Excavations at Ham Hill, Somerset (2012)



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with Christopher Evans & Niall Sharples

CAMBRIDGE ARCHAEOLOGICAL UNIT
UNIVERSITY OF CAMBRIDGE

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HAM HILL, SOMERSET
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SUMMARY

The following report outlines results from the second of three seasons' excavations by the Cambridge Archaeological Unit and Cardiff University upon Ham Hill, Stoke-sub-Hamdon, Somerset.

In the Summer of 2012 the main excavations focused upon the interior and entrance to a rectilinear enclosure of a Middle to Late Iron Age date. The enclosure entrance faces south east and the excavation of the ditch termini displayed a complex series of fills which suggest the dismantling and careful deposition of the adjacent stone revetted banks. The entrance was flanked by posts but direct access into the interior was blocked by a timber screen which forced the visitor to turn north to access the interior. The screen and the stone revetted bank would have blocked visual access to the interior.

The interior of the enclosure was relatively sparsely occupied. On the north side were two pennanular gullys. The most complete example appears to the eavesdrip gully of a large roundhouse. This enclosed a number of pits which contained placed deposits of pottery, including Glastonbury Ware, copper and iron metalwork, seeds of barley and wheat. A smaller pennanular gully to the west was only partly exposed but appears to be broadly contemporary with the roundhouse. A number of postholes and additional pits were located within the enclosure, but could not be securely dated. A six or seven post structure associated with Late Bronze Age pottery, suggests that some of these features could belong to an earlier phase of landuse. Middle Bronze Age occupation was represented by an extensive coaxial ditched field system with evidence for continued management and alteration. Each of these phases followed markedly different orientations with little architectural continuity. Earlier prehistoric activity was indicated by the recovery of lithics from across the entirety of the excavation area.

Understanding of the landscape and depositional history of the main excavation area has grown considerably. It is now clear that a thick buried soil spreads over much of Areas 2 and 4. Archaeological features are cut from high up within its profile, however, owing to considerable leaching the visibility of these features in the upper levels is poor. This has notable implications for our understanding of the site as a whole and for the value of the surface collection and test pitting methodology that continues to produce an abundance of finds.

In addition to the main 'open area' excavations, three trenches were opened over the hillfort ramparts – two along the northern spur, and one to the south – one of these re-opened a trench excavated in 1929 by Harold st George Gray. The trenches demonstrate the ramparts were first constructed in the Early Iron Age. In the north at least four major phases of construction were identified and are capped by occupation dating to the Early Romano-British era. Neolithic features were identified below the rampart sequence. In the south the rampart displayed no post- early Middle Iron Age horizons, which may be due to later disturbance and truncation. A stone walled Iron Age roundhouse was built into the rear of the rampart, and its floor deposits were preserved by the rampart's partial, and perhaps deliberate, collapse.

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INTRODUCTION

The second summer field season of a three-year (2011-2013) joint commercial and research programme of excavations was carried out between July 17th and September 15th 2012 within the Ham Hill hillfort (NGR 48402 160585; SAM 100) in the parish of Stoke-sub-Hamdon. This is a programme undertaken in partnership by the Cambridge Archaeological Unit (CAU) of the University of Cambridge and the Department of Archaeology of Cardiff University.

The primary thrust of these investigations is driven by the projected expansion of the Hamstone Quarry over an area of *c*. 1.3ha along the south-western sector of the hillfort (Figure 1). Geophysical survey (Geophysical Surveys of Bradford 1991; 2002) and trial trenching (Slater 2009) have together showed this to include a large rectilinear enclosure and related features, with an underlying field system. The quarry development has been divided into four areas (Areas 1-4) of investigation (Figures 2 and 3), of which Areas 1-3 will be quarried in their entirety; Area 4 lies within the eastern zone of the development area, where a bund will eventually be constructed thereby sealing unexcavated deposits. Area 1 presented the focus of the first season of archaeological excavations in 2011, during which preliminary investigations of Area 4 were also established (Slater *et al*. 2012). The results of this are briefly summarised below. Initially Areas 1-4 were machine-stripped of their topsoil down to the upper subsoil horizons that have been the subject of a programme of surface 'find'-collection and test pitting. Feedback from these procedures has been informative regarding retrieval versus feature density which, along with the first season's intensive sieving and sampling strategy, has directed subsequent modification in methodology and more fine-grained analytical targets. Area 1, with its archaeological sequence fully excavated, has now been incorporated into the broader quarry works.

This report outlines the results from the excavations of Area 2 and the completion of Area 4 (with Area 3 to be excavated in year three/2013). Owing to the difficult wet weather conditions in 2012 a thin buried soil sealed within a basin 'hollow' in Area 2 – and submerged for much of the duration of the field season – will be further investigated and reported upon in 2013.

In addition to the response to quarry workings the second- and third-year seasons have in their design a targeted programme of trenching that is hoped to further enlighten the sequence and nature of the hillfort, as well as to provide greater context to the results obtained from the open area excavations. In the following report the results from three trenches opened across the hillfort ramparts are also presented in interim form; two trenches from within the northern 'spur' of the hillfort and one along the southern ramparts just 50m east of Areas 1-4. Trenches 1 and 2 are new interventions, with Trench 3 having originally been opened in 1929 by Harold St. George Gray, but with only very limited reportage (Gray 1929). The results from each of these trenches are significant, providing a broader understanding of the origins and development of the hillfort, and further investigation is planned for 2013. Moreover, their importance to future management strategies at Ham Hill is also taken into consideration.

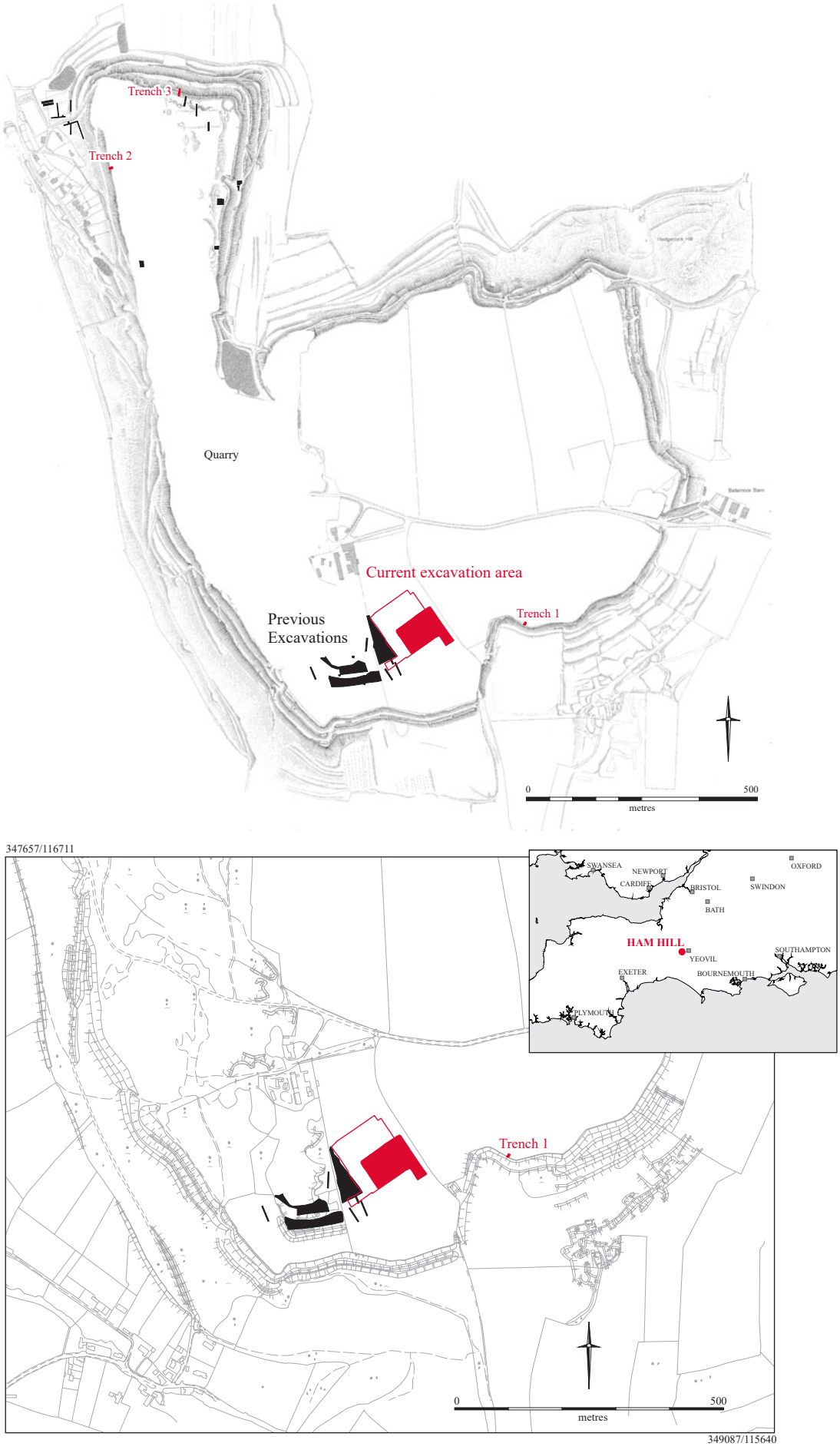


Figure 1. Site location



Figure 2. Site Area, contours and geophysical survey plot



Figure 3. Areas 1, 2 (2012, outlined in red) and 4 base plan showing excavation interventions and sections illustrated in Figure 8

Archaeological Background

Previous investigations within the hillfort have been described within the Project Design (Sharples and Evans 2010). The following, by way of introduction to the current project, is a brief summary of the results drawn from the first season of open-area excavation in 2011 (reported in full in Slater *et al*. 2012), as well as a summary statement concerning the excavations of 1929 that hold relevance to the rampart investigations carried out in 2012.

A systematic programme of test-pitting and finds plotting and retrieval from at least two layers of subsoil represented a period coverage of the late Mesolithic through to the post-Medieval period. What this has thus far illustrated is the long-term and relatively intensive usage of the hill's plateau. The focus in 2011 was primarily upon Area 1, with preliminary investigations within Area 4.

Neolithic and Bronze Age

Neolithic pottery and lithic assemblages spanning the Neolithic to the Early Bronze Age were located across the site during surface finds retrieval and were found in smaller numbers from later features; however, no Neolithic features were identified.

Four linear ditches were broadly assigned to the Middle Bronze Age on account of their associated flintwork, a stone macehead and saddlequern. Two of these ran parallel with one another upon a NE-SW alignment, approximately 50m apart, with the two other ditches running in a perpendicular series thereby forming a coaxial system of rectilinear allotment. Two additional ditches in Area 4 appeared to form an extension of this arrangement, and the results from geophysical survey to the north in 2001 and previous excavations carried out in the west have shown that this extends beyond the area of excavation into a sizeable distribution. A single possible re-cut was identified in one of the Area 1 ditches, and three termini allowed access between allotments.

Iron Age

Three different primary components of Iron Age activity were recorded: pit clusters, an eavesdrip gully and a rectilinear enclosure. 67 pits were excavated with three distinct clusters arranged outside of the enclosure. The pits varied between 0.1m and 1.7m in depth, and three preliminary pit 'types' were identified on account of their dimensions, volume and the presence or absence of 'special' deposits. The pits contained high quantities of material, including formally placed metal items, worked bone, rotary querns, Glastonbury ware pottery, articulated fauna with disarticulated human cranial fragments, and an unusually rich accumulation of charred black mustard seed (*Brassica nigra*). A circular eavesdrip gully with an internal diameter of 12.25m and a southeast entrance appeared to predate one of these pit clusters. Only two postholes were identified inside the entranceway, and the structure was absent of any floor or hearth deposit, but did contain a cache of slingstones within the southern terminus of the gully. Of the rectilinear enclosure, 65m of the south-western turn was exposed in Area 1 with a segment of the northern arm and two termini forming a southeast entranceway being exposed and partially excavated within Area 4. The ditch profile was consistently 'V'-shaped to a depth between 0.9m and 1.47m, with a sequence suggestive of a rapid backfilling of an internal bank, although seemingly only filling the ditch to half of its volume. The remaining fills of the ditch were slow accumulations of sand and silt, although in places with the addition of a thick dark 'midden'-like deposit. Three human skeletons were found either upon, or in graves cutting through, the basal silts of the ditch, and were overlain by the backfilled internal bank material, thereby inferring contemporaneity between these 'events'. Similarly, articulated and butchered faunal remains found upon the backfilled bank material further illustrate the formality of this decommissioning of the enclosure.

Romano-British and Medieval

A small amount of early Roman pottery was noted from the subsoil and from within the uppermost fill of some features, including a claw-handled beaker (which may even be of a later date). A pair of small parallel ditches forming a trackway were assigned a late date, but could not with certainty be distinguished as either Roman or Medieval. A number of undated features are most likely to be prehistoric, but their relationship to other features remains to be ascertained.

The 1929 excavations

The Ham Hill Excavation Committee was formed in 1923 in part owing to the threat of quarry works and in light of the interests of the director of excavations, Harold St. George Gray, who as curator of the Taunton Castle Museum had first-hand knowledge of the quantity and variety of prehistoric and Roman material from Ham Hill that had been deposited within its archives through the benefaction of various local antiquaries. The excavations of 1929 were the penultimate excavations that Gray carried out at Ham Hill (all associated with the northern spur of the hillfort), but only three partial reports (Gray 1924; 1925; 1926) and a note (Gray 1929) were published for excavations carried out between 1923 and 1930. One of the focuses of the 2012 investigations has been the re-evaluation of one of these trenches – Gray's Cutting XV – documented as being 65 feet by 6 feet that was opened in 1929 across the inner rampart. In a short published note Gray (1929, 100) described finding an inner 'mound' containing Iron Age pottery and a glass bead with a zig-zag grooved inlay design, beneath which was sealed an old turf line; one of two surviving photographs depicts an inner stone revetment under excavation mid-way through the profile. Gray's site diary presents a more complex picture of multi-phased earth and stone construction interspersed with layers of occupation through a profile measuring approximately 14 feet and 3 inches from the top of the rampart to the underlying land surface. However, there is no contextual information for the finds, with no profile, plan or formal section of the trench. The results of the re-excavation of this Trench – here referred to as Trench 3 – are presented in Section 2.4.

Geology and Topography

Areas 1-4 are situated at the southwest of the hillfort interior at *c*. 120m OD, within the base of a shallow bowl-like topography. This is crowned by a gradual landfall from the north to the east with a slight ridge elevated along the southeast; to the southwest the landfall within the excavation area is crested by the present quarry workings. Over Areas 2 and 4 the geology varies with a surface of fractured and weathered Liassic Hamstone to the northwest overlain within the hollowed landscape to the east by compacted Yeovil Sands, hardened in patches to the north and centre of Area 2 by iron pan formation. At the northeast and southeast where the topography again rises in the far corners of Area 4 the sands reduce again to Liassic Hamstone. Overlying this geology are layers of sandy bioturbated buried soils containing the archaeological deposits, capped by sandy subsoil and ploughsoil. This soil profile varies considerably in thickness from 45cm up to 90cm. These have been the target of ongoing geoarchaeological investigation since 2009 from which an understanding of the character of these deposits is emerging (see French and also Allen, Section 2.8). The implications of this in relation to the survival of archaeological data are highlighted below.

Excavation Methodology

Survival of Archaeological Deposits

The soil profiling is of particular importance to understanding the depositional history of the abundant surface finds and their relation to excavated features. As outlined in Slater *et al*. (2012) structured test pitting and surface finds retrieval and three-dimensional plotting formed an important component of the first phase of investigations in 2011. The test pitting was completed in 2012 with further retrieval and plotting of finds in conjunction with machine removal of the buried soils. This data is not explored here as it will eventually be combined with the 2013 plots, at which time a clearer understanding of the distribution is anticipated; however, the nature and condition of the soil profiles from which these deposits originate is significant to excavated area as a whole.

In essence the soils analysis (French, Section 2.8) now confirms that archaeological features of Bronze Age to Romano-British date were cut from relatively high in the profile (see Figure 8, section A-B). Unfortunately, heavy leaching throughout the soil profile has resulted in the impossibility of identifying cut features, many of which have simply blended into the soil horizon. Where a feature has been identified from high in the soil profile it is due to there being a 'preservative' deposit foreign to the leached soils such as, for example, a considerable charcoal content within its upper fills or, more frequently, packed deposits of burnt Hamstone. This is evident in Figure 4 in which an Iron Age pit, F.1941, was identified high in the soil profile as a result of a clutch of burnt hamstone chunks and charring within its upper fill. A sherd of Glastonbury ware was also recovered from amongst the stones before it was formally excavated. A 40cm-thick plinth was machine excavated around the pit to a level at which other features with less distinct fill types could be observed. The pit was excavated in 5cm spits to a depth of 29cm, and although it was evident through the material distribution coming from the pit that it had been cut to a rounded plan and concave profile, in section there was little of the pit's profile that was visibly discernible. The base of the pit did not reach the level at which an adjacent (and later) ditch, F.1937, became visible. A number of these plinths were retained and excavated in this way, in each case displaying a similar outcome. This has obvious analytical implications for the finds distributions arising from the surface investigation, as well as for a consideration of the features that have impacted upon the lower levels of the soil profile and beyond.

Surface Investigation Methodology

A comprehensive metal-detector survey was carried out in 2011 and was supplemented in 2012 by a second survey of the subsoil in Areas 2, 3 and 4 prior to and during machine removal of these deposits (in Areas 2 and 4). As expected following a previous survey and a nine month gap between excavations, only five items of metalwork were recovered, but this did include a Roman cavalry harness strap terminal in Area 3 (see Appleby, Section 2.6) that will be discussed in context when that area is subject to excavation in 2013.



Figure 4. Pit F.1941 - three stages of spit excavtion into buried soil

Excavation Methodology

Machine removal of the subsoil deposits remaining in Areas 2 and 4 was undertaken between the 17th and 26th of July. This was carried out under archaeological supervision using a 2.5m wide toothless ditching bucket, to levels at which archaeological deposits were exposed (see above). After removal, the topsoil was used to create a bund acting as a safety barrier between the southern extent of the excavation area and the quarry edge. A purpose-built earthen viewing platform constructed in 2011 was reinforced during this process using the overburden from the excavation area. As a slight amendment to the proposed area phases outlined in the Project Design (Sharples and Evans 2010), Area 2 comprised the southernmost half of the remaining excavation area rather than previously allotted western half.

A 10m grid, aligned to the test pits excavated in 2011 (site north) was laid out using a Total Station and the co-ordinates were later recorded using a mobile GPS system. All exposed archaeological deposits and features were hand cleaned and photographed, and each 10 x 10m grid-square was planned by hand to a scale of 1:50, with detailed plans of particular features/areas drawn at a higher resolution of 1:20 or 1:10 where appropriate. All metal finds, discrete human bone, notable ceramic and worked bone identified within excavated features and deposits were given a find number (SF) and three-dimensionally located using a Total Station.

The recording of excavated features and deposits followed a CAU methodology. Numbers were assigned to individual contexts ([No.]), e.g. cut, fill, layer; feature numbers (F.no.) were allotted to interrelated contexts (e.g. a ditch and its fills). All work was carried out in strict accordance with statutory health and safety legislation and with recommendations of SCAUM (Allen & Holt 2002). The site is archived under the code: TTNCM57-2011 (2012).

The basic excavation sample was a minimum of 50% of all prehistoric linear features, and 25% of later linear features, including the longitudinal half-section excavation of all terminals. Smaller linears, including structural gullies, were excavated by 1m length slots at 1m intervals; for safety during deep excavation and improved access for recording, linear features with larger sections, such as the rectilinear enclosure ditch F.1531, were excavated by 2m length slots at 2m intervals.

In light of the low-recovery of artefacts and ecofacts from the intensive sieving strategy in 2011 it was agreed that only significant deposits should be sieved using a 5mm mesh; all slots from within the enclosure were bulk sampled for wet sieving and heavy residue analysis, with bulk samples collected from alternating slots in smaller ditches.

Pits and discrete features were 100% excavated. These were dug by half section with all deposits from the first half of individual features being sieved. In the case of pits and other discrete features, after recording of the exposed sections the second 50% was bulk sampled, and the need for sieving of the second half being decided upon in light of the results of the first half. Where necessary, pits and discrete features were excavated in plan to 5cm or 10cm spits with a running section. This most notably practiced where 'special deposits' were encountered. These features in particular were 100% sieved and intensively bulk sampled. Given the rarity of small features such as postholes, these were excavated to 100%, with the entire deposit collected as a bulk sample.

Wherever possible, bulk environmental samples were a minimum of 40 litres in volume. A total of 230 bulk environmental samples were collected from a broad spectrum of feature and deposit types during the 2012 season from Areas 2 and 4, and Trenches 1-3. Along with the 148 samples stored at Ham Hill from 2011, 163 were processed and prepared for assessment either on site or at the CAU; totalling 311,

the results are presented below (see Stevens, Section 2.7). The remaining 67 samples are safely stored at Ham Hill.

The sampling system first initiated in 2011 provided substantial feedback on ecofacts and artefacts, thereby allowing for assessment of the value in subsequent systems for such an intensive sampling strategy. As previously stated (see Slater *et al*. 2012, 14), substantial find assemblages were produced from the Iron Age pits in particular, along with the Iron Age ditches being equally as productive, and the ratio of hand- versus sieve- collected finds retrieval was heavily in favour of the former (the latter, though minimally productive, was clearly not time-efficient in this instance). Given that the areas exposed in 2012 had very few in pits by comparison to the extensive Bronze Age ditch system it was deemed appropriate to considerably lighten the sieving strategy (see above).

Acknowledgements

The excavation was undertaken on behalf of Ham Hill Stone Company Ltd, and we are grateful for the co-operation and hospitality throughout of Saul Harvey. The work was monitored by Bob Croft and Steve Membery of Somerset County Council, in addition to Rob Iles and Hugh Beamish of English Heritage; we are also grateful for the advice of Vanessa Stracker of the latter organization. Furthermore, the help of the rangers of the Ham Hill Country Park is hugely appreciated.

The CAU team comprised Lawrence Billington, Matthew Jones, Lawrence Morgan-Shelbourne, Chris Wakeield, Matt Wood and Alasdair Wright, with Hayley Roberts as the project's Outreach Officer. 60 University of Cardiff Students participated in the project (*c*. 30 at any one time) and are thanked for vast efforts and sterling conduct throughout. The rampart trenches were supervised by Nick Wells (Trench 1) and Alan Graham (Trench 2); sections of Trench 3 were drafted by Ian Dennis (digitised by Niall Sharples). On-site surveying was variously conducted by Jane Matthews, Matt Wood and Nick Wells; finds were processed and catalogued by Jacqui Hutton, with Kelly Davies processing the environmental samples. The site facilities and general welfare were co-ordinated and managed by Jacqui Hutton. The project website was designed and updated by Jack Harvey. The report's main graphics were produced by Vicki Herring (CAU); plans of Trenches 1 and 2 were produced by Emma Leyson (Cardiff). Most of the photography is the work of Dave Webb; the cover photo is by Niall Sharples. The fieldwork was directed by Marcus Brittain in conjunction with Niall Sharples, and Christopher Evans as its Project Manager.

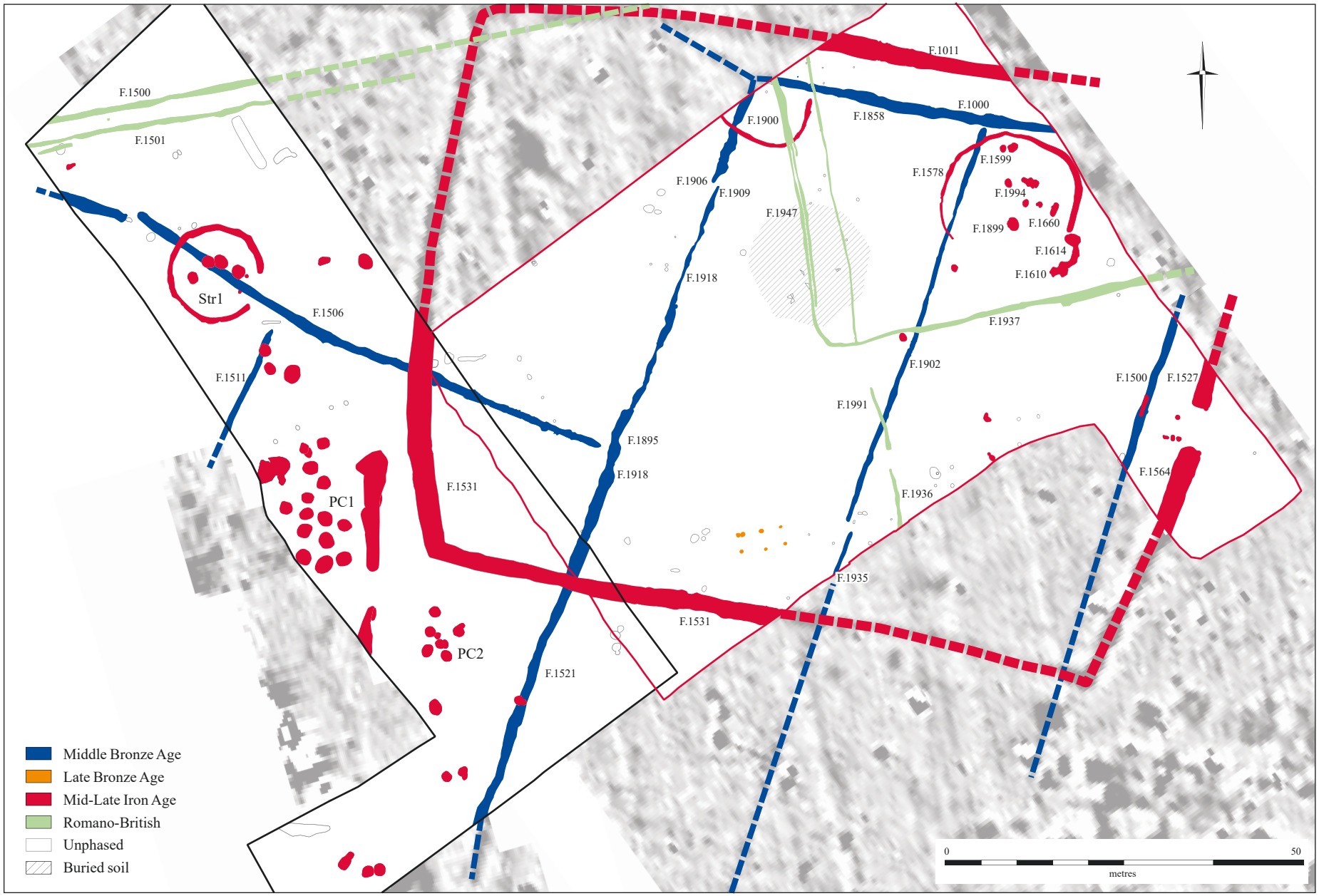


Figure 5. Phase plan of Areas 1, 2 and 4

2. EXCAVATION RESULTS

A total of 192 archaeological features were recorded in Areas 2 and 4. Features dated to the Neolithic through to the Romano-British periods are described below, with the ramparts and their related features from Trenches 1-3 outlined in Section 2.4. A full listing and brief description of all features excavated from seasons 1 and 2 is presented as appendices in Section 4.3. Figure 5 illustrates the provisional site phasing.

Eight excavated features were recorded as tree-throws (F.1900, F.1904-5, F.1907-8, F.1946, F.1982 and F.1990); these represent a sample tree throws identified within the area of the Iron Age enclosure. These contained no finds and remain undated. An additional 20 excavated features were also considered to be naturally occurring stains within either the subsoil or the natural Yeovil sands: F.1859, F.1860, F.1861, F.1863, F.1864, F.1868, F.1871, F.1872, F.1874, F.1875, F.1876, F.1880, F,1881, F.1882, F.1884, F.1885, F.1886, F.1887, F.1888 and F.1889. These too were absent of material culture and may, in some cases, also relate to tree-throw activity.

Anomalous Linear F.1932

Mid-way along Area 4, and highlighted on the geophysical survey (GSB 1992; 2001), was a large curvilinear anomaly extending over 12.8m northeast-southwest with a slight easterly curve (Figure 3 and 6). Excavation was competed in 2012, having begun in 2011 and been backfilled for safety during the intervening period. Whilst F.1932 represents the main linear anomaly, discussion here relates to a series of associated features that, throughout their investigation, have together provided a number of interpretative challenges. These comprise shafts up to at least 4m in depth, set beneath F.1932 and along the same curvilinear alignment.

Horizontal and longitudinal sections were opened across the anomaly which, owing to its depth, necessitated shoring and stepped excavation. Three 1m-wide transects were also opened by hand to investigate the relationship of deposits filling a hollow crowning the anomaly (Figure 3, in yellow) and their relation to the anomaly and other features in the vicinity. A 2m-wide transect was opened by machine to the south of the anomalous linear once hand excavation was completed. These deposits contained a small number of material items of worked stone, including a fragment of a polished stone axe (Timberlake, in Slater *et al*. 2012), burnt stone and Iron Age pottery. Some of this may be associated with Structure 2 (see below).

A general description and synoptic assessment is presented here. Discussion of the anomalous features associated with F.1932 is reserved for Section 3 in which there is a comparison of interpretation that might favour different elements of these features' totality as being of either natural or anthropogenic origin.

F.1547, F.1585, F.1660, F.1961 and F.1984 are shafts with near straight sides and near circular plans (Figure 6). Whilst a number of the shafts appear to merge with one another there was no clearly observable sequence in their intersection, and other than a general distinction no 'clean' boundary between their sides and the surrounding natural sand geology was recorded. Two shafts (F.1585 and

F.1660) were excavated through the profile of the Yeovil sand and down to the underlying Hamstone; the remaining shafts were excavated to a depth of 1.1-1.2m without reaching their base. All the shafts were sterile of material culture and were filled with mottled sand at times mixed with a slightly clayey composition, and often with a conical profile. Together this illustrates either backfill of excavated material or natural slumping and filling through a variety of natural agencies. The darker, clay patches are potentially re-deposited turf or subsoil, and a column tin sample has been taken from F.1585 [5052] and F.1660 [5139/5140] respectively to microscopically characterise and compare these deposits. The two most fully excavated shafts are described in detail here.

F.1585 had an elongated east-west oval plan, and contained 13 fills with a slight conical profile. The sides were near straight but slightly stepped at 1.5m depth, and undercutting towards the base. The flat base was met with the undisturbed Hamstone geology to a width of 1m at 2.5m depth. A flat deposit of orangey grey firm sand [5055] lay at the base to a thickness of 0.18m, suggesting that the shaft was temporality open; this was overlain by layers of mottled greyish brown, orange and greenish grey firm sand and silt [5049] [5050] [5051] [5053] [5054] with a layer of bioturbated brown silt clay [5052]. At 1.5m depth the sides of the shaft opened with a concave step to a width of 1.7m, and was filled with thick (*c*. 0.35m) deposits of greyish orange silty sand [5048] and patches of brown silt [5049] overlain by a yellowish orange sand [4584] banded with alternate tip lines of firmer yellow sand and dark greyish brown silt. At 0.8m depth the shaft again opened with gently sloping slightly convex sides with a width of up to 3.5m. This was partially filled with deposits [4574] [4582] [4583] slumping into the shaft, comprising of pale greyish brown clayey silt and orangey yellow silty sand, often containing dark humic patches, and all with poorly distinguished basal boundaries. These deposits appeared to represent a stabilising of the filling sequence.

F.1660 (Figure 6) was excavated to a depth of 4.1m, the sides of which were shored throughout the excavation. The base of the shaft was not reached since the excavation of the shaft had exposed a natural void oriented east-west in the Hamstone, and infilled with banded sand, at a depth of 2.2m and with a width of 0.7-1.2m. This was filled to a depth of 0.8m from the base with at least 8 near horizontal deposits ([5206] and [5243-9]) of mixed mid-orange and mid grey silt and clay sand. The remaining 1.1m of the void in the Hamstone was crowned with a slumping deposit of rubbly sand [5144/5145] and a central cone of mixed orange, yellow and mid grey sand-silt and clayey sand [5139-43]. At 2.2m the Hamstone geology was overlain by sand, and at this point the sides of the shaft straightened with a width of *c*. 1.8m and an irregular, but broadly circular aspect. This was filled with two deposits [3674] [4576] similar to those of the underlying cone, with the upper of these slumping from the southeast of the mouth of the shaft.

From *c*. 0.9-1m depth the upper profile of both F.1585 and F.1660 was capped by the curvilinear anomaly of F.1932 (=F.1545/F.1546/F.1896). This was predominantly filled with deposits of dark humic sandy silt – replaced in increasing depth with clayey sand to the northeast – which also included small amounts of material culture throughout its profile. In F.1585 this consisted of two fills of homogenous mid to dark orangey greyish brown silt [4504] [4506] infused with occasional charcoal flecks, Middle to Late Iron Age pottery sherds (9), worked flints (3), and utilised stone (1); F.1660 was filled with 15 various types of moderately compact mid to dark orangey grey-brown silt [3113-21] [3134] also containing Middle to Late Iron Age pottery and a small quantity of prehistoric flint. A rounded terminal at the anomalous ditch's western end reached a depth of 1.7m with concave sides, but again with a poorly defined basal boundary, and contained four dark sandy clay silt fills [5218-21] with a worn and partially burnt 'Wessex'- type Iron Age quern fragment (Timberlake, see below). The upper break of slope from the mouth of the anomalous ditch opened into a shallow sub-oval hollow F.1994, F.1995 and F.1996 (yellow on Figure 3) containing a single fill of mottled mid to dark orangey brown silt to a depth of *c*. 0.3m. It was not possible to make a clear distinction between the fill of the hollow and that slumping into the head of the shafts (e.g. [3674] in F.1660). Both the anomalous ditch and the hollow were cut by the eavesdrip gulley (F.1578/F.1579) of Structure 2, and a small pit (F.1537), with the hollow also being cut by pits F.1538, F.1539, F.1554, F.1610, F.1897 and posthole F.1920.

There are two broad interpretative possibilities for the totality of these anomalous features, although some overlap between these may also be considered. First, these may be hand-cut pits or shafts cut by a later sizeable ditch; second, the shafts may be naturally occurring with a weathering cone forming at their head. Both of these statements are taken into consideration in Section 3.

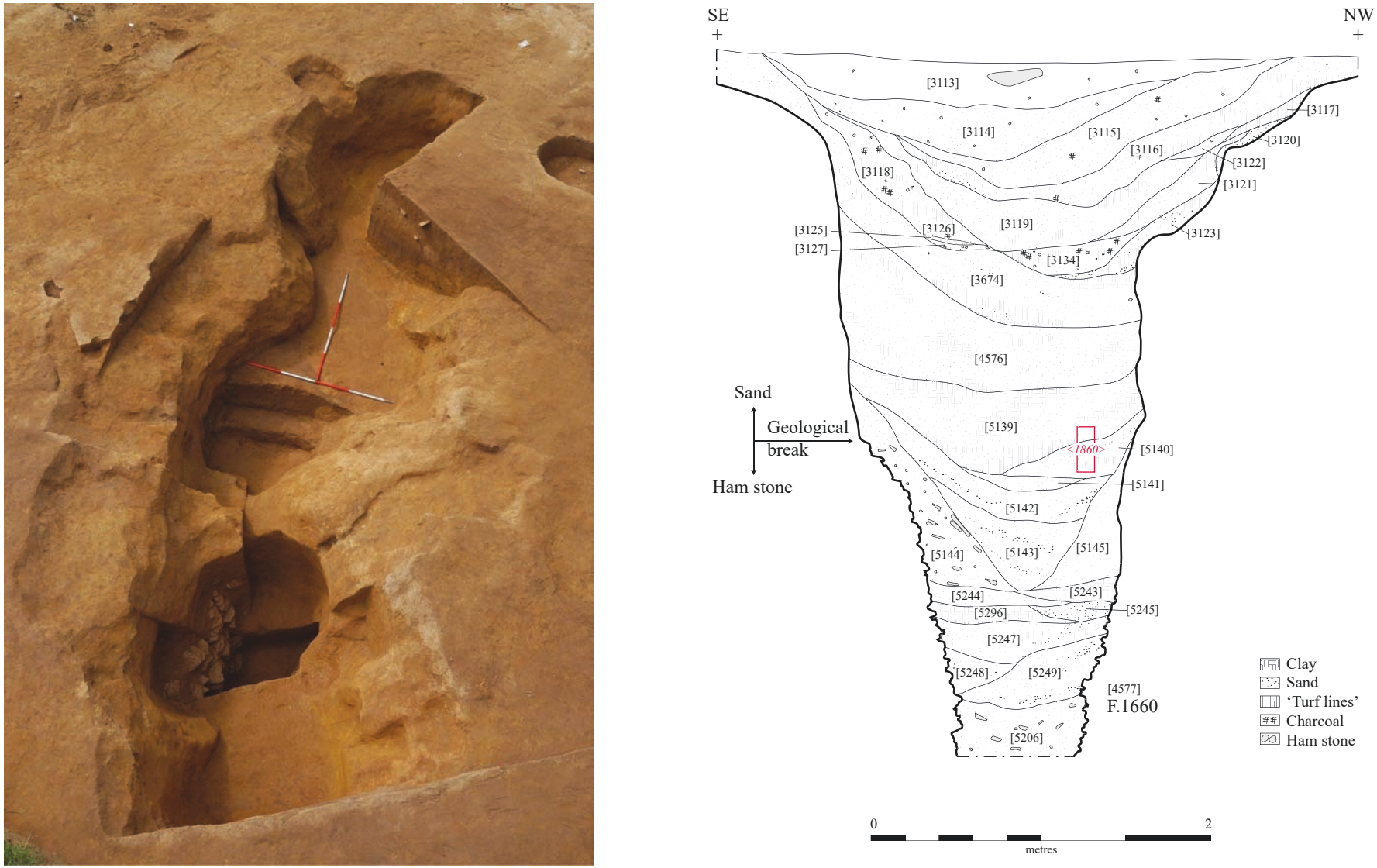


Figure 6. Photograph (looking southwest) and section of anomalous Ditch F.1932 and 'Shaft' F.1660

2.1 Neolithic and Bronze Age

The early prehistoric background to the site comprises lithic and pottery scatters within the buried soil horizons and from secondary contexts within later features. The 2011 distribution densities have changed little despite additional surface collection, excavation of features and the completion of the remaining five test pits over Areas 2 and 4. Whilst no pottery was recovered in 2012, excavation of Areas 2 and 4 added a further 316 lithic items of Late Mesolithic to Early Bronze Age date, with the possibility of a small Middle Bronze Age component. Much of this came from within the Bronze Age field system, the exact date of which awaits definition.

No features have as yet been identifiable to Neolithic or earlier Bronze Age phases in the main excavations (however, see rampart Trench 3 in Section 2.5), although within the base of a Bronze Age ditch (F.1521, see below) a possible feature was tentatively identified as a post hole (F.1883), 0.3m in diameter to a depth of 0.06m, and may therefore have been an earlier 'stand-alone' feature or perhaps even a marking-out, or early phase, of a pre-ditch fenced field system.

Of notable significance in the 2012 investigations was the greater visibility of a Late Bronze Age element to the site. The residual presence of a small collection of later Bronze Age sherds in Iron Age features has previously been noted (Brudenell, in Slater *et al*. 2012), but with little direct association. Secure dating of a rectangular structure, perhaps also with a fenceline and associated pits, is now documented.

Field system

Area 1, 2 and 4 are covered by a ditched coaxial system of field allotment that is visible in the earlier excavations and the geophysical survey, and which appears to extend across the hillfort plateau (Sharples and Evans 2010). Four fields were identified oriented south-southwest to north-northeast across the excavated area. On the west side (Area 1) the field boundary F.1511 terminates against a sinuous boundary F.1506 in the middle of the excavation, but the remaining three boundaries extend much further to the north where they terminate at boundary F.1000/F.1858. Three fields provide width measurements which are *c*. 50m, 30m and 32m and previous excavations (MacKinley 1999) indicate the next field to the northwest was *c*. 40m wide.

A total of 83 slots were excavated into five main ditch circuits in Areas 2 and 4. The dimensions of the ditches were consistent along individual ditch lengths, but varied considerably between ditches from 0.3-1.8m in width and 0.09-.6m in depth. Fills were consistently mid orange-brown soft to firm silt-sand, varying in hue and consistency largely with respect to the geological contexts into which the ditches were cut. The number of fills varied between 1 and 3, although distinction between fills was not easily discernible in many cases.

Multiple termini were identified indicating either construction breaks within the cut circuits, access points between allotments or points at which ditches have been stopped to respect existing ditch banks. Of the five ditches excavated, two had no re-cuts – F.1506 and F.1902 (with F.1935) – and the other three had between 1 and 2 re-cuts. The degree of ditch cutting reflected the geological context, most notably in the north of Area 2 where hardened iron panning had restricted water filtration through the sand. Here multiple re-cuts were encountered (F.1900, F.1906, F.1914, F. 1915, F.1923, F.1924, and F.1925), mainly in plan, as in section the iron leaching had blurred much of (but not all) distinction between cuts. The correspondence of multiple re-cuts with iron panning may indicate some degree of contemporaneity in an area of comparatively poor drainage. Here 1 or 2 layers of iron pan formation were noted from within the ditch profile.

Three obvious access points between plots are immediately apparent; these are defined by off-set terminals between F.1906 and F.1909 on the north side of area 2, and between F.1902 and F.1935 on the south side, each forming a throughway of approximately 0.73-.96m. A throughway of 1.17m was also accessible between perpendicular ditches F.1506 and F.1521 in area 1. Another probable access point to the east between ditches F.1902 and F.1930 appears to have been blocked by the re-cutting, and thereby extension, of F.1930 (F.1858/F.1000). Finds include fragments of a burnt saddlequern from F.1935.

Six-Post Structure

On the southern edge of the main enclosure's interior a rectilinear structure of 6 or 7 postholes (F.1862, F.1968, F.1969, F.1970, 1983, F.1986 and F.1993) defining an area of 6.7m by 2.4m, was aligned on an east-northeast to west-southwest axis. The posts were sub-circular in plan ranging in width between 0.37-.54m and in depth to 0.11-.27m. It was assumed that being situated within the main enclosure that this was of a broadly contemporary date and associated with activities therein. However, the complete base of a Late Bronze Age vessel was recovered from F.1986 along with 25g of daub fragments. Additional sherds of Late Bronze Age provenance were found in F.1968, F.1970 and F.1983, with a single cereal grain also in F.1968.

Pits and postholes

One pit (F.1973) could be dated to the Late Bronze Age on account of its pottery content (Brudenell, *pers. comm.*). Its position, set 1.35m inside the ditch line of the main enclosure, is likely to have been concealed by the enclosure's inner bank, and its proximity to the six-post structure provides security for its date. A number of post or pit features thought to pre-date the enclosure on account of their alignment and fill types may also be of the Bronze Age. These include pits with light to mid-brown silt-sand fills, largely devoid of artefacts, but with small amounts of barley, hazelnut shell and grass. Both with a diameter of 0.95-1.45m and depths of 0.2-.27m, pits F.1865 and F.1866 fall within this category. Two similar pits (F.1851 and F.1853) were located next to F.1865 (others – F.1916, F.1928 and F.1938 – are in the vicinity of the six-post structure), and F.1866 was also aligned with a series of four post holes (F.1913, F1927, F1959 and F1960) that correspond at a right angle with five postholes identified, but undated, in Area 1 (F1586, F1595, F.1657, F1658 and F1659). One of these from Area 1 (F.1595) was cut by the main enclosure's ditch (F.1531), and all hold broadly similar dimensions of c.0.45m width and c.0.2m depth. It is interesting to note that the orientations of the six-post structure and the right-angled fenceline are closely paralleled.

2.2 Iron Age

The main focus for the excavation in 2012 was the interior of the rectangular enclosure and the excavation strategy was specifically modified in anticipation of the presence of complex stratifed deposits in the centre of the enclosure. It was also planned to complete the excavation of the enclosure's entranceway in Area 4, which would enable a detailed reconsideration of its infill sequence. At the end of the 2012 season the excavations in Area 4 were backfilled by machine for general health and safety reasons and in preparation for the construction of an earthen bund in 2013.

The Rectilinear Enclosure

The majority of the area investigated within Areas 2 and 4 lay within the interior of the large rectilinear enclosure first identified in the geophysical survey. Four lengths of the enclosure ditch were also exposed; F.1011 to the north, F.1531 to the south, and F.1527 and F.1564 which formed the terminals of the entrance. Excavations of the

entrance terminal ditches were begun in 2011, from which interim observations have been reported (Slater *et al*. 2012: 18). A fuller assessment is presented here. Seven additional 2-m long slots were excavated through the enclosure ditch, combined with *c*. 13m of the termini. The evidence recovered from the ditch broadly mirrored the observations of morphology and sequence recorded from Area 1, though an additional stretch of 'midden' deposits high in the profile was identified. The structure of the enclosure entrance is returned to in the discussion section, but it suffices here to state that its complexity and investment in labour is significant.

Areas 2 & 4 enclosure ditches

A length of 26m of the ditch (F.1531) defining the south west side of the enclosure was exposed in Area 2. The ditch had been cut through sand and had an undulating depth of between 0.6m and 1.14m and a markedly 'V'-shaped profile. A length of 35m was exposed of the ditch (F.1011) defining the north east side of the enclosure. This was cut through an exposure of solid hamstone and had a rounded base and a consistent depth of around 1.2m.

Little variation was noted between the sequence identified in 2011 and that recorded in 2012. This comprised predominantly clean primary silt overlain by a deposit interpreted as deliberate infill, probably using the adjacent internal bank. This was represented in the north (F.1011) by hamstone rubble mixed with mid brown clayey silt and occasional voids, and in the south (F.1531) by laminated deposits of silty sand. A low density of finds is thus far characteristic of these layers, although a rare find of 30 sherds of pottery in the basal deposit [4531] is notable here. The articulated remains of three human skeletons were found either resting upon or cut into the primary silting in 2011 and though no additional interments have been encountered human cranial fragments were recovered within rubble layer [4570] on the northwest side of the enclosure. This is adjacent to the location of the grave of the young woman excavated in 2009/11 which was associated with disarticulated skeletal elements.

It appears that the levelling of the bank into the enclosure ditch was not a complete erasure of the earthwork, as this only partially filled the enclosure ditch, thereby leaving a shallow and irregular hollow. A gradual accumulation of deposits subsequently filled this shallow profile. Within F.1011 this comprised of sandy silt; however, along F.1531 [4414] [4422] [4455] and [5044] a thick deposit of either dark grey or dark greyish brown silt overlay the collapsed bank. This appears to have been tipped in from outside the enclosure and is similar to a deposit overlying the rubble layer in the northernmost slot [3533] of F.1531 in Area 1. This slot contained relatively high quantities of burnt stone and charcoal but this is largely absent from the final ditch deposits in Area 2. The density of finds within the southwest section of ditch was comparably small, but did contain pot, animal bone, small quantities of burnt stone, and an iron sickle blade [5041]. The dark deposit found in Area 1 was postulated to have originated from activities associated with Structure 1 some 10m to the west, and the presence of black mustard seed in the ditch fill creates a link with similar deposits in pit cluster 2.

Area 4 enclosure entrance

Two sub-squared terminals of ditches F.1527 and F.1564 formed a southeast facing entrance, 6m wide. It was associated with seven postholes (F.1590, F.1604, F.1608, F.1609, F.1669, F.1985 & F.1999) and a palisade slot (F.1933) (Figure 7).

The ditch terminals had a flattened 'V'-shaped profile with a narrow flat base; they were 1m (F.1527) and 1.23m (F.1564) deep and the width varied from between 2.4m and 3.05m at the top, and between 0.38m and 0.44m at the base (Figure 8, C-D, E-F). A length of 4.7m was excavated along F.1527 and 7.9m along F.1564.

The sequence of deposits from both terminals is superficially similar to that observed in the other slots along the enclosure ditch, pale primary sandy silts, overlain by a layer of hamstone slabs covered by brown silts which completes the fill of the ditch. However, the character of these deposits is markedly different to that observed elsewhere along the enclosure ditch.

The primary mid- to dark-orangey brown sandy silts of each ditch terminal were thicker than those observed in the majority of the enclosure ditch slots, varying in thickness between 0.2-0.3m in F.1527 [3651] [3653] and 0.25-0.45m in F.1564 [3634] [3633] [3631] [3630]. In the east terminal (F.1527) these overlay a thin (0.05m) deposit of slumped natural sand ([3656]), and were partially overlain by another slump [3652] from the front edge of the terminus that formed a slight step in its profile. This was overlain by a layer of mixed dark greyish brown silty sand with occasional small lumps of hamstone and charcoal flecking [3648] [3654] (in F.1527); [3630] [3631] (in F.1564) which appears to represent deliberate infill filling each ditch to a little over midway. Various items were found upon the surface of this deposit in each ditch, including pottery (40), animal bone (6), burnt stone (9) and flint (1) in F.1527 [3648), and flint (3), pottery (14), animal bone (97), and a sling stone in F.1564 [4557] (over [5273]).

This layer was overlayen by a thick (0.05-0.62m) layer of hamstone slabs and rubble mixed with dark orangey brown clayey sandy silt (F.1527: [2845]; F.1564: [3629]). These slabs ranged in size, the largest of which with dimensions approximating 0.56m x 0.4m x 0.14m. In F.1527 this layer also produced 30% (8.77kg) of the entire Area 2/4 burnt stone assemblage, along with pottery (20), animal bone (59), and a copper alloy button. A small lump (24g) of iron slag emerged from the corresponding deposit in F.1564. The presence and distribution of the hamstones within the ditch terminals is of considerable interest. The ditch in this area was cut through sand and therefore cannot be the source for these slabs which must have been imported from another area of the site. The most likely interpretation is that they were brought to the entrance to create a revetment and that this revetment was dismantled and laid in the terminals with some degree of formality.

The overlying ditch fill is a mid orangey brown silty sand (F.1527: [2846]; F.1564: [4785]). These were absent of the darker 'midden'-like deposits noted in some sections of the enclosure ditch, but occasional spreads of artefacts indicate some deliberate deposition, notably 198 pot sherds (SF.1156 <3087-8>) representing a near complete jar smashed *in situ* within F.1564 ([4520] in [4785]). A longitudinal line of small to medium hamstones was noted within the uppermost fill of F.1564 [4497], but this is probably related to recent cultivation of the hilltop.

Seven postholes (Figure 8, sections G-H and I-J) were excavated in the entrance to the enclosure. The outermost postholes comprised a pair (F.1985 and F.1999) located at the outer corners of the terminal ditches. Four post holes (F.1590, F.1604, F.1608, F.1609) spaced *c*. 0.25m apart, formed a line perpendicular to the enclosure boundary on the south side of the entrance. A fifth post hole (F.1669) was located 2.3m to the north. All the postholes were circular and straight sided with flat bases, ranging between 0.43-.75m diameter and 0.07-.27m depth, and devoid of finds. A possible post-pipe was identifed in two of the postholes (F.1589 and F.1590). The exterior postholes appear to be cutting the weathering lip of the terminal ditches, but the Hamstones within the upper profile of the levelled revetting ([3629]) in F.1564 overlay the cut and fill of posthole F.1985. The exterior postholes may therefore be regarded as contempory with the ditch terminals, and perhaps all being simultaneously 'decommissioned'.

A linear slot (F.1558/F.1933) was found cut through the fill of a ditch (F.1550) of the coaxial field boundary on an orientation parallel with the entrance ditches and lying 6.5m inside the inner edge of the enclosure ditch. The slot was 2.7m in length cut to a depth of 0.89m with straight sides of 0.84m width at the top inverting slightly to a sharp break of slope and near flat base *c*. 0.54m in width. It contained three fills [4430/4551] [4431/4552] [4432/4561] of dark grey and mid orange silty sand layered horizontally without any distinct tip lines. The narrow morphology, depth and position of this feature suggest that it supported a timber screen which was subsequently dismantled.

The features present in the entrance to the enclosure suggest access into the interior was carefully choreographed. Some form of timber gateway may be indicated by the large outer posts F.1589 and F.1609. The timber screen blocked direct ingress and the line of postholes on the south side of the passageway suggests that visitors were encouraged to turn to the right to access the interior. Views of the interior may also have been restricted by the timber screen and the flanking stone revetted banks. All of this seems to have been sytematically dismantled and not long after it had been constructed.

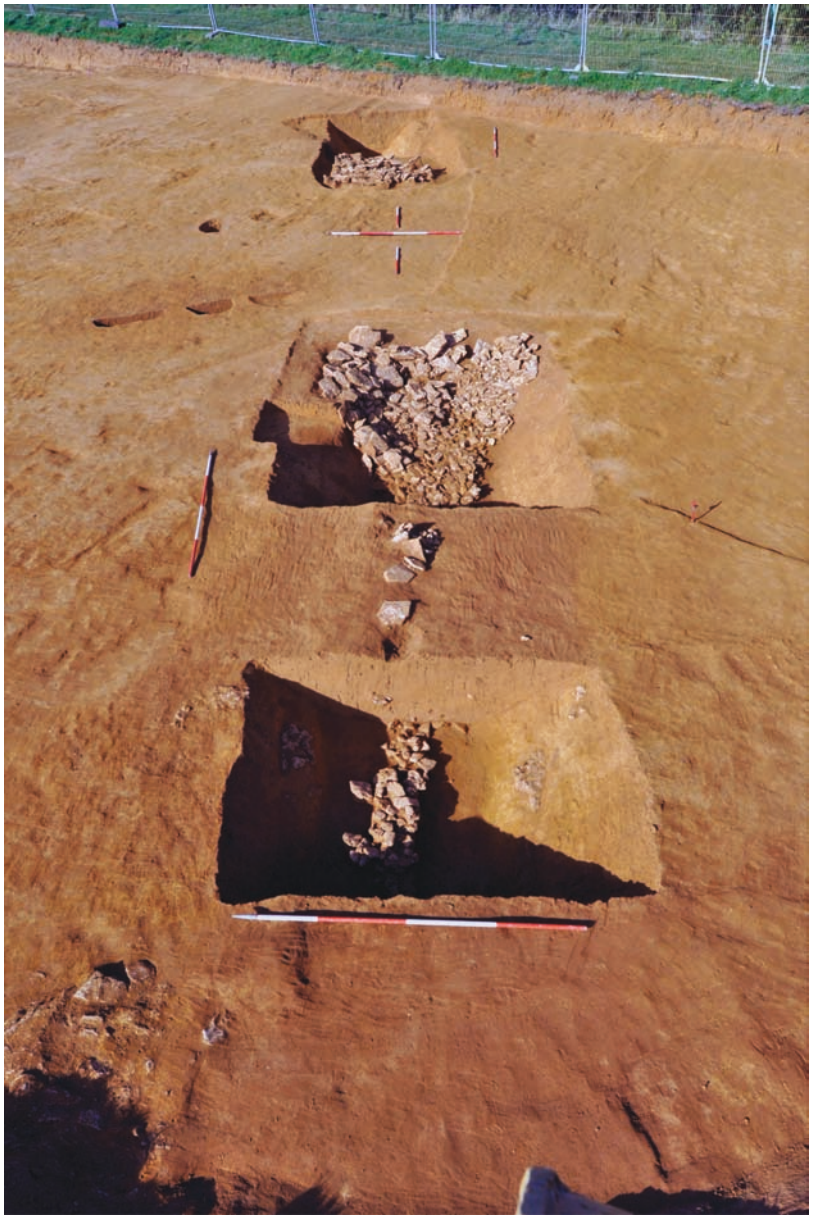




Figure 7. Photograph of entranceway with stone fills, looking North (left), and postholes and palisade trench, looking East (above)

S*tructure 2*

A large circular eaves-drip gully comprised the main architectural component of the main enclosure interior (Figure 3). The circumference of the gulley was incomplete, having suffered considerable truncation along its southern aspect. Nonetheless, an internal area of *c*. 20m in diameter was enclosed by F.1578, F.1579, F.1903 and F.1942. With a shallow concave profile to a width of 0.2-0.7m and a depth of 0.18-.35m (Figure 8, section Q-R), F.1578, F.1579 and F.1903 contained a single fill of dark brown clay-silt with frequent charcoal flecks, occasional cereal grains (*Hordeum*) and, particularly along its eastern aspect, a number of pottery sherds of the mid to late 1st century BC. In plan a rounded terminus at the western arm of F.1578 represented a possible re-cut of F.1942, although – highly truncated – in section these appear to contain the same dark fill. This survived to a depth of 0.08m (Figure 8, section O-P). A short 5.5m length of irregular gully (F.1610), 1.5m wide and 0.2m deep, may also represent a seoarate phase of the structure, but its mis-alignment and undulating profile instead suggest that this is a pit or gulley perhaps connected with an entranceway. This was filled with dark, charcoal-rich silt that contained 333g of fired clay daub (the third highest concentration of daub from Areas 1, 2 and 4), seven elements of cow and sheep/goat bone, and a lump of iron mineral suitable for smithing (see reports in Slater *et al*. 2012).

A number of pits and a posthole were found within the interior of Structure 2, or in its vicinity. These include pits F.1537, F.1538, F.1539, F.1543(=F.1953), F.1554, F.1897 and F.1962, and posthole, F.1920. A possible oven pit, F.1980, was situated 3m to the east. These are presented in *Pits and Postholes* below.

Penannular Gully

A curving penannular or C-shaped gully F.1899 was identified on the northern edge of Area 2. This continues beyond the 2012 excavation limits into Area 3. The plan of the ditch is of a slightly stretched semi-circle with an opening towards the north. The gully is 0.36-0.66m wide, with a depth of 0.2-0.46m. It contains an upper fill of redeposited firm reddish brown sand, formed through natural silting, overlying a firm mid to dark orangey grey clayey sand-silt with rare charcoal flecks (Figure 8, sections K-L and M-N). As previously mentioned, this part of the site is particularly firm with a layer of hard iron pan both within and around the features. This is true also of F.1899 which cut through a panned surface and yet had also been affected by a process of pan formation that most notably distinguished a basal boundary between fill and natural geological sand. As a result of this hardening the ditch was particularly difficult to follow in plan along its western axis, which was most effectively identified by probing for relative changes in the ground's firmness, the ditch being comparatively softer than surrounding natural sand; in section the profile of the ditch could more easily be discerned, thereby confirming its character.

A clearer picture of this feature will be forthcoming with its continued excavation in 2013, but it currently appears to be a penannular gully situated, very close to the edge of the enclosure's inner bank. A handful of later Iron Age potsherds from the gully (Brudenell, this report) is probably contemporary with its use. This supports the stratigraphic dating as the Romano-British ditches (F.1947, F.1948 and F.1949) cut the gully, and the Bronze Age field system (F.1906), was cut by the gully. A number of postholes were located around the terminus and central area of F.1899, but are considered to be later – one, F.1919, cut the upper fill of F.1899 – and possibly associated with the parallel ditches of F.1947, F.1948, F.1949 and F.1855 (see below).

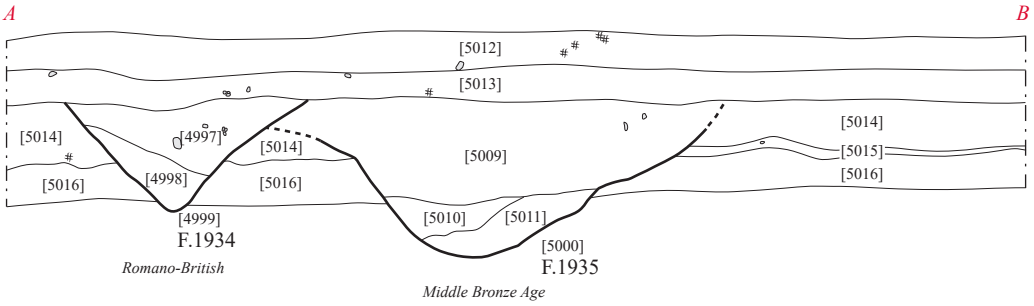
Pits and Postholes

Including the six/seven-post structure discussed above (section 2.1), a total of 81 features were recorded as either certain or possible pits or postholes. Many of these could not be assigned to any particular period with certainty. Where this was possible, most notably in association with Structure 2, pits containing datable material were generally clustered within the eastern half of the excavation area. Suggestions regarding the date of select groupings of pits/postholes should therefore be considered as preliminary only.

Structure 2 – Seven pits (F1537, F1538, F1539, F1543/F1953, F1554, F1897, and F.1962) and a single posthole (F.1920) were recorded from within the eaves-drip gully of Structure 2. The pits varied in size, the largest being F.1897 with dimensions in plan of 1.48m by 1.72m and a depth of 0.57m, and the smallest, F.1962, measuring 0.66m by 0.9m at a depth of 0.17m. A range of material most likely associated with activities from different structural phases was recovered, including copper and iron metalwork in F.1554 (3 copper studs) and F.1897 (1 copper button, 4 iron pieces inc. two fragments of an iron saw). The latter of these was the most productive of the 2012 pits. It produced the largest assemblage of pottery (1624g), with at least two complete vessel profiles reconstructed, one a Glastonbury Ware vessel, the other a fine cordoned bowl (Figure 15). These displayed a pinkish colour indicative of having been re-fired. A lump of iron slag was also recovered, along with the lower stone of a heat-affected, Wessex style quernstone. Both F.1554 and F.1897 produced a number of cereal grains of barley and hulled wheat. Towards the centre of Structure 2 the base of F.1962 was covered with large heat-affected flat ham stone slabs covered by a dark silt fill. This is the most obvious candidate for a hearth from within Structure 2, although similar, but less structured, deposits were noted from within F.1538 and F.1539, also close to the centre but slightly higher in the soil profile than F.1962. The only posthole identified with any certainty was F.1920, but this was only identified during the excavation of pit F.1897 and, situated at the interface of the weathering cone of the large gull/shaft, it was not possible to discern any direct relationship. A possible oven pit, F.1980, was situated 3m to the west.

2.3 Romano-British

The first season's investigations presented a Medieval date to a set of shallow parallel ditches in the north of Area 1. Aligned roughly east-west, it remains possible that this late date is applicable; however, the lack of Medieval finds compared with the, albeit small, assemblage of Early Romano-British wares, along with the finding of a Romano-British cavalry harness strap terminal (Appleby, Section 2.6) from the projected course of these ditches in Area 3, requires a consideration of a similar date for the final phase of features in Areas 2 and 4. These comprised ditches (F.1947-9, F.1855, F.1936 and F.1991) aligned north-northwest to south-southeast, of which at least one (F.1947) turns at 90^{o} to the east (F.1937) mid-way through Area 2. The maximum depth of this latter ditch was 0.9m, with the remaining ditches being no more that 0.35m, and more generally averaging around 0.2m. Clearly extending into Area 3, discussion of sequence and phasing will await further data.



Profile of Area 2 soil and feature sequence

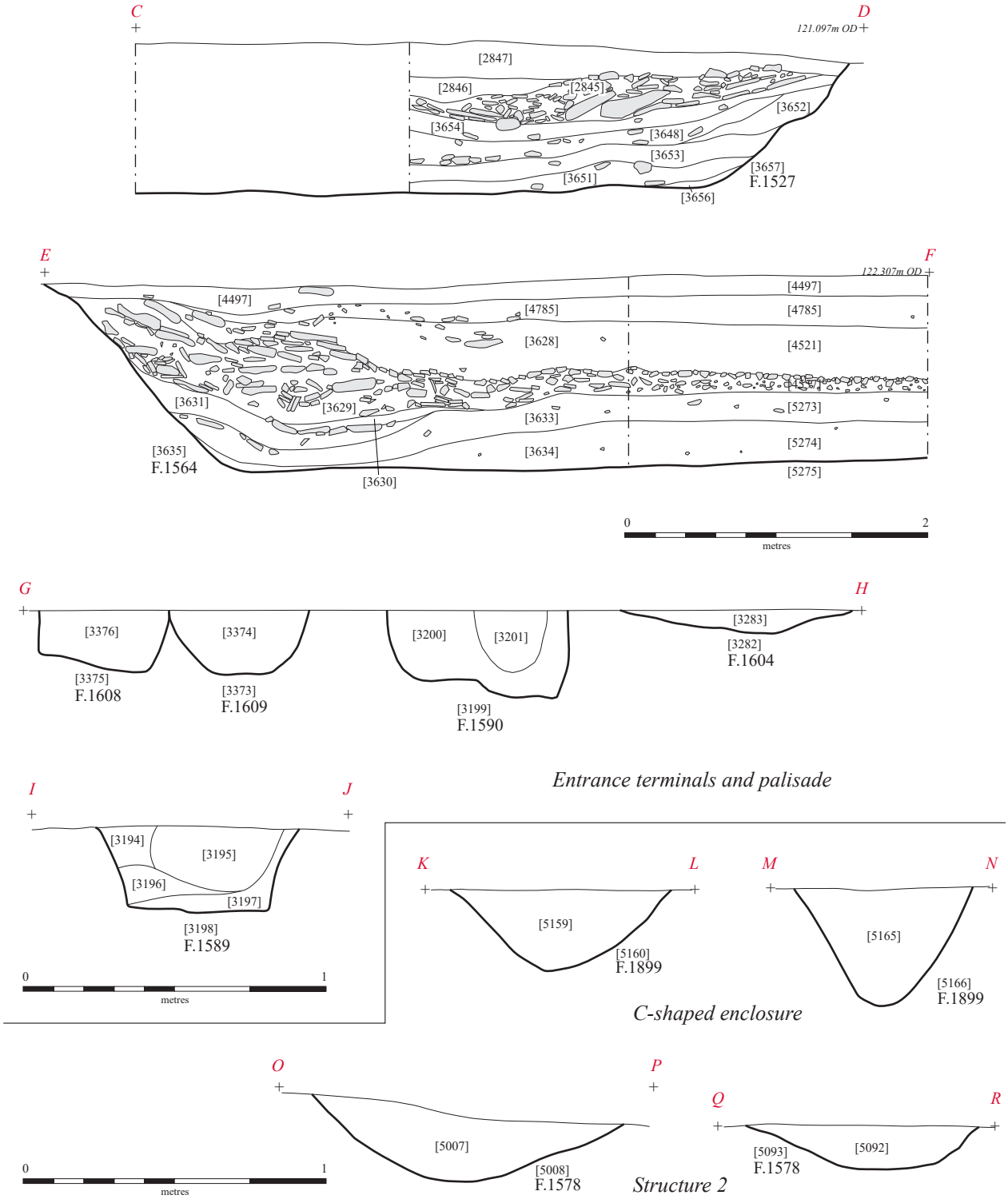


Figure 8. Selected sections

2.4 The Rampart Trenches

Introduction – Niall Sharples

The 2012 excavations at Ham Hill involved the excavation of three trenches across the inner rampart. Trench 1 was on the south side of the plateau, close to the main area excavation (Areas 1-4), Trench 2 was on the west side of the northern spur and Trench 3 on the north side of the spur (the latter being a re-investigation of a trench previously opened in 1929 by Harold St. George Gray). The goals of these trenches included the following objectives:

- to assess the integrity and structural complexity of the ramparts;
- to identify construction phases;
- to date the rampart sequence;
- to explain the visible differences in the form of the rampart on different parts of the hill;
- to relate the act of enclosure to the occupation of the hill in the first millennium BC;
- to understand the effects of the recent quarrying activity on the definition of the edge of the hill.

In the following text a lettering system has been devised to preliminarily distinguish between Trench-Block-Event. Each trench is summarised in Tables 1-3, with comparative matrices in Figure 13.

Trench 1 – Nick Wells

This trench was located on the southern boundary of the main plateau, behind the scarp which defines the edge of the hillfort in this area (trench centred on NGR ST 48760 16210). The remains of an enclosing rampart and ditch are not clearly visible along this scarp which is one of the few areas of the hillfort's periphery that is not covered in dense vegetation.

Work began on the 24th July 2012 and continued, with a one week break, until the 13th September. Initially, the trench was 4m by 4m, set 1m north from the rampart edge. After the second week, the trench was extended an additional 1m north and in the final week a 1.9m wide slot was excavated across the rampart edge along the western section of the trench. In total the area excavated comprised 21.9m^2.

Fifteen stratigraphic units were recorded (Table 1). A thin buried soil was sealed by the rampart and sampled for analysis (see Allen, Section 2.8). Only one phase, 0.4m, of the rampart survived, and this was associated with Early Iron Age pottery. To the rear of the rampart was a circular house with a stone wall surviving to five courses, 0.2m, high. A square hearth was recorded in a compact floor layer that was covered by a dark layer of domestic debris. This occupation activity was covered by a thick deposit of rubble and soil, which appeared to indicate the deliberate destruction of the rampart. Later, possible Medieval, activity appears to have disturbed the rampart, which may account for the lack of any later phases of construction.

Contexts	Phase	Comments
3763	A-A-A	Natural deposits
3745, 3752	A-B-A	Sub-rampart buried soil
3745, 3747, 3762	A-C-A	Rampart construction
3753, 3754, 3755, 3756	A-D-A	Hillfort Occupation - pit
3747, 3758, 3760	A-D-B	Hillfort Occupation - roundhouse structure
3732, 3759, 3761, 3764, 3765,	A-D-C	Hillfort Occupation - roundhouse floor and hearth
3749, 3751, 3766, 3767	A-D-D	Hillfort Occupation - roundhouse rubble
3743, 3745, 3746, 3747, 3759	A-E-A	Rampart stabilisation and tree-throw
3742, 3744, 3745, 3746	A-F-A	Dumping against rampart
3727, 3729, 3732, 3735, 3736, 3737, 3738, 3739, 3740, 3741	A-G-A	Rampart removal and levelling 1
3728, 3730, 3731	A-G-B	Rampart removal and levelling 2
3745, 3757	A-G-C	Rampart removal and levelling 3
3724, 3726, 3733	A-H-A	Abandonment 1
3725, 3748, 3762, 3768	A-H-B	Abandonment 2
3720, 3721, 3722, 3723	A-I-A	Topsoil

Table 1: Summary of Trench 1 Phase Sequence.

Block A-A Natural

A-A-A Bedrock [3763] was found only in the south-western corner of the trench at 0.9m below ground level where a 2m wide (narrowing to 1m wide in the north-western corner) sondage was excavated to test the depths of deposits. In places the upper 0.15m of the natural deposits were heavily weathered comprising mostly of orangey yellow sands, which also filled the gaps between the bedding planes of the bedrock.

Block A-B Buried soil

A-B-A Immediately above the bedrock was a yellowish brown firm sandy silt [3752] with occasional small sandstone fragments, 0.4m deep to the south and thinning to 0.2m deep northwards away from the rampart. The layer is very similar to the material making up the bank deposit [3745] and in dry conditions it was virtually impossible to distinguish the two, but fortuitously the interface was defined by frequent charcoal flecks occurring in patches. This suggests that there was a buried soil and made differentiation of the two layers possible in places.

The north and east facing sections clarified things a little, showing that the upper 0.1m contained slightly more in the way of coarse components (maybe the topsoil/turfline remnant) and that the interface between 3752 and 3745, while diffuse, was in places defined by medium sized sandstone fragments – seemingly lying flat on the buried soil and subsequently covered by bank deposit 3745.

Block A-C Rampart

A-C-A The southern half of the trench was covered by a brownish yellow friable to firm sand [3745] with common small to large hamstone (it had a crunchy texture when not disturbed by animal burrowing!). The layer ran across the full width of the trench (4m), extended 2.2m into the trench and reached a maximum height of 0.4m. There was no evidence of any stone capping, except at the extreme south-western corner, and even here it was exceptionally patchy (though see below). The layer partially covered the rubble deposit [3747] behind roundhouse F.1674 and the top of pit 3756, forming fill 3753.

Initially 3745 was thought to be dumping against a proper stone-built rampart to the south of the main area excavated and possibly destroyed by erosion of the escarpment. However, excavation of a 1m

wide slot up to the edge of the escarpment in the last week of the excavation revealed a revetment wall that suggests 3745 is the *in situ* core of a rampart, roughly 2.2m wide. The revetment wall was defined by *c*. 5 courses of small to large hamstone slabs [3762] that stood approximately 0.35m high. The revetment sat directly on top of buried soil 3752.

Block A-D Hillfort occupation

The earliest substantive human activity inside the hillfort comprises: a pit [3756] and a stone walled roundhouse F.1674 (Figure 9). The latter structure was well preserved and contained occupation deposits including a hearth F.1675 sitting within a floor deposit [3761]. The pit was exposed in a deeper cutting made along the east section of the trench and is unfortunately unrelated to the house.

A-D-A Pit [3756] was 1.08m north-south and over 0.56m east-west (running under the eastern baulk) and 0.75m deep. It had stepped vertical sides and a flat irregular base. It contained three fills; the basal deposit was a 0.1m thick greyish brown sticky sandy silty clay [3755] with occasional small to medium hamstone fragments. Above this was a 0.6m thick greyish brown firm sandy silty clay [3754] with common small to medium hamdstone fragments occurring in patches. The latest deposit was a 0.1m thick yellowish brown firm sandy silty clay [3753] with frequent small to medium hamstone fragments.

This pit, excavated through natural bedrock, appears to have had a short silting period [3755]. This was followed by [3754] in which 'tip' lines within a concentration of stones suggest deposition from the bank to the south, either as a deliberate act of backfilling or a result of 'washing in' from the bank. The uppermost layer [3753] represents the latest bank wash prior to stabilisation.

A-D-B In the north-eastern corner of the trench, the remains of a roundhouse F.1674 was uncovered. The house was defined by a 2.5m arc of wall [3758] which suggests a house about 5m in diameter. The wall survived as up to five courses (max 0.2m high) of medium and large hamstone slabs. To the east the wall ran into the trench edge and to the north-west the wall was robbed and no stones survived at the north section. An area of the interior roughly 2.4m east-west by 1.9m north-south was available for exploration.

To the south of the house wall was a brownish yellow sandy silty clay [3747] with very frequent small to large hamstone fragments, some showing burning (i.e. a reddening of the stone). A sondage along the western side of the trench encroached into 3747 (most of it was not excavated), and showed that it filled a cut [3760] (0.24m deep where exposed) that truncated buried soil horizon 3752 (the interface between the two layers was sharp), 3.6m from the southern baulk. It is probable that 3760 was the cut to create the platform for roundhouse F.1674 and that 3747 represent construction rubble co-terminous with revetment wall 3758.

A-D-C The principal floor layer within the house was a mixed dark greyish brown/yellowish brown firm sandy silty clay [3761] with frequent small to medium hamstone fragments. This floor layer was encompassed within roundhouse F.1674, extending at least 1.7m north-south and 1.4m east-west. Some of the larger hamstone seemed to be laid flat, and it may be that below this layer is a stone floor.

North of this layer was a greyish brown firm sandy silty clay [3749] with very frequent small to medium hamstone fragments. It occurs within the roundhouse and extends to the north-west corner of the trench and seems to be a general rubble layer. The interface between 3761 and 3749 was diffuse and the stratigraphic relationship was not defined it is therefore unclear whether this represents an underlying foundation layer or part of the overlying destruction layer.

The most striking feature in the house interior was a well preserved rectangular hearth F.1675 0.4m wide and 0.6m long, aligned east to west. The south side of the hearth comprised a kerb of two upright hamstone blocks, both 0.2m long by 0.08m wide, projecting 0.18m above the surface. The north edge was marked by a shallow empty stone-setting, which might have originally contained a similar upright stone. Within the setting was a burnt deposit, probably in-situ wood, and occasional small to medium burnt hamstone [3759] in a black charcoal-rich silty clay matrix. The hearth was unexcavated so the depth of the deposits is not known.

Overlying part of hearth F.1675 and extending north-east under the baulk was a mixed greyish brown/black sandy silty clay [3765] with occasional small to medium hamstone fragments. This layer may represent occupation activity within the roundhouse, but as it seals part of the hearth, it is more likely that it formed after the structure was abandoned.

Adjacent to and running under the northern edge of the trench was a small area of black sandy silty clay [3764], 0.62m east-west and over 0.3m north-south. This layer was rich in both charcoal and burnt bone but its precise relationship with 3749 (in which it sits) is uncertain. It appears to sit in a slight depression within 3749 (sealed by levelling deposit 3732) and it is possible that this represents a cut feature associated with roundhouse F.1674 and it might indicate the location of the house entrance.

Sealing the deposits within roundhouse F.1674 was a very dark greyish brown/black sandy silty clay [3743] with occasional small to medium hamstone fragments occurring in patches. This deposit was 0.15m thick, and was probably a dump of occupation debris within the roundhouse. It is possible that like 3765 (see above) this belongs to the immediate post-roundhouse activity phase.

A-D-D The north-west corner of the trench always raised questions. The roundhouse structure disappeared into an homogenous rubble layer [3749] in this area, and there was no clear structural evidence or deposits. The sondage along the western edge of the trench (1m wide in the northwest), while clarifying the bank deposits did little to help here. It became apparent on removing the top 0.05m of 3749 (numbered 3751 to differentiate it from deposits in the roundhouse) that structural elements did exist. In the northwest section corner what appeared to be two courses of a stone wall may indicate another house to the north and east of the current trench.

The removal of 3751 also revealed two unexcavated deposits; [3766], a pale yellowish brown firm sandy silty clay with common small to medium hamstone lay adjacent to pit 3756; and [3767], in the extreme north-western corner, a yellowish brown firm sandy silty clay with common small to medium hamstone occurring in patches. It is very likely that 3767 is identical to 3749 and that removal of the remaining rubble will reveal more structural evidence.

Block A-E Stabilisation deposits

A-E-A 1m to the southwest of the roundhouse was a localised layer – a dark yellowish brown firm sandy silty clay [3750] with common small to medium hamstone fragments occurring in patches, 1.56m north-south by 1.3m east-west and 0.05m deep. This layer came down partially onto bedrock, and seems to represent a bush/tree throw growing into the now abandoned rubble 3747 between the roundhouse and rampart. Above this was an amorphous 0.1m deep deposit of a mid brown firm silty clay [3746] with occasional small to medium hamstone fragments. This ran partially over rampart deposit 3745, but curiously skirted around deposit 3743 within the roundhouse. It is probable that 3746 represents a degree of soil formation over the rubble layer (where roots could easily be established) around the roundhouse.

Block A-F Dumping against the rampart

A-F-A A series of finds rich deposits were dumped over the soil formation [3746]. The first, lying on 3746 and 3745, was a firm (loose where animal burrowed) orange yellow clayey sand (3744) with rare small to medium hamstone fragments, 2.8m north-south and 0.12m thick. This deposit is interpreted as redeposited natural, possibly derived from erosion or destruction of the rampart core. Above this, and covering much of Trench 1, was a black/dark greyish brown firm silty clay (3734) with occasional small to medium hamstone fragments, over 5m north-south and 0.25m deep (in the north-west - for the most part it was no more than 0.1m deep). This in turn was covered by a firm brownish grey mottled orange silty clay (3742), with occasional small to medium hamstone fragments which is finds rich. The layer is concentrated in the centre and western part of the trench, and was 0.1m thick. It is another occupation layer.

Block A-G Rampart removal and levelling

A-G-A Above the finds-rich deposits of AFA and concentrated in the south-western part of the trench was a small area of hamstone tumble [3741] 0.25m deep. Above this was an elongated spread of friable mid brownish grey sandy silt [3740], over 3.2m north-south and 2.2m east west. It was generally only 0.05m, but became deeper in the north-west. This was overlain to the south by another small area of hamstone tumble [3727], 2.2m east-west, 1.2m north-south and 0.15m deep.

To the north, 3740 was covered by a substantial mixed levelling deposit. This was a firm to compact mixed yellow/yellowish brown sandy clay [3732] with patches of dark yellowish brown silty clays, frequent small to large hamstone fragments occurring in patches, largely within the yellowish brown sandy clays. It covered the full width of the trench. It was relatively patchy and very thin (0.05m) over 3734 and 3740, but it thickened substantially, up to 0.5m, against the northern baulk.

While very clear once excavated, the dark yellowish brown silty clay patches were originally considered to be cut features, and were given separate context numbers ([3729], [3735], [3736] and [3737]). On excavation it was apparent that they were interleaved with the yellowish brown sandy clays and so formed the same dumped deposit. Similarly 3738 and 3739 were originally treated as separate contexts but subsequently recognised as being part of the levelling deposit, and so should be treated as 3732.

This substantial deposit [3732] is clearly levelling out a significant gradient at the back of the rampart and infilling the hollow above roundhouse F.1674. Initially it was thought that it derived from deposits somewhere in the interior of the hillfort, but a more persuasive argument is that it represents the destruction and levelling of the rampart. The sandy clays with frequent hamstone fragments are common to both deposits and it is consistent with the slumping/tumble stone deposits, 3741 and 3727. The dark yellowish brown lenses within the layer could represent augmentation of this deposit with soils from the interior or indicate redeposited occupation soils from the surface of the rampart – they certainly were more finds-rich than the sandy clay.

A-G-B Cutting this deposit was a narrow (0.3m wide) and shallow (0.18m to 0.02m deep) gully [3731] aligned parallel with the rampart 2.6m from the northern baulk. It could be that it was just another lens of occupation debris found within 3732, but at the time it seemed a clear linear feature, with steep concave to vertical sides and a flat irregular base. It extended for at least 2.1m east from the western baulk, but then was impossible to distinguish where 3732 became patchier; in certain weather conditions it was easier to make out than in others. It contained two fills: the basal fill, a friable mid brown silty clay [3728] with occasional small hamstone fragments (0.13 max. depth) and a yellow mottled brown friable silty clay [3730] with rare small hamstone fragments (0.18m max. depth). If this feature is archaeological then it was most probably a beam slot.

A-G-C A greyish brown firm to friable sandy silty clay [3757] with common small to large hamstone fragments was found between the front of the revetment and the edge of the escarpment. There was no evidence for slabs from collapse in front of the upstanding revetment. This observation and the fact that the rampart revetment lay 1m behind the edge of the escarpment suggests that the rampart had been deliberately 'flattened' with material being pushed forward over the slope.

Deliberate flattening of the rampart might also have occurred at the back of the rampart and this might explain why the edge of the rampart soil layer [3745] appears to overlie the wall of house ADB. It seems very unlikely that this house was constructed prior to the rampart and the apparent stratigraphic relationship is best explained as due to an inability to distinguish between *in situ* and disturbed rampart.

Block A-H Abandonment

A-H-A Above the levelling deposit (A-G-A) lay an amorphous firm mid-greyish brown silty clay [3726]/[3733] with common small to medium hamstone fragments, 0.08m deep. This may represent a phase of topsoil development. Above this was another rubble slump deposit [3724] concentrated in the south-western part of the trench, 3.1m east-west by 1.8m north-south and 0.15m deep.





Figure 9. Plan and photograph of Trench 1

A-H-B Straight after the removal of the turf an area of small to large hamstone blocks [3748] was recognised in the southeast corner. These hamstone blocks originally looked like an internal revetment slightly skewed to the scarp slope. After removal it was apparent that they filled a 0.4 m deep cut [3768] through the top of the rampart running broadly south-west/north-east. The soil matrix or fill was a loose sandy silt [3725]. This was heavily bioturbated by small rodents.

This feature was not sealed by the subsoil deposits and may be a very late intrusion into the rampart. The feature is not aligned with the edge of the escarpment or the rampart revetment [3762].

Block A-I Topsoil

A-I-A The turfline was a firm to friable dark greyish brown silty clay [3720]; 0.15m thick in the northern part of the trench, becoming thinner (0.05m) and more broken in the area where the underlying rampart deposits were more stony. Below this the subsoil deposits were divided into three; a firm dark brown silty clay [3721] and a friable mid brown mottled yellow and black silty clay [3722], both with occasional hamstone fragments. These were shallow deposits (0.05 to 0.08m deep) that stretched east-west across the trench on the inside (northern) part of the rampart slope. On the northern 2m of the trench there was a firm to friable mid brown silty clay [3723] with occasional small to medium hamstone fragments occurring in patches. This layer was shallow (0.05m) in the south, but became thicker (0.22m) to the north. It seems likely that these layers derive their differences from the layers immediately below them: 3723 from 3732 (the mixed levelling deposit), 3722 from 3726 (a dump up against the rampart) and 3721 from both 3734 (possible midden dump) and 3726.

Trench 2 – Alan Graham

This trench was located on the western edge of the spur projecting to the north of the main plateau area of the hill. It was difficult to predict what was surviving in this area as it had clearly been much disturbed by quarrying activity. Superficially, it appeared that a strip of undisturbed hill survived along the west side but there was little sign of an obvious rampart in this area – though there was a low discontinuous bank immediately adjacent to the very steep scarp slope that currently defines the edge of the hill. Large quarry spoil heaps lay over the edge of the area of deep quarrying to the east of the escarpment and to the north ancient quarries clearly encroached close to the rampart, though they only break through at the north end of the spur.

Work began on the 26th July 2012 and continued until the 13th September. Initially the trench was 4m by 5m, set c1m north from the rampart edge. After the second week, the trench was extended 2m to the east, but the excavation of the last 0.5m did not continue into the stratigraphy below the spoil heaps as it was used as a step to access the trench. Due to the depth of the excavation and the danger of section collapse the lowest deposits were explored in a 2m slot in the centre of the trench (Figure 10).

Twenty stratigraphic units were recorded (Table 2). Of particular importance here is the observation that up to 1m of quarry rubble has masked the rampart along the west flank of the hillfort's northern spur. This means that the rampart is deceptively well preserved and, in light of the results from Trench 3 (see below), indicates that potentially up to 4m of deposits need to be excavated to obtain a full profile (only a fraction of this was excavated in 2012). Two rampart construction phases were recorded, with corresponding sub-phases of land surface development, occupation activity and rampart collapse, or decay. The final rampart construction phase – the only phase to be fully exposed – consisted of a stone wall into which a rectangular

chamber had been built. This is currently interpreted as a guardhouse, with a metalled surface part-exposed beside this structure. Taken together these may represent a previously unknown secondary entrance to the hillfort. Late Iron Age and Early Roman finds were associated with this phase. The excavation is sequenced in reverse order (i.e. top-down) to the other trenches as further excavation in 2013 will reveal new stratigraphic units that will have to be added to the current sequence.

Contexts	Phase	Comments
3951	B-F-A	Rampart 3?
3952	B-E-A	Rampart collapse and decay - hamstone slabs
3935, 3942, 3952	B-E-B	Rampart collapse and decay - land surface
3939, 3940, 3941, 3948, 3949	B-E-C	Rampart collapse and decay - occupation activity 1
3920, 3929, 3933, 3934	B-E-D	Rampart collapse and decay - occupation activity 2
3930, 3936, 3937, 3938, 3945, 3947	B-D-A	Rampart 4? - hamstone structure
3953	B-D-B	Rampart 4? - routeway surface
3927	B-D-C	Rampart 4? - 'midden' accumulation
3925, 3928, 3931, 3932	B-C-A	Rampart collapse and decay - dismantling?
3916, 3919, 3920, 3924, 3926	B-C-B	Rampart collapse and decay - 'midden' accumulation
3914, 3918, 3922, 3925	B-C-C	Rampart collapse and decay - hamstone rubble
3917	B-C-D	Rampart collapse and decay - soil formation
3911, 3915, 3921	B-B-A	Field wall and land surface - drystone wall
3911	B-B-B	Field wall and land surface - soil formation
3921, 3950	B-B-C	Field wall and land surface - erosion
3907, 3908, 3909, 3910	B-A-A	Quarry spoil 1
3905	B-A-B	Quarry spoil 2
3906, 3912, 3913, 3923	B-A-C	Quarry spoil 3
3902, 3903, 3904, 3905	B-A-D	Quarry spoil 4
3901	B-A-E	Topsoil

Table 2: Summary of Trench 2 Phase Sequence.

Block B-F Rampart 3?

This unit describes the unexcavated layers exposed in the base of the trench at the end of the 2012 season. The large slabs are similar to those of rampart 3 (C-E-B, Trench 3).

B-F-A The eastern 3m of the central trench came down onto a layer of large hamstone slabs. The western edge of this layer appeared to have a west facing revetment of horizontal laid slabs [3951]. This may be part of a structure and its position is very similar to that of 3936 (below), which might indicate that it was an earlier phase of guard chamber. This was left *in situ* at the end of excavation season in the deeper part of the trench.

Block B-E Collapse and decay layers

These layers represent the collapse or decay of the previous rampart, being unexcavated rubble in the base of the trench and the overlying loamy soil horizon representing the stabilization of the slope behind the rampart. There is also some evidence of activity at the base of the slope behind the rampart. This phase includes layers on the crest of the rampart which again seem to represent depositional activity. Other than the latter contexts all the layers are on a potentially steep slope down to the east and collapse and erosion of structures and layers down that slope may have been extreme.

B-E-A A layer of large irregular hamstone slabs [3952] in the base of the central trench at the end of the excavation season. Some of it, just north east of 3951, could be direct collapse/slippage from that wall. Further east it is a lot more higgledy-piggledy, and may be a different layer. One vertical slab and a large adjacent slab have burnt edges and there may be a feature here. A wider view of the layer would be good. Elements of the layer clearly seem to be collapsed/slipped slabs from a stone structure up slope (possibly 3951).

B-E-B A general loamy soil horizon seals the rubble 3952. This comprises two layers, a compact grey brown gritty clay loam [3942] in the lower part of the trench and a soft grey brown loam [3935] in the upper part, sloping down to the east above 3951. They appear to be the same layer, though 3935 is conclusively sealed (buried) by a sequence of layers that does not extend above 3942, which may therefore remain an active land surface for longer.

B-E-C Occupation/activity on the land surface in the east end of the trench, above 3942. Comprises two layers of distinctive, clayey material, a compact yellow sandy clay [3949] and a fine grey brown clayey loam [3940], with concentrations of pottery and animal bone. Contemporary with the deposition of these layers was a posthole [3948]. This had a setting of medium sized hamstone slabs [3941] around the edge and a black compact sandy clay fill [3939].

B-E-D A distinctive sequence of layers was found at the crest of the rampart. They probably lie above the land surface of B-E-B, specifically layer 3935, but what they lie within is less certain. The lower of the two layers, comprises laminated bands being a fine loam sandwiched between two thin horizons of black, charcoal rich, material [3933]. The layer is slightly dished but has no great extent, fading out in all directions. The overlying layer is a similar fine dark grey brown loam [3929]. They differ from the typical rubble loams that characterize the deposits in this part of the trench, being much more occupation type deposits. These layers appeared at first to be occupation layers within the guard chamber (B-D-A), but they were observed to underlie and pre-date that structure (wall 3930). The relationship with 3935 is less clear, but if they overlie it then they are not within the earlier possible structure, represented by 3951 (above B-F-A).

These layers overlie reddish brown fine silty loam [3934] which is not yet fully excavated. This may belong to an earlier block but is provisionally phased here until further excavation clarifies this issue.

Block B-D Rampart 4?

This block includes the final structural phase of the rampart and associated layers of occupation. It is probably equivalent to the phase 4 rampart (C-F-A) in Trench 3. The principal structure includes a number of elements; including stone walls, a posthole and a gully. These suggest the excavation fortuitously landed on top of a chamber at the north end of a substantial stone wall. To the north of the chamber there appears to be a deliberately laid surface which is currently interpreted as an entrance through the rampart. Contemporary occupation soils accumulated behind and at the base of the rampart slope.

B-D-A A substantial hamstone structure was built on top of the earlier rampart. The structure comprises a rectangular block of horizontal large hamstone slabs [3930], 2 m wide and extending 1.3m into the trench. This has a north facing revetment cutting across the line of the rampart that is three courses (0.35m) high. A vertically-set slab marks the eastern end of this revetment; it goes deeper than the laid wall face. The eastern and western extent of the structure does not appear to be faced probably as a result of erosion undermining the structure on either side.

A single large hamstone slab [3936] extended from the north east corner of the block and was sitting upon a discrete patch of hamstone rubble [3937]. This slab appeared to be facing west and this may indicate the existence of wings extending north from the wall to create an enclosed area (filled with occupation soils B-E-D). The north side of this structure is defined by a narrow gully [3947] 0.30m wide and c.0.30m deep, which had a substantial post hole [3945]at its west end, 0.30m in diameter and over 0.45m deep, and three courses of isolated hamstone slabs [3938] at the east end.

The slot was never easy to define during excavation; the edges were unclear and the base obscure, but it always marked a break between occupation layers to the south (B-E-D) and a surface to the north (B-

D-B). Even at a higher level (below B-C-A) the line of the slot appeared to separate rubble 3928 from rubble 3931 and 3932 and the line is only finally infilled and obscured by the black layer 3919. The otherwise anomalous stones 3938 also mark the line and perhaps indicate this feature originally held a row of vertical or angled hamstone that acted as a kerb.

B-D-B Immediately to the north of gully 3947 was a distinctive yellow-brown compact clay loam [3953] containing many small hamstone fragments and occasional larger stones. This was a compact layer which appears to be a deliberately created surface providing a route across the rampart immediately to the north of the chamber described in B-D-A.

B-D-C This comprises a single layer of characteristically black, clayey loam [3927] lying in the lower, eastern part of the trench, down slope from the structural elements described in B-D-A. It has no direct stratigraphic relationship to B-D-A but is likely to be accumulating behind the rampart at the same time as the structure is in use. Its western limit roughly corresponds with the outer (eastern) face of whatever structure 3930 and 3936 comprised. The layer contained pottery and other occupation debris and in that way is similar to the layers above it; however, it seems to predate the destruction of the rampart structure which those layers seem to post-date.

Block B-C Rampart collapse and decay

This represents the collapse or partial destruction of the structure described in B-D-A, and includes the removal of some of the stone for re-use elsewhere. Rubble layers mask the destroyed structure and there is a deep build up of dark, midden-like material at the bottom of the slope behind the rampart and in the hollow of the entranceway across it. The deposition of this material appears to post-date the destruction of the rampart structure. The sequence ends with the stabilization of the ground over and behind the rampart and the formation of (now buried) topsoil. This would have been the land surface for many centuries, preserving the slope at the back of the rampart and the dip in the crest that represents the entranceway.

B-C-A The remains of the B-D-A structure are overlain by layers of mixed, but often fairly small hamstone slabs. Lying within and against the remains of the structure was a compact grey brown clayey loam [3928] which had a high proportion of small angular hamstone rubble. This clearly postdates the decay of B-D-A and there was little difference between this layer and the overlying rubble layer [3925]. Layers 3932 and 3931 lay to the north of the line of slot 3947, above 3953, was tightly packed layer of angular slabby hamstone [3931]. Over this was a loose brown gravelly loam [3932] with a less frequent hamstone rubble component.

The absence of the large hamstone slabs that characterize the B-D-A structure, downslope to the east, suggests that some deliberate dismantling of that structure took place. A single large slab was present collapsed/slumped in the angle of 3930 and 3936, and was part of layer 3928, but otherwise there was no *in situ* collapse.

Also in this unit are the fill [3946] of gully 3947 and the fill [3943, 3944] of posthole 3945. Both these fills post date the removal of whatever structural elements these features had held.

B-C-B This is a sequence of black layers, containing much domestic refuse that lie to the north and east of the mound of rubble over the ruined rampart structure. To the east, in a deep hollow behind the rampart are a black clayey loam [3926] with numerous small often rounded hamstone fragments and, overlying this, a black clayey loam [3916] with medium to large angular hamstone slabs and boulders; together these layers reach a maximum thickness of 0.35m. Both layers contained scatters and concentrations of pottery and animal bone as well as a scatter of fragments of slag. A much greater concentration of slag came from a compact grey to black clayey loam [3919] which lay to the northwest in the hollow above surface B-D-B. No definite edge could be defined between 3919 and 3916 as the only difference being the two layers was the amount of metalworking slag present. This included hearth bottoms, heavy slag, a distinctive light slag, almost as if formed around or against something, and the fragments of a clay tuyere. No evidence of burning was found *in situ* so the material appears to be dumped here from elsewhere, as was the pottery and animal bone. Some bone may have been partly articulated, specifically parts of a dog [3924] and there was an adjacent concentration of pottery [3920].

The layers represent an active, humic land surface, onto and into which debris is being dumped and onto which rubble/stone is collapsing/weathering; the question is where is the stone coming from – presumably the remaining structure to the south and west.

B-C-C Further hamstone rubble accumulated over the decayed structure and is a continuation of the process started in B-C-A. The lowest layer was a dark grey-brown gritty loam [3918] with large quantities of small hamstone on the north side of the trench. This was overlain by compact greyish brown clayey loam [3922/3925] with large quantities of small to medium angular hamstone fragments. This was overlain by a friable grey brown gravely loam [3914] with large hamstone rubble. Both lie over the decayed structure and slope down to north and east, merging with or overlying the active dark soils around them. They represent the stabilization of the ground as an earthwork above which there is the beginnings of a more stable, long-term soil horizon.

B-C-D The rubble layers over the structure (B-D-A) were sealed by a dark grey clayey loam [3917]. This remains only where fossilized beneath later rubble, but would have been very widespread. Where not covered and preserved it continued and developed as 3911 (B-B-B).

Block B-B Field wall and land surface

This records the more recent events on the west side of the hillfort; the construction of a field wall along the crest of the rampart; the continued development/preservation of the land surface within this wall; and the gradual erosion of the steep scarp of the hill, outside the wall line to the west.

B-B-A Along the crest of the former rampart on the north side of the trench the remains of a dry-stone field boundary wall [3921] survive as two courses of hamstone slabs. It sits in a slight hollow to the north of the higher rubble mound above the structure B-D-A. Clearly when the wall was built it simply followed the existing ground surface, and this included the hollow which survived the stabilization and grassing over of the rampart. The hollow later acted to preserve the foundation course from later destruction.

A compact dark grey brown soil [3915] containing medium sized hamstone slabs lay immediately east of the wall and may indicate the collapse of this wall. The rubble seals the adjacent humic ground surface 3917, and is sealed by another ground surface [3911]. The western side of the wall erodes away down the steep scarp to the west.

B-B-B A compact dark grey brown clayey loam [3911] covers the eastern part of the trench. This is probably a very long-lived horizon, post-dating the final stabilization of the Iron Age earthworks of the rampart. This stabilization horizon originally predates the field wall, as buried soil 3917 on the crest of the hill, and continues to develop on top of the collapse from that wall. The horizon reflects the underlying layers; it is deeper and darker above the deeper sequence in the eastern part of the trench and thinner upslope where it overlies hamstone rubble layers. Where it does not get sealed and fossilised by later deposits it becomes the present topsoil and turf.

B-B-C This represents erosion of the steep scarp of the hill in the western edge of the trench, and was numbered as a cut, 3954. The mechanics of this need some thought. Once the overlying quarry spoil was removed, the earlier steep scarp was revealed. This must be a product of either erosion or deliberate quarrying because the western side of the field wall [3921] was undermined and had collapsed down the scarp; so progressive erosion of the slope seems to have taken place over centuries. Cleaning of the exposed scarp face did not, however, reveal a clear sequence of layers through which the scarp had been cut/eroded; it all seems a bit homogenous, with flat stones lying on the slope of the scarp. Instead, there seems to be a land surface on the slope of the scarp, a compact grey brown clayey loam [3950] which masks the layers through which the slope eroded. This might indicate that this slope down to the west represents the relatively un-eroded front of the Iron Age Rampart with only a relatively late period of erosion that caused the wall to collapse.

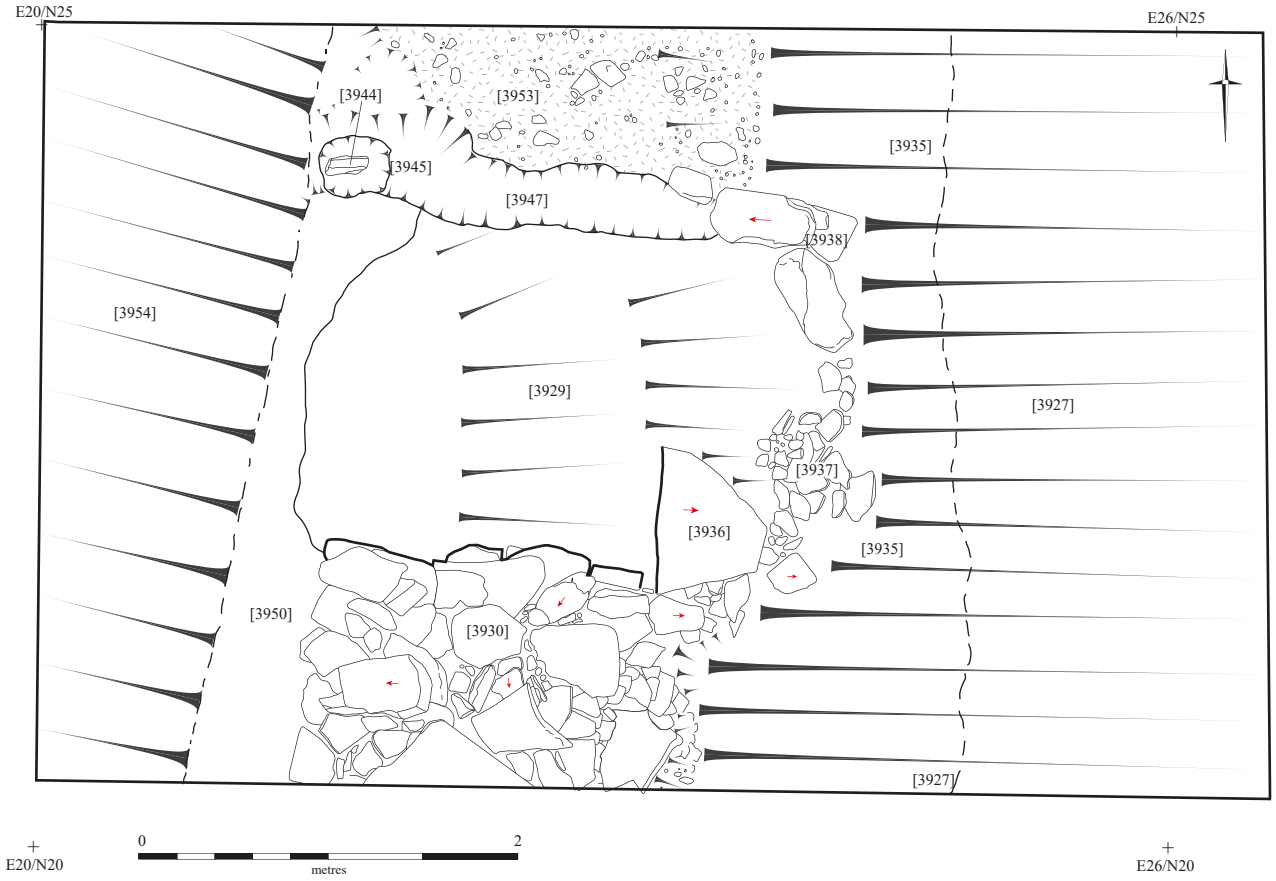


Figure 10. Plan and photograph of Trench 2

Block B-A Quarry spoil

The preserved earthworks of the western side of the hillfort are obscured and buried beneath at least three periods of quarry spoil tipping. By this time the field wall is gone, and much spoil is tipped over the edge of the hill, completely masking the original escarpment. The other tipping is against the back of the rampart, completely obscuring the earthworks. This tipping may be relatively recent, but the presence of a thick buried topsoil must indicate some longevity to the process.

B-A-A The earlier of two periods of quarry spoil tipping in the eastern part of the trench. This lies to the east of the field wall line but may nevertheless post date the collapse of that wall. It consists of clean yellow hamstone rubble and sandy clay layers [3907, 3908, 3909 and 3910]. These have been tipped from the east, progressively covering and obscuring the slope of the old land surface behind the rampart.

B-A-B A turf line formed above the quarry spoil tips of B-A-A. This was a varied loamy, humic soil [3905] that follows the contours of the tips below it and reflects in its colour and thickness the nature of the deposits it covers. How long such a land surface would take to form is a good question.

B-A-C Massive quarry spoil tip over the western edge of the hill. Rubble layers comprising rough, angular stone slabs and fragments [3923, 3913, 3912 and 3906] form a huge tip of hamstone spoil covering and completely changing the nature of the slope of the western side of Ham Hill. The field wall has certainly gone, or is destroyed by the process of tipping.

B-A-D A second dump of spoil covers the eastern part of trench, above the land surface [3905]. These comprise yellow hamstone rubble and slab layers [3902, 3903 and 3904] and unlike the other quarry tips, they include lots of cut and faced fragments of hamstone. A lead air-gun pellet and machine-cut stone from the layers suggests a not particularly early date for this dumping.

B-A-E This represents the extant topsoil and turf [3901] that covers the whole of the trench. As with the earlier land surfaces exposed by the excavations, the thickness and nature of this layer reflects the nature of the underlying deposits.

Trench 3 – Niall Sharples

This trench was located in the centre of the northern rampart and comprised the re-opening of a trench initially excavated in 1929 by Harold St. George Gray. The main objectives were to fully record the rampart sections (Figure 11) and to carry out a programme of sampling of the exposed deposits. The trench started at the highest point of the rampart and ran south, across the back of the rampart and the adjacent quarry hollow to the slope which marks the inner edge of the quarry hollow. The original trench was not opened in its entirety, but stopped where the base of the trench began dipping into the quarry hollow.

The trench was identified fairly easily by the presence of a slight rise in the ground surface over the quarry and a slight dip in the ground surface at the top of the rampart. The location was confirmed by three 50cm wide slots and the surface of the trench was deturfed prior to the machine removal of Gray's backfill. The machining was undertaken on Saturday 25th August. The principal rampart sections were 3.7 m deep (Figure 12) and were shored for health and safety reasons. The two pairs of planks put into the deepest part of the trench were not moved after they were put in position but a third pair supporting the tail of the rampart was moved to enable a more complete recording of the section. The trench was backfilled and reinstated by machine.

Twenty stratigraphic units were recorded (Table 3). The pre-rampart land surfaces were cut by a feature, either a pit or the terminus of a ditch, which finds indicate was probably Early Neolithic in date. The layers forming the rampart have been divided into four construction phases on the basis of dark occupation layers, which indicate periods of stability in the construction sequence. The rampart phases consisted of a variety of both formal stone architecture and rubble dumps; a stone quarry to the rear of the rampart may be the source of the stone in the later phases. Amongst the finds was pottery from the Early to Late Iron Age and the Early Romano-British period.

Contexts	Phase	Comments
3793	C-A-A	Weathered land surface
3817, 3826, 3827, 3828	C-B-A	Pre-rampart activity - ditch terminus
3823, 3824, 3825	C-B-B	Pre-rampart activity - pit
3805, 3806, 3817, 3792	C-B-C	Pre-rampart activity - soil formation
3808, 3809, 3810, 3811	C-C-A	Rampart 1 - soil and stone dumps
3812, 3813, 3814	C-C-B	Rampart 1 - soil formation or 'midden' accumulation
3791, 3794, 3804	C-C-C	Rampart 1 - soil formation
3803	C-C-D	Rampart 1 - collapse or decay
3790	C-D-A	Rampart 2 - clay and stone heightening of Rampart 1
3802	C-D-B	Rampart 2 - soil formation
3785, 3786, 3801	C-E-A	Rampart 3 - clay and stone heightening of Rampart 2
3799, 3800	C-E-B	Rampart 3 - hamstone slabs
3818, 3819, 3820, 3821, 3822	C-E-C	Rampart 3 - clay and stone dumps
3783, 3784	C-E-D	Rampart 3 - soil formation and soil dump
3796, 3797, 3798, 3816	C-E-E	Rampart 3 - soil formation and soil dumping
NA	C-E-F	Rampart 3 - rampart quarry
3787, 3788, 3789	C-E-G	Rampart 3 - quarry fills
2782, 2795, 3815	C-F-A	Rampart 4 - clay and stone heightening of Rampart 3
3781	C-F-B	Rampart 4 - erosion
3780	C-F-C	Topsoil

Table 3: Summary of Trench 3 Phasing Sequence.

Block C-A Undisturbed deposits

C-A-A At the base of the stratigraphy is a layer of fragmented hamstone [3793] surrounded by loose yellow sandy silty clay which banked up in the centre of the trench. This is interpreted as the weathered surface of the natural bedrock which has been truncated by the quarry to the south and which follows its natural slope down to the north.

Block C-B Early Prehistory

The evidence for human activity begins with two features a circular pit and the butt end of a more substantial ditch or large pit that extends to the east.

C-B-A Extending beyond the east side of the trench was a large feature which appears to be the butt end of a ditch [3826]. The ditch was 1.6m wide and had a very straight or squared end; only 0.40m of the ditch was exposed and this reached a maximum depth of 0.36m, where it came on to bedrock. The basal fill was yellow silty clay [3828] with small to medium angular slabs of hamstone. This was covered by an orange brown silty clay [3827] with more rounded and less frequent hamstone inclusions. The final fill was a browney orange clay silt [3817] with a very high frequency of medium sized angular hamstone slabs.



Figure 11. Gray's Trench or Trench 3 in 1929 (left) and 2012 (right)

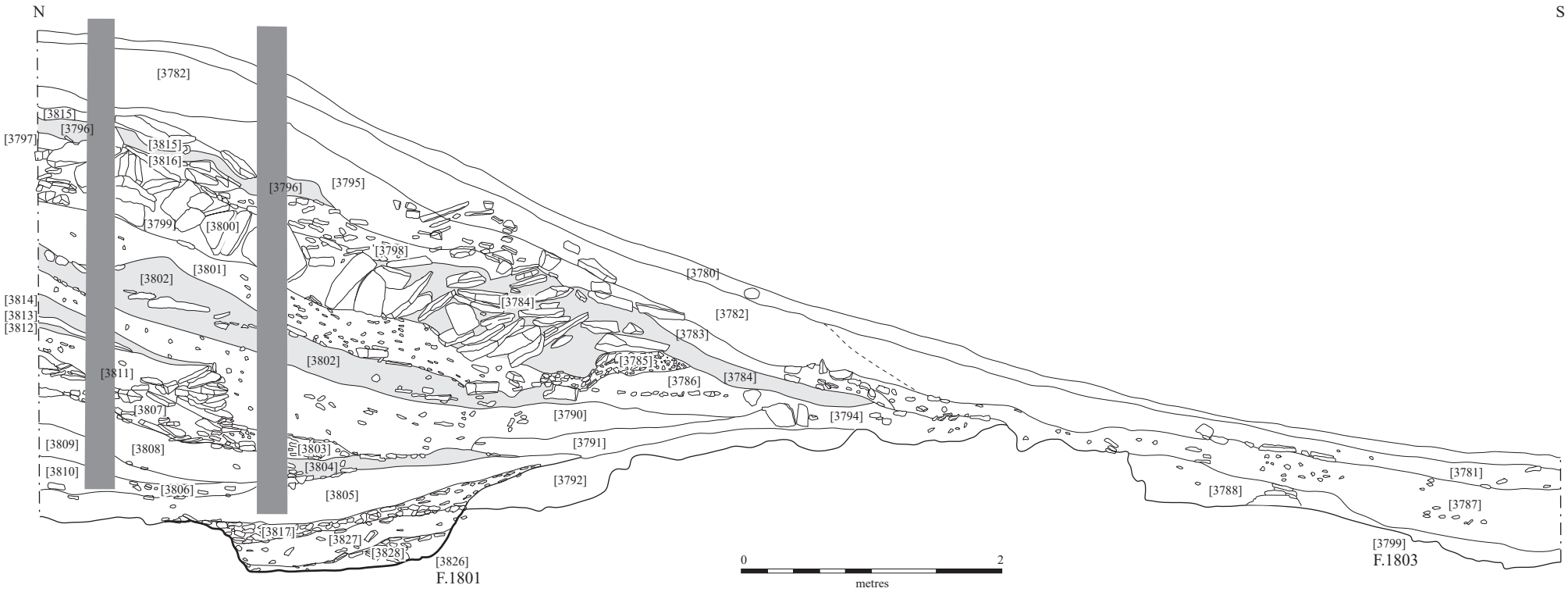


Figure 12. Section of Trench 3

C-B-B The circular pit [3824/3] (not in section) was 0.4m in diameter and contained a large flat slab at its base and two smaller slabs against the sloping south west side. It can be interpreted as a posthole. It was filled with a dark orangey brown clay [3825] containing flint flakes/blades.

C-B-C The final fill [3817] of the ditch merged into a reddish brown silty clay [3792] with frequent small to medium hamstone slabs, which has been interpreted as a rubified B-horizon of a buried brown earth (see Section 2.8). Overlying this is a reddish brown clay [3805] up to 0.30m thick which has very few stone inclusions but large quantities of charcoal particularly towards the top. Overlying this was a yellowish and greyish brown silty clay [3806] with a high component of hamstone. The latter two layers appear to be natural or anthropogenic accumulations in the hollow containing the ditch.

Block C-C Rampart 1

These early prehistoric layers are sealed by dumped soil and rubble layers representing the first rampart, occupation soils that accumulated against the back and on top of this rampart and some evidence for the decay of the rampart.

C-C-A The primary dumps are very similar and their surfaces rise steeply to the north. The first layer consisted of a pale yellow silty clay [3810] with very frequent small to medium hamstone slabs. It was covered by a pale brown silty clay [3809] with a less frequent hamstone component, and a pale brown sticky clay layer [3808] with very frequent small to medium hamstone. These were sealed by a layer of medium to large sub angular and angular hamstone slabs [3807]. These were laid flat and appeared to form a revetment at least six courses high facing to the south. This rubble layer effectively creates a flat top to the rampart. The final deposit associated with the construction of the rampart was a pale brown friable silt [3811] with frequent small fragments of hamstone, which lay on top of the slabs and behind the revetment of 3807.

C-C-B On top of the primary rampart [C-C-A] was a sequence of three thin layers. The lowest was a thin mid brown silty clay [3812] with occasional small hamstone inclusions; over this was an orange brown silty clay [3813] with common small hamstone fragments and this was sealed by a dark yellowish brown silty clay [3814] with occasional small hamstone fragments. The latter layer was the thickest of the three layers and had lots of charcoal and burnt stone fragments. These layers either indicate dumping of occupation soils to form a stable surface on top of the rampart or the accumulation of occupation soil due to activities on top of the rampart. The surface of these layers rises steeply to the south.

C-C-C Overlying the early soils (C-B-C) to the south of the rampart revetment is a dark greyish brown silty clay [3804] with small hamstone fragments. Charcoal is common in this layer. As one moves south away from the rampart this layer merges with a dark yellowish brown silty clay [3791], and this in turn merges with yellowish brown silty clay [3794]. These layers seem to represent an occupation soil accumulating behind the primary rampart. There is a possibility that the upper part of 3794 continues to accumulate when the later phases of the rampart are constructed (contemporary with 3786 and less likely 3784).

C-C-D Overlying 3804 at the base of the revetment 3807 was a spatially restricted layer of small to medium sized hamstone [3803] in a yellowish brown silty clay. This represents the collapse and decay of the primary revetment, but its limited nature suggests the revetment was not exposed for a lengthy period of weathering and abandonment.

Block C-D Rampart 2

The second rampart comprises a substantial and extensive dump that is sealed by an occupation soil which achieves a considerable thickness in places.

C-D-A The rampart heightening appears to be represented by only single layer a brownish yellow and pale brown silty clay [3790] with very frequent small to medium hamstone. This layer is up to 0.60m thick in front of the revetment and still roughly 0.20m thick above the centre of the rampart. It extends

3.8m back from the C-C-A phase revetment. This is a substantial dump of relatively homogeneous sterile subsoil which must have been quarried from the surface of the hill somewhere in the vicinity of the rampart.

C-D-B Overlying the rampart dump was a greyish brown clay silt [3802] with common small to medium hamstone which achieved a thickness of 0.50m half way up the slope of the rampart. The stones were not evenly distributed within the soil and clearly visible lines of stones suggest this layer accumulated over some time. Lots of animal bones and pottery were observed in this layer and there were occasional concentrations of charcoal. This appears to be an occupation soil building up behind and on top of the heightened rampart.

Block C-E Rampart 3

In contrast to the previous expansion this phase involved the deposition of several very different layers, including what appears to be large freshly quarried hamstone slabs. It was also associated with a thick occupation deposit.

C-E-A The first part of this layer is represented by another substantial dump of mid brown silty clay [3801] with very frequent small hamstone pebbles. This layer completely covers 3802. At the bottom or south end of this layer there appears to be a bank of mid brown silty clay [3786] with common small to medium hamstone, including a clear horizontal line of slightly larger slabs. Above this is a layer of small to medium sized hamstone fragments [3785]. These two layers form a bank which provides a base for the front of the overlying revetment.

C-E-B The previous dumps were sealed by a layer containing large and very large hamstone slabs [3800] up to 0.52m by 0.16m and 0.57m by 0.08m. To the south these slabs were closely set at an angle of 45° and appear to comprise a fairly well-built revetment to define the rear of the rampart (partly displaced by Gray's excavations and our own machine removal of the backfill). As this continued up the slope of the rampart the slabs become more loosely set and alternated with large blocks. The spaces between stones were either voids or filled with yellowish brown silty clay [3799] which might have been deliberately dumped with the slabs or percolated into the voids from above.

C-E-C In the south facing section (not illustrated) at the end of the trench the layer of hamstone slabs [3800] comes to a rather abrupt end and there is a sequence of dumps. These begin with a brownish yellow silty clay [3818] with frequent small to medium hamstone; overlying this is a greyish brown clay silt [3819] with a lesser amount of hamstone which is similar to the occupation soils; an orangy silty clay [3821] with little hamstone; overlying this is a light orange brown silt [3820] with frequent small hamstone fragments; and finally a yellowish orange sandy silt [3822] which contains a few very large hamstone slabs laid flat in the centre of the section. The significance of this material is unclear.
C-E-D A dark greyish brown silty clay [3784] with very few hamstone inclusions was found amongst the stones of the revetment face of 3800 and this extended 1.5m in front of the revetment. Overlying the area in front of the revetment was a mid brown clayey silt [3783] which contained a few more stones but not many. 3784 is clearly an occupation soil accumulating against the revetment and because of the loose nature of the revetment construction it actually is washed amongst the stones of the revetment. The overlying layer 3783 looks to Sharples to be a soil horizon forming on top of the occupation soil but Allen (Section 2.8) suggests that it is more likely to be a dumped B horizon.

C-E-E Accumulating on top of the revetment are a number of thin layers which appear to represent dumping as a result of activity this phase. Immediately overlying the rubble and also overlying the occupation soil 3784 was a dark yellowish brown silty clay [3798] with occasional hamstone, overlying this was yellowish brown silty clay [3797] with a much greater hamstone component. To the north overlying this or contemporary with it was yellow brown sandy clay [3816] with very little hamstone but a distinctive pea grit texture. Both these layers were covered with a dark greyish brown silty clay [3796] with very little hamstone and a lot of charcoal. The last layer can be described as an occupation soil comparable to that in front of the rampart but it may well represent a redeposited layer rather than one which is formed *in situ*.

C-E-F It is likely that the quarry F.1803 behind the rampart was excavated in this period. It is the most obvious source of stone for the construction of the large rear revetment. The cut [3779] appears to truncate soil horizon 3794.

C-E-G The quarry has a number of fills which may be roughly contemporary with the use of the C-D phase rampart. There are two primary layers are of dark yellowish brown silty clay [3788 and 3789] and they are overlain by another yellowish brown silty clay [3787] with a much higher quantity of hamstone slabs. There was no evidence for occupation deposits in the area of the quarry examined.

Block C-F Rampart 4

At the very summit of the rampart were a series of rubble dumps and laid slabs which must represent the final refurbishment of the rampart.

C-F-A The initial layer is a yellow brown sandy clay [3815] with a pea grit component and not very many slabs. This may have been deliberately laid to create a surface for a layer of large hamstone slabs which lies at the base of a yellow brown silty clay [3795] which has frequent small to medium slabs of hamstone. This spreads some distance down the slope of the rampart. Overlying this was an orangey brown clay silt [3782] with frequent small to medium slabs of hamstone which covered most of the rampart.

C-F-B At the back of the rampart, partially overlapping 3782, was a light grey brown silt [3781] with a limited amount of hamstone rubble. This certainly represents erosion of soil and small stones from the higher layers of C-F-A.

Block C-G

C-G-A The topsoil and turf was removed as context [3780].

Conclusion – Niall Sharples

The evidence recovered from these three trenches provides a valuable addition to our understanding of the hillfort of Ham Hill but also raises some interesting problems. The re-examination of Harold St. George Gray's trench across the northern rampart proved to be extremely informative and well worth the effort. This trench provided a clear sequence through the back of the rampart where it appears to have survived to its highest point. We cannot guarantee that we have the full sequence of activity but it appears to be relatively complete.

The sequence begins with early prehistoric activity comprised of a ditch (C-B-A) and a post hole (C-B-B). Pottery, flint and animal bone were recovered from these layers. The pottery was generally undiagnostic plain body sherds and, as it comes mostly from the overlying soil horizon, does not help with the dating of the ditch. Radiocarbon dates will be required to accurately date this feature. It seems likely, however, given the presence of a flint assemblage dominated by blades and a cattle skull that this is an early Neolithic feature. The main area excavation has produced a large flint assemblage which suggests Late Mesolithic and/or Early Neolithic activity in the southwest corner of the hill and the Museum collections are reported to contain many polished axes, so the presence of features of this date should not be regarded as surprising; however, the discovery of a possible ditch opens up the possibility that there is a causewayed camp on the hill. The feature exposed was rather shallow for a causewayed camp ditch but the area examined was very limited and it is possible that

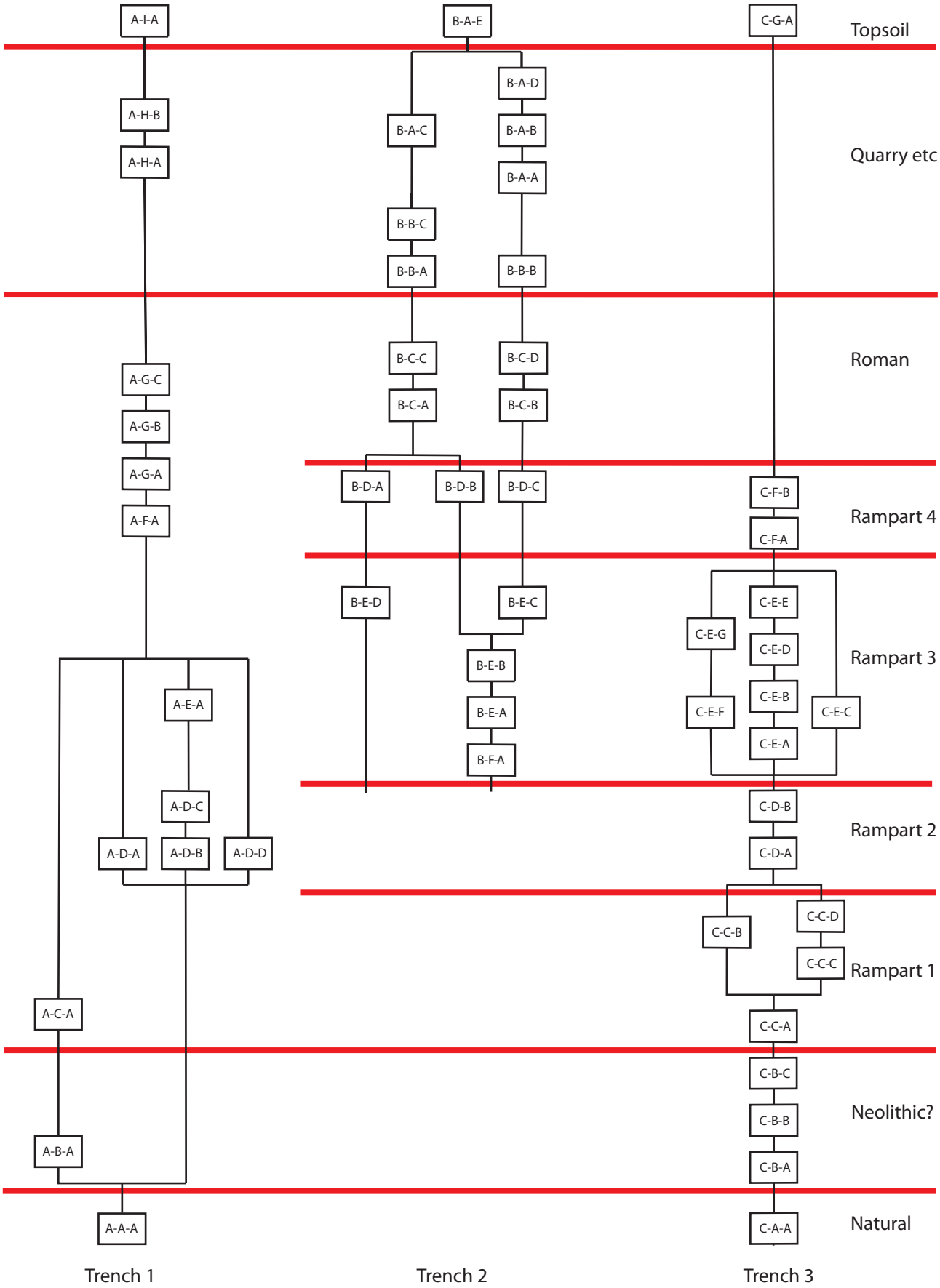


Figure 13. Rampart comparative matrices

the feature deepens significantly to the east of the trench. The prominent position of the spur would certainly be appropriate for a causewayed camp and it may be significant that the nearby enclosures, such as Maiden Castle, Hambledon Hill, Whitesheet Hill and Hembury are both built on, or adjacent to, important hillforts (Oswald *et al*. 2001).

Above this ditch was a sequence of layers, 3.5m high, which revealed at least four major phases of rampart construction. These phases can be partially related to the other trenches; the earliest rampart appears to be comparable to the deposits in Trench 1 and the latest ramparts are comparable to those in Trench 2. The quantities of artefacts from Trench 3 were negligible (with those remaining in the 1929 archive lacking contextual information) and do not enable us to construct a chronology for this sequence. Samples dug out of the section do, however, contain carbonised plant remains that could be radiocarbon dated and have the potential to provide a more accurate chronology. Artefacts were much more frequent in Trenches 1 and 2 and provide some chronological information.

The first phase of rampart construction would appear to indicate a relatively insubstantial structure. In Trench 3 the rampart was represented by several distinct dumps of yellow silty clay (CCA) that reached a maximum height of 1.20m. One layer contained a considerable quantity of hamstone rubble and this was associated with the construction of a rear revetment made from small hamstone slabs. In Trench 1 a rampart was identified which consisted of a bank of yellow silty clay which had a front revetment of hamstone slabs (A-C-A). The two ramparts appear to be quite similar in comprising relatively clean yellow silty clay deposits; however, the absence of a rear revetment in Trench 1 may be significant. The ceramic assemblage was reasonably substantial from later layers in Trench 1 and this has been dated to the Late Bronze Age / Early Iron Age transition.

The general similarities between the primary ramparts in both areas and the dating evidence from Trench 1, therefore suggest that the original enclosure of the hilltop occurred sometime in the first half of the first millennium BC. We will hopefully be able to refine this by further analysis of the pottery and by radiocarbon dating. Nevertheless, this is an important discovery as it had been proposed in the Research Design that the enclosure of the plateau area might have been the result of Middle Iron Age expansion, but this is clearly not the case. Instead, it appears that Ham Hill is a very early large hillfort and can be compared to enclosures such as the Breidden, Powys (Musson 1991), Eildon Hill, Borders (Owen 1992) and Traprain Law (I. Armit *pers*. *comm*.). These hillforts are all located on substantial prominent hills which dominate the surrounding landscape and this description is applicable to Ham Hill. They also differentiate the north and west of Britain from Wessex in the first half of the first millennium BC, as in Wessex large Late Bronze Age enclosures, such as Balksbury (Wainwright and Davies 1995; Ellis and Rawlings 2001), are not normally located on significant topographical eminences and are enclosed by relatively insignificant boundaries that often don't take advantage of the topography.

The second phase, in Trench 3, appeared to be just a dump of soil (C-D-A) that covered the decaying remains of the rear revetment of the first rampart. This reached a height of 1.80m in the trench but was rising steeply to the north. A thick occupation soil covered this revetment which is quite difficult to explain. Occupation soils, which

can be characterised as dark grey brown silty clays, are associated with all the different ramparts and they characteristically accumulate as thick deposits at the back of the rampart and as thin deposits over the top of the rampart. It is difficult to explain the depositional processes that create these accumulations, particularly the deposits on top of the ramparts, but they must derive from some form of deliberate dumping of occupation material. The C-D-B phase deposits are particularly unusual as they accumulate on top of the rampart and are at their thickest half way up the rampart. They cannot be the result of any natural accumulation down the hill slope against the rampart base.

It is presumed that the house (A-D-B) discovered in Trench 1 belongs to the earlier part of the Middle Iron Age. The house has an inner diameter of about 5m which is small but not beyond the range of Middle Iron Age houses in central southern England (Sharples 2010). The presence of a well built stone revetment is comparable to houses at Maiden Castle (Wheeler 1943) and other hillforts in Dorset and south western Britain but, surprisingly, stone walled houses are not known in Somerset despite the presence of good quality building stone throughout the county (S. Membrey pers. comm.).

Rows of houses built immediately behind the rampart of a hillfort are relatively common features of the Iron Age in southern Britain, and elsewhere, so it came as no surprise to discover this example at Ham Hill, or to find indications that another house might lie next to it. Obvious parallels are Maiden Castle (Sharples 1991) and Danebury (Cunliffe 1995). However, it is slightly unusual to find the house quite so close to the rampart; the houses at Maiden Castle normally lie some distance from the rampart but one of the early houses appears to have got as close as 3m (Sharples 1991, Figure 69).

The main problem with the archaeological sequence in Trench 1 is the absence of evidence for any rampart construction on top of the primary rampart. Instead, the rampart appears to be deliberately pulled down to cover and infill the house and obscure the front revetment. None of the material culture from these deposits suggests any activity in this area post dates the Early Middle Iron Age and apart from a possible beam slot there is no stratigraphic evidence for activity at this location above the levelling deposits. It is difficult to explain the absence of a substantial Middle to Late Iron Age rampart in this area, as a substantial rampart exists along the southern boundary of the hillfort and around the north east corner of the plateau area. The only explanation is that the later ramparts were removed as part of much later Medieval agricultural activities related to the deserted Medieval village of Whitcombe in the valley to the south (see also Section 3).

The third phase of rampart construction in Trench 3 represents a substantial rebuilding which creates a monumental barrier up to 2.7m high. Construction began with a dump of gravely silty clay (C-E-A) similar to rampart 2, but the principal feature of this rampart is a layer of large hamstone slabs (C-E-B). These appear to be freshly quarried stone and suggest this phase might have been constructed when the quarry hollows were excavated at the back of the rampart. The stone was laid in a deliberately unstable manner to try to achieve as much height as possible and a rear revetment was constructed to give a false impression of stability. The large hamstone

rubble layer (B-E-A) exposed at the base of the excavated deposits in Trench 2 may represent the top of this rampart.

The fourth and final phase of the rampart in Trench 3 consists of two thick soil layers with only a small stone component (C-F-A). On the crest of the rampart these layers sit on top of a layer of large hamstone slabs which appear to indicate the vestigial remains of structure. This structure was much clearer in Trench 2 (B-D-A) where a masonry block formed the base of a substantial stone wall. This was associated with a rectangular chamber which appears to open onto a path across the rampart. Structurally, these features appear to indicate the presence of an entrance to the hillfort, but the entrance is on top of a rampart, which is estimated to be at least three metres high at this point. The entrance also overlooks a very steep slope, though the precipitous nature of this slope may be the result of later quarrying. Clearly, further work is required and it is intended to expand this trench in 2013 to get a much clearer picture of these structural features.

It is clear from the work in Trench 2 that the final phase of rampart was substantially robbed presumably as it contained much good building stone. It is likely therefore that the thick soil layers that represent phase C-E in Trench 3 indicate the debris from this phase of robbing. In Trench 2 the robbing debris was associated with the deposition of substantial quantities of occupation debris (B-C-B), which contain a considerable quantity of Early Roman ceramics, metalwork, including a ballista bolt, and metalworking debris. There were large quantities of well preserved animal bones, including most of a dog, and mixed with these were several human bones. A substantial massacre deposit of conquest period date is known from South Cadbury (Barrett *et al*. 2000) and it may be possible we are dealing with similar deposits, although cut marks identified on the human bone from Ham Hill are perhaps more indicative of post-mortem processing such as de-fleshing or even preparation for tool manufacturing (see Dodwell, Section 2.5). It should be emphasised, however, that only a very small area of this rich occupation deposit was exposed, and it clearly has a complex depositional history that will need to be further explored before it can be characterised and interpreted.

The three rampart trenches have provided a considerable amount of information and have gone some way to answering the questions originally set for them. We are for the first time able to discuss the structural complexity of the ramparts, identify construction phases and attempt to provide some chronology to the creation of the boundary. It is clear that some of the differences visible in the survival of the rampart are due to the effects of quarrying and that this has substantially altered the topography of the hill. Along the west side of the northern promontory the archaeological preservation is actually much better than we expected and it appears that the rampart is completely buried and preserved by quarry spoil heaps. In contrast, along the south side of the plateau there is no evidence for the later phases of rampart and this is currently very difficult to explain. The quality of the rampart trenches has raised additional questions that will only be answered by further work, and it is intended to expand Trench 2 in 2013 and to excavate a separate trench close to Trench 1, where the rampart is better preserved. When these two trenches are completed it should be possible to confidently relate the activity on the boundary to the occupation in the interior and to provide a complex narrative of the development of the hillfort.

2.6 **Human Bone** – Natasha Dodwell

Excavations at Ham Hill in 2012 produced 47 fragments of disarticulated human bone from 11 discrete contexts (Table 4). The bone derived from the enclosure backfill/bank collapse, and from the terminus of the enclosure entrance, both within Area 4, as well as from various layers and land surfaces in Trenches 2 and 3.

Preservation of the material

With the exception of small bones, specifically those from the feet, all of the elements examined were fragmentary and in most instances the articular ends of long bones were not present. In enclosure ditch F.1011, much of the cortical bone has been etched with rootlets.

Methodology

All of the bones were scanned and examined with a hand lens, and an inventory made including details of any pathological changes or modifications e.g. animal gnawing and cut/chop marks. Attributing an age to disarticulated and fragmentary limb bones and extremities of the skeleton is problematic. Age could only be assessed in broad terms by the size and robustisity of elements and by the degree of epithyseal fusion when joint surfaces were present. For the immature, near complete fibula in [3940] an estimate of age was made using the postulated length (Maresh 1970 table in Schaefer *et al*. 2009, 302). None of the elements could be sexed.

Results

A summary of the results is presented in tabular form below but several points should be highlighted:

- The disarticulated elements identified in the 2012 excavations represent a *minimum* of four individuals; three adults and one immature (*c*. 5 years old).

- Unlike the assemblage recovered from Areas 1 and 4 in 2011 where the disarticulated elements were predominantly skull fragments, those identified in 2012 are predominantly from the appendicular skeleton (exception being skull fragment from basal layer [5274] of enclosure ditch terminus F.1564).

- The great majority of limb bones survived only as shafts and had dry fractures at either the proximal or distal ends (or both).

- F.1011 represents the enclosure backfill/bank collapse above the articulated female burial [1061] excavated in 2011 (see Dodwell, in Slater *et al*. 2012). Four of the contexts within this feature contain disarticulated elements from a *minimum* of two, possibly three individuals. Whilst the loose tooth in [4590] could derive from the burial itself, neither of the fragments of tibia shaft or distal femur do. The canine puncture mark on the femur [4433] and its abraded cortical bone suggest that it was lying on the ground surface for a period of time prior to being incorporated into the enclosure ditch backfill. The distal tibia in [4438] has been split vertically along the shaft in a manner similar to many of the elements found in Trench 2.

- Of particular significance are the disarticulated skeletal fragments from Trench 2, specifically elements from [3940] and [3942] which have been chopped/split, cut or charred. The humerus and femur shafts from [3942] have been split axially as has the 4th metatarsal shaft. In addition fine, parallel knife incisions, suggestive of skinning or de-fleshing were observed on the distal humerus and the 4th and 5th metatarsals from [3942] (Figure 14). The 'V'-shaped profile of the cut marks suggests that they were made with a metal blade. In [3940] the fragments of humerus have all been charred a brown-black colour

- Some of the metatarsals recovered from Trench 2 articulate with each other but it is unknown if they were found in articulation in the field (the bone was only identified as human in the post-excavation phase).

Discussion and Recommendations for future work

Redfern's re-examination of disarticulated human bone from Iron Age hillforts in Dorset (2008) identified purposeful breaking and modification of elements which suggested a complex funerary process involving excarnation, dismemberment and processing of the body. The modifications observed on much of the material recorded in this assessment suggest that similar processes may have been occurring at Ham Hill, although the axial splitting of long bones would appear to be an additional modification. This is intriguing, as vertical splitting of the shaft when recorded in faunal assemblages is seen as diagnostic of marrow extraction or preparation for bone working. Whilst tools fashioned from human bone are known from the Iron Age, for example in Scotland (e.g. Tucker 2010) and Cambridgeshire (Dodwell, in Patten 2012), it is unclear whether the nature of the bone (i.e. was it human or animal) would have been known to the manufacturer or indeed have mattered. To help make the assemblage directly comparable to the butchered animal bone found both in the same contexts and across the site in contemporary features it is recommended that the human elements are recorded in a similar manner to animal bone i.e. by zone (e.g. Dobney and Reilly 1988; Knüsel and Outram 2004). This would allow any similarities (or not) to be identified and the depositional history of the elements explored.

In summary:

- Record all disarticulated bone from this phase and previous phases by zone in order to compare it with the faunal assemblage.
- Record all modifications in detail.

Feature	Context	Area	Element	Age	No. of indiv	Comments
F.1011	[4433]	4	l. distal femur (lateral condyle)	adult	1	canine puncture mark
F.1011	[4438]	4	r. tibia (distal 1/3rd)	adult	1	Split axially. NSPI on shaft
F.1011	[4585]	4	?r. tibia (mid shaft)	adult	1	
F.1011	[4590]	4	r. maxillary central incisor & frag. ?immature sacrum	adult & ?immature	1 (?2)	tooth may derive from articulated skeleton F.1021 excavated in 2011
F.1564	[5274]	4	u/s fragment of parietal	older subadult/adult	1	slight porotic hyperososos
-	[3805]	Tr.3	distal shaft l. humerus	adult	1	distal joint not present
-	[3918]	Tr.2	u/s ?prox. humeus shaft	adult	1	
-	[3926]	Tr.2	l. scapula (partial)	adult	1	glenoid cavity =26.25mm
-	[3927]	Tr.2	u/s tibia shaft frags. (x3)	adult	1	2 frags. refit
-	[3940]	Tr.2	3xfrags of l.humerus including distal shaft, u/s frag. femur shaft, u/s mid & distal fibula shaft, r. 2nd,3rd,4th & 5th metatarsals, 2x phalanges.	with exception of immature (c.5yrs old) fibula all elements are adult	2	humeral fragments are charred. OA on head of 3rd metatarsal
-	[3942]	Tr.2	l. distal half humerus, frag. scapula wing, prox. shaft femur, navicular, 1st & 5th metatarsals. R.femur & tibia mid shafts, 1st cuneiform, 3rd, 4th & 5th metatarsals. u/s fibula shaft & 4 u/s phalanges. Plus 6xfrags limb shaft. Proximal humeral epiphysis.	with exception of the immature epiphysis all elements are adult	3	Fine cut marks on humerus, l. 5th & r 4th metatarsals. Axial splitting of humerus, femur & r.4th metatarsal. Size of l & r 5th phalanges very different (? 2 individuals). OA on proximal phalange.

Table 4: Summary of disarticulated human bone from Ham Hill 2012 excavations.

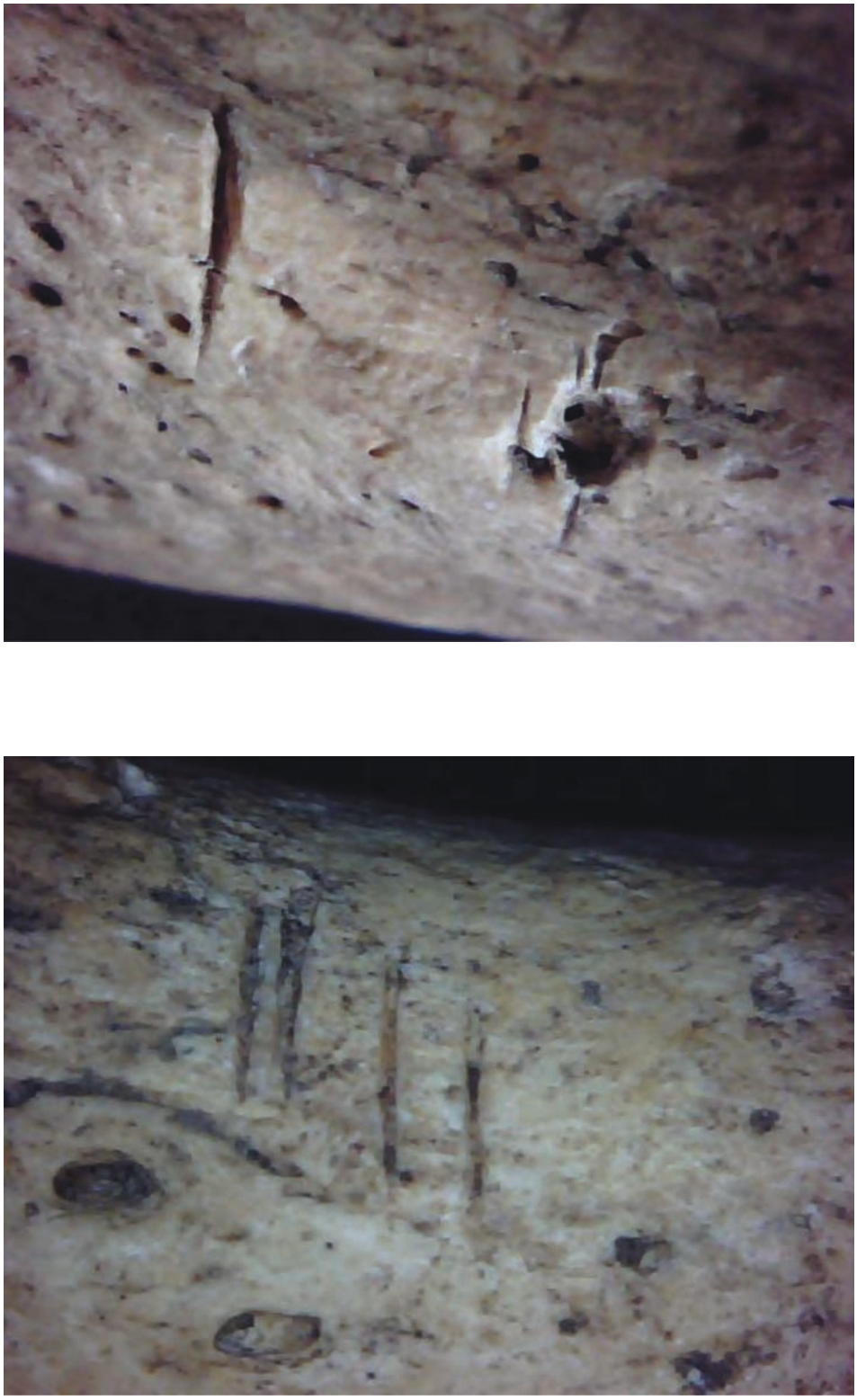


Figure 14. Photographs of cut marks on human bone

2.7 Material Culture

Flint and Chert – Lawrence Billington

A total of 537 pieces of worked flint and chert were recovered from Areas 2 and 4, and Trenches 1-3, together with 26 pieces (71.1g) of unworked burnt flint (Tables 5 and 6). The vast majority of the assemblage was derived from the excavation of cut features and sealed archaeological deposits, with a smaller number deriving from surface collection and test pitting. The material is closely comparable to the lithics recovered during the 2011 programme of fieldwork in Area 1 which produced a larger assemblage of 888 pieces of worked flint and chert (Billington, in Slater *et al*. 2012, 36-40). The 2012 assemblage is chronologically mixed attesting to activity from the Mesolithic to at least the Early Bronze Age. With a few notable exceptions, very little flintwork was found associated with demonstrably contemporary contexts and the vast majority of the assemblage found within cut features is thought to represent residual material incidentally incorporated into later deposits.

This report first considers the condition, raw materials and dating of the assemblage as a whole. This is followed by separate discussions of the sub-assemblages derived from surface collection, the cut features of Areas 2 and 4 and the three rampart trenches and concludes by briefly discussing the 2012 assemblage in the context of the ongoing fieldwork programme.

	Worked flint/chert no.	Unworked burnt flint no.	Unworked burnt flint weight (g)
Ramparts	221	15	35
Area 2/4 surface collection	54	0	0
Area 2/4 features	262	11	36.1
Total	537	26	71.1

Table 5: Basic quantification of the lithic assemblage.

Condition –: The condition of the assemblage is closely comparable to the material recovered from the 2012 excavations. In summary, the assemblage is very varied in condition but with a relatively high degree of breakage and edge damage/rounding. Recortication (patination) is common but does not appear to have a strong chronological significance and more probably relates to local differences in burial conditions and the taphonomy of individual pieces.

Raw materials – The assemblage is dominated by flint with a smaller proportion (under 5%) of chert. The characteristics of the raw material have been discussed in greater detail elsewhere (Billington, in Slater *et al*. 2012, 36-40; Harding 1995; Smith 1990) and indicate the use of flint of varied quality, mostly derived from secondary sources potentially quite close to Ham Hill with smaller amounts of imported material including flint from the chalk lands to the south and east and chert from the Greensand to the south (ibid; see also Bond 2004).

Dating – The assemblage consists almost entirely of material recovered as a residual element within later deposits and therefore dating relies exclusively on technological and typological characterisation of individual pieces. Technologically the assemblage can be separated into two broad but distinct groups. The first of these is narrow flake/blade based material of Mesolithic/earlier Neolithic date. This material is characterised by a structured and systematic core reduction strategy geared towards the production of regular, elongated and parallel sided removals and is closely associated with the use of careful platform preparation and soft hammer percussion. Narrow flake/blade technology is the hallmark of Mesolithic and earlier Neolithic flint working and its use in these periods has traditionally been linked to the need for the parsimonious use of raw materials and production of versatile and portable tool blanks in communities with relatively high levels of residential mobility (Bradley 1987; Edmonds 1987).

	surface collection		cut features					rampart trenches			
TYPE	Surface finds	Test pits	BA field system	IA enclosure	Other features	Structure 2	Structure 3	Trench 1	Trench 2	Trench 3	TOTAL
Chip	5	-	28	7	7	-	-	5	7	19	78
irregular waste	2	-	6	4	3	-	-	7	2	7	31
Flake	27	1	74	24	29	2	2	37	42	26	264
narrow/blade like flake	5	1	8	4	3	2	2	12	7	5	49
Blade	5	1	10	3	-	-	1	12	5	2	39
Bladelet	2	-	10	2	2	-	-	4	7	7	34
end scraper	2	-	6	-	1	-	-	-	-	-	9
side scraper	-	-	1	-	-	-	-	-	-	-	1
end and side scraper	-	-	1	2	-	-	-	-	-	-	3
horseshoe scraper	-	-	1	-	-	-	-	-	-	-	1
Knife	1	-	1	-	-	-	-	-	-	-	2
Piercer	-	-		-	-	-	-	2	-	-	2
Microlith	-	-	1	-	-	-	-	-	-	-	1
backed bladelet	-	-	1	-	-	-	-	-	-	-	1
retouched flake	3	-	1	1	-	-	-	1	-	-	6
retouched blade	-	-	-	-	1	-	-	-	-	-	1
serrated flake	-	-	1	-	-	-	-	-	-	-	1
serrated blade	-	-	1	-	-	-	-	-	-	-	1
notched flake/blade	-	-	-	-	-	-	-	1	-	-	1
irregular core	-	-	-	-	-	-	-	-	-	1	1
single platform flake core	-	-	1	-	-	-	-	-	-	-	1
multiple platform flake core	1	-	-	-	-	-	-	1	-	-	2
keeled core	-	-	1	-	-	-	-	-	-	-	1
core fragment	-	-	3	-	-	-	-	1	-	-	4
minimally worked core	-	-	-	1	-	-	-	-	-	-	1
core reused as hammerstone	-	-	1	-	-	-	-	1	-	-	2
core on a flake	1	-	1	-	-	-	-	-	-	-	2
hammerstone	-	-	1	-	-	-	-	-	-	-	1
TOTALS	54	3	159	48	46	4	5	84	70	67	**540**
burnt unworked flint no.	0	0	5	1	5	0	0	1	10	4	**26**
burnt unworked flint weight (g)	0	0	25.5	3.6	7	0	0	4	26.1	4.9	**71.1**
% broken (excludes chips)	*40.8*	-	*53.4*	*36.6*	*28.2*	-	-	*57*	*58.7*	*43.8*	***48.9***
% worked and burnt	*1.9*	-	*8.8*	*14.5*	*0*	-	-	*7*	*10*	*19.4*	***8.8***
% retouched	*11.1*	-	*9.4*	*6.3*	*4.4*	-	-	*5*	*0*	*0*	***5.6***
% of removals blade/narrow flake based	*30.8*	-	*27.5*	*14.7*	*17.7*	-	-	*43*	*31.1*	*35*	***31.6***

Table 6. Basic Quantification of the flint and chert assemblage by type from the 2012 excavations.

In the assemblage as a whole over 30% of the unretouched removals have been classified as narrow flake or blade based products. This is a high proportion and is directly comparable to the assemblage derived from the 2012 excavations. Technological variability within the broad group of narrow flake and blade based material suggests the material represents centuries, if not millennia of activity from at least the late Mesolithic to the earlier Neolithic. Distinguishing Mesolithic and earlier Neolithic flintwork in the absence of certain diagnostic

forms is problematic at a national level (Edmonds 1995). However, as in most areas of the country, core reduction strategies in Somerset and south-central/southwest England generally appear to have become somewhat less formal in the earlier Neolithic, with more 'blade-like' and narrow flakes than the true blades and especially bladelets that characterise Mesolithic assemblages (for a recent review of assemblages from Somerset see Bond 2011, Table 4.3). The presence of very fine prismatic blades and bladelets alongside more irregular elongated flakes and robust blade like forms suggests a mixture of Mesolithic and earlier Neolithic activity on the site. Whilst it will never be possible to quantify exactly, *further analysis may be able to make a broad assessment of the relative proportions of material from the two periods*.

The second group of material that can be distinguished technologically consists of flake based material exhibiting a great deal of variability in morphology but representing a more expedient core reduction strategy characterised by a lack of platform preparation, freehand hard hammer percussion and a corresponding change in the morphology of removals to broader, thicker forms. Little of this unretouched flake based material is strictly chronologically diagnostic and a proportion is likely to represent the product of early core reduction stages and less structured elements of Mesolithic/earlier Neolithic technologies. Nonetheless, the majority of this material is typical of later Neolithic and Early Bronze Age technologies, although some later flintwork may also be present. Two removals have the finely faceted platforms and multi-directional dorsal scars typical of products from late Neolithic levallois-like cores (Ballin 2011).

A total of 30 retouched tools were identified in the assemblage, accounting for approximately 6% of the assemblage as a whole. The retouched forms include a high proportion of scrapers, making up almost half of the recovered tools. These are dominated by forms consistent with a later Neolithic/Early Bronze Age date and include one end scraper with a faceted striking platform made on a levallois–like blank of probable late Neolithic date (Ballin 2011; Manby 1974) and four small scrapers with the semi-invasive retouch characteristic of Early Bronze Age forms (Pollard 1999). Mesolithic activity is represented by a single microlith, a backed bladelet and a truncated bladelet. Two serrated blades were also recovered, although found in earlier and later periods these pieces are a particular feature of Early Neolithic assemblages (Healey and Roberston-Mackay 1983). The remaining retouched pieces consist largely of informally retouched flakes consistent with a later Neolithic and Early Bronze Age date.

Surface Collection

Test Pits – Five test pits were excavated during the 2012 season to complete the buried soil sampling undertaken in the 2011 season, two of these produced worked flint. Test pit 29 contained a single undiagnostic flake whilst Test pit 31 contained two blade based removals of Mesolithic/earlier Neolithic date.

Surface finds – A total of 54 worked flints were collected as surface finds from the main excavation area. The assemblage is typical of that from the site as a whole, containing a relatively high proportion of Mesolithic/earlier Neolithic blade based material alongside more generalised flake based flint work of later Neolithic/Early Bronze Age date. Notable unretouched pieces include a heavily reduced multiplatform flake core weighing just 17g (SF.1065) and a large elongated decortication flake 84mm long (SF.1124) which attests to the occasional exploitation of relatively large raw material packages. The surface find assemblage included a notably high proportion of retouched forms, making up 11% of the assemblage. These include an end scraper with additional invasive retouch along one lateral edge (SF.1128), an end scraper made on late Neolithic levallois-like blank (SF.1131) and a flake knife (possibly a laurel leaf point) (SF.26).

Features – A total of 262 pieces of worked flint and chert were recovered from the excavation of cut features in the main excavation area. The assemblage from the features is presented in Table 6 by broad feature groups; a full list of the lithic assemblages from individual features and contexts is available in the archive. The 262 lithics were thinly distributed, deriving from a total of 120 individual contexts, only five of which contained more than five worked flints. The assemblages from the feature groups are generally closely comparable with few significant differences in composition or character. The unretouched material includes a high proportion of Mesolithic/earlier Neolithic blade based removals including a large chert blade, 94mm long, from Structure 3, a late Neolithic levallois-like flake from pit F.1897 and several expediently worked flake cores. Two flint hammerstones were also recovered from features making up part of the middle Bronze Age field system.

The retouched tools included almost all of the diagnostically 'early' (Mesolithic/earlier Neolithic) forms from the entire 2012 assemblage. These include a late Mesolithic microlith, a narrow blade version of Jacobi's type 3c (Jacobi 1978), recovered from middle Bronze Age ditch F.1550. A backed bladelet and two serrated tools

were also recovered from ditches making up part of the middle Bronze Age field system. The remainder of the retouched tools include a relatively high proportion of diagnostically Early Bronze Age pieces, including at least three scrapers and an invasively retouched flake knife. Whilst the small densities and mixed chronological traits of the lithic material clearly indicate that the feature assemblage is overwhelmingly residual it is possible that a very small proportion of the lithic material is broadly contemporary with the features from which they were recovered, particularly in the case of the Middle Bronze Age field system. Although rare, Middle and Late Bronze Age flint assemblages are known from Somerset (see Bond 2011, Table 4.1) and it is possible that some of the flake based material from the site relates to flint working and use during this period. Post-Early Bronze Age flintwork is characterised by extremely expedient core reduction strategies, frequent evidence for knapping errors and a restricted range of informal tools (Ford *et al*. 1984; Mclaren 2010) and can be very hard to distinguish in chronologically mixed assemblage dominated by earlier material. A very few pieces from features associated with the field system show an expediency and lack of control that is consistent with these later technologies, including a crude core from F.1588, but could equally reflect the least structured reduction strategies of earlier periods and it seems likely that the routine working and use of flint and chert on the site had ceased by the close of the first half of the second millennia BC.

Trenches 1-3

The excavation of three trenches through the ramparts of the hillfort recovered a total of 221 worked pieces of flint and chert, a large proportion of the total assemblage from the 2012 fieldwork. The vast majority of this material is residual and has been incorporated into deposits post dating or making up elements of the ramparts; however, small amounts of lithic material were recovered from deposits sealed by the rampart in Trench 3.

Trench 1 – A total of 84 pieces of worked flint and chert were recovered from 19 individual deposits in Trench 1. The assemblage includes a high proportion of broken pieces and the condition of the material generally is consistent with substantial disturbance and redeposition. The Trench 1 assemblage has the highest proportion of blade based material from any of the broad assemblage groups defined in Table 5 and clearly indicates a substantial contribution of Mesolithic/earlier Neolithic material to the assemblage. The retouched pieces include a notched blade-like flake and two piercers.

Trench 2 – A total of 70 worked flints were recovered from 20 individual deposits in Trench 2. The assemblage includes a high proportion of small flakes and fragments under 10mm in size (chips) and there is a complete absence of retouched pieces or cores. The condition of the assemblage is comparable to that from Trench 1.

Trench 3 – A total of 54 worked flints were recovered from eight individual contexts in Trench 3 with a further 13 worked flints deriving from unstratified deposits (Table 7). The lithic material is closely comparable to that from the other two trenches both in terms of condition and composition. Thirty of the worked flints from Trench 3 derived from pre-rampart deposits (Phase C-B) and are significant in having not been exposed to the extensive disturbance and re-deposition identified elsewhere in the rampart trenches and potentially relate directly to *in situ* earlier prehistoric activity in this area. Seven flints were found within [3827], the fill of a feature sealed below the rampart sequence. This is a fairly disparate assemblage of unretouched removals including some clearly Mesolithic/earlier Neolithic blade-based material and with no demonstrably later pieces. Twenty three flints were recovered from layer [3805], sealing a cut containing [3827]. This deposit produced the largest number of flints from a single deposit within any of the trenches and is notably more coherent in terms of condition than the material derived as a residual element in other contexts. The assemblage is dominated by very small removals and fragments, including several blade-based products and a lack of clearly post-earlier Neolithic material. The relatively high density of flintwork in this deposit, the coherence of the assemblage and the dominance of small waste products suggests it may relate to *in situ* flint working or the small-scale dumping/redeposition of knapping waste.

Discussion

The lithic material from the 2012 excavations represents a substantial and complementary addition to the larger assemblage recovered from the previous season's fieldwork, clearly demonstrating activity from the Mesolithic to the Early Bronze Age (see Billington 2012). Perhaps the most significant aspect of the 2012 assemblage is the recovery of lithic assemblages from the rampart trenches which display a similar chronological range to the

lithic material recovered from Areas 1 to 4 and appear to demonstrate widespread earlier prehistoric activity across the hilltop. The recovery of flintwork from potentially contemporaneous deposits sealed by the rampart in Trench 3 indicates the potential for the survival of *in situ* earlier prehistoric remains to be encountered where conditions for preservation are favourable.

	Pre-rampart deposits		**rampart and post rampart associated deposits**						**unstrat**	
	3805	3827	3808	3786	3791	3794	3817	3825	-	**TOTALS**
chip	10	1	1	-	-	1	1	1	4	19
irregular waste	1	2	-	-	1	-	2	-	1	7
flake	9	3	-	-	1	-	6	1	6	26
blade like/narrow flake	2	-	-	-	-	-	-	1	2	5
blade	-	1	-	-	-	-	-	1	-	2
bladelet	1	-	-	-	-	-	2	4	-	7
irregular flake core	-	-	-	1	-	-	-	-	-	1
TOTALS	23	7	1	1	2	1	11	8	13	67

Table 7: Worked flint from Trench 3, quantified by context.

Later Prehistoric pottery – *Matt Brudenell*

Areas 2, 4 and Trench 3 yielded a total of 945sherds (4959g) of later prehistoric pottery, with a low mean sherd weight (MSW) of 5.2g in 2012. The pottery is mainly of later Iron Age origin (2nd and 1st centuries BC), although the assemblage includes a small group of Late Bronze Age ceramics. The condition of the pottery is extremely variable, ranging from total representative parts of whole vessels to small and often heavily abraded sherds. The latter dominate, as reflected in the low MSW, and the high percentage of small sized sherds (87% measuring <4cm in size).

This assessment report offers a summary of the character and chronology of the assemblage from Areas 2, 4 and Trench 3. A very brief un-quantified summary of the material from Trenches 1 and 2 is also offered. All the pottery from Areas 2, 4 and Trench 3 has been fully recorded following the recommendations laid out by the Prehistoric Ceramic Research Group (2009). After a full inspection of the assemblage, fabric groups were devised on the basis of dominant inclusion types, their density and modal size. Sherds from all contexts were counted, weighed (to the nearest whole gram) and assigned to a fabric group (sherds broken in excavation were refitted and counted as single entities). Sherd type was recorded, along with evidence for surface treatment, decoration, and the presence of carbonized residues. Rim and base forms were described using a codified system recorded in the catalogue, and were assigned vessel numbers. Where appropriate, these were categorised by form – using the Cadbury series (Woodward in Barrett *et al*. 2000, 325-346), based on a slightly modified version of the Danebury series (Cunliffe 1984, 259-307). Rim and base diameters were also measured, and surviving percentages noted. Sherds less than 4cm in diameter were classified as 'small'; sherds measuring 4-8cm were classified as 'medium', and sherds over 8cm in diameter were classified as 'large'. A programme of refitting was also conducted, and sherd joins were noted within contexts. The quantified data is presented on an Excel data sheet held in the site archive.

Fabrics, forms, surface treatment and use evidence

Twelve major fabric groups were identified, divided into 32 individual types (Table 8). Vesicular (Groups V) wares dominated, accounting 35.4% of the assemblage by weight. Judging by the shape of the voids, most of these were probably calcite gritted wares whose inclusions had been leached from the sherds, though some were possibly tempered with shell or other calcareous grits. On occasions, white degraded specs of calcareous matter were still visible in the break of some vesicular sherds, but it proved very difficult to identify (macroscopically) what these remains represented.

Whereas shelly wares (Group S) dominated the material from the 2011 season, they only accounted for 12.4% of the pottery from the 2012 investigations. This is hard to explain, though the results may be skewed by condition of the material, and the higher levels of leached calcareous inclusions throughout the assemblage. The clays used to produce the shelly fabrics (inclusion Group SQ, 0.2%) are likely to be of local origin, as were the wares with inclusions of limestone (Groups LS and L, 1.0% and 2.0% respectively), calcareous grits (Group CA, 11.6%), flint (Group F, 1.0%) and grog (Group G, 2.7%). Some of the sandy wares (Group Q, 12.6%) may also derive from local clays sources, though those of types Q4-Q6 (8.9% by weight in overall assemblage) are from the Wareham-Poole Harbour region, and belong to the 'Durotrigan' tradition of the later Iron Age in the Somerset-Dorset-West Wiltshire area.

Other non-local fabrics include the Group R (13.2%) and AR wares (0.1%), and possibly the calcite sherds of Group C (11.6%). The Group A and AR wares have weathered igneous rock fragments likely to be felspathic tuff from the region of Shepton Mallet in the Mendip Hills (E. Morris *pers comm*.). Fabric types R, R2 and R6 constitute the finer wares of this group, and include the vast majority of the site's decorated Glastonbury/South-Western style wares. The coarse varieties, R1, R3 and R4, appear to be of Late Bronze Age origin.

Flint group (Group F)
F1: Moderate medium to coarse burnt flint (mainly 2-4mm) in a sandy clay matrix.
F2: Sparse to moderate medium flint (1-2mm) in a sandy clay matrix.

Sandy group
Q2: Sparse to moderate fine quartz sand, micaceous, powdery texture. Similar to Q1 (probably local).
Q3: Moderate to abundant quartz sand (probably local).
Q4: Common to abundant very coarse quartz sand, moderately sorted. This is an early coarse Durotrigian ware, dated from the Mid to Late Iron Age; source Wareham-Poole Harbour (non-local).
Q5: Common to abundant coarse quartz sand, moderate to well-sorted. Similar to Q4. Durotrigian ware, dated mid to Late Iron Age; source Wareham-Poole Harbour (non-local).
Q6: Common to abundant coarse quartz sand, well-sorted. Common Durotrigian Black Burnished Ware fabric; source Wareham-Poole Harbour (non-local).
Q8: Sparse to moderate fine sand.
Q9: Common medium and coarse quartz sand with sparse to moderate coarse to very coarse (1-5mm) gravel detritus.

Grog Group
G1: Moderate coarse to very coarse grog (2-4mm). Hard fabric unlike Early to Middle Bronze Age grog fabrics.
G2: Moderate coarse to very coarse grog (2-4mm) and sparse coarse flint (2-4mm).

Igneous rock group (Group R)
R?: Sparse to common fine (<1.5m) igneous rock inclusions whose source needs to be clarified by thin section analysis.

R1: Common coarse to very coarse (1-7mm), angular, weathered igneous rock fragments, poorly sorted, likely to be felspathic tuff (Morris pers comm.); source probably in the region of Beacon Hill near Shepton Mallet in the Mendip Hills.
R2: Common medium to coarse (mainly 1-1.5mm, with a few fragments up to 3mm) angular, weathered igneous rock fragments, moderately sorted, likely to be felspathic tuff (Morris pers comm.); source probably in the region of Beacon Hill near Shepton Mallet in the Mendip Hills.
R3: Common coarse to very coarse (1-7mm), angular, weathered igneous rock fragments, poorly sorted, likely to be felspathic tuff (Morris pers comm.), and moderate to common coarse voids (1-3mm); source probably in the region of Beacon Hill near Shepton Mallet in the Mendip Hills.
R4: Moderate medium to coarse (mainly 1-1.5mm, with a few fragments up to 3mm), angular, weathered igneous rock fragments, moderately sorted, likely to be felspathic tuff (Morris pers comm.), and moderate to common coarse voids (1-3mm); source probably in the region of Beacon Hill near Shepton Mallet in the Mendip Hills.
R6: Common medium to coarse (mainly 1-1.5mm, with a few fragments up to 3mm), angular, weathered igneous rock fragments, moderate to well sorted, with sparse glistening inclusions (unidentified).

Argillaceous and igneous rock group (Group AR)
AR2: Moderate medium to coarse (1-4mm) rounded argillaceous inclusions, poorly sorted, and moderate to common medium to coarse (mainly 1-1.5mm, with a few fragments up to 3mm) angular, weathered igneous rock fragments, poorly sorted, likely to be felspathic tuff (Morris pers comm.); source probably in the region of Beacon Hill near Shepton Mallet in the Mendip Hills.

Calcite group (Group C)
C1: Modern to common medium (up to 1.5mm) calcite, moderately sorted: source possibly Mendip Hills.
C2: Common coarse (mainly 2-4mm) calcite, poorly sorted; source possibly Mendip Hills.

Calcareous group (Group CA)
CA1: Common fine calcareous inclusions (<1mm).

Fossiliferous limestone group (Group LS)
LS1: Common coarse to very coarse (2-7mm) fossiliferous limestone with visible shell inclusions.
LS2: Moderate or common Medium to coarse (1-3mm) fossiliferous limestone with visible shell inclusions.

Limestone group (L)
L1: Common coarse to very coarse (2-7mm) limestone.
L2: Common fine oolitic limestone (<1.5mm).

Shell group (Group S)
S1: Moderate coarse shell (mainly 1-4mm).
S2: Moderate to common medium shell (mainly 1-2mm with occasional larger fragments <4mm).

Shell and sand (Group SQ)
SQ1: Sparse medium shell (1-2mm) in common quartz sand.

Vesicular group (Group V)
V1: Spare to moderate fine to medium voids (1-2mm).
V2: Moderate to common medium and coarse voids (mainly 1-2mm with occasional larger fragments <4mm).
V3: Moderate to common coarse voids (2-4mm+).
V4: Moderate to common fine or medium voids (<2mm) and sparse to moderate quartz sand.

Based on the total number of different rims and bases identified, the assemblage is estimated to include fragments of a minimum of 51 vessels (33 different rims; 18 different bases, 1 'complete' profile). These were assigned to form in instances where parts of both the rim and shoulder of the pot survived intact (Table 9). In total 14 vessels were assigned to form, including 60 sherds (1265g), representing 6% of the assemblage by sherd count, or 25% by weight (the high weight frequency largely resulting from the recovery of three substantially intact vessels from pit F.1897).

Fabric Group	Fabric Type	No./wt. sherds	% of fabric (by wt.)	No./wt. sherds burnished	% of fabric burnished (by wt.)	MNV	MNV burnished
Agrillaceous and igneous rock	AR2	1/4	0.1	-	-	-	
Calcite	C1	8/42	0.9	-	-	1	
	C2	64/336	6.9	-	-	1	
Calcareous	CA1	25/565	11.6	3/292	51.7	2	1
Flint	F1	8/41	0.8	-	-	-	
	F2	6/7	0.1	-	-	-	
Grog	G1	1/4	0.1	-	-	-	
	G2	1/128	2.6	-	-	-	
Limestone	L1	11/87	1.8	-	-	1	
	L2	1/9	0.2	-	-	1	
Fossiliferous limestone	LS1	2/25	0.5	-	-	-	
	LS2	2/26	0.5	-	-	-	
Sand	Q2	20/59	1.2	-	-	1	
	Q3	15/67	1.4	1/6	9.0	1	
	Q4	42/323	6.6	-	-	6	
	Q5	20/86	1.8	-	-	1	
	Q6	1/22	0.5	1/22	100.0	1	1
	Q8	4/50	1	-	-	-	
	Q9	1/3	0.1	-	-	-	
Igneous rock	R?	22/376	7.7	17/360	95.7	4	3
	R1	30/114	2.3	-	-	2	
	R2	23/67	1.4	-	-	3	
	R3	1/6	0.1	-	-	-	
	R4	19/43	0.9	-	-	1	
	R6	12/37	0.8	7/24	64.9	2	
Shell	S1	62/551	11.3	-	-	2	
	S2	19/51	1	-	-	-	
Shell and sand	SQ1	6/10	0.2	-	-	-	
Vesicular	V1	13/16	0.3	-	-	-	
	V2	155/269	5.5	-	-	7	
	V3	168/794	16.3	-	-	9	
	V4	182/641	13.2	46/172	26.8	5	1
TOTAL	-	*945/4859*	*99.7*	*75/876*	*18.0*	*51*	*6*

Table 8: Quantified pottery. MNV = minimum number of vessels calculated as the total number of different rims and bases identified.

The assemblage included fragments of plain ovoid to slightly globular-bodied jars (forms JB2, PA1 and PA3), shouldered jars (form JA1) and round-bodied bowls, with either upright necks (BD6 – Glastonbury Ware vessels), or beaded rims sometimes defined by a horizontal groove immediately below the lip (form BC3.3). One of the latter was wheel-made, as was the single BD2 vessel from pit F.1897 (detailed below). In total there were 199 sherds (1939g, including five different vessel rims and two different bases) of wheel-made 'Iron Age-type' pottery in the assemblage, with an additional five sherds (16g, including 1 rim) that were *possibly* wheel-made/wheel-finished. The former were confined to two features: the enclosure ditch F.1564, context [4520]; and pit F.1897. The five possible wheel-made sherds derived from pits F.1941, F.1962 and F.1979, and the backfill of Trench 3.

Fabric/from	JA1	JB2	JC4	PA1	PA3	BC3.3	BD2	BD6	TOTAL
CA1	-	-	-	-	-	-	1	-	1
Q4	-	-	1	-	-	2	-	-	3
Q5	-	-	-	-	-	1	-	-	1
R?	-	-	-	-	-	-	-	2	2
R1	-	-	-	1	-	-	-	-	1
R2	-	-	-	-	1	-	-	1	2
V2	-	1	-	-	-	-	-	-	1
V3	1	-	-	1	-	-	-	-	2
V4	-	-	-	-	-	1	-	-	1
TOTAL	1	1	1	2	1	4	1	3	14

Table 9: Correlation between forms and fabrics by vessel count.

In terms of surface treatment, 76 sherds (876g) were carefully smoothed or burnished in the assemblage, accounting for 8% by count or 18% by weight. Decoration consisted of various different applications ranging from finger-tipping on un-burnished vessels to the fine tooling of geometric and curvilinear motifs on the Glastonbury wares (Table 10-11). Evidence of vessel use was found in the form of carbonized residues (soot and burnt food-crusts) adhering to the surfaces of 21 sherds (158g). Food-crusts – many of which are suitable radiocarbon dating – were recorded on 12 sherds (102g).

Pottery from Areas 2 and 4

In total, 818 sherds (3915g) were recovered from excavated features in Area 2 and 4 (Table 10: 30 features, 67 contexts), with a further 20 (78g) retrieved as spot-finds, and six sherds (12g) from 'buried soil' layer [4485].

Decoration/location	Immediately below rim	Rim-top	Neck-shoulder	Shoulder	Body	?	TOTAL
Grooved horizontal lines forming slight cordons	-	-	14/357:**1**	-	-	-	14/357:**1**
Fingernail impressions	-	-	-	1/19:**1**	1/11:**1**	-	2/30:**2**
Fingertip impressions	-	1/7:**1**	-	-	-	-	1/7:**1**
Tooled horizontal line/s	22/150:**9**	-	-	-	-	1/1:**1**	23/151:**10**
Pin-pricks	-	-	-	-	1/7:**1**	-	1/7:**1**
TOTAL	22/150:**9**	1/7:**1**	14/357:**1**	1/19:**1**	2/18:**2**	1/1:**1**	41/552:**15**

Table 10: Decoration and surface treatment on non-Glastonbury wares – no. sherds/wt.(g): maximum no. vessels (bold).

Decoration/location	Rim exterior	Neck and shoulder	TOTAL
Tooled horizontal lines and cross-hatching (IGD)	2/20:**1**	-	2/20:**1**
Alternate standing and pending arc between horizontal lines (ICA)	-	1/23:**1**	1/23:**1**
Tooled horizontal lines and diagonal line above standing arcs filled with curvilinear lines (IGA & IC3)	-	5/29:**1**	5/29:**1**
Tooled horizontal lines and cross-hatching above diagonal lines and cross-hatching (IG4 & IGD)	-	10/319: **1**	10/319: **1**
TOTAL	2/20:**1**	16/371:3	18/391:**4**

Table 11: Decoration and surface treatment on Glastonbury wares (no sherds/wt.(g): maximum no. vessels (bold)). Codes IGD, ICA, IGA, IC3 and IG4 refer to the type series employed at Cadbury (Woodward in Barrett *et al*. 2000, 346).

Key groups from Areas 2 and 4

Rectangular enclosure (ditches F.1011, F.1527, F.1531 and F.1564): The ditches making up the rectangular enclosure yielded 426 sherds (1401g). The assemblage included fragments of a minimum of 20 vessels; with rim sherds generally displaying flat, rounded or beaded lips, sometimes with a horizontal groove on the exterior lip-edge. Of the seven vessels assigned to form, four were BC3.3 bowls, one of which from the uppermost fill of the enclosure ditch terminus F.1564 (context [4520]) was a Late Iron Age wheel-made vessel. The other form assigned vessels included a JB2 jar, and JC4 jar, and a small PA3 vessel likely to be Late Bronze Age origin. In term of fabrics, the assemblage was dominated by vesicular wares (62% by weight), with leached calcareous inclusions; most of which may have originally contained calcite. Sandy wares were the second most prolific fabric group (18%), with Wareham-Poole Harbour wares found throughout the ditch profile. Interestingly, sherds with flint or coarse igneous rock inclusion accounted for 15% of the ditch assemblage by weight. These are thought to be Late Bronze Age fabric types (Morris 1987), suggesting there is a fair amount of residual material in the ditch (particularly in context [4571]). Overall, however, there is nothing to indicate that this feature was constructed any earlier than the Middle Iron Age, matching the results from the previous season.

Anomalous Linear F.1932: The series of contexts/features which make up the anomaly yielded a total of 10 sherds (86g). With the exception of a single rim, all the fragments were plain body sherds, many in vesicular fabrics. However, Wareham-Poole Harbour wares were recovered from contexts [4504] and [4506], suggesting some infilling/slumping in the shaft occurred in the Middle/later Iron Age.

The six-post structure (postholes F.1968, F.1970, F.1983, F.1986): A total of 121 sherds (500g) were recovered from the six-post structure, most of which (64 sherds, 342g) relate to the base of a large, coarse, calcite-gritted vessel from posthole F.1986. Combined, the assemblages was characterised by vesicular and calcite-gritted wares, with a handful of sherds in coarse igneous rock tempered fabrics. One of these included the partial profile of barrel-shaped PA1 vessel with internally rounded rim. Overall, the character of the fabrics and the presence of the barrel-shaped jar suggest the structure dates to the Late Bronze Age.

Fieldsystem (ditches F.1503, F.1506, F.1521, F.1550, F.1858, F.1923 and F.1945): Although the majority of the pottery from the fieldsystem ditches dates to the Early-Middle Bronze Age, 18 sherds (39g) are thought to be of later attribution, including two Middle/later Iron Age Wareham-Poole Harbour Wares (3g). The other pottery is mainly in vesicular fabrics which probably date to the Late Bronze Age or Iron Age.

Structure 2 and its internal features (eaves-gullies F.1578 and F.1903, posthole 1920 and pits F.1897 and F.1962): The features associated with Structure 2 yielded a combined total of 182 sherds (1731g), although more than 80% of these derived from pit F.1897: the largest single feature assemblage from the season's excavations (152 sherds, 1624g). The eaves-gullies and posthole contained only body and shoulder sherds, mostly in vesicular fabrics, although three sherds in Wareham-Poole Harbour Wares were present. The assemblage from pit F.1962 was also small (eight sherds, 31g), but was dominated by igneous rock fabrics of unidentified origin (fabric R?, some possibly gabboric). The pottery group from pit F.1897 included fragments of a minimum of 15 different vessels, including the complete profile of a decorated Glastonbury ware bowl





Figure 15. Glastonbury ware (below) and wheel-made decorated bowl (above) from pit F.1897

(form BD6), and the partial profiles of a plain barrel-shaped PA1 jar and a wheel-made BD2 bowl decorated with a narrow cordon at the base of the neck and two grooved horizontal lines on the shoulder (Figure 15). Sherds belonging to these three vessels dominated the assemblage (accounting for at least 1011g), and all showed signs of being burnt after breakage – the wheel-made vessel being heavily discoloured with a pinkish surface. The rim of a second Glastonbury ware vessel was also recovered from pit F.1897. This was made in what appears to be local sandy fabric, although the complete Glastonbury bowl had unidentified igneous rock inclusions (possibly Sanidine?). A date in the mid to late first century BC for this assemblage is appropriate.

Structure III (eaves-gully F.1899): The eaves-gully yielded just three plain body sherds (9g) in sand and vesicular fabrics. One sherd, however, was in a Wareham-Harbour fabric suggesting a Middle/later Iron Age date.

Other pits (F.1941 and F.1979): Located within the enclosure, pits F.1941 (39 sherds, 126g) and F.1979 (11 sherds, 27g) contained wheel-made sherds of Middle/later Iron Age date, with F.1941 also yielding body sherds representative of a Glastonbury ware bowl.

Summaries of pottery from rampart Trenches 1-3

Just under 1900 sherds of pottery (c. 12.9kg) were recovered from rampart Trenches 1-3. Only that from Trench 3 has been fully quantified, and the totals for Trenches 1 and 2 should be treated as provisional (some of this is not prehistoric pottery).

Summary of pottery from Trench 1: The earliest pottery from Trench 1 possibly dates to the Late bronze Age / Early Iron Age transition *c*. 800-550 BC, and is characterised by fingertip decorated coarseware jars and tooled fineware bowls. The pottery is predominantly shell tempered, although the finewares appear to be predominantly made in a micaceous sandy fabric. The rampart is likely to contain a sequence of deposits running through the Early Iron Age, *c*. 800-400/350 BC. No obvious Middle/Later Iron Age wares were spotted amongst the main context assemblages.

Summary of pottery from Trench 2: The earliest pottery derived from the Phase B-E deposits and was dominated by handmade shell tempered sherds, found alongside a few fragments of Glastonbury Ware. Also present were a few Wareham-Poole Harbour Wares including fragments of several BC3.3 bowls, and a part of wheel-made cordoned BD2 bowl. This suggests a date no earlier than the first century BC. Similar ceramics were found in the small assemblage from Phase B-D. In the Phase B-C deposits, however, there was a marked increase in the quantity of Wareham-Poole Harbour Wares, and the first appearance of Romanizing and Early Roman pottery (including pieces of Samian). Wheel-made BC3.3 bowls are relatively prolific, some in BB1 fabrics, and some with pedestal bases. The small quantities of pottery from phase B-D-C and later deposits are mainly in wheel-made Roman fabrics or Wareham-Poole Harbour Wares. A few sherds of residual handmade Iron Age-type wares are however present, including a least one decorated Early Iron Age sherd.

Quantified pottery from Trench 3 (contexts [3790], [3802], [3803], [3805], [3809] and [3810], plus backfill and un-stratified finds): The investigation in Trench 3 yielded a total 101 sherds (834g). With the exception five rim and base sherds belonging to four different vessels, all the fragments were plain body sherds. Shell wares dominated the assemblage (60% by weight), followed by sherds with grog and flint (15%, though this was a single large Late Iron Age sherd) and sand (12%). The remaining 15% was shared amongst sherds with flint, igneous rock, fossiliferous limestone, calcite, shell and sand, grog, calcareous inclusions or vesicular fabrics. A total of 49 sherds (435g) were recovered from the stratified deposits relating to rampart Phases C-B, C-C and C-D:

Phase C-B-C (context [3805]): 39 handmade sherds (373g), mainly in thick shell-tempered fabrics, including two possible flat bases and a slightly in-turned rim. Further research is required to confidently date these sherds, although either a Neolithic or Early Iron Age date is likely.

Phase C-C-A (contexts [3808], [3809] and [3010): Five handmade body sherds (39) in shell, fossiliferous limestone and igneous rock tempered fabrics. The rock tempered fabric is likely to be Late Bronze Age (1 sherd, 2g).

Phase C-D-A and C-D-B (contexts [3790] and [3802], phases 3.1 and 3.2): Five handmade body sherds (24g) in shell and vesicular fabrics. Most likely Middle/later Iron Age.

Discussion

In general, the pottery from Areas 2 and 4 matches that from the 2011 season, and is predominantly of 2nd and 1st century BC date. The assemblage is characterised by the presence of plain ovoid bowls and jars with beaded rims, fragments of South Western/Glastonbury-style vessels (in non-local fabrics, principally Group R fabrics), with Wareham-Poole Harbour fabrics (non-local, fabrics Q4-6). The pottery also contains occasional wheel-made vessels. It is now apparent, however, that there is a Late Bronze Age phase of activity on the site, represented by features containing sherds in coarse Group R fabrics and vesicular and/or calcite wares. Although only a few vessel forms have been identified, these comprise barrel-shaped jars, some with internally bevelled rims.

At present there are no Early Iron Age wares from Areas 2 and 4. These, however, are prolific in Trench 1 through the rampart, which is likely to contain a sequence of Earliest and Early Iron Age deposits (*c*. 800-400/350 BC). The pottery so far recovered from Trench 2 is mainly first century BC and first century AD in date, spanning the Roman Conquest. The material from Trench 3 is harder to place, given the small size of the assemblage recovered and the absence of diagnostic sherds. That said, the fabric suggests an Iron Age date for most of the pottery, with the sequence possibly beginning in the Early Iron Age.

Metalwork – Grahame Appleby

This assessment considers 42 pieces of metalwork found during metal detecting and excavation of archaeological deposits and features from Areas 2 and 3, and Trenches 1-3. The following is based upon the photographic and x-ray images of the objects (dimensions are thus approximate and will require later revision). Consisting of one piece of lead, nine items of copper alloy and the remainder ironwork, twelve of the objects were recovered from archaeological features, seven of which were from pit F.1897. Of the rampart trenches, two metal items were covered from Trench 1, with twenty-one coming from Trench 2. The date range of the objects spans the Late Iron Age to the post-Medieval/modern era.

Catalogue

Area 2

Buried soil [4440]

<2500>a [4440]. Irregular-shaped, roughly oval/round and flat or domed object measuring 20mm x 16mm. This item has a possible tang or suspension point on one side.

<2500>b [4440]. X-ray of this object reveals this to be a square cross-sectioned iron rod bent at one end to form a suspension loop; length 68mm, width 5mm. Tent peg?

<2501> [4440]. Fragment of a relatively thick iron nail measuring 30mm long, with the domed head 9mm wide. Undated.

<2502> [4440]. Triangular shaped fragment 44mm long. Undiagnostic – possibly a lump of scrap.

Area 3

<2535> Buried soil [4440]. Roman cavalry harness strap terminal. The lower end has a round, slightly bulbous 'knob' with a circumferential groove. The end is separated from the plate by a rectangular bar. On the front of the plate traces of niello decoration can be discerned, whilst the rear of the plate reveals it was attached to the harness with two rivets. Dating from the Pre-Flavian period, similar examples have been found in Colchester, Chichester and Chester (Bishop 1988) and further cleaning and analysis of the decoration may reveal that the surface was originally tinned (Dr M.C. Bishop pers.comm).

Area 4

Enclosure ditch terminus F.1527

<2509> [4498] SF1153. Small domed copper alloy stud or button with a horizontal attachment bar on the underside; diameter 13mm, weight 2g. Similar to that <2516> found in F.1897. Late Iron Age/Roman.

Enclosure ditch F.1531

<2528> [5041] SF1160. Substantially complete large socketed/tanged iron hand sickle (Figure 16). Although both the tip and most of the socket/tang are missing the blade is relatively well preserved; length 150mm.

Pit F.1554

<2508> F.1554 [2986]. Flat-headed circular copper alloy stud, 20mm in diameter with and off-set circular shank found with fragments of a probable second similar stud (only the shank substantially survives); total weight 4g. Two similar examples were found from within the same feature during the 2011 fieldwork season (Appleby in Slater *et al*. 2012).

Pit F.1897

<2504> [4398] SF1134. Two refitting fragments of a rounded, straight-edged object measuring 52mm long and 20mm wide; the rounded end has a semi-circular perforation.

<2506> [4398]. Three objects: a) a small irregular oval object 25mm long by 17mm wide – function unknown; b) small section of reasonably well preserved saw blade with two transverse breaks measuring 38mm long. The serrations face 'backwards', indicating the cutting action is achieved as the saw is pulled towards the user; c) fragment of a conical-shaped ferrule or collar 48mm long. These three items may represent the fragments from a saw - the collar forming part of the handle arrangement.

<2507> [4445] SF1145. Long cylindrical iron rod 135mm long, 6mm wide. Undiagnostic (possible pilum shank?).

<2511> [4398] SF1146. Bar or pin, 60mm long, with round, slightly tapering conical head measuring 9mm.

<2516> [4482] SF1147. Small copper alloy domed button or stud with small shank; diameter 12mm, weight 1g.

Trench 1

Knives and tools

<2524> Phase A-E-A [3746]. Slightly tapering object measuring 45mm long and 21mm at the mid-point. No obvious blade edge is present, but this is most likely a knife blade fragment.

Miscellaneous

<2505> [3723]. Fragment from a large Shirehorse sized horseshoe; six rectangular nail-holes are observable four with identifiable in situ nails. These horseshoes are post-Medieval in date as Shirehorses were selectively bred for from the 17th century onwards. Consequently, horseshoe fragment <2514> also falls into this category and are not considered further, although they may provide indirect evidence for agricultural activity on the site.

Trench 2

Knives and tools

<2517> Phase B-C-D [3917] SF957. Rectangular shaped bar or rod 48mm long, width 9mm. One end widens in plane view to 12-13mm and may be indicative of a bladed tool, for example a chisel.

<2520> Phase B-C-B [3919] SF960. Fragment of a large iron pin with large eyelet (8mm) missing its tip; 4mm diameter, 50mm long. Probable leather-working needle.

Brooches, pendants and buttons

<2526> Phase B-C-B [3920] SF965. Complete iron Roman bow brooch (type). The latch plate is complete, with the spring and pin attached, although the pin is bent backwards; length 60mm. May be Late Iron Age in origin.

<2529> Phase B-C-B [3926] SF967. Triangular-shaped object with a centrally placed V-shaped cut-out along the longest edge, unequally shaped projecting arms and a central perforation on the protruding tang/attachment point; 60mm x 31mm. Possible pendant or harness fitting.

Weaponry

<2503> [3914] SF951. Well preserved ballista or catapult bolt, with pyramidal-shaped bodkin head and long conical socket (Figure 16); 85mm long. Ballista bolts were relatively short-length projectiles used by the Roman Army on a variety of weapons, all essentially a variation of the catapult, and primarily for siege warfare. Nonetheless, these weapons are attested from a number of hillforts in Britain, with numerous examples already recovered from Ham Hill (M. Brittain pers. comm.), the inference being that catapults were used against occupants or defender during the immediate westward advance of the army following the invasion of 43 AD. In terms of Ham Hill it would be useful to attempt to locate where the other examples of ballista bolts were found as they may indicate a focus for attack/defence.

Miscellaneous

<2510> Phase B-C-B [3916] SF952. Irregular, triangular-shaped fragment of copper alloy sheet measuring 75mm x 50mm (max width). A rivet and small piece of a second fragment of copper alloy sheet is present towards the narrowest point, thus illustrating this was once part of a much larger object.

<2512> Phase B-A-D [3902] SF953. Fragment from a small to medium sized horseshoe; width approximately 85mm. Modern.

<2513> Phase B-A-D [3902] SF954. Well preserved flat spoon terminal with part of the flat, widening shank surviving. Length of terminal 52mm, width at mid-point 18mm. Post-Medieval/modern.

<2515> Phase B-A-D [3904] SF956. Fragment of thin piece copper alloy sheet 62mm wide. The sheet has been clipped or cut close to one corner; it is unclear from the photo if this is a piece from a large object with one wing surviving. Undated.

<2518> Phase B-C-D [3917] SF958. Small iron rod or pin fragment; 35mm long. Undated.

<2519> Phase B-C-B [3916] SF959. Rectangular piece of iron plate or sheet measuring 35mm x 35mm. No obvious perforations or decoration apparent on the x-ray; undiagnostic.

<2521> Phase B-C-B [3916] SF961. Small straight iron rod or bar 45mm long, 2mm wide; undated.

<2522> Phase B-C-B [3919] SF962. Straight, tapering iron rod or bar 85mm long, 5mm wide; possible tip of pilum. Undated.

<2523> Phase B-C-B [3920] SF963. Reasonably well preserved square/rectangular cross-sectioned nail with a small domed (hammered) head; length 38mm. Undated.

<2525> Phase B-C-B [3926] SF964. Irregular-shaped fragment of copper alloy sheet measuring approximately 80mm x 60mm. Located towards one edge is a second piece of torn copper alloy sheet, triangular in shape, with three in situ rivets along its surviving edge where it has been fixed to the large fragment. Similar in appearance to cat. No. 2510 it would be interesting to further compare these two objects and to undertake a metallurgical analysis to help narrow down the date of manufacture.

<2527> Phase B-C-B [3916] SF966. Small rod, 30mm in length, bent towards the thicker end.

<2530> Bent, complete handmade nail, approximately 65mm long; undated (unstratified – not in catalogue).

<2532> Phase B-C-C [3925] SF970. Tapering iron rod fragment, 22mm long. Undated.

<2533> Phase B-C-C [3925] SF971. Flat tapering fragment measuring 35mm long, wider at one end; possible Roman flat-headed nail (Manning Type 1).

<2531> Phase B-C-C [3925] SF969. Tapering iron bar or rod measuring 85mm long; possible pilum shank. Undated.

<2534> Unstratified. Bent fragment of decorated lead strip, probably from the backfill of earlier excavation on site.

Discussion

The assemblage recovered during the 2012 fieldwork programme on initial assessment is unremarkable. Little of the ironwork is from cut features, and much of it is undiagnostic or relatively modern. Nonetheless, there are several observations and remarks than can be made about the material.

Recovered during a second spell of metal detecting of the exposed buried soil in Area 3 (to be excavated in 2013), the Roman cavalry harness strap end dates to the post-Conquest period of the area when the Roman Army was campaigning towards the southwest, with literary sources of the period asserting that resistance was encountered at several centres, these being interpreted as hillforts. The presence of cavalry equipment dating to this period is thus of interest as the terrain around the site is unsuitable for the use of cavalry as part of an assault on the ramparts or gateway. The strap end may thus have been brought to site as part of a war-booty, or more likely, lost by someone visiting the site shortly after the area came under Roman control. The recovery of several rods and a collar from the rampart Trench 2 (see below) is also of note as these may be of Roman manufacture and possibly weapon related. Until further analysis of these pieces is undertaken, this interpretation must remain speculative; however, the recovery of the ballista bolt also from Trench 2, adding to the earlier examples recovered from Ham Hill, does lend some support to this interpretation.



Figure 16. Photo and x-ray of an iron sickle from enclosure ditch F.1531 (top) and a ballista bolt from Trench 2 (below)

The recovery of the small assemblage from pit F.1897 is of significance, insofar as these were found within a feature located inside Structure II and in association with a quantity of Glastonbury type and wheel-made pottery (see Brudenell, this volume). The assemblage including a copper alloy stud or button, a saw blade fragment, iron rod, ferrule/collar and a possible piece of iron-binding or second blade and an iron lump. Saws are known from other Iron Age sites, notably the Glastonbury Lake Village (Bulleid and Gray 1917) and Cadbury Castle hillfort (Saunders, in Barrett *et al*. 2000, 230-1), but more significantly from Ham Hill itself, with three fragments of a toothed saw recovered from an Iron Age pit (F.1534) in 2011 (Appleby in Slater *et al*. 2012). The presence of a second flat, rounded strip or blade and the collar does highlight the possibility that these items were selected for deliberate deposition as discussed in the earlier report (*ibid.*), but this material is most likely to have been deposited as part of general cleaning of the structure or as refuse. A similar interpretation may also be provided for the sickle recovered from the upper fill of the enclosure ditch F.1531, although here relating to an area beyond the excavation perimeter. At least one other sickle has been found from Ham Hill, although its context is unknown (Anon 1886). The recovery of a further two flat-headed studs (cat. no. 2508) in pit F.1554 almost identical to two examples found in Pit Cluster 2 in Area 1 does, however, highlight the possibility that these were not chance losses, but were part of a deliberate deposit.

The triangular iron object from Trench 2 (cat. no. 2529) is intriguing as this may be a pendant or scabbard fitting. Alternatively, it may be a fragment from a larger more recent object; an interpretation that can be applied to the copper alloy sheet fragment described under catalogue number 2515. The two pieces of riveted copper alloy sheet (cat. nos. 2510 and 2525) have a superficial similarity and further metallurgical analysis of these two items may provide additional data that would enable the date of their manufacture to be broadly determined, and a comparison of their finds location with any evidence for metalworking debris is recommended. Of the remaining small number of miscellaneous copper alloy and iron objects recovered during the 2012 (and 2011) season, these are potentially indicative of midden material that has been spread or disturbed.

Slag – Simon Timberlake

A total of 8.86 kg of ‘iron slag’ (Table 12) consisting mostly of slag lumps with the occasional smithing hearth base, vitrified clay and fragments of partly vitrified clay furnace hearth lining were recovered from a variety of different contexts excavated within Trench 2. Small amounts of iron slag were also recovered from features F.1564 (an Iron Age enclosure entrance terminus) and from F.1537 (a pit within Structure II) – the latter slag taken from the >4mm residue of an environmental sample. All of this material appears to relate to secondary ironworking, or iron smithing, the latter confirmed in some cases by the visual identification of platy hammerscale welded into some of the slag smithing lumps.

The period of ironworking ranges from the (Late) Iron Age to the Early Romano-British period; the majority of it from Trench 2, in an area clearly associated with iron smithing. The near-absence of charcoal inclusions within the slag, and the fragmentary burnt silty clay and vitrified furnace linings seem characteristic of these iron smithing operations; with smithing hearth bases being rare, but slag smithing lumps more common, suggesting perhaps the forging of just small items, such as domestic utensils, knives, nails etc., or perhaps even the re-forging/ sharpening of objects, and also the carrying out of repairs. Just two small examples of dense (relatively non-porous) iron slag were noted which *could* have resulted

from smelting (i.e. as tap slag). Given the rarity of these and their individual contexts, an association with iron smithing seems a more likely explanation.

Collected alongside the slag were 586g of iron minerals recovered from Area 4, and to a lesser extent from contexts within Trenches 2 and 3. These mostly consisted of dense sub-metallic goethite (iron hydroxide) and limonite, and more rarely hematite. It seems possible that these formed (geologically) as iron replacement or joint/ fault fills within the Ham Hill limestone or other local rock. As has already been suggested (Timberlake, in Slater *et al*. 2012) lumps of this mineral could have been collected for use as an iron ore (given that they are of a grade sufficient for smelting), yet to date, no evidence of primary metalworking has been found.

Table 12: Summary of Iron Slag.

Cat. No.	Area/ Trench	Feature	Context	SF no.	No. pieces	Weight (g)	Iron smith slag	Description
3403	A1	1531	5041	Env sampl no. 1831	1	<1	slate	tiny piece of micac Devonian ? slate – possibly intrusive within IA enclosure ditch
3561	A2	1981	5284	Env sampl no. 1936	1	18	goethite adhering to rock	coating one side of a pebble of quartz porphyry
2918	A4	-	-	SF 1117	1	324	ditto	ditto
3005	A4	1527	4571	-	1	4	natural goethite (ore?)	iron oxides
3097	A4	1564	5273	-	1	24	-	iron smithing slag lump
3162	A4	1897	4398	-	1	10	ditto	ditto (found in IA pit)
3175	A4	1897	4482	-	3	202	natural goethite (ore?)	iron oxides/ hydroxide
3339	A4	1537	2813	Envir sampl no. 1661	1	<1	-	small frag vitrif furnace lining? from >4mm residue
3469	A4	1564	3062	Env sampl no. 1629	1	8	limonite	iron hydroxide replacing soil/ rock
2634	Tr1	-	3746		1	1		vitrified furnace lining
2648	Tr1	-	3753	-	1	90	Fe smithing/ smelting?	dense iron slag
2677	Tr2	-	3911	-	7	64	-	x5 pieces of iron slag (smithing hearth 'lumps') + 2 pieces of vitrified clay
2685	Tr2	-	3913	-	1	20	-	iron smithing slag lump
2699	Tr2	-	3916	-	39	844	-	incl x21 pieces of vitrified clay + 17 iron slag 'lumps' + a smithing hearth base (348g)
2705	Tr2	-	3917	-	6	118	-	x4 pieces of iron slag ('lumps') with some re-melted layers + 2 pieces of vitrified clay (furnace lining)
2712	Tr2	-	3918	-	19	246	-	incl. x16 pieces of broken-up iron slag (probably parts of a smithing hearth base) + 3 pieces of vitrified clay (absorbed furnace lining)
2721	Tr2	-	3919	-	611	5420	*Fe *Cu	'slag' incl. x57 pieces burnt clay (furnace lining); x253 vitrified clay; x301 iron slag 'lumps' + small amount of platy hammer scale. Traces of charcoal. x1 piece of 'copper rich' slag + x1 copper-alloy artefact fragment.

Cat. No.	Area/ Trench	Feature	Context	SF no.	No. pieces	Weight (g)	Iron smith slag	Description
2730	Tr2	-	3920	-	9	80	-	x6 pieces of iron slag + 3 pieces of vitrified clay
2738	Tr2	-	3923	-	1	4	limonite	iron hydroxide ochre replacing soil
2747	Tr2	-	3925	-	42	194	-	x23 pieces of iron slag ('lumps') + 19 pieces of vitrified clay (furnace lining)
2758	Tr2	-	3926	-	1	2	slate	micac Devonian ? slate associated with hearth?
2759	Tr2	-	3926	-	103	1084	-	incl x50 pieces of vitrified clay (from furnace lining) + 53 iron slag 'lumps' + small amount of platy hammerscale
2760	Tr2	-	3926	-	1	40	associated with Fe smithing	burnt clay hearth lining with fused and semi-vitrified surface
2769	Tr2	-	3927	-	11	52	-	x3 pieces of iron smithing slag + 8 pieces of vitrified clay
2784	Tr2	-	3935	-	1	56	Fe smithing/ smelting?	dense iron slag
2787	Tr2	-	3939	-	4	10	-	vitrified clay as detached pieces of furnace lining within iron smithing hearth
2797	Tr2	-	3942	-	38	170	-	incl. x35 pieces of broken-up iron slag ('lumps') + 2 pieces of vitrified clay (one with platy hammerscale adhering to it)
2811	Tr2	-	3950	-	1	4	ditto	
3611	Tr2	-	3911	Env sampl no. 1957	4	4	-	burnt and fused clay of furnace lining? from >4mm residue
3617	Tr2	-	3919	Env sampl no. 1958	>200	326	-	small fragments from >4mm residue consisting of: minor broken-up iron slag, vitrified clay, fused clay, burnt clay lining, platy hammerscale + small frags of Devonian slate (i.e. part of furnace build?)
2670 / 2669	Tr2	-	3909	-	1	18	-	broken-up iron slag
2819	Tr3	-	unstrat	-	1	10	natural goethite (ore?)	iron oxides/ hydroxide
3639	Tr3	-	3784	Env sampl no. 1889	1	<1	goethite	from >4mm residue: iron oxide
3664	Tr3	-	3799	Env sampl no. 1903	1	<1	fossil	tiny pyritised cast of internal mould of bivalve *Nucula pectinata* from the Gault Clay
3681	Tr3	-	3807	Env sampl no. 1900	1	4	-	smithing slag lump (from >4mm residue)

Worked, Utilised and Burnt Stone – Simon Timberlake

Worked stone

Approximately 20.9 kg of worked stone was recovered from the 2012 phase of excavations. This included some probably modern quarried and sawn stone, two hammerstones made of chert collected from probable Iron Age features, some pieces of Iron Age 'Wessex-type' rotary quern of Ham Hill derivation, some imported Romano-British Old Red Sandstone querns, and finally fragments of saddlequern identified from amongst the burnt stone assemblage.

The rotary quern fragments were interesting given that these resembled the 'Ham Hill derivative' form of quern described by Curwen (1937), with all three examples made from quite different rock types. This included one fabricated from Permian trap lava, another from Portlandian sandstone, and quite unusually, one from the Ham Hill limestone itself. The presence here of Permian trapstone lava transported from the Exeter region has been noted from previous excavations on Ham Hill (Hayward in Leivers *et. al*. 2006). Meanwhile the discovery of fragments of heat-fractured saddlequern amongst the burnt stone assemblage from the hillfort is not atypical of what we find in earlier Iron Age settlements, the level of re-use of this stone within sites in East Anglia (for instance within the Cambridge region at Barleycroft and Trumpington (see Tabor 2012 and Patten 2012) being generally high.

The small spindlewhorl made of Devonian slate in Trench 3 reflects the use of a sympathetic rock type in the fabrication of a universal artefact. This was all the more unusual on account of the intentional threading notch which had been cut into the rim of this to assist with the coarse spinning of wool. This is a very typical artefact associated with domestic dwellings, and thus an indicator of internal settlement present within the northern perimeter of the hillfort. Dating of the artefacts requires further analysis, but it is from a late phase of the rampart sequence.

Building stone

<3305> Trench 2 [3904]. x6 rock-sawn and faced fragments of Ham Hill limestone. Quite possibly these derive from modern dressing and on-site stone preparation, and are probably off-cuts. These may well have been machine-cut? Weight 862g, 410g, 512g, 530g, 1660g, 1658g.

Hammerstone

<3147> F.1896 [4506]. A hammerstone fashioned from a broken lump of honey brown-grey coloured chert, most probably derived from the Upper (Blackdown?) Greensand (90mm x 60mm x 50mm; weight 200g). Evidence for hammer use (against stone, flint or chert) can be seen on one heavily pounded side. Subsequent light pounding wear also extends around the end edges of this stone. There also appears to be evidence of flaking resulting from its use around the sides of this. A hammerstone made from a very similar type of honey-coloured chert was recovered in 2009 from the Iron Age enclosure ditch F.1009.

<3163> Area 4. F.1897 [4398]. A sub-spherical hammerstone fashioned from a small boulder of reddish-brown chert (75mm x 65mm x 5mm; weight 500g). The origin of this chert is probably the Upper (Blackdown?) Greensand. This appears to have experienced very extensive all-round use, the only unutilised areas being the two flattest faces. Although this was found within an Iron Age pit, it seems likely this is earlier prehistoric in date.

Rotary quern

<2857> Unstratified. The worn basal stone of a beehive 'Wessex' quern, probably of the Ham Hill derivative type (380mm in diameter and 20-50mm deep, with a central axle hole of *c*. 50mm (> 5kg)).The presence of a raised worn collar around the central axle pivot hole, and a concave to slightly convex profile to the grinding surface, shares a resemblance with the type of wear seen on Curwen's illustrated Ham Hill example (see Curwen 1937, 142, Figure 24). Interestingly this quern has been manufactured from coarse-grained Ham Hill limestone. Whilst still abrasive, the relatively soft and friable nature of this stone has led to the extreme wear seen on this; most of the lower stone having been completely worn away, and following the breaking-off of part of the exterior rim, this appears to have been discarded.

<2878> SF 1071. A fragment (120mm x 90mm x 30-45mm (thick); weight 896g) broken-off from the outside edge of the upper stone of an Old Red Sandstone quern (probably Shaffrey's Type 1 or Type 2 (Shaffrey 2006)). The slightly concave grinding surface has been polished smooth through use. There are also traces of burning and further fracture of this stone around the outer margin.

<2927> SF 1125. A fragment (130mm x 100mm x 40-175mm (thick); weight 1.67 kg) broken-off the outside edge of the lower stone of a disc-shaped Old Red Sandstone quern (probably Shaffrey's Type 2a or 2b (Shaffrey 2006). A probable source or quarry location for this quern could be the Forest of Dean/ Wye Valley or Gloucestershire east of the River Severn. Their distribution as traded items during the Romn period is common within the Bristol/Mendips area, but relatively rare along the North Somerset coast. The concave grinding surface of this quern has been worn and polished smooth. The lithology of this sandstone appears to be of a well-rounded quartz pebble grit. The estimated original size of this is around 450mm (diameter).

<3177> Area 4: SF 1158, F.1897 [4484]. A large fragment from the lower stone of a 'Wessex type' quern, possibly of the Ham Hill derivative type (330m in diameter and 170mm deep (>5 kg)). Because of the break line down the middle, no trace of the axle pivot hole survives, yet the gently convex surface is indicative of the characteristic and diagnostic concave sloping underside of the missing upper stone. This lower stone is large and bun shaped, with a narrower (240mm diameter) flat pedestal for its base. The quern has been manufactured from a coarsely crystalline Permian trapstone lava, the source of which is the Exeter region, more than 70 distant from Ham Hill (Hayward in Leivers *et al*. 2006).

<3243> Area 4: SF 1161 F.1932 [5074]. Part of the upper stone of a beehive 'Wessex type' quern. Weight >5kg; 200mm x 160mm x 150mm (original size c. 300mm diameter?)). This form shares certain similarities with the derivative Wessex type which Curwen describes from Ham Hill (see Curwen 1937, 142), possessing a flat to slightly concave basal grinding surface which slopes at less than 3°. However, the presence of a distinct hopper hollow in the top is quite unlike that shown in the example illustrated as the classic Ham Hill Wessex type (see Curwen 1937, Figure 24). The small size of this quern fragment, and thus the absence of a hole for a handle which appears to be diagnostic, makes it difficult to identify this beyond the classic Wessex form. The exterior surface of the quernstone has been finely pecked and shaped, whilst the grinding surface has been worn smooth, considerably more so around the *c*. 60mm diameter axle hole. The quern may have been burnt, and is also stained red-brown from the surrounding soil. The rock type appears to be of Portlandian sandstone, given the presence of the fossil gastropod *Aptyxiella portlandica* and fragments of the bivalve *Laevitrigonia gibbosa* – this seems likely to be a de-calcified calcareous sandstone , sharing certain similarities with the classic 'Portand Roach'; with its origin perhaps in the Isle of Purbeck/ Portland (East Dorset), more than 50km distant.

Saddlequern

<3035> Area 2 F.1531 [4454]. A small heat-fractured fragment from the edge of a probable slab-type saddlequern (65mm x 50mm x 55mm thick; weight 210g). A small part of the external edge of this is visible, and also the basal surface, the latter also perhaps used as a grinding face. The upper and most prominent grinding surface is flat and polished (worn) from extensive use. The rock is a fine-grained meta-sandstone/siltstone, partly silicified, but also with fine micaceous bands. Most probably from the Old Red Sandstone (Devonian). Found within the fill of the Iron Age enclosure ditch.

<3063> Area 4 F.1527 [3648]. A small heat-fractured fragment from the basal edge (?) of a possible saddlequern (230g). The piece appears to have been shaped, but the flat surface in question does not appear to be a grinding surface. The rock is a microsyenite/ diorite, and is evidently non-local , but probably SW England in origin.

<3245> SF 1157. F.1935 [5009]. Two adjoining fragments from a shallow slab-like saddlequern made from a boulder slab of microsyenite(?). Dimensions: 100mm x 60mm x 20-40mm (thick); weight 344g. The original saddlequern may have been around 300mm long, since broken up by burning. A possible source for this rock may be the igneous intrusions within the Dartmoor area.

Spindlewhorl

<2826> Trench 3 [3783]. A carved , round perforated disc of pale grey-green Devonian slate, c.40mm diameter and 5mm thick, with a central drilled and chamfered hole to take a stick (*c*. 5mm diameter), used as a spindlewhorl (weight 20g). On one side there is a shallow carved notch (of *c*. 2mm diameter), most likely cut to take the twisted thread when spinning the wool. The nearest source of Devonian Slate is likely to be North Somerset (i.e. Brendon Hills), though this might well have its origin further west.

Utilised Stone

Some 8.7 kg of pebbles used as sling stone were recovered from this phase of excavation (Table 13). This compares with 15.4 kg recovered during the previous phase of 2011 excavation, and just 209g in 2009. As might be expected, the characteristics of these were all pretty similar, most of them being small oval-round flint beach pebbles, typically of around 20-50g each (35mm-40mm diameter), with some instead being composed of yellow quartz or chert, or very rarely other exotics. This composition range and pebble size suggests a coastal source such as Chesil Beach (as Hayward (2007) and Jefferson (1992) have suggested), whilst the rarer incidence of exotics originate from East Devon and Cornwall, a product of west to east longshore drift.

A large circular and perforated slab of chalk recovered from Area 1 during quarry works between fieldwork seasons may be natural and unworked, and an example of a weathered mould of a very large chalk ammonite, yet equally this might then have been used as a weight or as a tether.

Uncertain – possibly natural

Unstratified. Of uncertain identification, found on the surface by quarrymen. This is in two parts. Perhaps part of a used natural stone (*c*. 390mm diameter +170mm high with a c.100mm diameter sub-cylindrical perforation). This could be the considerably weathered (weathered-out) mould of a large Lower Chalk ammonite – probably not *Parapuzosia* sp., but may be the thickened outer whorls of *Calyoceras* sp. or perhaps a *Scaphites*? These pieces show signs of considerable weathering and also the loss of surface detail on one side, perhaps due to half of this having been buried, and the other half of it having been exposed above ground. The unweathered part suggests this might have been subsequently shaped on the exterior, perhaps for use as a weight or even as a roller. The evidence for this being one of the 'hardground' chalks is the presence of intensive (fossil) burrowing. The nearest source of chalk is the Dorset coast or the Axe Valley, Devon.

Burnt Stone

In total some 29.88 kg of burnt stone was recovered (Table 14), of which 25.13 kg (89%) consisted of Ham Hill Stone. The remaining (11%) of the burnt stone was composed of 0.88 kg (3%) of local micaceous siltstone (Yeovil Sands Formation?), 0.76 kg (2.7%) of non-local dolerite, 0.5 kg (1.76%) of granodiorite + quartz porphyry, plus small amounts of a Jurassic (Lias) cementstone and Lower Greensand chert and sandstone and other rocks. The relatively

high percentage of exotic material in the form of dolerite and quartz porphyry is interesting in this respect, particularly as the nearest source of glacial erratic material probably lies some 30-40km to the east. It is possible that the latter represents broken-up yet unrecognisable quernstone. This is suggested by the recognition of Permian trapstone lava amongst the burnt stone, the latter clearly a rock that was imported for use as quern from sources known to outcrop within the Exeter region. The variation in size of the burnt fragments suggests both primary and secondary use of this material for the purposes of cooking, although the larger slabs of Ham Hill stone may once have lined or lain-over hearths; either domestic ones or those associated with metalworking. Approximately 1.42 kg of burnt stone (almost all of it Ham Hill stone) was recovered from the >4mm fraction residues present within the environmental bulk samples. This indicates the ubiquity of material from this site.

Some 30% of the burnt stone (8.77 kg) was recovered from the entrance termini (F.1527 and F.1564) of the Iron Age enclosure ditches, whilst another 30% came from the fill of a pit or posthole (F.1878). However, the widest variety of stone types (including crystalline dolerite and quartz porphyry) came from the enclosure ditch and its terminals, suggesting that these features may have been repositories for burnt and broken-up stone artefacts, particularly of quern. The Ham Hill Stone, on the other hand, may have been the much more utilitarian burnt stone, used as packing material for postholes as well as for lining domestic hearths.

Table 13: Summary of Table of Utilised Stone.

Cat. No.	Trench / Area	Feature/ SF	Context	Nos. frags	Size (mm)	Weight (g)	Geology	Notes
3014	A2	1531	4411	1	25	24	pebble round flint	slingstone
3019	A2	1531	4419	1	40	46	pebble light brown chert sstn	slingstone
3031	A2	1531	4452	1	40	50	ditto	slingstone
3041	A2	1531	4529	2	30	48	ditto	slingstones
3045	A2	1531	4530	1	45	70	ditto	slingstone
3050	A2	1531	5040	2	40	68	ditto	slingstones
3056	A2	1531	5041	2	40	88	flattened oval flint pebbles	slingstones
3143	A2	1895	4371	1	40	38	flattened oval-pebble of yellow quartz/ quartzite	slingstone
3185	A2	1899	5151	1	35	32	brown chert or quartzite	slingstone
3187	A2	1899	5152	1	35	22	pebble of brown chert or quartz sandstone	slingstone
3203	A2	1902	4669	1	85	200	angular brown chert –frost pitted	
3241	A2	1927	4554	1	25	12	small pebble of brown chert	slingstone?
3242	A2	1928	4560	2	20-25	20	small round pebbles of yellow quartz/ quartzite	slingstones?
3249	A2	1936	5002	1	40	40	split oval-shaped smooth pebble of flint	slingstone?
3252	A2	1939	5057	2	35-50	110	sub-rounded and slightly flattened beach pebble of flint + ?beach pebble of yellow quartz	slingstones
3267	A2	1941	5121	100+	25-80	2004	angular brown chert + flint + goethite (<6) + yellow quartz pebbles (<10)	none of this material is burnt or obviously utilised/ collected
3301	A2	1988	4647	1	30	14	broken fragment of yellow chert	
3521	A2	1914	4478	1	30	22	sub-round yellow quartz pebble - fractured	slingstone (from >4mm residue of Enviro sample 1820)
3534	A2	1936	4649	1	20	8	oval-shaped smooth pebble of yellow quartz	slingstone (from >4mm residue of Envir sample 1948)
3559	A2	1981	5284	1	23	14	sub-square – round pebble of yellow quartz/ qtzite	slingstone (from >4mm residue of Enviro sample 1936)
2863	A4	SF 1054	-	3	15-30	26	small pebbles of yellow quartz + goethite + grey chert	slingstone
2864	A4	SF 1055	-	1	30	10	ditto	-
2865	A4	SF 1056	-	1	15	4	ditto	slingstone
2867	A4	SF 1058	-	1	40	42	sub-rounded pebble of brown chert	slingstone

Cat. No.	Trench / Area	Feature/ SF	Context	Nos. frags	Size (mm)	Weight (g)	Geology	Notes
2868	A4	SF 1060	-	1	40	44	angular – sub-rounded and frost pitted brown chert	slingstone
2869	A4	SF 1062	-	1	45	50	pebble of yellow quartz	slingstone?
2874	A4	SF 1067	-	1	105	502	goethite-cemented coarse grit sandstone – possibly from the carstone or Greensand	this could have been used as an ore of iron
2907	A4	SF 1097	-	1	45	58	round-oval pebble of flint	slingstone
2929	A4	SF 1127	-	1	60	26	Devonian slate	
2953	A4	1011	4437	5	30-50	292	ditto	slingstones
2980	A4	1011	4592	1	35	26	round-oval pebble of flint	slingstone
2989	A4	1506 / SF 1107	4246	1	75	196	angular brown chert –frost pitted	-
3069	A4	1527	3650	1	40	60	round-oval flint	slingstone
3093	A4	1564	4521	1	45	68	sub-round pebble of flint	slingstone
3096	A4	1564	4557	1	45	70	sandy fossilif limestone (local Yeovil Sands?)	
3098	A4	1564	5273	2	40-55	78	oval-shaped pebble of laminated sandstone + sub-round pebble of fossiliferous greensand	slingstones
3101	A4	1564	5274	2	40-45	108	round-oval pebbles of flint and quartzitic sandstone	slingstones
3103	A4	1578	5004	1	30	18	broken layer of goethite	possible iron ore or local natural
3164	A4	1897	4398	11	30-50	452	oval-round pebbles of beach flint (7) + Bunter quartzite (BSPB) + yellow quartz/ quartzite + white quartz (burnt)	slingstones
3176	A4	1897	4482	3	35-45	122	round-oval pebbles of beach flint	slingstones
3353	A4	1011	4439	1	20	8	sub-round yellow quartz pebble	slingstone (from >4mm residue of Enviro sample 1799)
2633	Tr1	-	3746	2	40-45	102	round-oval beach flint	slingstones
2662	Tr2	-	3904	2	30	36	round-oval flint beach pebbles incl x1 fractured	slingstones
2678	Trr2	-	3911	2	25	22	small beach pebble of quartz-chlorite schist or altered gabbro (Cornish origin?)	slingstone
2691	Tr2	-	3914	6	25-55	220	round-oval beach flint (4) and white quartz pebble + Lias limestone	some slingstones
2700	Tr2	-	3916	22	20-50	1022	grey-brown round to oval beach pebble flint (20) + two pieces of Liassic limestone	slingstones

Cat. No.	Trench / Area	Feature/ SF	Context	Nos. frags	Size (mm)	Weight (g)	Geology	Notes
2706	Tr2	-	3917	2	40	50	pieces of Liassic limestone	-
2714	Tr2	-	3918	5	30-45	458	grey-brown beach flint pebbles (2) + large slabs of Liassic limestone	some of it slingstone
2723	Tr2	-	3919	7	20-40	210	oval pebbles of grey-brown beach flint (3) + burnt flint pebble fragment + chips of siltstone + Ham Hill stone	some slingstones
2732	Tr2	-	3920	5	25-45	122	oval-shaped flint beach pebbles (4) + small pebble of polished brwn chert	slingstones
2740	Tr2	-	3923	1	35	18	oval pebble white flint	slingstone
2750	Tr2	-	3925	1	35	38	circular flattened beach pebble of flint	slingstone
2761	Tr2	-	3926	16	30-60	658	round-oval beach pebbles of flint and one chert (14) + small slabs of Liassic limestone (local)	slingstones
2770	Tr2	-	3927	10	30-40	272	ditto + one fragment of a burnt and calcined flint pebble + splinters of a shattered (impacted)	slingstones
2792	Tr2	-	3940	3	35-40	102	oval – flattened grey and brown flint from chalk – beach pebbles	slingstones
2802	Tr2	-	3942	4	35-45	148	ditto	slingstones
2814	Tr2	-	3950	1	35	30	ditto	slingstone
2823	Tr3	-	unstrat	1	10	1	goethite	-

Table 14: Summary of Burnt Stone.

Cat. No.	Area	Feature/ SF	Context	Nos. frags	Size (mm)	Weight (g)	Geology	Notes
2984	A2	1503	-	1	55	106	leucocratic dolerite or microdiorite	-
3416	A2	1540	3648	3	20-105	170	Ham Hill stone	>4mm fraction from residue of enviro sample no. 1867
3142	A2	1878	4328	40	30-210	8620	Ham Hill stone	some large pieces sooted – cooking stone?
3262	A2	1941	5078 + 5121	31	15-130	1760	Ham Hill stone	-
3279	A2	1962	5197	5	80-160	1344	Ham Hill stone	-
3282	A2	1968	5223	2	10-55	26	Ham Hill stone + yellow quartz	-
3266	A2	1971	5121	20	30-150	1912	Ham Hill stone	some pieces burnt just on one side
3287	A2	1972	5236	8	25-Oct	24	Ham Hill stone	-
3300	A2	1988	4647	5	30-90	94	ditto	-
3303	A2	1993	4672	6	30-55	162	Ham Hill stone + fossiliferous siltstone (2)	-
3296	A2	F.1986/ SF1165	4622	3	10-100	190	ditto	-
2860	A2	SF1051	-	1	25	8	micaceous siltstone	-
2882	A2	SF1075	-	1	50	66	leucocratic dolerite or microdiorite	-
2886	A2	SF1077	-	1	40	76	leucocratic dolerite	-
2932	A2	SF1130	-	1	25	12	burnt flint or chert	-
3082	A4	1000	3624	1	30	12	ditto	-
2966	A4	1011	4588	13	30-80	570	ditto	-
2971	A4	1011	4590	7	30-150	1066	ditto	several pieces are sooted and worn – perhaps used as flat cooking stones
2974	A4	1011	4591	1	45	34	ditto	-
3351	A4	1011	4439	1	20	6	Ham Hill stone	ditto – enviro sample no 1799
3352	A4	1011	4439	1	35	18	quartz porphyry	naturally jointed – not shaped or worked: found within >4mm fraction of enviro sample <1799>
3356	A4	1011	4585	3	5	3	Ham Hill stone	>4mm fraction from residue enviro sample no 1826
2983	A4	1503	-	3	30-35	58	altered (weathered) dolerite or basalt?	non-local: this may have been part of a heat-fractured stone implement (also 3004)
3002	A4	1527	4498	12	40-150	2416	Ham Hill stone	some pieces appear to be crudely shaped (discs)

Cat. No.	Area	Feature/ SF	Context	Nos. frags	Size (mm)	Weight (g)	Geology	Notes
3004	A4	1527	4571	4	30-40	128	weathered dolerite (3) + chert flake	the chert flake appears to have been struck
3063	A4	1527	3648	9	40-80	850	leucocratic dolerite (7) + Permian trap lava (1) + Ham Hill stone (1)	NB one shaped fragment of dolerite seems to be the base of a quern or other WS object
3009	A4	1531	4410	1	80	182	Ham Hill stone	-
3013	A4	1531	4411	2	20	16	ditto	-
3026	A4	1531	4451	4	30-50	60	laminated micaceous sandstone	the larger sooted piece may in fact be of burnt clay made from this siltstone rock
3030	A4	1531	4452	1	75	98	altered quartz porphyry	-
3035	A4	1531	4454	2	50-60	284	dolerite + metaquartzitic sandstone (Old Red Sst?)	the metasandstone is a fragment from a heat-fractured saddlequern
3040	A4	1531	4529	3	30-60	74	altered quartz porphyry/ granodiorite with quartz vein + red siltstone (?)	NB siltstone may in fact be burnt clay – one of which encloses a corroded fragment of iron (removed to metal)
3044	A4	1531	4530	2	45-65	130	quartz porphyry/ diorite + Ham Hill stone	-
3055	A4	1531	5041	5	25-Oct	6	-	NB red and grey BC
3404	A4	1531	5041	3	105	198	Ham Hill stone	>4mm fraction residue from enviro sample no. 1831
3077	A4	1550	5066	21	20-120	1496	Ham Hill stone + micaceous siltstone	-
3092	A4	1564	4521	2	30	16	Ham Hill stone	-
3098	A4	1564	5273	13	40-130	998	Ham Hill stone + waterworn greensand and other small sandstone pebbles	NB 2 small pebbles are possible sling stones (not evidently burnt)
3100	A4	1564	5274	3	30-50	52	ditto	-
3482	A4	1564	5274	2	<0.5	1	Ham Hill stone	-
3683	A4	1564	3629	25	40-110	2530	ditto	-
3111	A4	1578	5063	1	35	12	ditto	-
2993	A4	1506/ SF 1110	4286	2	20-35	20	chert (Lower Greensand?)	-
2540	A4	TP 30	2500	1	40	14	metaquartzite	tiny fragment of a waterworn cobble – possibly of Bunter (Triassic) origin
2553	Tr1	-	3722	2	30-40	28	Ham Hill stone	-
2558	Tr1	-	3723	4	15-65	236	Ham Hill stone + micaceous siltstone + cementstone nodule (perhaps	-

Cat. No.	Area	Feature/ SF	Context	Nos. frags	Size (mm)	Weight (g)	Geology	Notes
							Lower Lias – Jurassic?)	
2572	Tr1	-	2572	1	25	6	Ham Hill stone	-
2575	Tr1	-	3730	1	25	8	Ham Hill stone	-
2581	Tr1	-	3732	6	25-Oct	22	Ham Hill stone + micaceous siltstone	-
2590	Tr1	-	2590	4	20-35	38	micaceous siltstone (possibly from the Yeovil Sands Fm?)	-
2597	Tr1	-	3736	3	20-35	26	Ham Hill stone	-
2608	Tr1	-	3740	3	25-Oct	20	micaceous silstone	-
2618	Tr1	-	3743	6	30-Oct	22	micaceous siltstone (5) + Ham Hill stone	-
2632	Tr1	-	3746	2	25-30	16	micaceous siltstone	-
2651	Tr1	-	3755	1	150	634	Ham Hill stone	-
3580	Tr1	-	3732	4	25-Oct	14	Ham Hill stone	ditto -enviro sample no 1752
3585	Tr1	-	3732	1	20	6	Ham Hill stone	ditto -enviro sample no 1817
3590	Tr1	-	3734	21	10-70	128	ditto	>4mm fraction residue from enviro sample no 1834
3600	Tr1	-	3743	23	10-45	154	ditto	ditto -enviro sample no 1837
3605	Tr1	-	3753	7	10-35	44	Ham Hill stone + micaceous siltstone	ditto -enviro sample no 1955
2665	Tr2	-	3908	1	50	48	ditto	-
2675	Tr2	-	3911	1	20	8	ditto	-
2690	Tr2	-	3914	1	130	654	micaceous siltstone	-
2698	Tr2	-	3916	3	20-80	144	Ham Hill stone	NB incl x1 small piece BC
2711	Tr2	-	3918	3	30-Oct	10	Ham Hill stone + cementstone (Lower Lias)	-
2722	Tr2	-	3919	7	<10-35	28	Ham Hill stone + Permian trap rock + Portland Roach	-
2723	Tr2	-	3919	3	35-55	130	Ham Hill stone + micaceous siltstone	-
2749	Tr2	-	3925	5	20-50	78	Ham Hill stone + micaceous siltstone + altered dolerite	-
2760	Tr2	-	3926	17	10-80	316	Ham Hill stone (11) + micaceous siltstone	NB 1:Upper Toarcian (Lias) ammonite fragments present within micaceous siltstone (local Yeovil Sands?)NB2: burnt clay included with a fused/ part vitrified surface as part of furnace lining?

Cat. No.	Area	Feature/ SF	Context	Nos. frags	Size (mm)	Weight (g)	Geology	Notes
2768	Tr2	-	3927	6	20-60	86	Ham Hill stone (5) + micaceous siltstone	-
2778	Tr2	-	3929	2	35-80	198	micaceous siltstone	-
2783	Tr2	-	3935	1	10	2	Ham Hill stone	-
2796	Tr2	-	3942	1	40	22	micaceous siltstone	-
2813	Tr2	-	3950	1	50	94	micaceous quartzitic sstn	-
3610	Tr2	-	3911	2	5	2	Ham Hill stone	ditto sample no 1957
3616	Tr2	-	3919	<30	10-35	106	Ham Hill stone + micaceous siltstone	ditto sample no 1958
3622	Tr2	-	3929	<30	10-40	154	Ham Hill stone	ditto sample no 1963
3627	Tr2	-	3933	2	25	10	Ham Hill stone	>4mm fraction from residue enviro sample no.1960
3632	Tr2	-	3943	12	10-50	52	Ham Hill stone	ditto sample no 1966
2821	Tr3	-	unstrat.	2	25-50	56	Ham Hill stone	NB x1 piece BN removed
2856	Tr3	-	3827 + 3826	1	20	8	Ham Hill stone	-
3640	Tr3	-	3784	7	5	4	Ham Hill stone	ditto – enviro sample no 1889
3643	Tr3	-	3785	3	25-Oct	12	Ham Hill stone + micaceous siltstone	ditto – enviro sample no 1890
3650	Tr3	-	3794	2	5	2	Ham Hill stone	ditto – enviro sample no 1888
3656	Tr3	-	3796	2	50-70	118	Ham Hill stone	>4mm fraction residue enviro sample no 1908
3659	Tr3	-	3797	5	30-Oct	22	Ham Hill stone + micaceous siltstone	ditto – enviro sample no 1907
3668	Tr3	-	3801	8	10-60	82	Ham Hill stone	ditto – enviro sample no 1898
3678	Tr3	-	3805	3	10-35	14	Ham Hill stone	ditto – enviro sample no 1893
3682	Tr3	-	3807	4	10	4	Ham Hill stone + micaceous siltstone	ditto – enviro sample no 1900
3686	Tr3	-	3808	5	10	6	Ham Hill stone	ditto – enviro sample no 1902
3691	Tr3	-	3809	3	4	<1	Ham Hill stone	ditto – enviro sample no 1901
3693	Tr3	-	3810	1	40	24	Ham Hill stone	ditto – enviro sample no 1909
3698	Tr3	-	3814	7	10-25	18	Ham Hill stone	ditto – enviro sample no 1905
3702	Tr3	-	3815	2	5	2	Ham Hill stone	ditto – enviro sample no 1910
3706	Tr3	-	3827	11	5-20	22	Ham Hill stone	ditto – enviro sample no 1912
3709	Tr3	-	3827	2	10-25	14	Ham Hill stone	ditto – enviro sample no 1913
3798	Tr3	-	3798	2	25-25	12	Ham Hill stone + micaceous siltstone	ditto – enviro sample no 1906

Fired and worked clay – Simon Timberlake

1.55kg of burnt clay (daub) plus a small fragment of a triangular clay loomweight were recovered from the 2012 excavations (Table 15).

Burnt clay

A relatively small amount of burnt clay (1.55kg), as daub, was recovered; some of this coming from the Iron Age enclosure ditches F.1531+ F.1011(86g), an Iron Age pit F.1897 (120g) within Structure II, but the majority of it from a couple of undated pits, particularly F.1980 (844g). In addition, a small amount of daub, most of it fabricated from distinctive white diatomaceous clay, was recovered from several Middle Bronze Age field-system ditches. In addition to this, a collection of fragments (278g) of highly-fired clay from former iron smithing hearth(s) was recovered from Trench 2, the latter presumably associated with the large amount of Romano-British iron slag recovered from this same area of the excavations. The largest proportion of this hearth lining came from context [3919] (Phase B-C-B).

At least eight different types of burnt clay fabric were identified, the commonest ones being a pinkish to light grey silty clay and a buff to grey brown (micaceous) silty clay, although within these there was also a range of inclusions, varying from burnt-out organic (chaff) to shell and quartz grit and sand to clay grog. Other fabric types included laminated brick-red silty micaceous clay (F.1980), a reddish coarsely porous clay (F.1897), a white laminated clay (F.1531), and a dark grey-black charcoal-rich clay (some from Trench 1).

Much rarer were larger pieces of daub as preserved fragments of wall surface, some of them with surviving impressions of stick wattling (e.g. SF.1066 and cat. no. 2979 from the basal silts of enclosure ditch F.1011).

It would be useful to plot the distribution of daub finds from this site in order to look for concentrations which might suggest nearby locations of dwellings or perhaps even clay ovens or hearths.

Worked clay – Simon Timberlake and Marcus Brittain

Two worked clay objects were identified from amongst the burnt clay assemblage. This was the tip of a triangular clay loomweight and an ovoid slingshot, both of a later Iron Age date.

<2883> SF 1076. Apex fragment(s) of a fired clay loomweight: 40mm x 25mm x 25mm (12g). The broken-off apex of a probably triangular-shaped loomweight with a central perforation of c.10mm diameter for hanging on loom. The clay fabric is coarse and organic-rich (with burnt-out chaff inclusions?) possessing a thin red oxidised exterior and mid-dark grey reduced interior. The original size of this triangular loomweight may have been approximately 120mm wide, 150mm high and 50mm thick; the latter dimensions based on similar sized/ shaped examples of Iron Age loomweights found at West Cambridge (Timberlake 2010) and other sites in East Anglia (although local styles of similar type loomweights in Somerset may have been different).This particular type of triangular loomweight appeared at the beginning of the Iron Age and continued in use until the Romano-British period; five complete loomweights of this type were found at Wardy Hill, Cambridgeshire (Gdaniec & Lucas, in Evans 2003, 194 & figure 93), and 51, of which 31 were only small fragments, were found at Danebury hillfort (Cunliffe 1984b, 401-6; type 1, figure 7.47-8).

<3161> F.1897 [4398]. Fired clay slingshot: Length 39mm, thickness 22.9-23.6mm, weight 21g. Ovoid in form, pointed at one end and slightly rounded at the other. Smoothed surface, Pinkish colour on one side, blackish on the other. Clay slingshots are found in Middle and Late Iron Age contexts within hillforts across southern Britain (Finney 2006, Appendix 1). At South Cadbury a total of 113 *unbaked* clay slingshots have been analysed, the majority of which (108) were found in a single pit (Poole 2000). Whilst the average weight, form and dimensions of the South Cadbury slingshots are comparable to the Ham Hill specimen, slingshots from other hillforts are generally slightly larger (e.g. Danebury: Cunliffe 1984b). Sizes of clay slingshots found in regional non-hillfort contexts are also similar to that from Ham Hill (e.g. Glastonbury: Bulleid and Gray 1917, 562-7). The Ham Hill slingshot was found within a pit (F.1897) in Structure 2 containing re-fired pottery, and both copper and iron metalwork. Deposition in pits was also a characteristic of these items at South Cadbury, often in association with metalwork and objects of worked bone and stone (Alcock 1972, 154, Plate 59; Barrett *et al*. 2000, 62 and 83).

Table 15: Summary of Burnt and worked clay.

Cat no.	Trench / Area	Feature	Context/ SF no	Wt (g)	No. of pieces	Colour/ text	Inclusions	Notes
2873	A2	-	SF 1066	28	1	brick red colour dense	-	moulded daub with impression of parallel sticks on side
3018	A2	1531	4419	4	6	1.brick-red coloured silty. 2.pinkish-light grey silty	-	ditto
3024	A2	1531	4451	1	4	grey brown micac silty	-	daub: IA enclosure
3054	A2	1531	5041	4	6	1.pinkish- light brown porous. 2.grey brown micac silty	organic	daub: IA enclosure
3055	A2	1531	5041	5	8	light-mid grey to oxidised red micac silty-clay	-	daub: IA enclosure ditch
3058	A2	1531	5042	3	6	1.buff- brown with grey reduced interior 2. grey brown micac silty	sand-gritty	daub: IA enclosure
3119	A2	1855	4127	8	2	brick red oxidised colour clay	-	daub: Romano-British ditch
3121	A2	1856	4130	8	3	brick-red coloured silty clay	mica shale flakes	daub: pit
3195	A2	1902	4466	6	1	buff- grey brown	-	daub: MBA field system
3244	A2	1935	5009	1	1	white pale grey silty	-	daub: MBA field system
3260	A2	1941	5087	8	5	1.buff- grey brown reduced mica silty. 2.pinkish fine silty clay	-	1. daub: IA pit. 2. daub
3261	A2	1941	5121 +5078	70		light grey micaceous silty-clay	-	daub: IA pit
3331	A2	1531	3571	10	17	1.grey-brown silty mica 2.pinkish- light grey silty	-	daub (from >4mm residue of Enviro 1684): enclosure ditch
3377	A2	1531	4411	4	15	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1787): enclosure ditch
3380	A2	1531	4412	<1	2	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1788): enclosure ditch
3383	A2	1531	4413	2	2	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1789): enclosure ditch
3386	A2	1531	4420	6	5	1.grey-brown silty mica 2.pinkish- light grey silty	reddish clay grog	daub (from >4mm residue of Enviro 1801): enclosure ditch

Cat no.	Trench / Area	Feature	Context/ SF no	Wt (g)	No. of pieces	Colour/ text	Inclusions	Notes
3402	A2	1531	5041	<1	3	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1831): enclosure ditch
3504	A2	1880	4135	<1	1	pinkish- light grey silty	-	daub (from >4mm residue of Enviro 1750)
3520	A2	1914	4478	6	1	pinkish- light grey silty	-	daub (from >4mm residue of Enviro 1820)
3563	A2	1986	4622	8	<30	1.grey-brown silty mica 2.pinkish- light grey silty	-	daub (from >4mm residue of Enviro 1969)
3566	A2	1986	4622	6	29	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1971)
3566	A2	1986	4622	6	<30	1.grey-brown silty mica 2.pinkish- light grey silty	-	daub (from >4mm residue of Enviro 1970)
3568	A2	1986	4622	<1	8	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1972)
3569	A2	1986	4622	<1	5	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1973)
3570	A2	1986	4622	<1	1	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1974)
3573	A2	1986	4622	<1	6	pinkish- light grey silty	-	daub (from >4mm residue of Enviro 1976)
3574	A2	1986	4622	<1	5	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1977)
3576	A2	1986	4622	<1	2	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1978)
2948	A4	1011	4434	6	1	pinkish- light grey silty	-	water-rolled lump of daub: IA enclosure
2979	A4	1011	4592	24	1	pinkish- light grey silty	sand-gritty	daub with impression of stick: IA enclosure ditch
3081	A4	1000	3624	12	1	dense grey-white laminated clay	diatomac clay?	daub: MBA ditch fields

Cat no.	Trench / Area	Feature	Context/ SF no	Wt (g)	No. of pieces	Colour/ text	Inclusions	Notes
3157	A4	1897	4398	92	12	1. pinkish-light grey silty. 2. grey brown micac silty. 3.reddish coarsely porous clay	1. shelly grit+ mud flakes. 2+3. organic	daub: IA pit
3161	A4	1897	4398	21	1	pinkish-reddened brown and black coloured silty micaceous ovoid		slingshot: IA pit
3174	A4	1897	4482	28	4	1.pinkish-light grey mica silty clay - dense. 2. grey brown micac silty clay	organic	daub: IA pit
3338	A4	1537	2813	2	7	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1661)
3346	A4	1011	4434	<1	1	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1797)
3349	A4	1011	4439	<1	1	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1799)
3464	A4	1555	2983	<1	10	pinkish- light grey silty	-	daub (from >4mm residue of Enviro 1607)
3481	A4	1564	5274	<1	3	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1935)
3557	A4	1980	4631	8	14	ditto	-	ditto
3558	A4	1980	4631	836	>100	brick-red coloured silty micaceous	-	many broken-up fragments of layered daub from pit (from >4mm residue of Enviro 1942)
2552	Tr1	-	3722	14	4	pinkish- light grey sandy silty micac	-	daub
2557	Tr1	-	3723	4	1	pinkish- light grey silty	organic	daub
2565	Tr1	-	3726	6	4	1. dense grey-white laminated clay. 2. brick red silty clay	shell + flint	daub
2579	Tr1	-	3732	10	9	pinkish-buff to grey coloured silty	shell + red clay grog	daub
2606	Tr1	-	3740	10	2	buff-yellow dense clay	shell + organic	daub
2613	Tr1	-	3742	4	1	grey-brown silty mica	-	daub
2617	Tr1	-	3743	20	7	1.grey dense silty micac. 2.grey-brown silty micac laminated. 3. dark brown	1+2 organic. 3. Gritty	daub
2623	Tr1	-	3744	4	1	pinkish- light grey silty	organic (chaff?)	daub

Cat no.	Trench / Area	Feature	Context/ SF no	Wt (g)	No. of pieces	Colour/ text	Inclusions	Notes
2631	Tr1	-	3746	4	3	1.pinkish- light grey silty. 2. grey-brown silty mica	-	daub
3584	Tr1	-	3732	<1	8	1.dark grey-black silty 2.pinkish- light grey silty	-	daub with charcoal (from >4mm residue of Enviro 1817)
3599	Tr1	-	3743	27	6	dark grey-black silty	-	daub with charcoal (from >4mm residue of Enviro 1837)
3604	Tr1	-	3753	2	2	pinkish- light grey silty	-	daub (from >4mm residue of Enviro 1955)
2674	Tr2	-	3911	22	1	pinkish- grey buff coloured silty fused	-	furnace lining
2684	Tr2	-	3913	10	1	grey brown micac silty	-	daub
2689	Tr2	-	3914	28	1	dense grey-white laminated clay	full with inclusions of grey grog + grit	daub wall or floor surface
2695	Tr2	-	3916	30	5	pinkish- grey buff coloured silty fused	-	furnace lining
2704	Tr2	-	3917	16	4	1. sandy grey brown fuse 2. Pinkish fine mica silty	grog	furnace lining w fused surface
2710	Tr2	-	3918	4	1	white pale grey silty fuse	sand	furnace lining
2719	Tr2	-	3919	198	32	pinkish- grey buff coloured silty fused	organic (burnt-out chaff?)	all part of furnace lining
2729	Tr2	-	3920	16	6	1. pinkish-grey fused (3) 2. dense buff-coloured clay with reduced centre(2) 3. grey brown micac silty	-	1+2 furnace lining. 3. daub
2746	Tr2	-	3925	16	2	1. pinkish-light grey silty 2. dense buff-coloured clay with reduced centre	grog + flint	daub
2748	Tr2	-	3925	14	1	pinkish- grey buff coloured silty fused	some sand grit + organic	furnace lining
2755	Tr2	-	3926	28	5	1. pinkish-light grey silty. 2. pinkish-grey fused	-	1. daub 2. furnace lining
2766	Tr2	-	3927	4	10	1.pinkish- light grey silty. 2. grey-brown fused (x1)	grog + flint	1.daub 2. furnace lining
3615	Tr2	-	3919	42	<30	1.pinkish- light grey silty 2.grey-brown silty mica	-	daub (from >4mm residue of Enviro 1958)

Cat no.	Trench / Area	Feature	Context/ SF no	Wt (g)	No. of pieces	Colour/ text	Inclusions	Notes
3621	Tr2	-	3929	6	6	grey-brown silty mica	-	daub (from >4mm residue of Enviro 1963)
3638	Tr3	-	3784	<1	1	pinkish- light grey silty	-	daub (from >4mm residue of Enviro 1889)
3667	Tr3	-	3801	<1	1	pinkish- light grey silty	-	daub (from >4mm residue of Enviro 1898)
3673	Tr3	-	3804	5	<30	1.pinkish- light grey silty2. grey-brown silty mica	-	daub? (from >4mm residue of Enviro 1894)

2.8 Economic Data

Faunal remains – Vida Rajkovača

The 2012 fieldwork at the Ham Hill generated a faunal assemblage from Areas 2 and 4, and Trenches 1-3, with a raw fragment count of 5279 fragments and the weight of 15408g. Of some 1573 assessable specimens recorded, 655 were identified to species level (41%). Approximately 90% of these (by count) came from the rampart trenches, with the remainder attributed to cut features. In addition to the hand-recovered material, a total of 810 fragments weighing 535g were collected during the processing of the environmental bulk soil samples. Feature-based material mainly derived from Iron Age contexts, and predominantly from the enclosure ditch and pit F.1897, with the remainder of the cut features, including that of the Middle and Late Bronze Age, producing very little bone. The aim of the assessment is to quantify and characterise the assemblage and provide a statement of research potential.

Methods: Identification, quantification and ageing

The zooarchaeological investigation followed the system implemented by Bournemouth University with all identifiable elements recorded (NISP: Number of Identifiable Specimens) and diagnostic zoning (amended from Dobney & Reilly 1988) used to calculate MNE (Minimum Number of Elements) from which MNI (Minimum Number of Individuals) was derived. Identification of the assemblage was undertaken with the aid of Schmid (1972), and reference material from the Cambridge Archaeological Unit and Grahame Clark Laboratory, Department of Archaeology and Anthropology, University of Cambridge. Ageing of the assemblage employed both mandibular tooth wear (Grant 1982; Payne 1973) and fusion of proximal and distal epiphyses (Silver 1969). Where possible, the measurements have been taken (Von den Driesch 1976). Withers height calculations follow the conversion factors published by Von den Driesch and Boessneck 1974. Taphonomic criteria including indications of butchery, pathology, gnawing activity and surface modifications as a result of weathering were also recorded when evident.

Preservation, fragmentation and taphonomy

Overall bone was moderately preserved with some abrasion and weathering, although the preservation varied between locations (Table 16). The bone recovered from cut features at was quite poorly preserved, whereas bone collected from the rampart trenches exhibited quite good level of preservation.

Collectively the material was highly fragmented and this is evident from the high numbers of unidentifiable cattle and sheep-sized limb bone splinters. Butchery was recorded on 82 specimens (*c.* 5% of the assemblage), of which the majority came from Trench 2 (62 specimens). Pre-depositional treatment of bone covers the entire sequence of the butchery process except for slaughter: skinning and disarticulation, with meat and marrow removal; however, it is important to note that the low percentage of butchered bone may be due to the poor preservation.

Preservation	Trench 1	Trench 2	Trench 3	Areas 2 / 4
Good	1	-	-	-
Quite good	4	233	-	4
Moderate	367	685	72	84
Quite poor	13	1	6	66
Poor	16	-	-	8
Mixed	-	-	13	-
TOTAL	401	919	91	162

Table 16: Number of fragments by trench and preservation category.

Trenches 1-3

Of the three trenches, Trench 2 (total 919) yielded the greatest quantity of bone (Table 17) including disarticulated human bone exhibiting fine cut marks (see Dodwell, this report). These are illustrative of activities either directly associated with the ramparts, or more generally within the hillfort interior. The contrast in finds density between the ramparts and the open area investigations is particularly noteworthy.

Once we have a better understanding of the chronology and the stratigraphic sequence, we will be able to consider the material in more detail. The high percentage of dog remains from Trench 2 is more likely to represent the remains of one or two near complete dog skeletons, although these were not encountered in an articulated state during excavation. The number of horse remains is particularly low in the rampart trenches, especially taking into account the quantity of horse elements recovered in the 2011 investigations within Area 1. Wild resources were evidently utilised, but perhaps only sporadically, and the remains of rabbit are most likely to be intrusive. All three trenches generated large amounts of unidentifiable cattle or sheep-sized limb bone splinters, and for the majority of these, it was not possible to assess whether the splitting was actively generated by activities such as bone working or marrow removal, or if this was resultant through trampling and other post-depositional activities. This is not uncommon in Iron Age assemblages, however, and perhaps just shows the degree of processing of the bone, both as food and as a raw material.

Taxon	**Trench 1**			**Trench 2**			**Trench 3**		
	NISP	**%NISP**	**MNI**	**NISP**	**%NISP**	**MNI**	**NISP**	**%NISP**	**MNI**
Cow	28	*20.6*	1	79	*18.2*	4	10	*37*	1
Sheep/ goat	72	*53*	3	212	*48.9*	9	15	*55.6*	1
Pig	21	*15.4*	2	75	*17.3*	4	-	-	-
Horse	3	*2.2*	1	9	*2.1*	1	2	*7.4*	1
Dog	5	*3.7*	1	47	*10.8*	1	-	-	-
Dog/ fox	-	-	-	3	*0.7*	1	-	-	-
Rabbit	1	*0.7*	1	1	*0.2*	1	-	-	-
Wild boar	1	*0.7*	1	-	-	-	-	-	-
Red deer	-	-	-	1	*0.2*	1	-	-	-
Vole *sp.*	4	*3*	1	-	-	-	-	-	-
Frog/ toad	1	*0.7*	1	5	*1.1*	1	-	-	-
Galliformes	-	-	-	2	*0.5*	1	-	-	-
Sub-total to species	**136**	*100*	-	**434**	*100*	-	**27**	*100*	-
Cattle-sized	74	-	-	107	-	-	9	-	-
Sheep-sized	181	-	-	361	-	-	55	-	-
Rodent-sized	2	-	-	2	-	-	-	-	-
Mammal n.f.i.	8	-	-	10	-	-	-	-	-
Bird n.f.i.	-	-	-	5	-	-	-	-	-
Total	**401**	-	-	**919**	-	-	**91**	-	-

Table 17: Number of Identified Specimens (NISP) and the Minimum Number of Individuals (MNI) from all contexts relating to Trenches 1-3. The abbreviation n.f.i. denotes that the specimen could not be further identified.

Areas 2 and 4

Given the range of material recovered predominantly from pits in Area 1 in 2011, it is perhaps surprising that excavations in Areas 2 and 4 did not result in large amounts of faunal material. With the exception of a small fraction of the material coming from Bronze Age contexts, the majority relate to Iron Age features.

Bronze Age

This small sub-set amounted to 13 assessable specimens, with only one being identified as pig (Table 18).

Taxon	MBA ditched field system	LBA 6-poster
	NISP	NISP
Pig	-	1
Sub-total to species	**-**	**1**
Cattle-sized	1	-
Sheep-sized	6	1
Mammal n.f.i.	3	1
TOTAL	**10**	**3**

Table 18: Number of Identified Specimens and the Minimum Number of Individuals from all contexts from the open area. The abbreviation n.f.i. denotes that the specimen could not be further identified.

Iron Age

Although recorded in significantly smaller numbers, the assemblage showed certain similarities with the faunal record recovered from Area 1: sheep were the prevalent species, closely followed in number by pigs and cattle. Of 149 assessable specimens, just over one third came from the enclosure ditch (Table 19, 56 specimens or 37%). Three main 'food species' are all represented, with sheep/goat being slightly more prevalent than pig and cow. A few fragments had the appearance of having passed through digestion. The absence of ageing data limits the degree to which this small sub-set can be further considered.

Taxon	Structure 2			Enclosure ditch			Other features			Total NISP	%NISP
	NISP	%NISP	MNI	NISP	%NISP	MNI	NISP	%NISP	MNI		
Cow	1	*25*	1	11	*40.7*	1	2	*7.7*	1	14	*24.6*
Sheep/goat	-	-	-	12	*44.5*	1	10	*38.5*	1	22	*38.6*
Pig	3	*75*	1	2	*7.4*	1	13	*50*	1	18	*31.6*
Horse	-	-	-	1	*3.7*	1	1	*3.8*	1	2	*3.5*
Red deer	-	-	-	1	*3.7*	1	-	-	-	1	*1.7*
Sub-total to species	**4**	*100*	-	**27**	*100*	-	**26**	*100*	-	**57**	*100*
Cattle-sized	1	-	-	8	-	-	17	-	-	26	-
Sheep-sized	-	-	-	8	-	-	42	-	-	50	-
Mammal n.f.i.	-	-	-	13	-	-	3	-	-	16	-
TOTAL	**5**	-	-	**56**	-	-	**88**		-	**149**	-

Table 19: Number of Identified Specimens and the Minimum Number of Individuals from all contexts from the open area. The abbreviation n.f.i. denotes that the specimen could not be further identified.

Heavy residues

As with the hand-recovered material, bone from the heavy residues was considered by area. A total of 810 specimens were recorded (Table 20). The great majority of the sieved material was made up of unidentifiable bone 'crumbs'. Sheep amounted to more than all other species combined. Vole, mouse and shrew were all positively identified as part of the background fauna. Although the processing of the environmental bulk soil samples did mean that two bird and a single fish specimen were recovered, it did also seem to prove that avian and fish fauna were not a considerable part of the diet. Just over one third of bone was recorded as burnt – either charred or calcined (287 specimens/ 35.4%) – perhaps illustrative of a bone waste management strategy.

Taxon	Trench 1	Trench 2	Trench 3	Feature-based material	Total NISP	%NISP
	NISP	NISP	NISP	NISP		
Cow	1	-	1	-	2	*2.5*
Sheep/ goat	11	9	5	20	45	*55.6*
Pig	3	2	2	6	13	*16*
Dog/ fox	-	1	-	-	1	*1.2*
Vole sp.	1	3	5	2	11	*13.6*
Mouse sp.	2	3	-	1	6	*7.4*
Shrew sp.	-	1	-	-	1	*1.2*
Frog/ toad	-	2	-	-	2	*2.5*
Sub-total to species	**18**	**21**	**13**	**29**	**81**	*100*
Cattle-sized	6	.	2	3	11	-
Sheep-sized	90	70	31	85	276	-
Rodent-sized	13	31	5	19	68	-
Mammal n.f.i.	70	68	109	124	371	-
Bird n.f.i.		1	1	-	2	-
Fish n.f.i.	1	-	-	-	1	-
TOTAL	**198**	**191**	**161**	**260**	**810**	-

Table 20: Number of Identified Specimens and the Minimum Number of Individuals from all contexts from the open area. The abbreviation n.f.i. denotes that the specimen could not be further identified.

Discussion

The faunal record considered here was typically sheep-dominated, heavily processed, and, adding to the list of common Iron Age traits, was mixed with sporadic findings of disarticulated human remains. Further analysis should record ageing evidence and biometrical data. This, in spite of the assemblage's small sample size, would allow for any considerations of broader economy patterns and husbandry practices, as well as finer detail of comparison between the open area investigations and the trenches over the ramparts.

Species diversity from this season's work was narrow, with wild animals being very rare among both the hand-recovered and sieved material. Although displaying a few Iron Age regional traits and some similarities with the findings from the 2011 investigation's faunal record, the assemblage of 2012 is still markedly different (Rajkovača 2012). Likewise, the assemblage appears to differ from similarly dated assemblages across the region (e.g. Grant 1984), particularly with regards to the circumstances of deposition. For example, at Danebury bone from pits was usually better preserved than bone recovered from occupation layers against the ramparts (Grant 1991); the inverse of this is thus far characteristic of the assemblage at Ham Hill. It is hoped that further investigations will help to clarify the regularity of this pattern.

Worked antler and bone - Vida Rajkovača and Marcus Brittain

Three worked bones were identified in total. Two of these are from rampart Trenches 1 and 2, with the third from within a well-furnished Late Iron Age pit in Area 4 (within Structure 2).

<2697> Trench 2 [3916]: Sheep-sized limb bone fragment. Bone point (length 31mm, max width 4.5mm) broken at distal end; with polished surface.

<2582> Trench 1 [3732]: Sheep/goat proximal metatarsus chopped at an oblique angle. Pin beater or ?spearhead (length 57mm; proximal width 7mm, distal width/diam. 11mm). Possible drilled circular slot in distal long axis, but one side missing; tip also broken. Smooth polished surface along axial chop.

<3158> Area 4 SF.1135 [4398] F.1897: Sheep/ goat proximal metatarsus chopped axially – with a perforation in the proximal surface. Two refitting pieces (length 52mm; max. width 17mm), both charred.

Archaeobotany – Chris Stevens

A total 161 bulk samples (Table 21) were selected from those taken from features within the excavation and processed for the recovery of charred plant remains and wood charcoal, as well as molluscs and small animal bone where present. During processing the flots were collected using a 300µm mesh.

Of the 161 samples, 126 came from Areas 1, 2, and 4, while the remaining 35 samples came from Trenches 1, 2 and 3. The samples were recovered features of Middle Bronze Age to Romano-British date. Around 25 samples came from features associated with a Middle Bronze Age ditch system, including several from ditch 1550 in Area 4 and ditches F.1521, F.1858, and F.1935 in Area A2, and the terminals of the Iron Age enclosure in Area A4. Of the 18 samples phased to the Late Bronze Age a number were associated with pot SF.1165 and a 6-poster structure, others came from the postholes, and occasional pits. Two further samples from pits F.1865 and F.1866 are provisionally dated to the Late Bronze Age. The vast majority of the samples selected for analysis, some 64, came from Iron Age features, including many associated with the ramparts in Trenches 1, 2 and 4, the Iron Age enclosures in Areas 1, 2 and 4, pits and also several associated with roundhouse F.1578 (Structure 2), roundhouse F.1674 in Trench 1, and C-shaped enclosure F.1899. While several of the samples taken from deposits overlying the rampart may be later in date, a number of these may comprise reworked material. Of the more definite later samples two were associated with Romano-British ditches F.1936 and F.1937.

The bulk samples break down into the following phase groups:

Phase	No of samples	Volume (litres)	Feature types
Middle Bronze Age (MBA)	25	526	Ditches (field system)
Late Bronze Age (LBA)	18	159	Postholes, 6-poster, pit (pot)
Possible Late Bronze Age (LBA?)	2	40	pit
Iron Age (IA)	59	1499	Ditches, pits, postholes, roundhouse, gully, ramparts, occupation layers
Middle Late Iron Age (M-LIA)	5	149	Posthole, pit
Possible Iron Age (IA?)	23	485.5	Ditches, pits, postholes, ramparts, occupation layers
?Post-Iron Age (post-IA)	3	8	Soil horizons, occupation deposits
Romano-British (RB)	2	29	Ditches
Undated (?)	25	366	Pits, ditches, posthole, rampart
Totals	**161**	**3261.5**	

Table 21: Sample provenance summary.

The samples were sorted under a low-powered stereo binocular microscope at Wessex Archaeology. Charred plant remains were extracted, identified and recorded in Table 22, following the nomenclature of Stace (1997) for wild species and the traditional nomenclature as provided by Zohary and Hopf (2000, 28, Tables 3 and 65), for cereals.

Plant Remains

While some of the flots were quite large, a great many were dominated by modern roots, along with uncharred seeds of species such as goosefoot (*Chenopodium* sp.), dock (*Rumex* sp.) and ivy-leaved speedwell (*Veronica hederifolia*). In general preservation of charred material was very sporadic with less than 20 samples containing more than 10 charred cereal grains and fewer still containing cereal chaff. Preservation of such material was generally poor, although in around four cases, where richer samples were encountered, preservation was notably better.

While the poor survival of charred remains may reflect a genuine absence of material, it must be considered that such poor preservation could be due to the high number of modern roots. These would certainly adversely affect wood charcoal which is readily broken down within active soils by bioturbation. In the previous assessment it was noted that survival of charred material was better within deeper pits than ditches and similar results were noted here, although some of the rampart deposits were also a little richer in charred material than the ditches in general.

Bronze Age

The Middle Bronze Age samples from the filed ditches were generally poor and only one single sample had more than a few cereal grains, ditch F.1906 [4408]. Given the high numbers of modern roots in many of these samples, many of such remains may be intrusive from Iron Age occupation, although the aforementioned sample did contain fewer roots. A few of these samples contained fragments of hazelnut shell (*Corylus avellana*) although these were fairly scarce.

The Late Bronze Age samples were generally fairly sterile and only a single cereal grain was recovered from posthole F.1969 in Area A2. A few charred stems, rootlets/grass rhizomes were recovered in the samples. It is unknown, however, whether these are related to the burning of turves or modern stubble burning. The samples from the possible Late Bronze Age pits F.1865 and F.1866 were also fairly empty with just a single grain of barley (*Hordeum vulgare*), a fragment of hazelnut shell and several probable grass stems/rhizomes.

Iron Age

Cereal remains were present in a number of the Iron Age deposits. In general the ditches rarely contained more than a few cereal grains, with occasional fragments of chaff, although emmer wheat (*Triticum dicoccum*) and barley were both identified. As with the previous stage of work, the pit deposits produced occasionally richer deposits with pit F.1539 in particular producing a number of grains of barley, emmer and glume bases of both emmer wheat (*Triticum dicoccum*) and spelt wheat (*Triticum spelta*) were recorded. Pit F.1980 also contained a similar albeit less rich assemblage.

Two pits (pits F.1554 and F.1897) dated to the Middle-Late Iron Age from Area A4, also produced a number of cereal grains, with some 70 grains of hulled wheat and 20 of barley from pit F.1554. However, remains other than cereal grains were relatively rare in these two pits.

More notable were a number of samples from Trench 3, associated with occupation horizons, and from a roundhouse floor within Trench 1. The former samples included a reasonable number of grains of hulled wheat, with some barley along with identifiable glume bases of both emmer and spelt from [3804] and also [3897]. Weed seeds included those of oat/brome grass (*Avena/Bromus* sp.), probable cleavers (*Galium aparine*), fig-leaved goosefoot (*Chenopodium ficifolium*), scentless mayweed (*Tripleurospermum inodorum*) and narrow-leaved cornsalad (*Valerianella dentata*). A number of probable Iron Age samples from this same trench also contained relatively cereal rich deposits, e.g. [3783], [3796], and [3801].

The sample from the roundhouse floor [3743] in Trench 1 had a large number of grains of probable emmer wheat along with a reasonable number of emmer glume bases and spikelet forks, with some spelt wheat also present. Weed seeds were also well represented within this deposit with many of brome grass (*Bromus* sp.) and lesser numbers of oat (*Avena* sp.), vetch/wild pea (*Vicia Lathyrus* sp.), black bindweed (*Fallopia convolvulus*) and dock. The sample also contained a number of fragments of charred hazelnut shell.

The final samples of probable Iron Age date of interest are associated with the rampart. These included several probable occupation layers [3929], [3933], from Trench 2, similar material in a hollow [3919] and in a posthole [3945] associated with a rampart collapse. As with the previous samples these comprised remains of emmer wheat, barley and glume bases, in particular from layer [3933]. This same deposit also contained the only remains of probable pea (*Pisum sativum*) and/or bean (*Vicia faba*). Also associated with the rampart within Trench 3, was a relatively rich sample from the top of the primary rampart [3814] which had over 30 grains of hulled wheat and a number of glume bases, including those of emmer, together with a similar range of weed species to those outlined above.

Romano-British

Neither of the two samples from Romano-British ditches F.1936 and F.1937 within Area 2 and Area 2/4 had more than a single fragment of cereal grain and a single seed of vetch/wild pea (*Vicia Lathyrus* sp.).

Of the three samples within Trenches 2 and 3 associated with the ramparts, representing soil horizons and occupational deposits overlying the revetment, only one [3797] associated within Trench 3 contained any substantial remains. These comprised several glume bases, including some of emmer wheat, and a few grains of hulled wheat. It might be noted that this material is likely to have been reworked or redeposited.

Undated

Of the samples from undated features most contained very few remains. A few within Trench 3 associated with ditch [3826] did have a few remains of hulled wheat, with occasional hulled wheat grains and glume bases, but generally very few remains. Most of the remaining undated samples came from postholes within Area 2 and had no more than single fragments of grain, and/or monocot stems and rootlets.

Discussion

The dominance of grains of hulled wheat and barley, along with some chaff with both emmer and spelt being identified, is consistent with the previous results from this current phase of excavation (Stevens 2012), as well as previous investigations on the site (Ede 1999; Stevens 2006). While the remains of pea (*Pisum sativum*) and/or bean (*Vicia faba*) from layer [3933] could not be identified to species, celtic bean (*Vicia faba* spp. minor) was identified from the previous excavations.

The presence of emmer is consistent with the findings from the south-west of England (e.g., Wessex Archaeology 2010; Stevens 2008) while spelt becomes much more dominant on sites to the east in the Thames Valley (Robinson and Wilson 1987).

That some of the richer assemblages, in terms of cereal remains, came from the trenches associated with the ramparts is of some interest and might imply that midden material was dumped there or that occupation was within such areas. With respect to the latter it might be noted that at least one richer deposit was associated with a roundhouse floor [3743] in Trench 1. The alternative is that the ramparts provided better preservation conditions than other parts of the site with shallower, more disturbed deposits.

In contrast to the previous archaeobotanical assemblages studied from the site, only a single seed of black mustard (*Brassica nigra*) from Trench 2 [3929] was recovered from these samples. This may be a reflection of the lower number of samples from pits, which produced most of the richer charred deposits in which this species dominated within the previous excavations.

Wood charcoal

As with the previous work from the ongoing excavations, very few of the samples contained wood charcoal, and it is probable that such material was broken down into very fine particles that were not recovered during flotation (Stevens 2012). The main exceptions was the assemblage from the Mid/Late Iron Age pit F1554, and an Iron Age pit F.1559 [2962] in area A4 that both had a reasonable quantity charcoal, with roundwood charcoal identified from the former sample. Both samples have the potential to identify wood species from the charcoal.

Smaller assemblages included that from occupation layer [3734] and the roundhouse floor [3743] in Trench 1, and a posthole F.1586 [3231] in Area 1. It should also be noted that while fragments of slag were seen within the sample from the hollow [3919] within Trench 2, there was no charcoal associated with this deposit.

As with the previous work (Stevens 2012), several features were noted as charcoal-rich in the field but produced little to no charcoal from the processed samples. Examples include several of the occupation layers in Trench 3 ([3796], [3797] and [3798]), and Trench 2 [3933] although the latter was rich in cereal remains.

Only a single sample produced over 10ml of charcoal, predominately, where identifiable, of oak (*Quercus* sp.) and this came from pit F.1593 [3261]. Smaller amounts of charcoal were recovered from pit F.1607 [3370] (Structure I) and pit F.1541 [2857]. These are all located from within Area 1.

Land and fresh/brackish water molluscs

Mollusc survival was sporadic and as with the previous excavations generally there were few shells preserved in the features (Stevens 2012); however, shells of molluscs were particularly prevalent within the revetment samples.

Potential

Charred plant remains: The assemblages from this phase of excavations produced relatively few samples that were rich in charred materials and therefore the potential for detailed analysis is limited. However, they still have the potential to contribute further information on the range, and importance of various crops grown, as well as the cultivation, storage and processing of these crops (Ede 1990; 1999; Stevens 2006; 2012). With the increased spatial area covered by the excavations, there is the opportunity to examine the survival and distribution of such remains, which may possibly reflect on the location of such activities, relating to domestic households, or at least the deposition of such material.

Wood charcoal: Wood charcoal assemblages can provide information on the range of species as well as potentially woodland management and exploitation; however, given that only a few samples had sufficient charcoal to warrant analysis, such potential is limited. Wood charcoal analysis has been conducted on samples from nine individual features from previous excavations, indicating a fairly wide range of species present (Gale 1999; Chisham 2006). There is some limited potential for wood charcoal analysis on a few samples from this excavation stage to augment the data from the previous excavations on the site and to assist in determining an indication of any variation across the site.

Proposals

Charred plant remains: From this stage of excavation only nine samples have sufficient charred plant remains preserved to be worth considering for further analysis. These are marked with a "P" in Table 22. The majority of these are associated with the revetment in Trenches 1 (3743), Trench 2 ([3929, 3933]) and from Trench 3 ([3784, 3796, 3804, 3807, 3814]). Only a single sample was deemed worthy of analysis from the main excavations in

Area 4, from pit F.1554 [2986]. It should be noted that that the decision to further analyse samples should also be taken with respect to the level and confidence of phasing for the features from which they were recovered.

The following methodology will be employed: for the analysis all identifiable charred plant macrofossils will be extracted from the flot. Identification will be undertaken using stereo incident light microscopy at magnifications of up to x40 using a Leica MS5 microscope, following the nomenclature of Stace (1997) for wild species and the traditional nomenclature as provided by Zohary and Hopf (2000, 28, Tables 3 and 65), for cereals and with reference to modern reference collections where appropriate. The remains will be quantified and the results tabulated.

Wood charcoal: Only two samples were deemed worthy of consideration for charcoal analysis. These were from pit F.1554 [2986] and from pit F.1559 [2962] both within Area A4. These are marked with a "C" in Table 22.

Identifiable charcoal will be extracted from the 2mm residue together and the flot (>2mm). Larger richer samples will be sub-sampled. Fragments will be prepared for identification according to the standard methodology of Leney and Casteel (1975) and Gale and Cutler (2000). Charcoal pieces will be fractured with a razor blade so that three planes can be seen: transverse section (TS), radial longitudinal section (RL) and tangential longitudinal section (TL). They will then be examined under bi-focal epi-illuminated microscopy at magnifications of x50, x100 and x400 using a Kyowa ME-LUX2 microscope. Identification will be undertaken according to the anatomical characteristics described by Schweingruber (1990) and Butterfield and Meylan (1980). Identification will be to the lowest taxonomic level possible, usually that of genus and nomenclature according to Stace (1997), individual taxon (mature and twig) will be separated, quantified, and the results tabulated.

Table 22: Archaeobotanical Sample Summary.

Feature	Description	Area	Context	Phase	Sample No.	Ltrs	Flot size	Roots	Grain	Chaff	Seeds etc.	Cereal Notes	Other cpr notes	Charcoal 2/4mm	Other	Analysis
1527	ditch	-	4498	IA	1814	14	20	80	-	-	-	-	-	0/0ml	moll-t (B)	-
1531	ditch	-	2987	IA	1914	33	80	80	C	-	-	2x hulled wheat, 1x cf. emmer grain	-	0/0ml	-	-
1531	ditch	-	2988	IA	1915	47	30	80	C	-	-	5x cereal	Parenchyma	0/0ml	moll-t (C)	-
1531	ditch	-	2989	IA	1916	43	30	25	C	C	C	?cereal, 1x emmer glume	Persicaria, Bromus	0/0ml	moll-t (C)	-
1531	ditch	-	2991	IA	1917	21	8	20	-	-	-	-	1x Avena	0/0ml	moll-t (B)	
1531	ditch	-	4411	IA	1787	25	8	50	-	-	C	-	1x Corylus avellana	0.5/0.5ml	-	-
1531	ditch	-	4412	IA	1788	14	5	50	-	-	-	-	-	0/0ml	-	-
1531	ditch	-	4413	IA	1789	23	25	2	C	-	C	fragment of cereal	3x Corylus	2/1ml	-	-
1531	ditch	-	4420	IA	1801	15	5	70	C	C	C	1x Hordeum, 1x emmer spikelet	1x rootlet, 1x Bromus 1x stem.	0/0ml	-	-
1531	ditch	-	4421	IA	1802	22	4	10	-	-	-	-	-	0/0ml	-	-
1531	ditch	-	4421	IA	1829	23	15	5	C	-	-	1x cereal grain	-	1/1ml	-	-
1531	ditch	-	4451	IA	1803	15	20	40	C	-	-	1x emmer grain	-	2/2ml	-	-
1531	ditch	-	4453	IA	1804	8	1	50	-	-	B	-	several rootlets	0/0ml	-	-
1531	ditch	-	4454	IA	1805	14	5	50	-	C	-	1x glume base	-	1/1ml	-	-
1531	ditch	-	4530	IA	1830	23	5	2	-	-	-	2x cereal grain	-	0/0ml	-	-
1531	ditch	-	5041	IA	1831	24	35	50	-	-	-	-	-	0/0ml	moll-t (C)	-
1564	Enclosure ditch	-	3062	IA	1629	27	60	95	-	-	-	-	-	0/0ml	-	-
1564	Enclosure ditch	-	3063	IA	1630	33	80	95	-	C	-	1x glume base (emmer)	-	0/0ml	moll-t (C)	-
1564	Enclosure ditch	-	3064	IA	1631	43	70	95	-	-	-	-	-	1/1ml	moll-t (C)	-
1564	Enclosure ditch	-	3110	IA	1634	56	60	95	-	-	-	-	-	0/0ml	moll-t (C)	-
1564	Enclosure ditch	-	3178	IA	1635	59	60	95	-	-	-	-	-	0/0ml	-	-
1564	Enclosure ditch	-	3610	IA	1686	38	15	3	C	-	-	1x ?barley grain	-	1/0ml	-	-
1564	Enclosure ditch	-	3613	IA	1687	29	10	5	C	-	-	1x Triticum	-	0/0ml	-	-
1564	Enclosure ditch	-	3633	IA	1695	46	8	80	-	-	-	-	-	0/0ml	moll-t (A) smb-(C) arun-(C)	-

Feature	Description	Area	Context	Phase	Sample No.	Ltrs	Flot size	Roots	Grain	Chaff	Seeds etc.	Cereal Notes	Other cpr notes	Charcoal 2/4mm	Other	Analysis
1564	ditch	-	5274	IA	1935	58	15	80	-	-	-	-	-	0/0ml	-	-
1565	ditch	-	3245	?	1648	25	15	95	-	-	-	-	small charred stem	1/1ml	-	-
1550	ditch	1100/2020	2902	MBA	1792	40	20	50	-	-	-	-	1 stem.	1/1ml	-	-
1550	ditch	1100/2020	4432	MBA	1793	39	25	80	-	-	-	-	-	0/0ml	-	-
1550	ditch	1100/2020	5065	MBA	1854	24	40	95	C	-	C	Hordeum sp.	tuber x1	0/0ml	-	-
1550	ditch	1100/2020	5066	MBA	1855	21	40	95	-	-	-	-	-	0/0ml	-	-
1550	ditch	1100/2020	5068	MBA	1851	35	60	95	-	-	-	-	-	0/0ml	-	-
1550	ditch	1100/2020	5069	MBA	1852	22	20	95	-	-	-	-	-	0.5/0ml	-	-
1550	ditch	1100/2020	5084	MBA	1853	25	30	95	-	-	C	-	Avena, Rootlets	0/0ml	-	-
1558	ditch	1100/2020	2967	IA	1600	31	15	60	-	-	-	-	-	0/0ml	-	-
1558	ditch	1100/2020	2969	IA	1601	33	5	5	C	-	-	a few grain fragments	-	1/1ml	-	-
1558	ditch	1100/2020	2970	IA	1602	16	5	5	-	-	-	-	-	1/0ml	-	-
1521	ditch - field system	A1	3444	MBA	1666	36	10	50	-	-	-	-	1x charred stem	0.5/0ml	-	-
1521	ditch	A1	4464	MBA	1809	16	6	50	-	-	-	-	-	1/1ml	moll-t (C)	-
1521	ditch	A1	4597	MBA	1865	13	2	50	-	-	C	-	Corylus avellana x1	0/0ml	-	-
1586	posthole	A1	3231	LBA	1968	15	70	0	-	-	-	-	-	30/8ml	-	-
1851	pit	A2	4118	?	1716	28	10	80	-	-	-	-	-	0/0ml	-	-
1856	pit	A2	4130	IA?	1722	16	10	80	-	-	-	-	-	0/0ml	-	-
1858	ditch - field system	A2	4248	MBA	1719	13	5	80	-	-	-	-	-	0/0ml	-	-
1858	ditch	A2	4611	MBA	1938	15	5	50	-	-	-	-	-	0/0ml	-	-
1858		A2	4709	MBA	1956	8	10	80	C	-	C	1x Hordeum grain	3x Avena/Bromus	0/0ml	-	-
1865	pit	A2	4279	LBA?	1725	20	20	80	-	-	C	-	1x Corylus avellana	0/0ml	-	-
1866	pit	A2	4305	LBA?	1731	38	20	95	C	-	C	1x Barley	3x monocot stems	0/0ml	-	-
1867	posthole	A2	4287	?	1737	14	10	60	C	-	C	1x Grain frag	1x monocot stem	0/0ml	-	-
1869	posthole (?4 poster)	A2	4301	?	1740	20	3	80	-	-	C	-	1x monocot stem	0/0ml	-	-
1873	posthole (?4 poster)	A2	4312	?	1746	15	10	50	C	-	-	1x hulled wheat grain	-	1/0ml	-	-
1877	pit	A2	4324	IA?	1757	20	10	50	C	-	C	2x cereal	1x moncot tuber & stem/ 1 Bromus	2/1ml	-	-
1878	pit/posthole	A2	4327	IA?	1747	9	8	20	C	-	C	1x hulled wheat grain, 1x barley, 1x cereal	1x Avena, 1x monocot stem	3/0ml	-	-
1890	pit/posthole	A2	4358	IA?	1758	12	8	40	-	-	-	-	1x monocot stem	1/1ml	-	-
1893	posthole/post pit	A2	4367	IA?	1780	2	4	80	-	-	-	-	-	0/0ml	-	-

Feature	Description	Area	Context	Phase	Sample No.	Ltrs	Flot size	Roots	Grain	Chaff	Seeds etc.	Cereal Notes	Other cpr notes	Charcoal 2/4mm	Other	Analysis
1895	Ditch terminus	A2	4371	?	1781	21	50	80	-	-	-	-	-	0/0ml	-	-
1899	ditch	A2	4377	IA	1790	9	5	10	-	-	-	-	-	1/1ml	-	-
1899	ditch	A2	4378	IA	1783	34	20	30	-	-	-	-	-	2/1ml	-	-
1899	ditch	A2	4378	IA	1791	6	5	90	-	-	-	-	-	1/1ml	-	-
1899	ditch	A2	5107	IA	1845	13	10	10	-	-	-	-	-	0/0ml	-	-
1899	ditch	A2	5125	IA	1849	12	2	50	-	-	-	-	-	0/0ml	-	-
1900	ditch	A2	4486	MBA	1818	12	5	5	-	-	-	-	-	0/0ml	-	-
1906	ditch	A2	4408	MBA	1786	31	10	5	B	-	C	1x Barley, 1x Grain frg.	1x Corylus avellana	2/2ml	-	-
1913	posthole	A2	4470	LBA	1811	21	5	80	-	-	-	-	-	0/0ml	-	-
1914	ditch	A2	4478	MBA	1820	12	2	2	-	-	-	-	-	0/0ml	-	-
1915	ditch	A2	4480	MBA	1819	32	8	80	C	-	-	cereal fragment.	-	0/0ml	-	-
1916	pit	A2	4494	LBA	1810	20	5	80	-	-	C	stem/rootlet	-	0.5/0ml	-	-
1919	posthole	A2	4513	?	1815	17	10	5	-	-	-	-	-	0/0ml	-	-
1923	ditch	A2	4532	MBA	1832	29	15	50	C	-	-	Hordeum vulgare x2	-	0/0ml	-	-
1926	ditch	A2	4540	MBA	1828	30	20	25	C	-	C	3x cereal grain.	Galium x1,	1/2ml	-	-
1927	posthole	A2	4554	LBA	1825	23	30	5	-	-	C	-	tuber x1. Plantago lanceolata	3/4ml	-	-
1935	ditch	A2	4648	MBA	1883	10	4	5	-	-	-	-	-	0/0ml	-	-
1935	ditch	A2	4648	MBA	1941	26	15	20	C	-	C	2x cereal. 1x hulled wheat	1x Bromus	1/0.5ml	-	-
1936	ditch	A2	4649	RB	1948	12	1	8	C	-	-	cereal frg.	-	0/0ml	-	-
1938	pit	A2	5046	LBA	1833	31	8	80	-	-	-	-	-	0/0ml	-	-
1945	ditch	A2	5100	MBA	1946	6	1	0	-	-	-	-	-	0/0ml	-	-
1950	posthole	A2	5117	IA	1846	4	2	5	-	-	-	-	-	0/1ml	-	-
1950	posthole	A2	5119	IA	1850	6	5	2	-	-	-	-	-	0/0ml	-	-
1963	posthole	A2	5211	IA	1878	12	3	5	-	-	-	-	-	0/0ml	-	-
1965	posthole	A2	5209	M-LIA	1864	4	2	2	C	-	-	cereal ?hulled wheat x1	-	0/0ml	moll-t (C)	-
1967	posthole	A2	5214	?	1882	41	5	25	-	-	-	-	-	0/0ml	-	-
1968	posthole	A2	5223	LBA	1877	14	10	50	-	-	C	-	rootlet x1	0.5/0ml	-	-
1969	posthole	A2	5225	LBA	1879	10	4	2	C	-	-	cereal grain frag. X1	-	0/0ml	-	-
1970	posthole	A2	5229	LBA	1880	10	1	0.5	-	-	C	-	rootlet x1	0/0ml	-	-

Feature	Description	Area	Context	Phase	Sample No.	Ltrs	Flot size	Roots	Grain	Chaff	Seeds etc.	Cereal Notes	Other cpr notes	Charcoal 2/4mm	Other	Analysis
1973	posthole	A2	5238	LBA	1881	5	5	5	-	-	-	-	-	0/0ml	-	-
1981	posthole	A2	5284	?	1936	15	5	50	-	-	-	-	-	0.5/0ml	-	-
1986	pot 1165. 6-poster	A2	4622	LBA	1969	1	5	20	-	-	C	-	stems x2. rootlets x1.	0/0ml	-	-
1986	pot 1165. 6-poster	A2	4622	LBA	1970	n/a	1	0	-	-	-	-	-	0/0ml	-	-
1986	pot 1165. 6-poster	A2	4622	LBA	1971	n/a	<1	0	-	-	-	-	-	0/0ml	-	-
1986	pot 1165. 6-poster	A2	4622	LBA	1973	n/a	<1	0	-	-	-	-	-	0/0ml	-	-
1986	pot 1165. 6-poster	A2	4622	LBA	1974	n/a	<1	0	-	-	-	-	-	0/0ml	-	-
1986	pot 1165. 6-poster	A2	4622	LBA	1975	n/a	<1	0	-	-	-	-	-	0/0ml	-	-
1986	pot 1165. 6-poster	A2	4622	LBA	1976	n/a	<1	0	-	-	-	-	-	0/0ml	-	-
1986	pot 1165. 6-poster	A2	4622	LBA	1978	n/a	<1	0	-	-	-	-	-	0/0ml	-	-
1987	posthole	A2	4629	?	1943	12	4	80	-	-	-	-	rootlet x1	0/0ml	-	-
1989	posthole	A2	4651	?	1945	5	3	80	-	-	-	-	-	0/0ml	-	-
1993	pit/posthole	A2	4672	?	1947	15	2	80	-	-	-	-	1x rootlet. Vicia	0/0ml	-	-
2000	pit	A2	4718	?	1951	20	15	10	-	-	-	-	1x stem	1.5/0.5ml	-	-
1537	pit	A4	2813	IA	1661	15	30	85	-	-	-	-	-	1/0ml	-	-
1539	pit	A4	2819	IA	1575	33	50	90	A	B	C	2-3x barley, 6-7 emmer grains, 5-6x glume base (1x emmer. 1x spelt),	1x Avena, 3x Bromus, 1x monocot stem	2/0ml	bone frgs	P
1540	Encl. ditch term.	A4	2846	IA	1612	21	60	95	C	-	-	3x hulled wheat	-	0/0ml	-	-
1540	Encl. ditch term.	A4	2846	IA	1613	20	60	95	C	-	-	a few grain fragments	-	1/0ml	-	-
1540	Encl. ditch term.	A4	2847	IA	1610	22	70	95	-	-	-	-	-	0/0ml	-	-
1540	ditch	A4	3648	IA	1867	39	30	75	-	-	C	-	Corylus avellana x1, Rumex x2	/ml	moll-t (C)	-
1540	ditch	A4	3651	IA	1869	41	30	80	-	-	-	-	Rumex x2	0.5/0ml	-	-
1540	ditch	A4	3653	IA	1868	41	20	80	-	-	-	-	-	0/0ml	moll-t (C)	-
1554	Pit	A4	2986	M-LIA	1606	59	100	8	A*	C	C	70+x hulled wheat, 20+x barley, 2x glume bases	1 large Vicia, Parenchyma and some roundwood. Bone	60/40ml	-	P C
1559	Pit	A4	2962	IA	1599	47	120	40	C	-	C	1x barley. Monocot stem x2	Persicaria/Polygonum x1. Monocot stems x2. Mainly charcoal	50/10ml	-	C

Feature	Description	Area	Context	Phase	Sample No.	Ltrs	Flot size	Roots	Grain	Chaff	Seeds etc.	Cereal Notes	Other cpr notes	Charcoal 2/4mm	Other	Analysis
1578	Eavesdrip gully - Str 2	A4	3108	IA	1647	27	25	95	-	-	C	-	1x hazelnut	1/1ml	-	-
1578	Eavesdrip gully - Str 2	A4	5058	IA	1835	6	5	5	C	-	-	Hordeum fragment x1	-	0/0ml	-	-
1578	Eavesdrip gully - Str 2	A4	5063	IA	1840	6	5	50	C	-	-	3-4x Hordeum ,	-	0/0ml	-	-
1578	Eavesdrip gully - Str 2	A4	5088	IA	1841	11	5	80	C	C	-	1x glume base, 1x Hordeum	-	0/0ml	-	-
1604	posthole	A4	3283	IA	1691	21	25	95	-	-	-	-	-	0/0ml	-	-
1609	posthole	A4	3374	IA	1609	55	60	95	-	-	-	-	-	0/0ml	-	-
1897	pit	A4	4374	M-LIA	1785	62	60	75	A	-	A	2x barley, 7x cf. emmer grain,	4x Bromus , 10x Avena 1x Fallopia convolvulus	1/1ml	smb-(C)	-
1897	pit	A4	4445	M-LIA	1821	16	6	4	C	C	A	emmer wheat x2, emmer glume	Galium x2, Malva? x1, Bromus x3, Vicia x1. Avena x2, Poa/small grass x1. 1x Arrhenatherum type tuber	0/0ml	-	-
1902	ditch	A4	5060	MBA	1839	16	5	80	C	-	-	cereal fragment.	-	0/0ml	-	-
1917	ditch	A4	4501	MBA	1822	15	10	5	C	-	-	cereal grain frag.	-	0/0ml	-	-
1932	anomalous ditch	A4	4574	?	1874	11	5	75	-	C	C	1x glume base	rootlet x1	0/0ml	-	-
1933	ditch	A4	4430	IA	1857	35	20	95	-	-	-	-	-	0/0ml	-	-
1953	pit	A4	5132	M-LIA	1858	8	3	95	-	-	-	-	-	0/0ml	-	-
1955	posthole	A4	5147	IA?	1859	2	5	-	-	-	-	-	-	0/0ml	-	-
1957	posthole	A4	5170	IA?	1870	12	10	50	-	-	-	-	-	0.5/0ml	-	
1958	posthole	A4	5168	IA?	1872	4	5	75	-	-	-	-	-	0/0ml	-	-
1959	posthole	A4	5173	LBA	1961	2	2	60	-	-	-	-	-	0/0ml	moll-t (C)	-
1937	ditch	Area 2/4	4599	RB	1959	17	8	25	-	-	C	-	1x Vicia	0/0ml	-	-
1980	pit	Area 2/4	4631	IA	1942	13	15	80	B	C	B	1x cf. emmer grain. 2x hulled wheat, 3x cereal grain frg. 1x barley. 1x glume base	5x Avena/Bromus, 2x Rumex 1x rootlet, 1x Odontites vernus	0.5/0.5ml	-	-
3756	pit	Tr 1	3753	?	1955	21	25	80	-	-	-	-	-	0.5/0ml	moll-t (C)	-

Feature	Description	Area	Context	Phase	Sample No.	Ltrs	Flot size	Roots	Grain	Chaff	Seeds etc.	Cereal Notes	Other cpr notes	Charcoal 2/4mm	Other	Analysis
-	leveling deposit	Tr 1	3732	IA?	1752	20	20	80	C	C	C	3x indet. cereal, glume base x1	2x monocot stems	1/0ml	moll-t (C)	-
-	leveling deposit	Tr 1	3732	IA?	1817	105	60	90	C	-	-	Barley x2	-	2/4ml	-	-
-	occupation layer	Tr 1	3734	IA?	1834	92	75	10	C	-	-	Hordeum x1, hulled wheat x1, cereal grain x1.	-	10/10ml	moll-t (C)	-
-	roundhouse floor	Tr 1	3743	IA	1837	88	100	40	A*	A	A	100+ emmer grains, 3-4 hulled wheat, 3-4 Hulled barley, 20+ emmer glumes, some spelt	lots of Bromus grass + Avena , 8+ Corylus avellana, 1x tuber, Fallopia convolvulus, Vicia , Rumex , Persicaria	6/15ml	moll-t (C)	P
	occupation layer	Tr 1	3742	IA?	1816	55	45	50	-	-	C	-	1x Polygonum	2/4ml	moll-t (C)	-
3945	posthole/ rampart collapse	Tr 2	3943	IA?	1966	15	4	3	A	-	B	4x cereal, 3-4 hulled wheat grains	2-3 Bromus/Avena	0/0ml	moll-t (B)	-
-	occupation layer/ associated with rampart	Tr 2	3929	IA?	1963	16	15	30	A	-	A	15+ Hulled wheat, Barley x2	Persicaria, Polygonum Bromus , Avena , Chenopodium Brassica , Valerianella dentata, Vicia/Lathyrus,	0/0ml	moll-t (C)	P
	soil horizon	Tr 2	3911	post-IA	1957	28	15	80	-	-	-	-	-	0/0ml	moll-t (B)	-
	hollow	Tr 2	3919	IA?	1958	33	60	80	A	C	B	Cereal indet. x10+, Hulled wheat x3-4, Barley x2-3. Spelt glume bases x1	Avena/Bromus and Slag type material.	0/0ml	moll-t (B)	-
	occupation layer/ associated with rampart	Tr 2	3933	IA?	1960	24	20	50	A*	A	A	cereal indet. emmer grain, 50+ hulled wheat, 5-10 Barley grain, glume bases x20+ emmer glumes	Vicia/Pisum (Pea/Bean)x2, 20+ Avena/Bromus, Fallopia	0/1ml	moll-t (B)	P

Feature	Description	Area	Context	Phase	Sample No.	Ltrs	Flot size	Roots	Grain	Chaff	Seeds etc.	Cereal Notes	Other cpr notes	Charcoal 2/4mm	Other	Analysis
	occupation layer/ associated with rampart	Tr 2	3940	IA?	1965	0.5	10	1	C	C	-	1x emmer grain. 1-2 glume bases	1x mineralised ?seed	0/0ml	-	-
3826	ditch	Tr 3	3792	?	1886	14	15	25	B	-	-	6x hulled wheat	-	0/0ml	moll-t (B)	-
3826	ditch	Tr 3	3805	?	1893	8	2	0	-	C	C	1x cf. emmer glume base	1x Trifolium	0/0ml	moll-t (C)	
3826	ditch	Tr 3	3817	?	1911	10	5	5	A	-	C	7-8 hulled wheat grains, a few cereal grains.	1x Avena type	0.5/0.5ml	moll-t (C)	-
3826	ditch	Tr 3	3827	?	1912	15	8	5	C	-	C	1x Hordeum +1 cereal frg.	1x Corylus frag.	0/0ml	moll-t (B)	-
3826	ditch	Tr 3	3827	?	1913	12	10	5	-	-	-	-	-	0/0ml	moll-t (B)	-
-	sealing occupation deposit (over roundhouse 1674)	Tr 3	3743	IA?	1887	6	5	80	-	-	-	-	-	0/0ml	moll-t (C)	-
-	dump soil hori\zon over occupation deposit 3783	Tr 3	3783	IA?	1892	5	15	5	A	C	B	4-5 hulled wheat, 1x glume base,	Vicia x1., Avena/Bromus sp,.x1. Persicaria x1	0/0ml	moll-t (B) moll-f (C)	
-	occupation deposit against revetment	Tr 3	3784	IA	1889	4	5	5	A	C	-	Cereal indet x3, Hulled wheat x3, Barley x4, 2-3 glume bases, incl. spelt	-	0/0ml	moll-t (C)	P
-	small stone layer, under revetment	Tr 3	3785	IA?	1890	4	4	10	-	-	-	-	-	0/0ml	moll-t (C)	
-	-	Tr 3	3794	?	1888	8	50	80	C	-	C	Cereal indet, 1x hulled wheat	1x Avena/Bromus	0/0ml	moll-t (C)	-
-	layer final part/ refurbishment of rampart	Tr 3	3795	IA	1895	12	40	50	C	-	-	1x Hordeum, 1x Hulled wheat, 1x Cereal	-	0/0ml	moll-t (A)	-
-	occupation soil/layer over revetment	Tr 3	3796	IA?	1908	14	20	50	A	A	C	9-10x hulled wheat, 3-5 glume bases + 1x spelt, 1x emmer + 1x spikelet fork,	Bromus, Avena , Persicaria ,	0/0ml	moll-t (C)	P

Feature	Description	Area	Context	Phase	Sample No.	Ltrs	Flot size	Roots	Grain	Chaff	Seeds etc.	Cereal Notes	Other cpr notes	Charcoal 2/4mm	Other	Analysis
												+1x glume				
-	occupation soil/layer over revetment	Tr 3	3797	post-IA	1907	4	10	50	B	B	C	4-5 hulled wheat, 2-3 cereal, 2-3 glumes + 1 emmer	Vicia x1	0/0ml	moll-t (B)	-
-	occupation soil/layer over revetment	Tr 3	3798	post-IA	1906	4	8	80	C	-	-	3-4 cereal,	-	0/0ml	moll-t (C)	-
-	revetment, fill between stones	Tr 3	3799	IA?	1903	7	20	30	B	C	C	3x cereal indet, 2x barley, 2x hulled wheat, 3-4 glumes	Raphanus raphanistrum capsule	0/0ml	moll-t (B)	-
-	layer associated with revetment/bank	Tr 3	3801	IA?	1898	12	60	5	A	B	B	3x Hulled wheat, 3-4 cereal indet. 4-5 glume bases	Avena/Bromus x5, Poaceae x3-4	0/0ml	moll-t (A)	-
-	occupation layer/soil	Tr 3	3804	IA	1894	5	30	5	A*	B	A	30+ hulled wheat, 3-4 Hordeum, 4-5 glume bases, including spelta.	Avena/Bromus , Galium, Rumex, Chenopodium ficifolium, Valerianella Tripleurospermum parenchyma/ ?slag type material	3/2ml	moll-t (B)	P
-	base of revetment	Tr 3	3807	IA	1900	5	15	2	A	A	A	6-7 hulled wheat, spelt wheat glumes, 10x glume bases	Avena/Bromus x2, Persicaria x1,	0/0ml	moll-t (C)	P
-	primary rampart	Tr 3	3808	IA	1902	3	5	0	-	-	-	1 cereal indet.	-	0/0ml	moll-t (B)	-
-	primary rampart	Tr 3	3809	?IA	1901	2	5	20	-	C	-	Spelt wheat glume.	-	0/0ml	moll-t (C)	-
-	primary rampart	Tr 3	3810	??IA	1909	2	4	10	-	-	-	-	-	0/0ml	moll-t (C)	-
-	top of primary rampart	Tr 3	3814	?IA	1905	13	30	10	A	A	A	30+ hulled wheat grains, 10+ glumes, 1 emmer	Avena/Bromus/Vicia	2/2ml	moll-t (B)	P
-	-	Tr 3	3815	?	1910	2	3	10	C	-	-	1x hulled wheat grain	-	0/0ml	moll-t (C)	-

2.9 Environmental Data

Soil profiles – Charles French

The current excavations at Ham Hill involve two sectors: the research excavations of the rampart areas, and the rescue excavation of the interior of the enclosure. Accordingly, the assessment given below is divided up into those two sections.

Areas 2 & 4

As for the soil assessment in 2011 (French, in Slater *et al*. 2012), the present-day soil profile exhibits considerable variation in thickness from about 45cm to as much as 90cm. Beneath the homogeneous, fine sandy loam topsoil, or former ploughsoil, is a pale yellowish brown horizon of fine sandy/silty loam which appears bleached, no doubt as a result of leaching. Beneath this lies a variable expression of reddish brown fine sandy loam, much affected by amorphous iron formation derived from the underlying weathered/*in situ* limestone bedrock. This Ap, eluvial B, Bw and B/C horizon sequence is typical of a thick brown earth soil developed on a limestone bedrock.

The variable thickness of the soil profile is due to a number of factors. These include slight undulations in the surface of the limestone, possibly some localised hillwash accumulation, and the strong probability of some spreading of soil material as a result of adjacent quarry operations. The remarkable homogeneity of the profile and poor horizon definition is a result of a combination of earthworm mixing, rooting and more recent arable agriculture, possibly compounded by the down-profile within-soil movement of fine material (mainly silt sized material) associated with bare soil surfaces above and localised colluviation.

The western excavation profile had three cleaned areas which exhibited a sequence of cut ditch features beneath the modern topsoil and buried soil sequence. In one of these areas (Figure 8, section A-B), ditch F.1934 cut ditch F.1935 and the southern part of the section revealed a relatively undisturbed profile through the surviving buried soil. This consisted of two horizons: an upper mid-brown sandy silt loam B horizon (36-66cm) [5013] above a yellowish brown fine sandy silt loam B/C horizon (66-88cm) [5014/5015], all developed on an homogeneous pale yellow silt B/C horizon [5016]. This palaeosol was sampled for micromorphological analysis. In addition, a possible 'clod' of turf/topsoil opportunistically observed in the fill of 'shaft' (F.1585, context [5052]) was also sampled as a best proxy for the now missing pre-Iron Age topsoil of the day. This composite profile, in combination with the four other palaeosol profiles sampled in 2009 and 2010, should be sufficient to characterise the soil development of this site. But, if during the remainder of the excavation phase any further well preserved buried soil contexts were observed, say for example beneath any remnants of upcast banks, these should also be opportunistically sampled for soil micromorphological analysis.

This largely undifferentiated and homogeneous soil appears to be a product of the weathering of the fine sand/silt/iron-rich Ham Hill stone substrate beneath, although there may have been some localised within-soil illuviation, leading to the creation of a weakly developed textural B horizon (Bw). The only part of the soil profile that is undisturbed appears to be the basal *c*. 25-30cm thick B horizon; most of the profile above has been much mixed and disturbed by either Iron Age features and/or later agricultural and quarrying activities. All of the soil profiles and many of the feature fills are strongly influenced by the secondary formation of iron oxides and hydroxides, leading to either reddening or yellowing of the soil/sediment colours.
Sampling

Given the relatively poor preservation of soils encountered within the interior, only eight samples for micromorphological and multi-element analyses have been taken (Tables 23 and 24). Despite the soil profile being highly modified by possible medieval agriculture and quarrying activities, these profiles will characterise the soil type present within the interior, and possibly give some idea of the nature of past land-use in the enclosure.

Trenches 1-3

Each rampart section preserved buried soils, and occasionally midden and/or settlement related deposits. These well preserved buried soil profiles were sampled at four loci (Trenches 1, 2 and 3, and Area 2), and one midden

deposit (in Trench 1), and one possible structural context, F.1674 (the round stone structure on the interior side of the rampart in Trench 1) (Tables 23 and 24). In each case, there appears to be the base of the A and certainly the B horizon present of the *in situ* pre-Iron Age buried soil.

A series of five sets of thin section blocks were taken from five different loci under the rampart and associated deposits (Tables 23 and 24). The good preservation conditions present offer the opportunity to investigate the relatively unmodified soil that should better reflect the nature of soil development within the interior of the enclosure as well.

Sample no.	Context information
1 <MM1>	western edge profile B horizon
2 <MM2>	western edge profile B/C horizon
3 <MM3>	ditch F.1935, context [5015]
4 <MM4>	buried soil [5015] adjacent to F.1935
5052	Pre-Iron Age turf; 'shaft' fill [5052]
TTNCM57/1	'Shaft' fill [5139]
TTNCM57/2	'Shaft' fill [5140]
TTNCM57/3	'Shaft' fill [5139/5140]

Table 23: Soil profile samples collected from Area 2 and 4.

Sample no.	Context information
5	Trench 1: midden deposit, context [3734]
6	Trench 3: inner edge of rampart (Phases C-C-C and C-E-D), upper B horizon of buried soil; contexts [3784/3794]
7	Trench 3: inner edge of rampart (Phase C-B-C), lower B horizon of buried soil; context [3792]
8	Trench 3: lower A of buried soil (Phase C-E-A), context [3786]
9	Trench 3: B horizon of buried soil (Phases C-C-C and C-B-C), context [3791/3792]
10	Trench 3: lower A horizon of buried soil (Phase C-C-C), context [3804]
11	Trench 3: B horizon of buried soil (Phase C-B-C), context [3805]
12	Trench 1: upper B horizon (Phases A-G-H and A-B-A), contexts [3745/3752]
13	Trench 1: lower B horizon (Phase A-B-A), context [3752]
14	Trench 2: guardhouse within rampart (Phases B-E-B and B-E-D); contexts [3929/3933/3934/3935]

Table 24: Soil profile samples collected from Trenches 1-3.

Recommendations

The recommended further work from the soil analytical perspective concerns a suite of 18 soil micromorphological samples and coincident small bulk samples for multi-element characterisation, with an indication of costs given below. As a suite of samples, the both analyses should give a good idea of the pre- and post-Iron Age soil development and land-use trajectories.

Geoarchaeology, Pollen and Land Snails – Mike Allen

Eight key profiles were sampled and described for soil micromorphology, each sequence was reported to the field team after visit by Charly French (24/09/12) and Mike Allen (site visit 1 to 6). This résumé collates all those profile descriptions and lists all the kubiena samples taken for soil micromorphology.

Pollen samples were taken on site (7 samples) and this has been augmented by a further 33 (?+2) samples taken precisely from a selection of the soil micromorphology samples. The rampart buried soils and midden/occupation deposits (profiles 3-5) have been sampled where exposed, but better exposures and a fuller sequence is expected to be recorded during the 2013 excavation season.

The nine key sequences were:

Areas 2 & 4

1. The present day soil profile and buried soil (described by Charly French and Mike Allen)
2. Neolithic Bronze Age pit

Trench 1

3. Buried soil/weathered C (Trench 1 profile 1)
4. Midden/occupation deposit (Trench 1 profile 2)

Trench 2

5. Floor deposits in ?guard house (Trench 2 profile 1)

Trench 3

6. Buried soil [3784-3794] (Trench 3 profile 1)
7. Buried soil [3786] & dump below [3791] (Trench 3 profile 2)
8. Buried soil [3804]/ feature fill [3805] (Trench 3 profile 3)

Areas 2 & 4

Buried soil area in the enclosure: This is located within a hollow at the centre of the main Iron Age enclosure, and directly between the Bronze Age field system. It is a truncated and deflated late glacial and early post-glacial soil, of which just the Rw or B/C horizons of a former brown earth survive. Some patches are slightly reddened, possibly as result of burning or (more likely) as a result of iron mobilisation and ferruginsation. It predates the archaeology here, although the horizon contains charcoal and artefacts, some of which may have been biotically reworked down profile into the soil. This was examined and characterised by Charly French, and no further sampling or description is considered necessary.

Site soil profiles: Three areas of the north-facing excavation had been cleaned and the full profile exposed a well-developed brown earth, two ditches (F.1934 and F.1935) and in the northern part a relatively undisturbed buried soil. The profile is fully described by French (above) and the buried soil samples have been taken for soil micromorphological analysis (Table 25). The profile was re-examined in the field and context [5015] which was originally recorded both within ditch F.1935 and to the west of ditch F.1935 was sampled in these two locations (as MM3 and MM4 respectively). Context [5015] to the west of ditch F.1935 is observable as a denser firmer and darker layer – probably equivalent to the material less disturbed and sampled by MM2. Context [5015] within ditch F.1935 was not well developed and was not the same material; the fact it coincides (if it really exists) with the vertical location of [5015] to the west of the ditch is either co-incidence or illusorily.

Anomalous Ditch F.1932/F.1896 and 'shafts' [F.1585/F.1660]: The fill of the 'shaft' F.1585 contained a clod of fallen topsoil [5052] (A horizon or Ah horizon) material. This was described and sampled by Charles French for soil micromorphological analysis. Two pollen samples were removed from the upper and lower portions of the clod. A further sample (a 30cm monolith <1860>) was taken from darker (?more humic) sands in F.1660 thought to be A-horizon material or turves within the shaft fills. This is described in Table 25, and 5 pollen sub-samples were removed from the sample.

Depth	Context	Description
0-6cm	1cm 6cm	Mixed, especially 0-2cm, yellowish brown/brownish yellow fine sandy silt loam, stone-free, massive, sharp boundary ?Ah/turf
7-11cm		Yellowish brown/brownish yellow fine sandy silt loam, stone-free, massive, abrupt boundary 'Shaft' fill
11-18cm	14cm	ark yellowish brown/dark brownish yellow (?more humic) stone-free silt loam, sharp to abrupt indurated/undulating boundary patch of more humic material ?Ah / turf
18-30cm	22cm 28cm	(as 6-11cm) yellowish brown/brownish yellow fine sandy silt loam, stone-free, massive 'Shaft' fill

Table 25: Monolith sample <1860> of 'shaft' F.1660 contexts [5139] and [5140].

The fills of the anomalous ditch F.1932/F.1896 were relatively fine-grained, firm and darker in colour than many other feature fills (?more humic). A series of five samples were removed from this rapidly in-filled 'feature' for consideration for pollen assessment/analysis (Table 26).

Depth	Context
20cm	4505
40cm	4505
60cm	4505
80cm	4505
120cm	4505

Table 26: Samples retrieved from anomalous ditch F.1896.

Ditch infills: Most of the ditch fills were fine sands and silts and typically light yellowish brown in colour. Some, however, were finer and darker in colour. The significance of this requires further investigation. Does this represent different local activities or infill histories? The latter may be better for pollen survival than that sampled and assessed in 2011.

Analysis	Context	No. of samples
Soil micromorphology	Anomalous ditch F.1896 [4504]	1
	'Shaft' fills	1
Pollen	pre-Iron Age soil clod [5052]	2
	'Shaft' soil clod [5052]	5

Table 27: Summary of samples removed (Area 2)

Trench 1

The rampart had been fully sectioned in the northwest portion of the trench revealing both the rampart's basal deposits lying over the natural, and occupation deposits resting against the

rampart. The opportunity to sample was limited to these two key deposits. The roundhouse F.1674 in the rear of the rampart was exposed, but the occupation/floor deposits F.1675 were not excavated. The roundhouse floor was not sampled so that this could remain intact for future investigations.

Deposits/basal soil horizon under the rampart: A thick silty loam survived below the rampart (Table 28). This may represent the minerogenic B horizon of the former soil, or (less likely) weathered silty deposits relating to the Hamstone (as in Area 2).

Depth	Context	Kubiena samples	Pollen samples	Description
0-5cm				Very dark grey (10YR 3/2) humic silty loam, essentially stone-free, many fine fleshy roots, abrupt boundary Ah
5-21cm				Large and medium Ham stones, in a matrix of compact dark brown (10YR 3/3) silt loam, abrupt boundary Rampart stones
21-57cm	3745			Yellowish brown (10YR 6/6) silt loam, common medium stones, some fine charcoal flecks, weak large blocky structure, abrupt boundary Rampart matrix
52-64cm	3752	MM12		Yellowish brown to brownish yellow (10YR 5/6 – 6/6), silt loam, massive, no structure observed, some small stones, rare medium stones, clear boundary B1: buried soil / Cw
64-88cm	3752	MM13		As above i.e. yellowish brown to brownish yellow (10YR 5/6 – 6/6), stone-free, silt loam, massive, no structure observed, sharp boundary B2: buried soil / C
88cm +				C: Ham Stone

Table 28: The basal soil / weathered parent material was samples in tow kubiena tins (MM12 and MM13).

'Midden' / occupation deposit against rear of rampart: At the back of the rampart is a well-defined black stone-free 'greasy' occupation deposit. This was sampled in a single kubiena tin (MM14).

Context no.	Kubiena samples	Pollen samples	Thickness	Description
3742	MM14	2cm	12cm	Brown (7.5YR 4/2) very firm silt loam, rare stones, reported to contain numerous finds, abrupt boundary Mixed – finds rich deposit
3734		6cm 10cm		Black (7.5YR 2.5/1) very firm stone-free massive 'greasy' silt loam, abrupt/sharp boundary 'Midden' / occupation deposit
3744		12cm		Yellowish brown (10YR 5/8) stone-free silt Dump

Table 29: Summary of 'Midden' / occupation deposit sample.

Both of these deposits (Table 30) may be available to re-sample if future excavations are undertaken here. The question of the buried soil (i.e. buried soil or weathered parent material) could be resolved by rapid soil micromorphological analysis.

Analysis	Profile no.	Context	No. of samples	Ref. no.
Soil micromorphology	1	Buried soil/weathered C 3752	1	<MM12>
		Buried soil/weathered C 3752	1	<MM13>
	2	Midden/occupation deposit 3734	1	<MM14>
Pollen		Midden/occupation deposit 3734	4	<MM14>

Table 30: Summary of samples removed from Trench 1.

Trench 2

Within the stone rampart Phase B-D-A is a stone-walled structure (?guard-house), within which there is a series of soils (A horizon material) and charcoal lenses. These may represent either floor surfaces, and/or a weakly developed soil. This profile was summarily described (Table 31) and sampled as MM 5.

Depth	Context	Pollen samples	Description
0-11cm	3928		medium tabular hamstone filling guardhouse, abrupt/sharp boundary
11-19cm	3929	2cm	dark brown (7.5YR 3/3) stone-free silty loam (no structure noticed)
19-30cm	3933/4	6cm	Brown (7.5YR 4/2) stone-free silty loam (?A horizon material) with (upper) intermittent charcoal lens within this
30-31cm		10cm	(lower) clear charcoal lens
31-34cm		14cm	Brown (7.5YR 4/2) stone-free silty loam (?A horizon material) as above
34cm+	3935		Abundant small and medium stones

Table 31: Trench 2, soil deposits in ?guardhouse within the rampart.

The upper occupation deposits overlying the rampart in Trench 2 were exposed but the buried soil under the rampart was not exposed as the full sequence was not excavated, although further investigation is anticipated for the 2013 season where a more complete section will be established. It was decided to restrict all sampling to that main section and sample this further in 2013.

Analysis	Context	No. of samples	Sample ref.
Soil micromorphology	?guardhouse	1	<MM5>
Pollen	?guardhouse	4	<MM5>

Table 32: Summary of samples removed from Trench 2.

Trench 3

The recording of Trench 3 was completed in full, and included a pre-Iron Age – possibly Neolithic – phase (Phase C-B) represented by features and soil; this was overlain by at least

four if not five Iron Age buried soils, the last of which at the top of the profile was considered by the team to not be appropriate to health and safety for the purposes of sampling.

The section was examined with Nail Sharples and five clear soils are present of which four were sampled:

1a. A complex basal buried brown earth soil with a dark (humic) A horizons over a reddish brown silty clay B over slabs of Hamstone parent material (C).

1b. The feature is adjacent to this and contains a reddish brown silty clay matrix (B horizon material and weathered C material), and is sealed with a clear A horizon which here.

2. Buried soil (A horizon) is stone-free worm-worked soil (grassland, developing over the earlier stage rampart).

3. Buried soil (A horizon) is stone-free worm-worked soil (grassland, developing over the earlier stage rampart).

4. A well-developed buried soil (A horizon) is stone-free worm-worked soil (grassland, developing over the later stage rampart).

5. A well-developed immature soil over the main rampart and high in the section.

Three areas were cleaned, described (following standard terminology – Hodgson 1976) and sampled. The section drawing in the archive shows the precise location of both samples and the stratigraphic relationship of the buried soils will be required. The profiles are described below in chronological order.

Profile 3: Phase C-B. Basal buried soil and feature (?Neolithic) located under the main Iron Age rampart at the base of the sequence (Table 33).

Samples collected: Kubiena sample MM10: [3804-5]
Kubiena sample MM9: [3805]

Context	Kubiena samples	Pollen samples	Thickness	Description
				Hamstone rubble
3804	MM10	2cm 6cm 10cm	0-8cm	Brown (7.5YR silty clay, common medium stones and abundant fine charcoal, clear boundary bA
3805	2cm gap MM11	14cm 18cm 24cm	8-32cm	Strong brown (7.5YR 4/6) stone-free firm dense silty clay, with weak large blocky structure, charcoal fragments present, and animal bones at base, abrupt boundary bB/ bC ?feature fill
			32cm +	Ham Stone Cw

Table 33: Description of Trench 3 (Phase C-B), Profile 3.

Profile 2: Two buried soils located within the main rampart (Table 34).

Samples collected: Kubiena sample MM8 [3786]
Kubiena sample MM9 [3791-2]

Context	Kubiena samples	Pollen samples	Thickness	Description
3786	MM8	2cm 6cm 10cm 14cm	Lower part = 10cm	Lower part of this context is under a stone lens, the upper part of which is called the same context but has different colour and texture etc Brown (7.5YR 4/3) silty loam/ slity clay loam with medium to large tabular Ham stone above (within this context), otherwise this part stone-free, no observable structure, many very small charcoal fragments, shells present (inc *Trochulus hispidus*), clear to abrupt boundary Buried soil: bA
3790			20-25cm	Brownish yellow (10YR 6/6) compact silty clay loam with common small and medium Hamstone pieces, abrupt to sharp boundary Dump, rampart: C (B/C)
3791	MM9	2cm 6cm 10cm	12cm	Brown (10YR 4/4) to strong brown (10YR 4/6) silt loam with common medium stones, weak blocky structures, abrupt boundary Buried soil: bA
3792		14cm		Yellowish red (5YR 4/6) silty clay with some medium stones Dump, rampart: C (B/C)

Table 34: Description of Trench 3 (buried soils), Profile 2.

Profile 1: Buried soil [3784] and [3794] located on the inner edge of the rampart (Table 35).

Context	Kubiena samples	Pollen samples	Thickness	Description
3783				Layer of large tabular Hamstone [3783] in a brown sandy silt loam soil matrix (rampart dump) sitting over the buried soil with an abrupt smooth boundary
3784	MM6	2cm 4cm	13cm	At sample the buried soil location is 13cm thick. Dark brown (7.5YR 3/2) silt loam, almost stone-free, rare medium Ham stones, no structure observed, fine vertical fleshy rootlets present, some fine charcoal, abrupt wavy boundary buried soil: bA horizon
3794		6cm 8cm 10cm	12cm	Strong brown (7.5YR 4/6) silty clay to silty clay loam, common medium stones, many fine charcoal flecks grading into (gradual boundary) bB1
3792	MM7	2cm 8cm 12cm	15cm	Yellowish red (5YR 4/6) silt loam, stone-free with weak small subangular blocky structure, abrupt to sharp boundary
3793				Hamstone slabs and reddish yellow (7.5YR 6/8) sandy silt Cw

Table 35: Description of Trench 3 (buried soils), Profile 1.

Samples collected: Kubiena sample MM6 bA [3784] and bB1 [3894]
Kubiena sample MM7 bB1 [3894] and bB2 [3792]

Analysis	Profile	Context	No. of samples	Sample ref.
Soil Micromorphology	3	Buried soil 3804/top feature fill 3805	1	<MM10>
		Buried soil/feature fill 3805	1	<MM11>
	2	Buried soil 3786	1	<MM8>
		Buried soil 3791 + dump below 3791	1	<MM9>
	1	Buried soil 3784-3794	1	<MM6>
		Buried soil 3794-3792	1	<MM7>
Pollen	3	Buried soil 3804/top feature fill 3805	4	<MM10>
		Buried soil/feature fill 3805	2	<MM11>
	2	Buried soil 3786	4	<MM8>
		Buried soil 3791 + dump below 3791	4	<MM9>
	1	Buried soil 3784-3794	5	<MM6>
		Buried soil 3794-3792	3	<MM7>

Table 36: Summary of samples removed from Trench 3.

Summary of soil micromorphology and pollen sampling

		Pollen ✓ / × (no.)
Area 2		
Pre-Iron Age soil clod [5052]	sampled 21/9/12 <clod>1 with CAIF	✓ 2
'Shaft' fill	sampled Ham Hill Team with CAU	(✓2)
buried soil B & B/C (western profile)	sampled 21/9/12 <MM1> with CAIF	×
buried soil B & B/C (western profile)	sampled 21/9/12 <MM2> with CAIF	×
?[5015] within ditch F.1935 "	sampled 3/9/12 <MM 3>	×
Buried soil [5015] "	sampled 3/9/12 <MM 4>	×
Trench 2		
Deposits in ?guard house	sampled 3/9/12 <MM 5>	✓ 4
Gray trench		
Profile 1		
Buried soil [3784-3794]	sampled 9/9/12 <MM 6>	✓ 5
Buried soil [3794-3792]	sampled 9/9/12 <MM 7>	✓ 3
Profile 2		
Buried soil [3786]	sampled 9/9/12 <MM8>	✓ 4
Buried soil [3791] + dump below [3791]	sampled 9/9/12 <MM9>	✓ 4
Profile 3		
Buried soil 3804/top feature fill [3805]	sampled 9/9/12 <MM10>	✓ 4
Buried soil/feature fill [3805]	sampled 9/9/12 <MM11>	✓ 2
Trench 1		
Profile 1		
Buried soil/weathered C [3752]	sampled 12/9/12 <MM12>	×
Buried soil/weathered C [3752]	sampled 12/9/12 <MM13>	×
Profile 2		
Midden/occupation deposit [3734]	sampled 12/9/12 <MM14>	✓ 4

- A total of 15 soil micromorphological samples were removed (15 tins and 1 'clod')

Pollen:	Samples from kubienas listed above	32	M. Allen (for R. Scaife)
	'Shaft' fill; to consider for sampling (at CAU)	(2)	(CAU)
	Anomalous ditch F.1896 [4504]	5	M. Allen (for R. Scaife)

- This constitutes eight 'profiles' and 37 (?+2) pollen samples from which a selection should be made for assessment.

Land snails

The large set of flots (2 boxes) was assessed for land snails after completion of the assessment of charred plant and charcoal remains. The flots were rapidly scanned by eye, under x10 stereo-binocular microscope. Flots with >50 shells or with species of particular note were selected for full assessment.

Methods

The flots were scanned (and many sorted) under x7 to x 45 magnification. Species were identified and recorded as present (>40 shells ●) or abundant (>40 shells ●●) and presented in Table 1. More detailed estimates of the species number were made and retained in working documents. The table is arranged in species habits preferences.

Results

The non-base rich soils on Ham Hill are generally not conducive to shell (or bone) preservation and shells are only present in suitable numbers where rock rubble, bank deposits or deposits of bone have created local microhabitats with higher free calcium carbonate levels. Despite this a reasonable high percentage of the flots (20-25%) contained assemblages worthy of assessment (Table 37). A series of 27 samples were fully assessed.

The majority of the assemblages listed have enough shells to make them statistically viable (i.e. c.100, cf. Evans 1972), and it is possible that further shells, including Limax (slug) plates, and other species may be present in the residues.

The implication of the results are not immediately obvious as several of the abundant species may relate to the local rock-rubble habitats (*Discus rotundatus, Oxychilus cellarius*. and *Vitrea contracta*) (see Evans and Jones (1973). These are designated RR in Table 37. Furthermore, in the Iron Age we generally expect the local landscape to be broadly open, and especially within an occupied hilltop enclosure. The aims, therefore, were to examine, in particular the rampart sequences (Trench 1, 2 and 3) for evidence of episodic regeneration (longer grass and scrub) and clearance and trampled grass perhaps indicating episodic and changing levels of occupation activity and density on Ham Hill. In each rampart sequence the highest context numbers (presumably the stratigraphically lowest and oldest) are listed on the left of the table, and the lowest context numbers on the right.

Trench 1: There are too few samples from Trench 1 to make any meaningful comments, and both samples are dominated by the Introduced Helicellids (*Candidula intersecta, C. gigaxxii* and *Cernuella virgata*) indicating intrusion via biotic activity (roots or burrows), mixed or recent deposits.

Trench 2: The assemblages indicate relatively open conditions generally but probably more mesic conditions (long grass and scrub) on the bank. Slightly clearer conditions are indicated in context [3911] with an increase in *Pupilla muscourm, Vallonia excentrica* and *Helicella itala* (archive records), suggesting possibly shorter trampled grassland and bare soil.

Trench 3: This shows a similar picture, although there are tentative hints of more mesic (shadier) phases representing scrubby long grass, interrupted by more drier shorter grassland in contexts [3814] and [1903]. The possible emplacement of rock rubble and loose vacuous habitats after the shorter drier turfed conditions of context [1905] is suggested in context [1902] by the increase in *Discus rotundatus* (Table 37) and other rock-rubble species (archive).

Another important presence is that of mesic (moisrure loving) and freshwater shells (*Succinea putris* and the freshwater species *Bathyomphaus contortus*) from contexts [3792] and [3783]), the latter of which suggest the

acquisition of water from a valley or spring. The presence of freshwater shells has been discussed for a number of other Wessex Iron Age sites by the author (Allen 2006 a,b; 2008).

Significance and Potential

The assemblages here provide one of the few methods of determining the nature of the vegetation cover on and within Ham Hill. Pollen survival is unlikely in these contexts, though may survive in buried soils (which will be exposed and more effectively sampled in the 2013 season).

There are indications of both the nature of the vegetative cover of the ramparts and the wider environs, and of changes in that vegetational cover. These include increasing mesic environments as grasses grow and possibly even some shrubs started to invade the interior ramparts slope. The later sampled phases in Trench 2 (context [3911]), and episodes in Trench 3 (contexts [1905] and [1903] at least tentatively suggest possible clearance and establishment of more open shorter, possibly trampled grass). These changes may reflect wider changes within the settlement, and use dynamics of the hilltop occupation. The exploitation of water resources, stream or springs is also seen from the assemblages.

A selection of a sequence of samples from the enclosure ditch will aid in characterising the interior and provide both a control for the rampart sequences. Careful selection of a *sequence* of samples through the rampart in Trenches 2 and 3 is clearly also beneficial.

Recommendations

A series of samples should be fully analysed to examine the land-use history. These should include:

- 2 samples from selected features in the interior (i.e. 2 of samples [1560], [1814], [1917] and [1916]) to act as a control and define the broad nature of the interior landscape.
- 3-4 samples through the rampart in Trench 2.
- A selection of up to 12 samples providing a *sequence* through the rampart in Trench 3 (and to include samples from context [1905], [1903], [3792] and [3783]).

Table 37: Assessment of the snails in the selected flots; Key ● = 1-39; ●● = 49-200; [●] retains perisotricum / modern

Trench			×		Tr1	Tr 1	Tr 2	Tr 2	Tr 2	Tr 2	Tr 2	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3	Tr 3
Feature/context type		ditch	ditch	ditch																							
Feature	1509	1527	1531	1531																							
Context	2811	4498	2991	2989	3734	3732	3943	3933	3929	3919	3911	3827	3827	3817	3814	3808	3807	3804	3801	3799	3797	3795	3794	3792	3785	3784	3783
Sample	1560	1814	1917	1916	1837	1817	1966	1960	1963	1958	1957	1913	1912	1911	1905	1902	1900	1894	1898	1903	1907	1895	1888	1886	1890	1889	1892
Volume (litres)	20	14	21	43	92	105	15	24	16	33	28	12	15	3	13	3	5	5	12	7	4	12	8	14	2	4	5
SHADE-LOVING																											
Aegopinella nitidula (Draparnaud)	●	●		●	●		●	●	●			●	●	●			●			●	●	●		●	●	●	
Nesovitrea hammonis (Ström)		●	●	●								●															
Aegopinella pura (Alder)		●							●			●								●	●					●	
Vitrea contracta (Westerlund) RR		●	●	●			[●]	●	●			●		●	●	●				●	●	●	●	●	●	●	
Oxychilus cellarius (Müller) RR		●		●			●+[●]			●	●	●	●	●	●	●	●			●		●	●	●		●	
Discus rotundatus (Müller) RR							●+[●]	●	●	●	●	●	●	●	●	●●	●	●	●	●	●	●	●	●	●	●	●
Carychium tridentatum (Risso)							●	●	●	●		●	●	●	●						●					●	
Clausilia bidentata (Ström)							●	●	●	●	●	●		●			●	●	●	●	●	●	●				
Acanthinula aculeata (Müller)								●				●								●	●						
Cochlodina laminata (Montagu)											●							●		●							
Vitrea crystallina (Müller)																				●						●	
Trochulus striolatus (C. Pfeifer)																							●				
CATHOLIC																											
Trochulus hispidus (Linnaeus)	●	●	●	●	●	[●]	●	●	●	●	●	●	●	●	●	●●	●	●●	●	●	●	●	●	●	●	●	●
Cochlicopa cf. *lubricella* (Porro)		●	●	●						●	●	●	●											+			●
Cochlicopa spp.		●					●				●		●			●			●		●	●			●		
Cochlicopa cf. *lubrica* (Müller)				●				●		●			●						●				●				
Vitrina pellucida (Müller)	●														●					●							
Pomatias elegans (Müller)							●	●		●										●		●				●	
Merdigera obscura (Müller)															●		●		●	●	●				●		●
Punctum pygmaeum (Draparnaud)		●													●												
Cepaea hortensis (Müller)		●						●		●				●							●						
Cepaea nemoralis (Linnaeus)													●														
Cepaea spp.			●				●									●	●	●	●	●		●		●			
Cornus aspersum (Müller)	[●]																				●						
Helicigona lapicida (Linnaeus)																				●							
OPEN COUNTRY																											
Vallonia costata (Müller)	●	●					●+[●]						●	●	●	●	●	●	●	●	●	●	●	●		●	●
Vallonia cf. *excentrica* Sterki	●	●	●	●			●+[●]	●	●		●		●		●●	●●	●	●	●	●●	●	●	●	●	●	●	●
Vallonia pulchella (Müller)		●							●															●			
Vallonia spp.		●													●					●			●		●		
Helicella itala (Linnaeus)	●			●			●			●	●			●	●	●		●	●	●	●		●		●	●	●
Vertigo pygmaea (Draparnaud)							●	●	●	●					●	●	●			+		●			●		●
Pupilla muscorum (Linnaeus)							●			●	●				●●	●	●	●		●	●	●	●	●		●	●
Pyramidula pusilla (Vallot)																											
Lauria cylindacea (da Costa)																		●									
Candidula inersecta (Poiret)					●	[●]																					
Candidula gigaxii (L. Pfeiffer)					●	[●]																					
Cerneulla virgata (da Costa)						●					●																
Helicellids											●																
MOIST or FRESHWATER																											
Succinea putris (Linnaeus)																								●			
Bathyomphalus contortus (Linnaeus)																											●
Cecilioides acicula (Müller)	○	○	○	○	○○	○○	○○		○	○	○	○			○				○	○	○		○			○	○
TOTAL	**25**	**50**	**125**	**50**	**10**	**1+[5]**	**70**	**100s**	**100s**	**250**	**100**	**50**	**300**	**40**	**250**	**200**	**200**	**130**	**100s**	**150**	**75**	**100s**	**80**	**30**	**20**	**90**	**400**

Wider considerations

Understanding the development of the soils across the main excavation area at Ham Hill may be crucial to explaining the archaeological record within Areas 1-4. It provides a basis for assessing the loss of archaeological resolution through leaching and soil disturbance, and emphasises the potential value of the surface finds collection and test-pit strategy from which the finds accumulation may be approached analytically.

As was previously illustrated in Figure 4, where smaller pits and postholes have been identified high in the soil profile it is on account of clutches of burnt Hamstone or high densities of charred material from within their upper fill. A number of post structures and small pits have also been observed in the natural sands underlying the 'buried' soil. Taken together, these distributions highlight areas of the site in which there are blank or 'negative' spaces, and correlation with finds densities recorded from the walkover survey could help to clarify the nature of these areas.

3. Discussion

The 2012 excavations have provided a great deal of information on the long term settlement of the hilltop and it is now possible to provide a reasonable chronological summary of the activity occurring in the main area of the excavation.

Neolithic

Understanding of the earliest inhabitation of Ham Hill has significantly expanded as a result of the second season of excavations, most notably with the identification of a possible causewayed enclosure in Trench 3 (see Sharples section 2.4). The limited area available for examination means this interpretation has to be treated with caution but excavation in Trench 2 may provide supportive evidence. What is increasingly clear from the lithic assemblages in the main area excavations, as well as the quantity of blade-based lithic material from Trench 1, is that the Ham Hill plateau attracted a considerable amount of activity, no doubt through centuries of repeated visitation.

Late Neolithic/Early Bronze Age

A lot of effort was expended on investigating the substantial shafts in Area 4. The overall context appeared to be a linear feature comprising conjoined deep circular shafts that had been later cut, and perhaps directly referenced, by an elongated and fairly substantial Iron Age ditch. However, an alternative hypothesis is that this is a large natural opening capped by a weathering cone. It is generally noted that the 'true character' of the structure of natural shafts only becomes visible from a depth of 2.5m (Hawkins and Privett 1981, 159); with the anticipation of further analysis, the excavation of one of the shafts to a depth in excess of 4m should in due course provide a more detsailed understanding of their archaeological significance. The fill of the shafts comprises mixed sand deposits that are strikingly devoid of artefacts and other obvious evidence for human activity. In contrast the overlying ditch or weathering cone produced a mixed assemblage of artefacts, mainly consisting of

Middle to Late Iron Age items, but including a Neolithic stone axe (SF.290, see Timberlake, in Slater *et al*. 2012).

Deep later prehistoric and Romano-British shafts have been recorded from a number of hillfort sites across southern Britain (e.g. Ellis and Powell 2008, 169-170; Gent and Quinnell 1999; Hirst and Rhatz 1997, 33-4; Page 1906, 582; Ross 1968). Some of these may involve the exploitation of pre-formed natural voids. Elsewhere, natural voids or sink holes encountered within hillforts have been ignored by the inhabitants (e.g. Waddington 2011, 24-6). Shafts containing later prehistoric material have also been encountered from unenclosed settlement contexts (e.g. Bishop and Proctor 2011; Bradley *et al*. 1978; French *et al*. 2007; Moss-Eccardt 1988; Phillips *et al*. 2009), and have in a number of instances presented a series of interpretative challenges, namely their status as either hand-cut or naturally occurring. Deep shafts originally interpreted as hand-cut have in light of more recent investigations been reconsidered to be shafts that have opened and subsequently filled through natural agencies (e.g. Wainwright 1973; Healey 1986), but in most cases uncertainty remains as to which of these actions is an appropriate interpretation.

Hawkins and Privett (1981) identify three types (A-C) of movement that potentially develop into four overall classes (I-IV) of shafts that are referred to as gulls. Of most relevance here is A-type movement that results in the opening of a single joint creating a straight, parallel-sided gull (generally characterised by Class I gulls). The form of a gull is dependent upon the lithology of the parent strata, but in sandstones, ironstone and calcareous sandstone gulls have generally vertical, almost parallel sides symmetrical in section that extend through the full thickness of overburden, the head sagging into the gull (Hollingworth *et al*. 1944, 12-18). Gulls form through a widening of a joint or fissure that has become a channel for percolating water and localised solution in calcerous beds. The walls of the fissure become decalcified a few feet from the gull, resulting in a loss of cementing material that leads to fragmentation and disintegration of the gull's walls that crumble into the void (especially at the top) and broaden the gull. Under these circumstances, infilling occurs more from the sides than from above. It is interesting to compare these observations with a number of consistencies identified in the excavation of shafts that reach depths of at least 3m and are found to contain prehistoric and Romano-British material culture. These include, (1) a circular or ovoid plan, (2) near vertical sides, (3) a thin layer of basal silting indicating that the shaft was open for a short period of time, (4) naturally accumulating primary fills from the ground surface or the shaft sides to mid-way into the shaft, (5) a general paucity of material culture in the primary fills, (6) an erosion or weathering 'cone' at the shaft head, or a conical upper fill profile, (7) darker, artefact rich fills in the upper profile.

Naturally occurring open shafts on Ham Hill has been periodically documented (Prudden 1995; 2005) and these were clearly encountered during the Iron Age occupation of the hillfort. In previous excavations the fill of an Iron Age pit appeared to have slipped into a void in the underlying Hamstone resulting in a V-shaped profile similar in section to that of the shaft in Area 4 (McKinley 1999). Excavation of an Iron Age pit [F.1536] in Area 1 also encountered, at its base, a possible void in the underlying Hamstone. Such 'features' may in some instances at Ham Hill have become the focus of activities associated with formal deposition, at least where large openings in the ground surface might have been considered unusual or even divine



Figure 17. Certain and possible late Bronze Age features

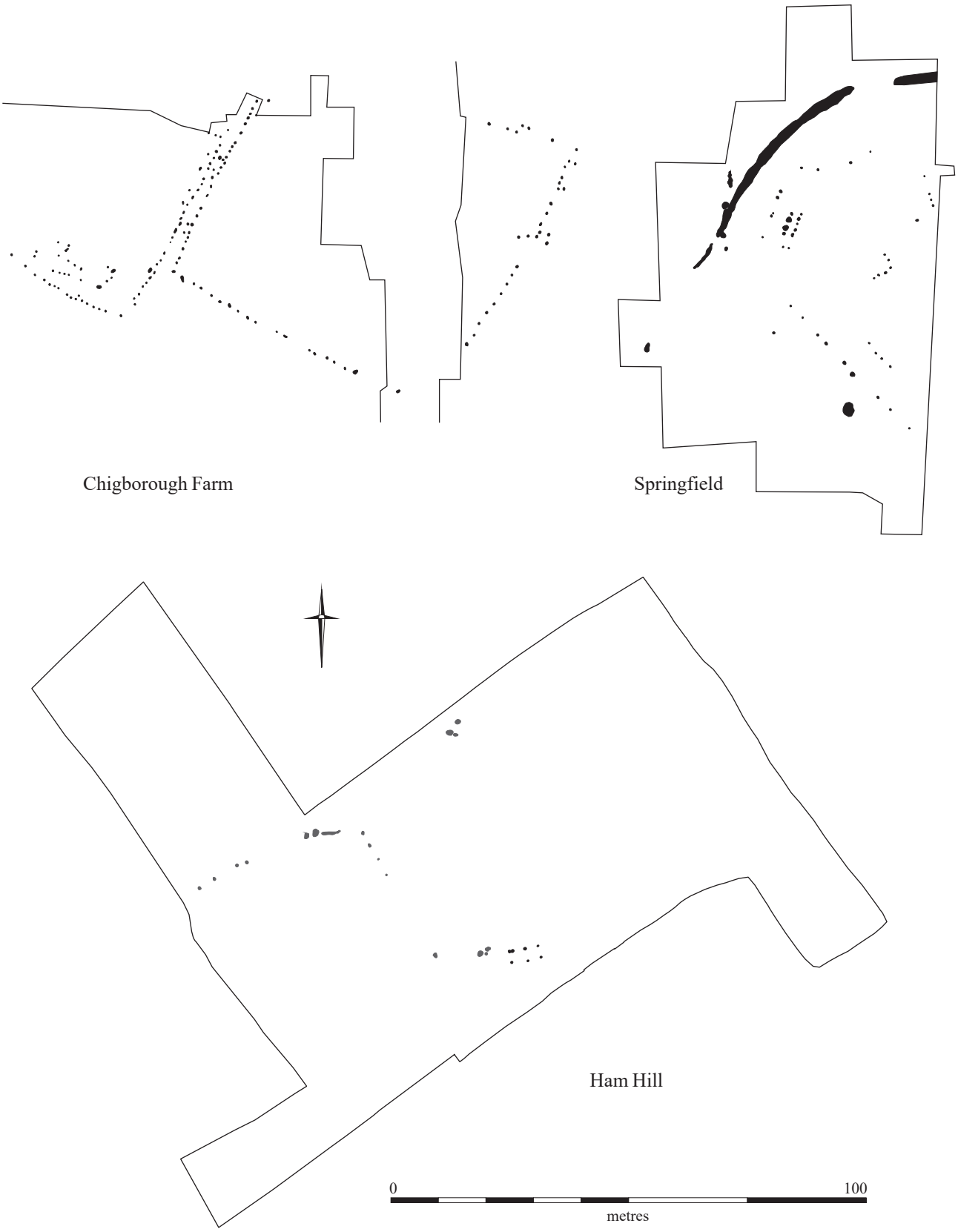


Figure 18. Comparison of Ham Hill Late Bronze Age features with palisade enclosures at Chigborough Farm (after Waughman 1998) and Springfield (after Lavender 1999), Essex

There is a note from the mid-nineteenth century of a 'fissure or chasm' exposed by quarry workers from which the remains of animal bones and human skulls were collected (Walter 1853, 87).

Middle Bronze Age

Few Middle Bronze Age sites have been excavated in Somerset (e.g. Bell 1991; Leach 2009; Tabor and Johnson 2002; for a summary see Yates 2007, 72, 164), and the coaxial field system upon Ham Hill is clearly an important contribution to this corpus. Moreover, the intensity of the sampling – 50% hand excavation of the ditch – is clearly proving fruitful for maximising finds retrieval, as well as its identification of repeated recutting. The standard 1m in 10 would most certainly miss the vast majority of circuit terminals that have thus far been noted. Continued emphasis on this intensity in the forthcoming season of investigations will hopefully provide a clearer understanding of the recutting process and its relationship to plot demarcation. At present the picture is one of extended management. Given the intensity of the sampling it is noteworthy that the degree of contemporary material culture or associated deposits is minimal, although with another season of investigation this remains open to change.

Late Bronze Age

An interesting development of this year's excavation has been the identification of a group of features possibly dating to the Late Bronze Age (Figure 17). The features include a six (or seven) post structure and a post alignment crossing Areas 1 and 2 on an approximate north-south, east-west axis. This alignment clearly differs markedly from the Middle Bronze Age field system and indicates a major reorientation of activity on the plateau. This could either indicate a separate phase of agricultural activity or the earliest phase of occupation of the hillfort. Excavation of the rampart in the area immediately to the east has recovered large quantities of Late Bronze Age/Early Iron Age transition ceramics accumulating behind the rampart but the rampart may have been constructed even earlier, in the Late Bronze Age. Excavation and field survey of the large Late Bronze Age enclosures of Wessex suggests these tend to be sparsely occupied with isolated four post structures (Wainwright and Davies 1995; Bedwin 1978, 1979) which would be comparable to the situation at Ham Hill.

However, timber post alignments and post partitions are also a feature of the Late Bronze Age landscapes that contrast with preceding systems of predominantly ditched field enclosure (see for an example, Best *et al*. 2012; Evans and Knight 2001; Lavender 1999; Moore and Jennings 1992; Waughman 1998). A change in orientation is also visible in the development of Late Bronze Age linear boundaries in Wessex. These frequently cut across coaxial fields – an indication, Cunliffe (2004) has suggested, of changing social attitudes to landscape and production.

This Late Bronze Age activity is associated with the deposition of large quantities of metalwork, a feature that can be paralleled at other prominent hills in the region. Within 20km of Ham Hill established hillforts, such as at Norton Fitzwarren to the

west (Ellis 1989) and South Cadbury to the east (Barrett *et al*. 2000) have produced good evidence for Late Bronze Age metalwork deposition. Further dating evidence is clearly required to clarify the nature and significance of the Late Bronze Age activity on Ham Hill.

Iron Age

The principal focus for the 2012 season of excavation was the interior of the rectangular enclosure, though the opportunity was also taken to excavate several sections across the enclosure ditch and complete the excavation of the entrance. The area excavated (Area 2) contrasts markedly with the area excavated in 2011 (Area 1) in the relative paucity of large grain storage pits present and of material culture found. The most obvious interpretation of this patterning is that the enclosure was kept relatively clean and that settlement activity was concentrated in areas outside and around the enclosure.

The principal Iron Age features visible inside the enclosure comprised two gulley complexes, Structures 2 and 3. Structure 2 was a circular gulley that lay completely within the area excavated, whereas Structure 3 was an apparently pennanular feature which extends into an area still to be excavated. Superficially these gulleys indicate two structures built on the north side of the enclosure; one a house, the other an ancillary building. However, it has to be emphasised neither structure can be securely associated with the construction and use of the enclosure. Indeed Structure 3 lies close to the enclosure ditch and would possibly have been under the adjacent bank, though this has to be confirmed by the excavation of Area 3. It is possible that the enclosure was empty and that these structures pre- or post- date its use.

Both gullys are more irregular and insubstantial than the gully defining Structure 1 excavated in 2011. The gully defining Structure 2 is almost 20m in diameter with a large opening, 15.5m wide, facing south. The area enclosed contains a concentration of features, mostly shallow pits, but including a single posthole F.1920. This posthole cannot be convincingly associated with the structure of the house, unlike Structure 1 where a pair of postholes clearly marked the entrance of a house, probably 9.25m in diameter (within a gully 12.25m diameter). It is consequently impossible to estimate the size of the structure defined by this gully. It seems most likely that the defining gulley was not structural and that it contained a smaller house. If the ratio of gulley to house wall is similar to Structure 1 then a house approximately 15.2m in diameter could be expected.

The features contained within the gully are assumed to be roughly contemporary with the use of the structure but this is only through location rather than stratigraphy. Most of these features were identified at a much higher level than the gullies due to the presence of large quantities of stone, burnt debris and artefactual material. The most productive feature was a pit F.1897 which contained an important ceramic assemblage which had clearly been deliberately placed in the pit. It would be surprising if this pit was only accidentally associated with Structure 2 as very few pits were present in Area 2

Cambria Farm, approximately 1.6km east of Taunton, provides the nearest excavated comparison, with five gully defined roundhouses up to 17m in diameter (SHER 28221). Groundwell Farm in Wiltshire has a double-ditched roundhouse with an internal diameter of 17.5-19.5m (Gingell 1981). Both of these sites date to the Early Iron Age and might support the argument that Structures 2 and 3 are unconnected to the enclosure. However, geophysical survey at West Wood, *c*. 10km north of Ham Hill, has identified several roundhouse gullys between 11m and 20m in diameter, surrounded by a rectilinear enclosure ditch (Gater *et al*. 1993).

Excavation of the ditch and entrance of the enclosure confirmed the character and sequence identified in 2011. The features present in the entrance suggest access to the interior was impeded by a timber screen that forced entry to the north and would have restricted visibility into the interior by anyone standing in front of the entrance. The entrance structures appear to have been systematically dismantled with a thick layer of slabs indicating the presence of an elaborate stone revetted bank. The bank appears to have been used to deliberately infill the ditch all the way around the enclosure.

The duration of the enclosure's use is at present uncertain but there are certain features which suggest it could be quite short lived.

1. the enclosure's entrance displayed no signs of erosion, or metalling, that might indicate repeated use;
2. the deliberate backfilling of the enclosure ditch lay on a relatively thin accumulation of primary silts which would have accumulated quickly;
3. there was no evidence for re-cuts.

The 'event' of levelling the inner bank is significant; a formal act far from simple vandalism or decay. However, it did not completely erase the enclosure, which would have remained as a noticeable feature in the landscape. It might therefore be prudent to consider whether the destruction of the surrounding bank and infilling of the ditch represented the end of the enclosure's use? After the infilling the remaining hollow was used to deposit domestic refuse, which is associated with settlement activity surrounding the enclosure. This indicates that settlement continued to avoid the interior of the enclosure and that the presence of the enclosure was redefined by the creation of foul smelling midden.

Finally, it is curious that amongst the material recovered from Areas 1, 2 and 4 that nothing attributable to the Early Iron Age has so far been identified. This is particularly surprising as Trench 1, which lies only *c*. 150m to the east, produced large quantities of material and a stone walled roundhouse dating to this period. Moreover, in light of the quantity of Middle to Late Iron Age settlement activity in Areas 1, 2 and 4, it is also surprising that Trench 1 contained no evidence for settlement activity, nor of any rampart construction or maintenance that could belong to this period. Whilst another trench is planned over the southern rampart, it is worth considering the implications of the possibility that the southern rampart was *never* elaborated after its initial construction in the Early Iron Age. The north, east and west sides of Ham Hill overlook a comparatively low-lying agricultural landscape and have long distance views. However, to the south the hill overlooks an undulating hillside with limited views and a valley that today is pocked with carr woodland and spring lines. The visual significance of the ramparts would perhaps have been most apparent

from a distance to the north, east and west. It may also be significant that the major elaboration of the hillfort broadly coincides with the construction of the rectilinear enclosure, which according to the geophysics is one of a number within the hillfort's interior. Could construction of enclosed settlement upon the hillfort's plateau have served a broadly similar purpose to the rampart elaboration in lieu of any such emphasis of construction along the southern aspect?

Romano-British and Later Usage

Two sets of parallel ditches have now been excavated in Areas 1 and 2. These cut all major prehistoric features and the recovery of a few sherds of Roman pottery and metalwork suggests a Romano-British date. The excavation of Area 3 is expected to reveal the relationship between these various sets of ditches which at present appear to represent a fairly basic rectilinear layout. With the triple ditches of F.1947-9 either terminating at staggered points, or, in the case of F.1947, turning sharply at a right angle, it seems likely that we are actually looking at more than just one phase of field allotment.

Large quantities of Early Roman material have been recovered from the rampart trenches along the northern spur and it seems most likely that this represents an early military occupation of the hillfort comparable to that found at Hod Hill (Richmond 1968) and South Cadbury (Barrett *et al*. 2000). The presence of human remains and a ballista bolt in the midden accumulating against the back of the rampart in Trench 2 is interesting and may indicate the presence of a 'massacre deposit' similar to that found at South Cadbury (Barrett *et al*. 2000), and the cut marks on these remains illustrate a complex mortuary process. This deposit will be further explored in 2013.

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4. APPENDICES

4.1 Public Outreach – Hayley Roberts

The 2012 excavation season built upon the 2011 season with many visitors returning, wanting to see the next piece in the Ham Hill jigsaw (Figure 18). The outreach program was hampered by generally poor weather, and this is reflected in our overall visitor statistics. Nevertheless, these statistics remain positive, with feedback being in the main good. Moreover, the project website (www.hamhillfort.info) was re-designed and launched to accompany the onset of the 2012 field season. This includes broader information relating to the background of archaeology at Ham Hill, the aims of the project, and ongoing updates regarding the project results during the excavation and post-excavation stages.

The following comments have been drawn from the project's visitor book:

- Really educational tour by Hayley & Tom, thoroughly enjoyed. Very knowledgeable team. Thankyou, Odcome Walkers Association.
- So interesting, our walks over Ham Hill will never be the same. Thank you. Karen, Jason, Imogen and Theo Rousell
- A really interesting day- very accessible. Please could you let us know events next year- my 7 year old son is enthused. Thank you. Lynd

Lectures

Twelve lectures have been presented to academic and public audiences between August 2012 and March 2013 (Table 38), with all proving to be popular and well-received. Three lectures presented to local groups during the 2012 field season and part of the British Festival of Archaeology also included the use of artefacts on display. These were generally oversubscribed, and additional public presentations are in the booking stages for the 2013 season. Information regarding the presentations was distributed via word-of-mouth and pre-existing networks, as well as poster advertisement. Entry to one of these events was free upon advance booking, with a small charge for entry fixed at the discretion of the other venue organisers. In Tintinhull there was an audience of 100 people and in 120 at Seavington St. Michael. Both of these raised money for local causes; for example, Seavington raised over £600 for the community store and café.

Date	Venue/Organisation	Speaker
July 2012	Ham Hill Rangers' Office	Sharples
July 2012	Tintinhull village hall	Sharples
July 2012	Seavington St. Michael village hall	Sharples
Aug 2012	European Association of Archaeologists conference, Helsinki	Sharples
Oct 2012	South Somerset Archaeological Research Group conference	Sharples
Oct 2012	Bangor University	Sharples
Nov 2012	Cardiff University	Sharples
Nov 2012	Rethinking Hillforts conference, Oxford University	Brittain
Feb 2013	Cambridge Archaeology Field Group	Brittain
Mar 2013	Current Archaeology Live, London	Sharples
Mar 2013	Somerset Archaeology and Natural History Society	Sharples
Mar 2013	Cambridge Instruments Fellowship	Brittain

Table 38: Summary of Ham Hill project presentations, Aug 2012 – March 2013

Public guided tours

Over the course of the 2 month field season we provided 35 guided tours for 429 members of the public. This actually demonstrates the value some people placed up on seeing the excavations. Similarly, as an aside, more than one of the tours was caught by torrential rain and strong winds, but requests for the tour to continue predominated.

The main excavation area in 2012 was in many ways less visually diverse or distinct than in 2011 and was therefore a harder interpretative process for non-specialist members of the public. This combined with the generally poor weather and often treacherous conditions underfoot, meant that the guided tours were either far more challenging or limited to particular, safer, areas, often restricted to a brief overview from a purpose-built viewing platform. To prevent disappointment these tours were also taken to the Trench 1 along the southern rampart where the round house presented a much clearer, and rare, means for communication.

Many of the tours were undertaken by Cardiff University students, greatly helping them to improve their understanding of the site and their communication skills. Repeat visitors also appreciated different tour guides and the varied perspectives that they brought to each tour.

Larger groups were able to book in advance for additional guided tours. During the excavation period this catered for c.230 people from groups ranging across local history societies, schools, and non-affiliated interested parties and a school (see Table 39). Unfortunately since the excavation only coincided with two weeks inside of term time the number of school groups was fairly low, although family visits were by comparison much higher.

Group	**Number of people per tour**
Odcome Walkers	25
Cardiff Archaeology Society	32
Lopen History Group	8
John Bailey and friends	11
Chris Tripp and students	15
Lufton Excavation team	10
The Prehistoric Society	15
Yeovil Lions	25
Cambridge Society of Somerset	25
Huish Episcopi Sixth Form	12
Yeovil Archaeology and Natural History Society	15
Devon Antiquarian Society	16
Country Park Rangers, Ham Hill Friends and volunteers and Members	21
Total	**230**

Table 39: Summary of pre-booked group tours.

The Open Day

As in the 2011 excavation season we held an open day on the first weekend of September, planned to coincide with a Heritage Event held by the South Somerset District Council in the Ham Hill Country Park. The weather was acceptable (certainly compared to the rest of the summer), but numbers of attendance were lower than in 2011 in spite of improved signage and free horse and cart rides to the excavation, as well as the Country Park event again receiving high numbers. This is presumably due the fact that visitors focused upon the one-off event, choosing to visit the project excavations on another occasion. Other methods of advertisement and display will be explored for a repeat event in 2013.

A random sample of visitors on the open day was asked to fill in an evaluation questionnaire. This was particularly designed to see if the outreach programme re-enforced or challenged stereotypes about prehistory and archaeology/archaeologists, and to ascertain the form of knowledge regarding the site

and the excavations that people left with. More data is required for meaningful analysis, which is a target for 2013.

Volunteers

Volunteers were again invited to participate in the excavations. In total 25 volunteers spent 132 days on site. These were mainly local people living within 25 miles of Ham Hill. The demand for places was extremely high, and placements generally lasted for a minimum of 1 week. The number of placements for each week was dependent upon the prior experience of the volunteers and the ration of students/volunteers to CAU staff supervisors. Volunteer placements were free of charge (this did not include lunch). Feedback forms were used to assess the degrees of success of the volunteer programmes (Table 40). We received completed forms from 8 out of the 25 volunteers – a statistic that needs to be improved upon in 2013.

Two volunteers who participated in the 2011 excavations have recently signed up to undergraduate archaeology degree courses. For one of these volunteers the excavation confirmed their desire to pursue archaeology; for the other the excavation was a very new experience at a difficult time following long-term unemployment. In the latter example the decision to pursue studies in the areas of cultural heritage are in part a direct outcome of their experience with the project.

Q no.	Question
1	What features did you dig? What was their significance?
2	Did you get to record the features and were the recording methods adequately explained?
3	On a scale of 1-5 (where 1= poor and 5 = excellent) how was the quality of the teaching?
4	Do you feel that you have contributed to our understanding of the archaeology and therefore the interpretation of the hillfort?
5	Did we feed you satisfactorily?
6	Can you give three words that summarise your experience with us
7	What have you learnt by spending this week with us?

Table 40: Summary of questionnaire queries

Press coverage

The press coverage for the 2012 field season was not as extensive in the previous year, but, in spite of the overwhelming Olympic coverage in the national and regional press, local coverage remained good particularly through the Crewkerne Weekender, with the promise of further coverage next year. Aiming for a more focused (but further afield) audience an article titled 'Ham and Mustard' was published in the March/April edition of *British Archaeology*. Several enquiries about the site have been received in response to this, including requests for volunteer spaces.

Our press release was copied onto several websites:

- http://edition.pagesuite-professional.co.uk/launch.aspx?eid=51d8ce5c-7aa2-4ae8-bb26-b3b9b3d3bde0&skip=true
- http://phys.org/news/2012-08-iron-age-hillfort-reveals-secrets.html
- http://www.cam.ac.uk/research/news/ham-hill-digs-enhance-picture-of-iron-age-life/
- http://accesscambridgearchaeology.wordpress.com/2012/09/04/digging-the-iron-age-at-ham-hill/
- http://xcavate.blogspot.co.uk/2012_08_01_archive.html

Static interpretation

As in 2011 several posters were put up around the main excavation area and the rampart trenches, as close as possible to public footpaths, to explain the need for interventions as well as the character of what was being revealed. These were updated with new findings when and where possible.

Internet presence

The website was completely redesigned to make it both more accessible and informative. This was carried out prior to and during the excavation, thereby enabling close communication between the web designer and the project team. Blog updates were authored by Cardiff students and volunteers, covering multiple aspects of the excavation, from different types of features to the range of excavation techniques and processes that were carried out on site. Informal feedback on the website was also gathered with the most frequent requests being for more photographs and even more information. The client report of the 2011 excavations was subsequently uploaded to the website (the large size of the file having initially proved to be problematic).

General Impact

Without drawing upon specific examples from the data (which after 2013 will be collated into a manageable and analysable database) there was an impression that the excavations had contributed as a major 'pull-factor' to the Country Park's visitor register. Comments during tours perhaps illustrate a sense of this with statements such as, 'I haven't walked over here for ages,' or, 'I have never been to this bit of the Country Park before.' This is likely to have also contributed towards local business, so often reliant upon favourable weather that was largely absent throughout the 2012 season, particularly with respect to refreshments. Furthermore, catering for the project team (numbering throughout in excess of 45) was supported by the Prince of Wales public house which furthered the degree of interaction with the local community and moreover benefited the project itself with local knowledge concerning the hillfort and its environs.



Figure 19. Site tours and public outreach

4.2 X-ray assessment of metal finds – Johanna Thunberg

Metal finds were x-rayed using a Faxitron 4305 cabinet system. X-ray films were digitised using an Array Corporation 2905 Laser Film Digitiser. Below are comments on information arising from the x-rays.

Find (SF) no.	X-ray number	Notes	Treatment recommendations
2500	(A) H833 (x1); (B) H834 (x1)	(A) Loop-headed object. Crack has developed in rounding. (B) Part of object has flaked off due to corrosion. Little metal remaining.	Conservation needed to prevent corrosive action. Cleaning and consolidation recommended to join the pieces back together.
2501	H833	Nail, end is missing.	
2502	H833	Very dense object. Outlines of a rectangular object inside.	Cleaning recommended for identification.
2503	H833	Bolthead with pointed end and corroded socket. Original nail in socket remains. Flaking.	Conservation needed to prevent corrosive action. Cleaning for illustration recommended.
2504	H834	Metal strap in two parts. Punched hole at one end. Flaking.	Conservation needed to prevent corrosive action. Consolidation to join the pieces back together recommended.
2505	H834	Section of horse shoe. Some nails remaining in the nail holes. Flaking.	Conservation needed to prevent corrosive action.
2506	(A) H834 (x1); (B) H834 (x2)	(A) One rounded object, socket for saw? Heavily corroded. Organic material is incorporated in corrosion material. (B) One square object with teeth, part of saw. Organic material is incorporated in corrosion material. Corrosion of various densities. One round object with less dense loop imprinted within the object. Organic material is incorporated in corrosion material. Little metal remaining.	(A) Conservation recommended for identification of object and organic residues. (B) Cleaning recommended for illustration.
2507	H833	Nail? Head missing.	
2511	H834	Pin with rounded piece of organic material added on at one end, part of handle of an iron tool? Both ends of object are missing.	Conservation recommended for identification.
2512	H833	Curved object with punched holes. Has 'railing' on one side and is flattened on the other. Not complete, signs of another nail hole on one end. Horse shoe or modern material?	
2513	H834	Modern spoon handle with decorative end. Dented. Coated with metal of different density. Different corrosion pattern from iron.	

Find (SF) no.	X-ray number	Notes	Treatment recommendations
2514	H834	Section of horse shoe, small section bent upwards at the end. Some nails still left in nail holes with heads fully visible.	Cleaning recommended to enhance details.
2517	H833	Dense rectangular object with flattened end. Section of chisel	Cleaning recommended to prevent corrosion.
2518	H833	Small rod.	
2519	H834	Heavily corroded metal sheet section.	
2520	H834	Section of needle with looped hole. End missing.	Cleaning recommended for illustration.
2521	H833	Small rod.	
2522	H833	Rod/bar? Broken at both ends. Flat and square.	Cleaning of cross section recommended for illustration.
2523	H833	Nail.	
2524	H834	Thin metal strap, slightly curved. Outline of rectangular hole where a nail could have been.	Cleaning recommended for identification.
2526	H834	Fibula where hinge is visible. No decorative features are visible.	Cleaning recommended for illustration.
2527	H834	Small, slightly curved rod.	
2528	H833	Scythe. Porous corrosion 'bubbles'. Limited amount of metal remains. End piece has snapped during storage.	Conservation needed to prevent further corrosive action. Cleaning and consolidation to join the pieces back together recommended.
2529	H834	Fastener with two legs. Could have corrosion pattern of different densities or have traces of an alloy. Punched hole in end.	Cleaning recommended for illustration.
2530	H833	L-shaped nail. Crack is visible in head.	Consolidation recommended.
2531	H833	Flattened nail. Head and end missing.	
2532	H833	Flattened nail? Both ends are missing.	Cleaning recommended for identification.
2533	H833	Flattened nail. Head and end missing. Top of object have small crack visible.	Consolidation recommended.

4.3 Feature Summaries

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1000	3377, 3612	A4	Same as F.1858	2-4		1.64-2.49	0.4-0.41
1011	1060, 2862, 4517, 4570	A2/A4	Middle to Late Iron Age Enclosure ditch - northern arm	7-9		2.6-3.5	0.38-1.2
1500	2525, 2533, 2543, 2548, 2569, 2618, 2632, 2651, 2652, 2699, 2702, 2740, 2741	A1	?Romano-British ditch oriented east-west, parallel with F.1501	1-2		0.63-1	0.03-0.29
1501	2528, 2535, 2539, 2541, 2545, 2562, 2574, 2577, 2584, 2752, 2754, 2766, 2768, 2776, 2786, 2816, 2827, 2851, 2978	A1	?Romano-British ditch oriented east-west, parallel with F.1500	1-2		0.36-1.6	0.05-0.54
1502	2565, 2567	A1	?Romano-British ditch oriented east-west, parallel with F.1500 and F.1501	1	0.95-1.15	0.47-0.55	0.13-0.15
1503	2537, 2550, 2585, 2595, 2597	A1	Bronze Age ditch oriented NW-SE, terminating with F.1506	1-2		1.65-2	0.2-0.5
1504	2554	A1	Shallow LIA Pit containing Glastonbury ware pot	2	0.29	1.4	0.25
1505	2592	A1	Undated pit	2	1	1.2	0.25
1506	2553, 2559, 2590, 2602, 2637, 2874, 2933, 3012, 3023, 3031, 3041, 3058, 3090, 3133, 3135, 3369, 3412, 3536, 3548, 3563, 3608, 3646, 4102, 4104, 4106, 4109, 4112, 4115, 4141, 4244, 4251, 4284	A1 & A2	Bronze Age ditch oriented NW-SE, terminating with F.1503 and F.1521	1-3		0.3-1.72	0.3-0.6
1507	2529	A1	Pit or post hole cut by Bronze Age ditch F.1503	1	0.8	0.6	0.2

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1508	2558	A1	Undated posthole	1			
1509	2563	A1	IA Storage Pit	11	2	2.05	1.68
1510	2656, 2959, 3105, 3407, 3436	A1	Bronze Age ditch oriented NE-SW, terminating with F.1506	1-2		0.65-1	0.19-0.53
1511	2657	A1	IA Pit cutting Bronze Age ditch F1510	5	2	2.05	1.97
1512	2571	A1	Pit	1	1	0.64+	0.43
1513	2579	A1	Posthole	1			0.22
1514	2582	A1	Pit	1	1.08	0.54	0.52
1515	2588	A1	Pit cutting Bronze Age ditch F.1506	1	0.61	1.15	0.31
1516	2617	A1	Pit	11	1.97	1.85	0.61
1517	2620	A1	Pit	1	0.6+	0.47	0.2
1518	2622	A1	Pit	6	2.65	1.34	0.6
1519	2624	A1	IA Pit	1	0.76	0.2+	0.12
1520	2634	A1	Undated ?ditch segment	1	1.8	1	0.11
1521	2642, 2703, 2748, 2829, 2868, 2911, 2993, 3042, 3056, 3210, 3255, 3391, 3420, 3430, 3443, 3480, 3519, 4337, 4338, 4381, 4399, 4425, 4450, 4464, 4489, 4503, 5201	A1/A2	Bronze Age ditch oriented NE-SW, terminating with F.1918 and cut by F.1522. Cuts posthole F.1883	1-9		1-1.9	0.35-0.9
1522	2644, 2705, 2750, 2831, 2870, 2913, 2995	A1/A2	Bronze Age ditch oriented NE-SW, terminating with F.1918 and cuts ditch F.1522 and posthole F.1883	1		1.2-1.8	0.65-0.8
1523	2639, 3233, 3224, 3254,3268, 3272, 3275, 3281, 3381, 3395, 3406, 3432, 3484, 3538, 3540, 3543, 3556	A1	Structure 1: IA eavesdrip gulley with internal diameter of 12.25m and a SE-facing entrance with two inner postholes: F.1647, F.1651	1-3		0.3-1	0.2-0.37

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1524	2640	A1	Pit or gulley/screen to east of Structure 1 entrance	6	1.45	1.5	1.2
1525	2646	A1	Storage Pit	3	0.6	0.9	0.5
1526	2654	A1	Pit or Posthole	1	1.6	0.47	0.27
1527	2681, 2841, 3657	A4	Middle to Late Iron Age Enclosure ditch entrance southern terminus	6-8	2.9	1.8-1.97	1-1.7
1528	2697	A1	IA Storage Pit	10		1.41	1.21
1529	2698	A1	IA Storage Pit	16	2.12	2.18	1.21
1530	2708	A1	Pit	1	1.1	0.95	0.64-1.2 (truncated)
1531	2714, 2765, 2821, 2839, 2932, 2943, 2992, 3032, 3533, 3621, 3706, 3708, 4414, 4422, 4455, 4531, 5044	A1/A2	Middle to Late Iron Age Enclosure ditch with x2 human burials on basal silts, overlain by partially backfilled inner bank, with slower accumulating deposits above, including midden deposits.	3-7		1-4	0.6-1.52
1532	2721	A1	Posthole	1	0.33	0.33	0.2
1533	2745	A1	IA pit	1			
1534	2848	A1	IA pit	7	2		0.75
1536	2801	A1	IA pit	15	1.3	1.37	1.21
1537	2814	A4	IA pit	1	1.28	0.66	0.2
1538	2818	A4	IA pit	2	0.69	0.61	0.24
1539	2820	A4	IA pit	2	1.2	2.28	0.24
1540	3707	A1	Stone layer within enclosure ditch terminus F.1564	2			0.2
1541	2857	A1	IA storage pit with articulated dog skeleton [2856] in uppermost fill. Skull facing SW, lying on its left side, tail pointing NE. Metalwork and worked bone 'special deposit' at base.	9	2.89	1.88	1.48
1542	2849	A1	IA pit cutting F.1544, cut by F.1548	8	1.7	1.7	0.94
1543	2854	A4	IA pit	1	1.06	0.96	0.22
1544	2864	A4	IA pit cut by F.1542. Associated with Structure 2	14	2.18	1.34	

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1545	2956, 3111, 3112, 3170	A4	Anomalous ditch overlying 'shafts' F.1547, F.1585, F.1660	1-14	0.68	2.18	0.41-1.28
1546	2958, 3016, 3055, 3172, 3175	A4	Anomalous ditch overlying 'shafts' F.1547, F.1585, F.1660	2-10	3.34-3.41	2.11-2.55	0.93-1.28
1547	2957	A4	Shaft' (with F.1585, F.1660, F.1961 and F.1984) associated with anomalous ditch F.1932	1			
1548			void number				
1549	2901, 2973	A4	Possible re-cut of Bronze Age ditch F.1550	1		1.41-1.57	0.23-0.31
1550	2906, 2976, 3010, 4595, 5026, 5037, 5067, 5070, 5085, 5131	A4	Bronze Age ditch oriented N-S, cut by F.1549, F.1558, F1933, F1940, F.1944	2-5		0.89-1.34	0.33-0.83
1551	2909	A4	natural			0.64	0.24
1552	2910	A1	IA pit	7	2.25	2.46	0.56
1553	2918	A1	IA pit	5	1.8	2	1.1
1554	2925	A4	IA pit	1	1.2	1.1	0.32
1555	2931	A1	IA Pit cutting F.1562	7	1.3	1.3	0.85
1558	2971	A4	See F.1933				
1559	2963	A4	Pit	1	1.03	0.9	0.18
1560	2964	A1	Pit	2		1.89	0.28
1561	2998	A1	Pit	2		0.88	0.41
1562	3004	A4	IA Pit cutting F.1555	6		0.53	0.8
1563			void number				
1564	3027, 3061, 3611, 3635, 5275	A4	Enclosure entrance north terminus	5-8	8.2	1.5-3.05	1.13-1.24
1565	3241	A4	void number				

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1566	3044	A4	IA Pit: Very steep drop, almost vertical to level base. Sides meet base at an angle of around 90°. Includes special deposit [3419] in base of F1566. Stones placed around a piece of daub which overlay a mandible (-dog?). Top of a cranium (-human?), placed on edge of circuit of stones to W of daub. Bovine (?) ball joint placed to NW of daub and an animal bone and patella or worked bone were palced SW of daub. Stones and daub appear to have been burnt in situ	3	0.2	0.7	0.7
1567	3049	A4	void				
1568	3051	A4	Possible IA ditch/throughway	1	1	1.1	0.32
1569	3053	A1	pit cutting F.1568	1	1.7	0.48	0.23
1571	3059, 3077, 3128, 3202, 3204, 3547	A1	Possible IA ditch/throughway	1-6	0.74-2.6	0.31-1.9	0.17-0.5
1574	3698	A1	IA Pit	2	1.8	1.55	0.38
1576	3089	A4	IA Pit	9		1.73	0.91
1578	3109, 4770, 5004, 5006, 5008, 5059, 5064, 5076, 5089, 5093, 5097, 5099, 5205	A4	Structure 2: Phase 2. Eavesdrip gulley within IA main enclosure. 20m diameter with internal pits.	1		0.25-1.05	0.08-0.35
1579	3130, 3434	A4	same as F.1578			0.3-0.7	0.18
1581	3152	A1	IA Pit	12		2.22	1.27
1583	3171	A4	IA Pit	8		0.73	?
1584	3173	A4	void				
1585	3237	A4	Pit	1		2.03	2.53
1585	5047	A4	Shaft' (with F.1547, F.1660, F.1961 and F.1984) associated with anomalous ditch F.1932	11	2.0+	2.42	2.10+
1586	3191	A1	?Hearth	1-2	0.46	0.44	0.18
1586	3368	A1	Posthole	3231		0.4	0.2

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1589	3198	A4	Posthole	4		0.68	0.28
1590	3199	A4	Posthole	2	0.6		0.29
1591	3203	A4	Pit	1	2.7		0.38
1593	3247	A1	IA pit	5		1.6	0.71
1595	3215	A1	IA pit	4	1	0.6	0.38
1596	3235	A1	IA pit	6	1.55	1.75	
1598	3585	A1	Natural				
1599	3251	A1	?pit	4		0.7	0.6
1600	3270	A1	Posthole	1	0.21		0.08
1601	3271	A1	IA pit	8		1.83	0.94
1602	3279	A1	Posthole	1			
1604	3282	A4	Posthole	1		0.75	0.07
1605	3287	A1	IA pit	8		1.81	0.96
1606	3305	A1	Posthole	2	0.55	0.77	0.29
1607	3370	A1	IA pit	7	1.95	1	1
1608	3375	A4	Posthole	1		0.43	0.21
1609	3373	A4	Posthole	1		0.48	0.22
1610	3382	A4	Structure 2: possible Phase 3 eavesdrip gulley	1	5.5	1.5	0.2
1611	3392	A1	Posthole	1	0.3	0.2	0.0125
1612	3394	A1	?pit	3		1.5	0.7
1613	3397	A4	See F.1937				
1614	3384	A1	shallow hollow, possible pit	1	2.5		0.1
1615	3399	A1	IA pit	5	1.62	1.41	1.18
1616	3418	A1	Posthole	1	0.34	0.81	0.07
1617	3451	A1	IA pit	9		2.34	1.27
1619	3452	A1	IA pit	3			
1621	3454	A1	IA pit	3	0.57	0.4	0.23
1622	3456	A1	IA pit	3	0.63	0.78	0.13
1623	3455	A1	void number	3			

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1624	3457	A1	void number	2			
1625	3417	A1	void number	2			
1626	3516	A1	void number	2			
1627	3515	A1	void number	2			
1628	3485	A1	IA Pit	5	0.97		0.62
1629	3514	A1	void number	2			
1630	3527	A1	IA Pit	4	1.7	0.51	0.43
1644	3551	A1	IA Pit	7		2.1	0.99
1645	3557	A1	IA Pit	5	2	2	1.15
1646	3574	A1	IA Pit	8	3.2	2	1.27
1647	3583	A1	Posthole	1	0.49	0.39	0.15
1649	3599	A4	Posthole	1	0.4	0.4	0.3
1651	3614	A1	Posthole	2	0.45	0.4	0.16
1652	3627	A1	Pit	2	0.95	0.5	0.25
1653	3636	A1	IA Pit	9	1.95	1.8	1.68
1654	3658	A1	Pit	1	1.25	1.25	0.02
1655	3659	A1	Pit	2	1.8	1.5	0.45
1656	3660	A1	IA Pit	7	1.35	1.4	1.04
1657	3668	A1	Posthole		0.53	0.5	0.16
1658	3670	A1	Posthole		0.48	0.5	0.18
1659	3672	A1	Posthole		0.53	0.48	0.13
1660	4577	A4	Shaft' (with F.1547, F.1585, F.1961 and F.1984) associated with anomalous ditch F.1932	25	2+	1.94	4.1+
1661	3678	A1	Pit				
1662	3681	A1	Pit	2	1.55	1.5	0.43
1663	3683	A1	Pit	1	0.83	0.8	0.29
1664	3684	A1	Pit	1	0.7	0.7	0.85
1665	3687, 3689, 3691	A1	?Ditch	2	1	0.96-2.07	0.16-0.21
1667	3701	A1	Pit	2	1.68	1.46	0.27

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1671	3217	A1	Rectangular feature	1	1	0.8	0.1
1674	3761	Tr1	Circular stone-walled structure in rear of southern rampart. Well preserved floor deposit sealing heart F.1675. Approximately 25% of the structure was exposed but not excavated.		c.5	c.5	
1675		Tr1	Stone lined hearth in situ within floor [3761] of structure F.1674. Not excavated.				
1801	3826	Tr3	Ditch terminal or pit. Located beneath the rampart. Cow skull on base with lithic blades in fill.	3	0.4+	1.6	0.36
1802	3823	Tr3	Post hole. Located beneath the rampart. Large flat slab at base. Contains lithic blades. Cuts F.1801.	1	0.4	0.4	
1803	3779	Tr3	Quarry pit at rear of rampart	1	3+		1
1851	4119	A2	Pit ?LBA	1		0.98	0.m
1853	4123	A2	Pit ?LBA	5		1.18	0.54
1855	4129, 4296, 4510, 4524, 4680, 4711, 4732, 4739, 4741	A2	?Romano-British ditch oriented NE-SW parallel with F.1947-9. Cuts F.1856 & F.1858	1-2	1	0.18-0.5	0.11-0.35
1856	4134	A2	Pit with reddened soil fill, possibly associated with C-shaped gulley F.1899. Cut by F.1855	4	1	1.03	0.55
1857	4138	A2	Post Hole	3		0.24	0.24
1858	4250, 4257, 4261, 4300, 4353, 4357, 4363, 4444, 4610, 4662, 4708, 5181	A2	Bronze Age ditch orineted SE-NW cutting F.1930 and cut by ditches F.1855, F.1947-9	1-3		0.97-1.5	0.4-0.69
1859	4263	A2	Natural	1		0.5	0.2
1860	4265	A2	Natural	1	0.35	0.3	0.15
1861	4267	A2	Natural	1		0.4	0.18
1862	4269	A2	LBA Post Hole, six-post structure	2		0.4	0.24
1863	4272	A2	Natural	1		0.17	0.08
1864	4274	A2	Natural	1		0.17	0.12

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1865	4280	A2	Pit	1	1.45	0.5	0.2
1866	4283, 4307	A2	Pit	2	0.95	0.41	0.27
1867	4288	A2	Post Hole	1		0.41	0.32
1868	4291	A2	Natural	2	1.9		0.41
1869	4302	A2	Post Hole	1		0.35	0.14
1870	4304	A2	Post Hole	1		0.54	0.25
1871	4309	A2	Natural	1		0.44	0.41
1872	4311	A2	Natural	1		0.5	0.2
1873	4313	A2	Post Hole	1		0.53	0.14
1874	4319	A2	Natural	1		0.35	0.14
1875	4321	A2	Natural	1		0.35	0.16
1876	4323	A2	Natural	1			
1877	4326	A2	Pit	3	1.5	1.05	0.36
1878	4328	A2	IA Pit/post hole	2	0.6		0.09
1879	4330	A2	Pit	1		0.4	0.24
1880	4332	A2	Natural	1		0.35	0.16
1881	4334	A2	Natural	1		0.6	0.27
1882	4336	A2	Natural	1			
1883	4347	A2	Post Hole cut by F.1521	1	0.3	0.3	0.06
1884	4349	A2	Natural	1			
1886	4276	A2	Natural	1	0.25	0.5	0.14
1887	4317	A2	Natural	1		0.13	0.15
1888	4315	A2	Natural	1		0.8	0.1
1889	4278	A2	Natural	1		0.42	0.15
1890	4359	A2	IA Pit/post hole	1	0.45	0.36	0.25
1891	4364	A2	Post-hole, possibly part of a 4-post structure	2		2.25	0.49
1892	4293	A2	Post hole	1	?	?	?
1893	4368	A2	IA Post Hole/Pit with burnt hamstone	1	0.27	0.27	0.09

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1894	4370	A2	Post Hole/Pit cut by F.1895	1	0.4	0.27	0.13 (truncated)
1895	4372	A2	Ditch terminus cutting F.1894	1	1	0.59	0.25
1896	4373	A4	Anomalous ditch overlying 'shafts' F.1547, F.1585, F.1660	4		2.5	1.06
1897	4374	A4	IA Pit with Glastonbury ware and other items including metalwork. Associeted with Structure 2	5	1.72	1.48	0.57
1898	4376	A2	Gully Terminal - possibly natural	1	1	0.37	0.16
1899	4380, 4774, 5108, 5126, 5136, 5153, 5156, 5166	A2	C-shaped penannular ditch with LIA pottery, cut by F.1947, F.1948, F.1949	1-3		0.36-0.66	0.2-0.46
1900	4389	A2	Re-cut of Bronze Age ditch F.1914 oriented NE-SW	5		2.1	0.63
1901	4392	A2	Pit	1	1.8	1.5	0.48
1902	4393, 4465, 4616, 4620, 4636, 4642, 4645, 4656, 4671, 4677, 4681, 4690, 4707, 4715, 4727, 4735, 4754, 4768, 4772, 4776, 5062, 5232, 5242	A4	Bronze Age ditch oriented NE-SW terminating with F.1935 and F.1917/1930/1858	1-3		0.33-1.3	0.22-0.66
1903	4394, 4468	A4	same as F.1578	1		0.22	0.2
1904	4405	A2	Tree Throw	1	0.72	1.2	0.24
1905	4407	A2	Tree Throw	1	1.08	0.8	0.26
1906	4409, 4457, 4544	A2	Bronze Age ditch Terminus, cut by F.1911, F.1926	1-3		0.39-1.12	0.18-0.28
1907	4416	A2	Tree Throw cutting F.1908	1	0.7	0.8	0.28
1908	4418	A2	Tree Throw cut by F.1907	1	0.5	0.42	0.2
1909	4424, 4461	A2	Bronze Age ditch oriented NE-SW: Terminus cut by F.1912. Same as F.1523	1	1	0.49-0.58	0.18-0.29
1910	4447	A2	Same as F.1522	1		0.7	0.3
1911	4459	A2	Pit	1	1.61	1.12	0.1

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1912	4463	A2	Void				
1913	4472	A2	Post Hole	1	0.68	0.55	0.24
1914	4476	A2	Bronze Age ditch oriented NE-SW, cut by F.1900, F.1915	4		0.52	0.47
1915	4477	A2	Bronze Age ditch oriented NE-SW: terminus cutting F.1914	3		0.42	0.63
1916	4492	A2	Pit	4	0.8	0.8	0.3
1917	4502	A4	Possible Romano-British ditch	3		1.8	0.58
1918	4558, 4634, 4637, 4700, 4702, 4756, 4760, 4762, 5091, 5103, 5105, 5158, 5160, 5178, 5217, 5228	A2	Bronze Age ditch oriented NE-SW. Cuts F.1918	1		0.45-1.06	0.09-0.45
1919	4516	A2	Post Hole cutting F.1899. Possibly Romano-British?	1	0.44	0.22	0.31
1920	4518	A4	Post Hole associated with Structure 2. Possibly cut by pit F.1897	1	0.46	0.64	0.24
1921	4526	A2	Same as F.1948	1		0.45	0.8
1922	4528	A2	Same as F.1947	1		0.6	0.18
1923	4532	A2	Bronze Age ditch Terminus cuttng F.1924	3		1	0.65
1924	4534	A2	Bronze Age ditch Terminus cut by F.1923, F.1925	1			0.23
1925	4536	A2	Bronze Age ditch terminus cut by F.1923, cutting F.1924	3		1	0.52
1926	4539	A2	Bronze Age ditch terminus cutting F.1906	4		1.6	0.62
1927	4556	A2	Post Hole	2			
1928	4559	A2	Pit cut by F.1931	1	0.75	0.75	0.12
1929	4564	A4	Curvilinear Gully cutting F.1896	2		1.27	0.27
1930	4569	A4	Bronze Age ditch oriented NW-SE, terminating with F.1902, cut by F.1858	3	3	1.5	0.54
1931	4572	A2	Pit cutting F.1928	1	0.9	0.9	0.3
1932	4575, 5073, 5196	A4	Anomalous ditch overlying 'shafts' F.1547, F.1585,	1-5		1.9-3.6	0.8-1.21

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
			F.1660				
1933	4553, 5161	A4	IA Encosure entrance palisade ditch, cutting F.1550	3	2.7	0.84	0.89
1934	4999	A2	Ditch oriented N-S	2		1.4	0.6
1935	4650, 5000, 5234	A2	Romano-British ditch terminus oriented NW-SE	1-3		0.58	0.4
1936	4743, 4751, 5001	A2	Bronze Age ditch oriented NE-SW	1-3		0.4-0.5	0.13-0.17
1937	4684, 4730, 4737, 4745, 4763, 4766, 5029, 5149	A2/A4	Romano-British NW-SE Ditch, turning mid-0way across Area 2to NE-SW. Possibly continues as F.1947, Cuts F.1902 & F.1941	1-2		0.4-0.9	0.15-0.4
1938	5045, 5056	A2	Pit	1	1	0.5-1	0.04-0.15
1940	5072	A4	Bronze Age ditch Terminus cutting F.1550, cut by F.1944	1	1	Trunc.	Trunc.
1941	5077, 5078, 5079, 5080, 5081, 5082	A2	IA Pit containing burnt Hamstone and Glastonbury Ware pottery. Excavated in spits., Cut by F.1937	4		0.72	0.29
1942	5087	A4	Same as F.1937	1	0.42	0.19	0.19
1943	4480	A2	Pit	2	0.85	0.72	0.22
1944	5095	A4	Bronze Age ditch Terminus cutting F.1550 and F.1940	1		1.09	0.52
1945	5101	A2	Post Hole	1	0.36	0.4	0.16
1946	5110	A2	Tree Throw	1	1.36	1.2	0.18
1947	4624, 4721, 5112	A2	?Romano-British ditch oriented NE-SW, cutting F1858, F.1899, ?F1948	1		0.18-0.35	0.07-1
1948	4626, 4723, 5114, 5116	A2	?Romano-British ditch oriented NE-SW, cutting F.1858, F.1899, cut by ?F.1947, ?F.1949	1		0.2-0.32	0.08-0.09
1949	4628	A2	?Romano-British ditch oriented NE-SW, cutting F.1858, F.1899, and ?F.1948	1			
1950	5120	A2	Post Hole	1	0.27	0.3	0.16
1951	5118	A2	Post Hole	1	0.26	0.23	0.12
1952	5128	A2	Post Hole	1	0.18	0.19	0.07
1953	5134	A4	Pit	2	0.8	0.64	0.13
1954	5138	A2	Post Hole	1	0.21	0.2	0.07

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1955	5148	A4	Post Hole	1	0.16	0.17	0.1
1956	5167	A2	Possible terminus re-cut of Bronze Age ditch F.1918	1	1	0.6	0.25
1957	5171	A4	Post Hole	1	0.4	0.36	0.12
1958	5169	A4	Post Hole	1	0.36	0.33	0.06
1959	5174	A4	?Post Hole	2	0.4	0.29	0.24
1960	5176	A4	Post Hole	1	0.41	0.37	0.23
1961	5177	A4	Shaft' (with F.1547, F.1585, F.1660 and F.1984) associated with anomalous ditch F.1932	9	1.54+	2.1	1.15+
1962	5198	A4	?pit	1	0.66	0.9	0.17
1963	5211	A2	Post Hole	1	0.5	0.5	0.15
1964	5290	A4	?pit, cutting F.1660	3	0.3	0.28	0.62
1965	5210	A2	Post Hole	1	0.19	0.17	0.12
1966	5212	A2	Pit/Post Hole	1	1.2		0.2
1967	5215	A2	Post Hole	1	0.28	0.28	0.07
1968	5224	A2	LBA Post Hole, six-post structure	1	0.54	0.46	0.12
1969	5226	A2	LBA Post Hole, six-post structure	1	0.39	0.33	0.27
1970	5230	A2	LBA Post Hole, six-post structure	1	0.39	0.35	0.15
1972	5083, 5235	A2	?Post Hole	2	0.5	0.25	0.11
1973	5239	A2	Post Hole	1	0.35	0.34	0.10
1974	5259	A2	?natural or ?pit/posthole	1		0.45	0.26
1975	5267	A2	?natural or ?pit/posthole	1		0.48	0.25
1976	5276	A2	?tree-throw	1		0.35+	0.2
1977	5278	A2	?tree-throw	1		0.6+	0.27
1978	5281	A2	?tree-throw	2			
1979	4782	A2	IA Pit	2	0.52+	0.35+	0.21
1980	5283	A2/A4	IA Pit, possible oven, associated with Structure 2	2		0.95	0.32
1981	5285	A2	Post Hole	1	0.39	0.36	0.19
1982	5289	A2	Tree Throw	3			
1983	4598	A2	LBA Post Hole, six-post structure	1	0.45	0.5	0.11

Feature No.	Cut No.	Area / trench	Basic Feature Description	No. of Fills	Length (m)	Width (m)	Depth (m)
1984	4609	A4	Shaft' (with F.1547, F.1585, F.1660, F.1961 and F.1984) associated with anomalous ditch F.1932	1	2.0+	1.7+	0.5+
1985	4613	A2	Post hole	1			
1986	4622	A2	LBA Post Hole - six-post structure	1		0.42	0.22
1987	4630	A2	Post Hole	1	0.25	0.3	0.15
1988	4646	A2	Post Hole	1	0.4	0.4	0.21
1989	4652	A2	Post Hole	1	0.29	0.31	0.12
1990	4659	A4	?tree-throw	1	1.2	0.4	0.3
1991	4664, 4666, 4758	A2	same as F.1902	1		0.4-0.45	0.16-0.32
1992	4668	A2	natural hollow	1	0.25	0.3	0.12
1993	4673	A2	LBA Post Hole, six-post structure	1	0.37	0.57	0.17
1994	4691	A4	Hollow around anomalous ditch F.1932	1	1.2	1.2	0.3
1995	4693	A4	Hollow around anomalous ditch F.1932	1	0.9	0.9	0.3
1996	4695	A4	Hollow around anomalous ditch F.1932	1	1.7	1.7	0.35
1997	4698	A2	Post Hole	1			
1998	4703	A4	?pit	1	1.2	1.4	0.2
1999	4717	A4	Post Hole	1	0.44	0.57	0.28
2000	4719	A2	Pit towards centre of enclosure. Dark fill with no finds	1		0.85	0.13
2001	4784	A2	Post Hole, possible four-post structure, cutting F.1891	1		0.3	0.16