 8023
8	8030	Layer	Possible rampart, yellowish colour, against northern side of trench
8	8031	Fill	VOID
8	8032	Deposit	Black, burnt deposit dear 8030 and 8031
8	8033	Layer	Dark brown layer, clay silt, next to 8032
8	8034	Fill	Greenish/grey deposit south end of trench
8	8035	Fill	Grey fill south end of trench
8	8036	Layer	Black / very dark grey layer at north enf of trench, below (8030)
8	8037	Layer	Greenish clay, below (8036), north end of trench
8	8038	Cut	Poss stone lined pit
8	8039	Cut	Poss burnt feature
8	8040	Fill	Fill of feature [8038]
8	8041	Layer	Grey layer below (8016)
8	8042	Deposit	Stoney deposit below (8035)
8	8043	Deposit	Lighter grey deposit below (8041)
8	8044	Deposit	Redeposited natural deposit below (8042)
8	8045	Cut	Cut for causeway enclosure ditch in southern part of trench
8	8046	Fill	Fill of posthole southern side near causewayed enclosure
8	8047	Cut	Cut of possible posthole southern side of trench
8	8048	Fill	Fill of possible posthole southern side near [8047]
8	8049	Cut	Cut of possible posthole related to [8048] southern side
8	8050	Layer	Layer below (8043)
8	8051	Deposit	Grey layer with burnt material below (8041)
8	8052	Fill	Fill of feature [8039]

8	8053	Deposit	Later hedgerow bank
8	8054	Deposit	Hedgerow ditch fill
8	8055	Deposit	Burnt deposit on rampart (8032)
8	8056	Fill	Silty dark brown clay, fill of 8057 circular feature with stone
8	8057	Cut	Circular feature is layer 8051 filled with 8056
8	8058	Fill	Brown - grey silty layer beneath stone feature
8	8059	Fill	Fill of uncertain feature [8060]
8	8060	Fill	Cut of uncertain feature in southern part of trench
8	8061	Cut	Cut of quarry hollow
8	8062	Deposit	Natural clay
8	8063	Cut	Cut of hedgerow ditch

TRENCH	CONTEXT NO.	TYPE	DESCRIPTION
9	9001	Deposit	Topsoil
9	9002	Deposit	Subsoil
9	9003	Deposit	Natural
	9004		VOID
9	9005	Deposit	Turf horizon / trample beneath ?primary rampart
9	9006	Deposit	Mid brown w/ green mottling: primary rampart?
	9007		VOID
9	9008	Fill	Hillwash / rampart collapse (smallfinds 013)
9	9009	Fill	Stoney deposit
9	9010	Fill	Orangey band: rampart collapse?
9	9011	Fill	Greyish clay: rampart collapse?
9	9012	Deposit	Colluvium overlying deposit (9019)
9	9013	Deposit	Collapsed revetment? Stone deposit
9	9014	Cut	Cut of rampart ditch
9	9015	Deposit	Rampart slump / collapse over (9012)
9	9016	Deposit	Primary rampart / levelling event
9	9017	Deposit	Dark band overlying (9005)
9	9018	Cut	Cut of possible ditch feature in S section
9	9019	Deposit	Mid grey-red clay underlying (9013)
9	9020	Fill	Fill of posthole [9012]
9	9021	Deposit	Packing stones of posthole [9022]
9	9022	Cut	Of revetting posthole

9	9023	Cut	Cut of 'terrace' holding stones (9013)	
9	9024	Deposit Slump within terrace [9023]		
9	9025	Deposit	Slump within terrace [9023]	
9	9026	Deposit	Trample layer: rampart construction (grey band)	
9	9027	Deposit	Secondary rampart bank build	
9	9028	Deposit	Possible final layer in bank construction or collapse	
9	9029	Deposit	Large spread of collapse/ slump: victorian drainage?	
9	9030	Cut	Cut of ditch feature, cuts (9016), (9026) - (9028)	
9	9031	Fill	Secondary fill of [9030]	
9	9032	Fill	Basal fill of ditch / cut [9030]	
9	9033	Cut	Of ditch / cut feature filled by (9005), (9017)	
9	9034	Deposit	Mid grey clay underlying stones (9013) = (9019)	
9	9035	Cut	Cut of 'terrace' for stones (9013) = [9036]	
	9036		VOID	
9	9037	Fill	Fill of ditch [9033]	
9	9038	Fill	Fill of ditch [9018]	
9	9039	Fill	Fill of ditch [9018]	
9	9040	Fill	Basal fill of [9018]	
9	9041	Fill	Possible cut of ditch at southern end	
9	9042	Fill	Fill of [9041]	

# Appendix 2 - Small Find List

SMALL FIND NO.	TRENCH	CONTEXT	FIND CATEGORY	DESCRIPTION	SIEVE FIND	EASTING	NORTHING	HEIGHT
1	7	7039	Flint	Thin leaf-shaped awl	Y			
2	7	7011	Pot	Large, thick, rimmed shard of poss. Neolithic pot (lower)	Y			
3	7	7042	Flint	Thin kite shaped flint - poss arrowhead	Y			
4	3	3188	Metal	Thin iron nail		313342.3818	174920.6634	78.8021
5	3	3230	Stone	Saddle quern		313346.7995	174929.0642	78.6031
6	3	3236	Metal	Iron plate		313352.0675	174918.2422	78.4915
7	3	3188	Copper	Rolled copper tube, possible pin of brooch		313342.3223	174920.2704	78.8364
8	3	3212	Shale	Shale bracelet fragment (seive)		313350.3831	174918.2792	78.6334
9	3	3219	Lead	Rolled lead tube		313356.8363	174917.1007	78.6345
10	7	7045	Flint	leaf shaped flint arrowhead		313280.2992	174988.7743	76.244
11	7	7045	Flint	Broken (leaf?) shaped flint arrowhead	Y			
12	7	7051	Flint	Poss. flint tool, scraper	Y			
13	9	9008	Flint	Leaf shaped flint arrowhead		313293.9147	175064.0845	69.7577
14	3	3190	Copper	Penannular Brooch (spit 1)	Y			
15	3	3190	Bone	Drilled bone (spit 1)		313341.5088	174919.0989	78.3537
16	3	3190	Ceramic	Half spindle whorl (spit 1)		313342.799	174918.6209	78.5094
17	8	8024	Flint	Awl	Y			
18	3	3275	Shale	2 pieces		313341.081	174918.2194	78.4899
19	3	3289	Iron	Fe object (nail?)		313356.6886	174923.5875	78.6246
20	7	7055	Ceramic	Large sherd of pottery (poss Neo)	Y			
21	7	7045	Ceramic	Large sherd of pottery (poss Neo)	Y			
22	8	8035	Stone	Polished neolithic axehead (reused and broken)		313320.7999	175025.3536	74.8691
23	3	3294	Shale	Shale bracelet fragment		313350.9765	174907.995	77.9013
24	3	3294	Bone	Articulated animal remains - north		313351.3441	174908.644	77.9249
25	3	3294	Bone	Articulated animal remains - south		313351.2286	174908.5476	77.9218
26	7	7076	Ceramic	Neolithic pottery rim (orange-glazed)		313309.5998	174990.0607	76.754

27	7	7063	Flint	Neolithic stone axe - handle		313279.6796	174988.84	76.5923
28	7	7039	Stone	Pecked stone	Y			
29	7	7002	Stone	Polished stone axe flake	Y			

# Appendix 3 - Sample List

SAMPLE NO.	TRENCH	CONTEXT	DESCRIPTION	
1	7	7009	Posthole NW corner Tr.7 [7008]	
2	7	7015	Fill of posthole central west of Tr. 7 [7014]	
3	7	7019	Fill of posthole [7018]	
4	7	7017	Fill of posthole [7016]	
5	7	7021	Fill of posthole [7020]	
6	7	7025	Fill of pit [7024]	
7	7	7039	Fill of ditch [7038]	
8	7	7027	Fill of posthole [7026]	
9	7	7010	Fill of S-N ditch [7010] 2 bags	
10	3	3204	Fill of pit [3203]	
11	3	3212	Dark gret spread in sondage D	
12	3	3214	Red clay over rampart in sondage D	
13	3	3208	Primary fill of posthole [3210]	
14	3	3202	Fill of posthole [3201]	
15	3	3206	Fill of pit [3205]	
16	7	7029	Fill of posthole [7028]	
17	7	7035	Postpipe fill	
18	7	7037	Fill of posthole [7036]	
19	7	7042	Fill of lower ditch [7010]	
20	8	8009	Fill of possible hearth [8019]	
21	8	8015	Greyish brown deposit to north of (8018)	
22	3	3221	Fill of pit [3220]	
23	3	3225	Fill of pit [3224]	
24	3	3223	Fill of pit [3222]	
25	3	3238	Fill of posthole [3237]	
26	7	7044	Fill of posthole [7043]	
27	3	3188	Fill of [3187]	
28	7	7045	Fill of ditch [7010] 2 bags	
29	3	3202	Fill of posthole [3201]	
30	3	3223	Fill of posthole [3222]	
31	3	3182	Fill of green dump [2181]	
32	3	323	Fill of posthole [3254]	
33	3	3246	Fill of posthole [3245]	
34	3	3230	Fill of pit [3229]	
35	3	3256	Fill of posthole [[3255]	
36	3	3258	Fill of posthole [3257]	
37	7	7046	Lower fill of posthole [7043]	
38	8	8020	Grey/brown clay beneath (8018)	

39	3	3254	Dark brown/black deposit with charcoal [3253]
40	8	8016	Grey layer above metal surface (8017)
41	3	3236	Fill of [3235]
42	3	3260	Fill of posthole [3259]
43	3	3262	Fill of posthole [3261]
44	3	3264	Fill of shallow pit [3263]
45	7	7050	Fill of posthole [7049]
46	7	7051	Fill of lower ditch (4th) (7051) [7010]
47	7	7052	Fill of posthole [7053] 2 bags
48	8	8016	Grey layer above metal surface
49	8	8021	Reddish brown fill of feature [8022]
50	3	3190	Top 10cm of midden - sondage C (spit 1)
51	3	3270	Fill of [3269]
52	7	7055	Fill of [7054]
53	8	8008	Red/brown clay
54	3	3190	Spit 2 of moidden sondage D
55	8	8027	Grey clay fill of posthole [8028]
56	3	3198	Dark brown deposit under primary rampart in sondage B
57	3	3272	Fill of [3271]
58	7	7062	Fill of postpipe [7061]
59	7	7060	Fill of ditch [7054]
69	3	7275	Dark brown deposit under midden heap sondage C (3190)
70	8	8032	Black layer/deposit underlying (8021) 2 of 2
71	7	7064	Fill of possible pit cut on the SW edge od ditch [7030]
72	8	8033	Red/Dark brown layer
73	3	3232	Green clay rampart sondage D
74	3	3281	Red sandy fill of [3280]
75	3	3290	Main body of top of rampart, sondage E. Green clay.
76	7	7074	Posthole fill of [7073]
77	7	7072	Fill of sondage [7071] (poss. Ditch) bag 1 of 2
78	7	7045	Fill of extended ditch [7010]
79	7	7072	Fill of sondage [7071] (poss. Ditch) bag 2 of 2
80	8	8036	Dark layer below (8030)
81	8	8035	Grey clay fill, stoney. Southern end of trench 8.
82	3	3294	Grey occupation layer, sondage E
83	3	3185	Metalling Sonefage C
84	7	7075	Charcoal layer of fitch [7054]
85	7	7076	Grey layer underneath (7075) in [7054]
86	3	3297	Brown fill for PH in [3296]

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87	3	3299	Fill of PH in sondage B
88	3	3304	Fill of pit [3303] in sondage C
89	3	3302	Fill of posthole [3301] in sondage B
90	7	7051	Fill of extended ditch [7010]
91	7	7064	Fill of small posthole cut into [7030]
92	3	3310	Lower fill of pit [3303] in sondage C
93	3	3307	Single fill of pit [3306]
94	3	3291	Reddish-brown sandy layer over rampart (3277) - S. C.
95	3	3295	Dark grey/brown layer beneath rampart (3232) - S.D.
96	3	3315	Single fill of posthole [3314]
97	3	3318	Dark grey layer under (3291)
98	3	3317	Fill of drip gully [3316]
99	3	3312	Fill with packing stones [3313] of posthole [3311]
100	8	8041	Possible buried topsoil under(8016)
101	3	3320	stony dark fill below rampart - S.C.
102	3	3279	Grey / brown smelly fill beneath rampart in S.D.
103	8	8043	Dark brown silt underlying (8041) 2 bags
104	7	7072	Fill of sondage [7071] (ditch) bag 1/2
105	7	7072	Fill of sondage [7071] (ditch) bag 2/2
106	7	7076	Fill of ditch [7054] - layer under (7075)
107	3	3324	Fill of posthole [3323] in Sondage B
108	3	3322	Fill of [3321] in Sondage D
109	8	8050	Light brown below (8051)
110	8	8051	Dark brown silty clay below (8041)
111	9	9019	Deposit underlying stone 'path' (9013) 1x bucket
112	9	9034	Deposit underlying stone 'path' (9013) 1x bucket
113	8	8048	Posthole fill from southern area
114	8	8040	Posthole fill [8038]
115	7	7063	Base fill of [7010]
116	9	9017	Basal fill of [9033] 1x bucket
117	8	8056	

## CARDIFF STUDIES IN ARCHAEOLOGY

The excavations at Caerau Hillfort in the summer of 2014 explored both the interior of the hillfort and its inner rampart on its northern and southern sides. This report summarises the results of the excavations and includes the stratigraphic sequences recorded in each of the four trenches, the detailed animal bone and geoarchaeological analyses, and a summary of the community engagement activities. The structural remains and artefactual assemblages indicate that Caerau hillfort has an exceptional sequence of activities that span the Neolithic through to the Medieval period. Significantly, the 2014 excavations have identified the presence of an early Neolithic causewayed enclosure on the hill defined by four lines of ditches. Such a discovery is of national significance since only five other causewayed enclosures are known in Wales. The rich assemblage of pottery, flint tools and polished stone axes recovered from Caerau, combined with extensive palaeo-environmental sampling, has the potential to substantially increase our knowledge of this important, but little understood, period in Wales' history when people were first starting to farm the land.

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