



Herefordshire Archaeology
Conservation and Environmental Planning
Planning Services
Environment Directorate
Herefordshire Council

Credenhill Fort
Herefordshire:
A Summary Excavation Report
Phase 3, 2008
NGR: SO 451 446

Herefordshire Archaeology Report No 256

Report prepared by
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Herefordshire Archaeology is Herefordshire Council's county archaeology service. It advises upon the conservation of archaeological and historic landscapes, maintains the county Sites and Monument Record, and carries out conservation and investigative field projects. The County Archaeologist is Dr. Keith Ray.

Credenhill Fort Herefordshire: A Summary Excavation Report

Herefordshire Archaeology Report No. 256

Herefordshire Archaeology, January 2009.

Summary

This summary report describes the rationale, extent and results of excavation carried out at Credenhill Fort, Credenhill, Herefordshire by Herefordshire Archaeology in June and July 2008.

This work is the second season of a three-year field project at the site. The purpose is to provide information on the type and preservation of archaeology on the site in order to provide a better picture of the use of the site in the Iron Age and Romano-British periods, to provide interpretative material, and to inform future woodland management on the site.

Three areas were targeted in 2008. An area examined in 2007 (Trench 4) was reopened and expanded. Complex archaeology was encountered comprising metalled surfaces, possible beam slots and other cut features dating to the Roman period use of the site. These cut a number of features of Iron Age date. An area within the internal quarry ditch just south of the eastern entrance was opened and excavated to an extensive metalled surface associated with Romano-British artefacts. Inclement weather and time constraints lead to a postponement of further excavation here until 2009. Finally a slot was excavated through the rampart. The rampart at this point appears to be of two phases though with little structural complexity. The time interval between the two phases may have been as little as a season. An intact buried soil with a very clear grass or turf horizon was preserved below the rampart and this has been sampled for palaeo-environmental analysis.

Disclaimer: It should not be assumed that land referred to in this document is accessible to the public. Location plans are indicative only. NGR's are accurate to approximately 10m. Measured dimensions are accurate to within 1m at a scale of 1:500, 0.1m at 1:50, and 0.02m at 1:20.

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Introduction

This report provides a summary account of archaeological excavation at Credenhill Fort, Credenhill, Herefordshire. The work described is the second of an intended three seasons of excavation on the site and was carried out between the 9th June and the 5th August 2008. Evaluation work carried out in advance of timber felling and extraction is described in a separate evaluation report.

Credenhill Fort is a Scheduled Ancient Monument (HSMR 906, SAM Herefordshire 61) surmounting an elongated hilltop 5km northwest of Hereford city (figure 1). The site is now heavily forested largely with plantation conifer, having been stripped of its former cover of broadleaved woodland in 1965. The monument stands within Credenhill Park Wood, which originated from a Medieval deer-park, and which retains a substantial part of its deciduous woodland. The Woodland Trust purchased this woodland, along with the fort, in 2004.

The project to purchase and to establish plans to restore the former woodland cover of the site was supported by Herefordshire Archaeology, acting as advisors to the Trust. Works following the purchase included archaeological surveys (specified and monitored by HA staff but undertaken by AIL Ltd of Hereford), and the preparation of a Conservation Management Plan for the Fort linked to the Management Plan for the site as a whole. A Project Statement was prepared in part as a means of specifying the background to and provisions for the current archaeological field project at the site. The aim is to investigate for conservation and information purposes key areas of the massive and presently tree-covered Iron Age hillfort/Romano-British settlement partly in advance of and partly in tandem with a programme of disafforestation of the monument. The Project Statement covers some of the same ground as a detailed Project Design prepared to support an application for Scheduled Monument Consent for archaeological works at the site in 2007 and 2008

Scheduled Monument Consent (SMC) was obtained in June 2008 for a programme of work involving the opening of 3 trenches (the specific details of each trench are set out below). Two trenches (4 and 9) were located within the interior and one (trench 10) was excavated across the inner defensive rampart (figure 2). Trench 4 was an expansion of an area examined in 2007, where a metallised surface and other features indicated activity dating to the Roman period (Dorling and Williams, 2007). Trench 9 was located within the inner quarry ditch just to the south of the eastern entrance and adjacent to areas opened by Dr Stan Stanford in the 1960s. This area was selected in order to examine areas of known Iron Age archaeology (Stanford had identified timber post-set structures) and where good preservation below some depth of hill-wash was expected. Trench 10 was cut through the inner rampart in an area where disturbance in the form of a culvert had already damaged the rampart. The objective of this trench was to examine the form of the rampart at this point, to record any structural complexities and to recover dating evidence for the primary construction of the rampart and any subsequent phases.

Location and Geology

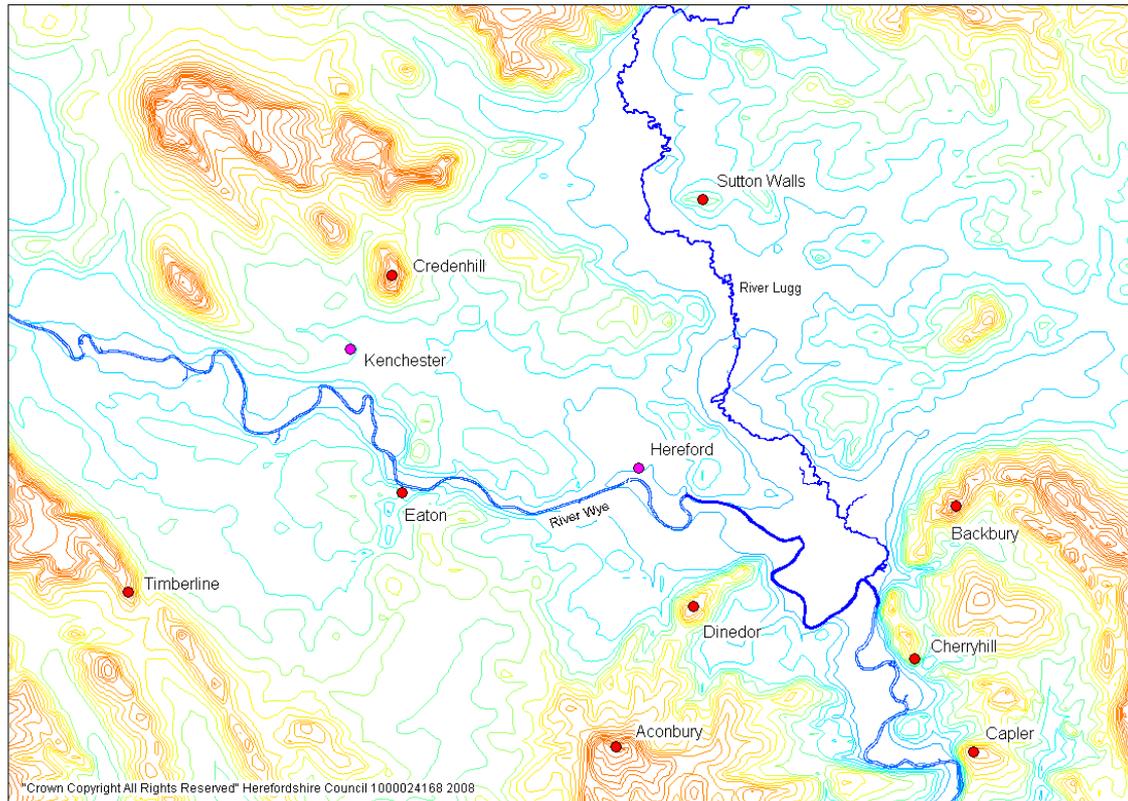


Figure 1. Site Location, nearby hillforts and topography

Credenhill Fort is located at NGR: SO 451 446 within the parish of Credenhill some 5km northwest of Hereford City. The site lies at a height of between 170m and 220m OD overlooking the Wye and Lower Lugg valleys and their confluence to the southeast of Hereford.

The underlying bedrock is Devonian Lower Old Red Sandstone of the St. Maughan's Formation. This is predominantly red-brown blocky mudstone with beds of sandstone and conglomerate, and with some inclusion of cornstones (immature calcretes). At Park Wood, Credenhill, there are also present some bands of Bishop's Frome limestone, but these apparently occur at lower elevations than the fort itself.

The soils are coarse loams of the Escrick I Association, mostly featuring non-calcareous brown earths (Ragg et al, 1984, 186-8). These soils are normally well drained, but are subject to localised periodic waterlogging.

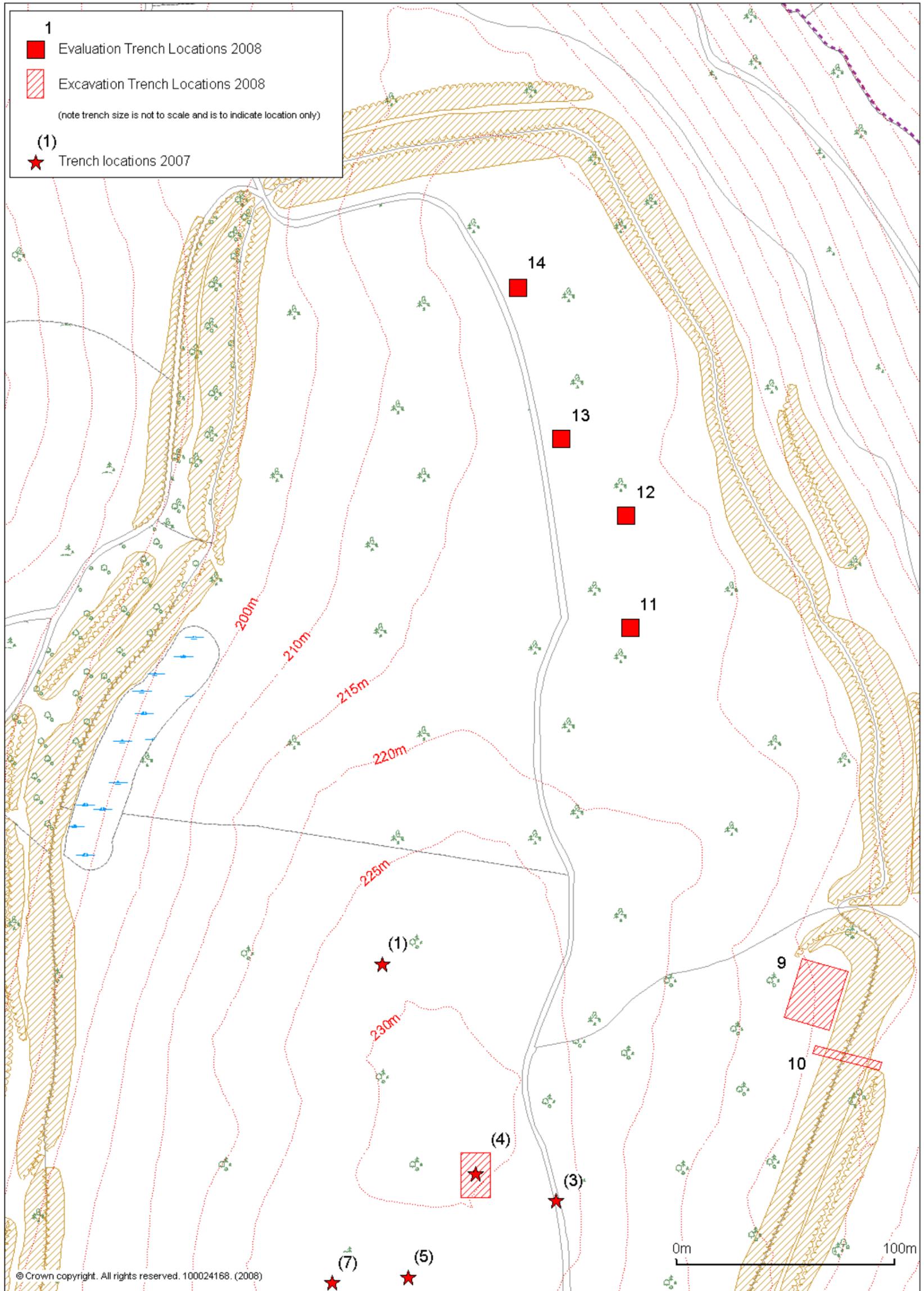


Figure 2. Trench Locations

Methodology

All trenches were stripped of topsoil by machine under close archaeological supervision using a toothless ditching/grading bucket. Thereafter excavation was carried out by hand.

The stratigraphic sequences exposed in all trenches during the excavation were recorded by running context and scale drawings (1:20 for plans and sections). Context sheets were completed for all identified contexts. Photographic records were also made on digital media during the excavation.

Backfilling was carried out by machine again under archaeological supervision.

Results

Trench 4 (12.00m x 9.00m)

Trench 4 was originally opened in 2007. A metallised surface and a complex of features containing Romano-British pottery were recorded in the initial 10.00m x 2.00m trench. Time constraints and site conditions (canopy cover) prevented completion that year and given the density of features revealed within a relatively small area it was earmarked as a target for further investigation in 2008. In addition



preliminary analysis of the pottery assemblage from the trench suggested a Pre-Flavian military use of the site might need to be considered in addition to any domestic activity (see pottery report below). Further investigation of this potential military use of the site was therefore considered desirable.

Trench four was reopened and expanded in 2008. The modern topsoil or plough soil that had been established was present to a depth of about 0.20m to 0.30m was removed mechanically. Below this was a compact layer of red/brown silty clay (012). This contained some quantity of Romano-British pottery, ferrous objects and other artefacts. The ceramics from this horizon are for the most part small and abraded

Plate 1. Metallised surface within trench 4 looking south

and it is interpreted as an early plough disturbed horizon, resulting from the intensive cultivation of the interior of the fort at some point during the Medieval period.

Below soil 012 on the western side of the trench a metallised surface was revealed (030). This appeared to have been laid on a terrace running north south, although its western side was not within the area of the trench. An interpretation as a north-south road or track does not therefore seem unreasonable. The surface of the metallising and its edges were disturbed, probably by ploughing.

Outside the area of the metallising (that is in the eastern part of the trench), a number of features were initially identified by their stone content. Removal of the metallising and thorough cleaning of the area allowed the further identification of features defined by



subtle soil colour changes. In the southern half of the site a number of slots ran east to west across the width of the trench and in the northern part a number of inter-cutting features were identified. Full excavation of these features was not completed due to their complexity but artefacts indicate both Roman and Iron Age dates for the features. The area was backfilled and it is intended to return to complete the excavation in 2009.

Plate 2. Detail of one of the linear slots

Trench 9 (16.00m x 12.00m)

Trench 9 was located within the inner quarry ditch just to the south of the eastern entrance and adjacent to areas opened by Dr Stan Stanford in the 1960s (figure 2). The eastern edge of the trench ran along the inner line of the rampart. It was known from the work in the 1960s that the quarry ditch deposits were up to 1.8m in depth



with well-stratified deposits and features. The primary aim of excavation in this area was to examine post-set structures identified by Dr Stanford and to recover artefacts and material for scientific dating of the sequence of activity here.

The topsoil and relatively recent hill-wash (in places up to 0.80m deep) was removed by machine, to a layer of gleyed clay (005/006). This layer

Plate 3. Area of cobbles within Trench 9, the edge of Stanford's Trench 23 is visible in the lower left corner

had also been identified by Stanford and probably reflects a period of standing water within the ditch. Below this a gritty silty-clay (007) containing Romano-British pottery overlay a stony horizon. In the northern half of the trench this was a consistent cobbled surface whilst to the south it consisted of larger stones without a good surface.

Within the former were two areas where the cobbles were observed to have sunk into underlying features. These features were about 2.00m apart and each had a diameter of around 1.00m. The most northerly of these features had been half sectioned by Dr Stanford within his Trench 23 (Stanford, 1970, Figure 12 and Plate 3 above) and interpreted as a post-hole belonging to a four-post structure. Presumably therefore, a cobbled surface had been laid over the position of an earlier post-built structure and in time the cobbles had sunk into the post cavities as the fill of these settled to some extent.



A period of heavy rain led to the flooding of trench 9 which lies at one of the lowest points on the eastern side of the hillfort interior. This and the difficulty of working these soils when at all wet led to the postponement of further excavation but it is hoped to examine the area containing the putative four-poster in 2009. The area was protected by tarpaulin and the entire site was backfilled.

Plate 4. Trench 9 acting as a sump for a large area of the hillfort interior

Trench 10 (7.00m x 15.00m)

Some 20.00m south of trench 9 a machine cut was made through the rampart where the presence of a modern piped culvert indicated that disturbance to the rampart had already occurred. For health and safety reasons the cut was made in three steps (Plate 5) and limitations of the machine reach meant that the front of the rampart could not at this stage be fully examined.

The rampart at this point proved to be a maximum of 3.60m in height. Construction comprised a series of dumps of material excavated from the quarry ditch in the interior and probably, though to a lesser extent, from the inter-vallum ditch that exists at this point of the defensive circuit. Definition of the differing dumps was extremely good allowing recognition and recording of 53 separate contexts (Figure 3). In particular the junction between the old ground surface and the rampart material was very sharp and clear to the extent that the actual grass line was visible as a distinct layer (plate 6). The buried soil and turf horizon have both been sampled for palaeo-environmental and pedological analysis.



Plate 5. The marl cap to the 1st phase of rampart construction can be seen at the top of the first (lower) step. The junction between the buried soil and the rampart material passes through the lower white / red division of the ranging pole.



The rampart appears to have been constructed in two phases, though with little structural complexity. Some levelling of the natural hill-slope appears to have been carried out by placing an initial layer of mixed yellow and red clays (050) towards the front of the rampart. At the junction between the layer 050 and the top of the buried soil a substantial amount of charcoal was revealed. This initially appeared to be in the form of baulks of timber

Plate 6. The junction between rampart material and buried soil

and it is possible that material of this type had been laid down to aid soil retention on the slope. Samples were taken for identification and radiocarbon dating. Its stratigraphic location will hopefully provide a good date for the initial construction of the rampart.

Following this initial levelling a dump of reddish brown silty clays, capped by a layer of stony dusky red (purple) marl (025) were placed to form a wide but low bank some 10.00m across and 1.30m in height (plate 5). It is assumed that this deposition represents the reverse of the geological stratigraphy as encountered in the quarry pits.

Weathering of the top of the marl layer indicates a break in construction although the time space between the two phases may have been as little as a season (see M. Allen's report below). Following this hiatus the resumption of construction is marked with a deposit of crumbly unconsolidated soil material (017/021/023). This was identified as redeposited colluvial material, essentially the same as that recorded below the rampart, and it is likely that this indicates the exploitation of a new undisturbed area for quarry ditching.

A deposit of stone towards the front of the rampart does not appear to be a formal revetment although it does fulfil this function to some extent. Interleaving of dump deposits with the basal layers of the stone suggests that its use was opportunistic. Further investigation of this deposit is planned for next season during excavation of the front of the rampart.

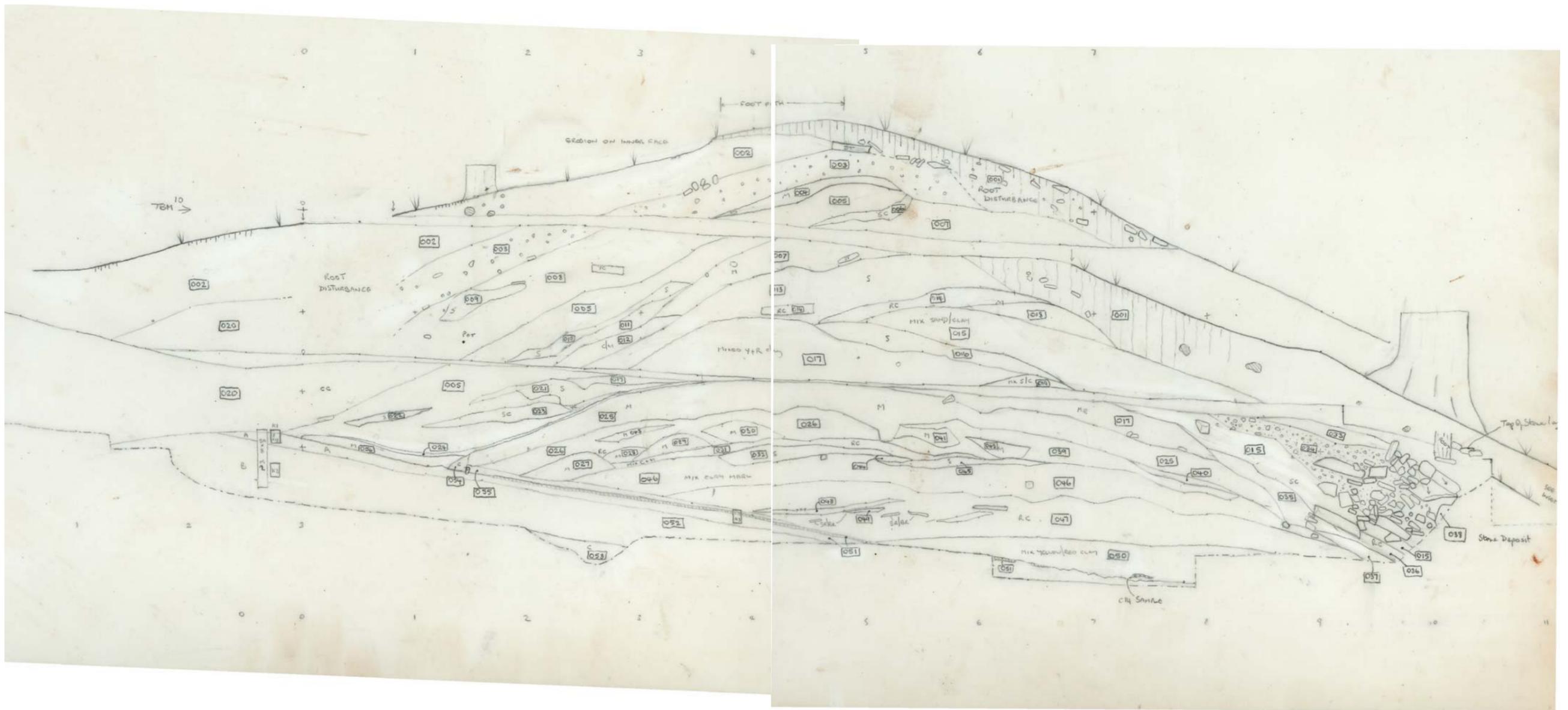


Figure 3. Copy of the field drawing of the Trench 10 section (section facing south)

Discussion

The following are some interim observations and interpretative possibilities based on a very preliminary assessment and analysis of the first two years work on the site. We still await detailed analysis of the pottery and other artefact assemblages. These will take place after the final field season in summer 2009.

There is clear evidence of early (almost certainly pre Iron Age) activity on the site. This takes the form of the accumulation of some depth of colluvial soils prior to rampart construction on the eastern side of the hill. Within the area of the section through the rampart (trench 10, above) the pre-rampart soils appear to reflect cultivation followed by stabilisation, grassland development and grazing.

On the south side of the hill within trench 2 (2007) apparently undisturbed developed brown earth soils are cut by Iron Age deposits which are in turn overlain by a substantial depth of colluvial material, that material probably deriving from Medieval and/or Post-Medieval episodes of ploughing.

Soil monoliths and other samples have been taken from both of these deposits, and it is anticipated that pollen and pedological analysis of these soils will provide further detail and definition of the pre hillfort activity and of the environmental history of the hill.

A significant assemblage of Late Bronze Age or very early Iron Age pottery also indicates an early use of the site (see summary pottery report 2007 below). This early assemblage from the work in 2007 outnumbered Iron Age material by 52 sherds to 16. It is not clear however if this activity was associated with an enclosure or simply use of the open hill top.

So far, apart from the section through the rampart, it is the Iron Age archaeology on the site that has proved most elusive. Within trench 4 evidence of pre-Roman Iron Age activity was just beginning to emerge towards the end of the 2008 season with a number of features producing Late Iron Age ceramics and this phase of activity will be further investigated in 2009.

The Romano-British pottery assemblage from both 2007 and 2008 appears from preliminary analysis to be late 1st to early 2nd millennium AD and to be military in nature rather than domestic. Features within trench 4 and 13 (see separate evaluation report for trench 13) also appear to support a military interpretation for the Roman period activity on the site. Linear features within these trenches may be beam-slots for granary and barrack foundations respectively. Similar evidence was forthcoming from Brandon Camp in northwest Herefordshire (Frere, 1987). Here the activity was interpreted as relating to a supply depot or campaign fort dating to AD 55–60. Either would be a plausible explanation for the activity at Credenhill, though a supply base for an often-proposed fort (Webster, 1981. Wilmott, 1980) above the Wye at nearby Kenchester would seem more likely.

Post Excavation Programme

All the finds recovered from the 2008 excavations have been processed and dispatched to artefact specialists or conservators. Pottery has been washed and re-bagged and metalwork has been where necessary packaged in secure containers with silica gel.

Jane Evans of WHEAS is examining the Iron Age and Romano-British pottery to provide an initial assessment. It is obviously anticipated that further material will be recovered from the excavations in 2009 after which a full pottery report will be commissioned. Her summary assessment report on the pottery from 2007 is attached below. Initial indications are that the assemblage from 2008 confirms the 1st century Roman military activity.

The Conservation department at Cardiff University is carrying out conservation work and where appropriate x-ray photography on the metalwork recovered. This includes 22 pieces of iron, two coins, three fragments of lead and three cast bronze objects including a brooch. Other notable small finds include a glass gaming counter and a small fragment of rim from a fairly fine glass vessel.

A charcoal sample from below the rampart in trench 10 is in the process of being identified prior to being submitted for C14 dating. The sample will be split with one third being sent to Beta Analytic Inc in Florida, one third to the Oxford Radiocarbon Accelerator Unit and one third retained.

Dr Michael Allen of Allen Environmental Archaeology has already sub-sampled the soil monolith from trench 2 and the report was submitted with the summary report of 2007. His site visit report for Trench 10, the rampart section, is attached below. His recommended tasks a to d (Section 8, page 22) have been commissioned. Tasks c and d apply also to the soil sample from Trench 2 taken in 2007.

Site archive

1. Site notebook
2. Photographs
3. Site drawings
4. Drawing Catalogue
5. Context Catalogue
6. This document
7. Assorted finds

Reports and other documents referred to in the text

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Validation

Herefordshire Archaeology operates a validation system for its reports, to provide quality assurance and to comply with Best Value procedures.

This report has been checked for accuracy and clarity of statements of procedure and results.

Dr Keith Ray, County Archaeologist

Credenhill, Herefordshire: Summary of the pottery recovered during the 2007 excavations by C. Jane Evans

	LBA	IA	LIA	Roman	Trench total
T1	22			94	116
T2			8	3	11
T3	29	8		18	55
T4				39	39
T5				38	38
T7				9	9
Unlocated	1				1
Total	52	8	8	201	269

Table 1: summary of the pottery assemblage by Trench and period

The excavations produced somewhere in the region of 269 sherds of pottery (some sherds were very fragmentary and are not included in the totals for the purposes of this assessment). The pottery is discussed by trench.

Trench 1

The most interesting finds from this trench were the 22 sherds in a coarse quartz tempered fabric which, like the pottery from Trench T3 below, probably date to the end of the Late Bronze Age. The only diagnostic pieces were two body sherds decorated with single grooves.

This trench produced the highest number of Roman sherds. These, however, were very fragmentary and abraded. Fabrics consisted entirely of Severn Valley ware, including the earlier organic tempered variants. Forms included bead rimmed jars, broadly dating to the first or second century.

Trench 2

This trench only produced a handful of sherds. However, these included a diagnostic Late Iron Age rim in Malvernian ware, decorated with linear tooling.

The Roman pottery consisted of Severn Valley ware, including the earlier organic tempered variant.

Trench 3

This trench produced a small but significant assemblage of Late Bronze Age pottery. The coarse quartz tempered fabric is similar to pottery recovered from the as yet unpublished excavations at Wellington North (Robin Jackson pers. comm.). Diagnostic sherds included a body sherd with fingernail decoration, and a slightly everted rim. These sherds have parallels in the assemblage from Potterne, Wiltshire, dated to the end of the Late Bronze Age (Morris 2000). The Early Iron Age is poorly defined in ceramic assemblages of this region; the date of the Trench 3 assemblage

could therefore extend in to this period. This is an important assemblage of pottery that might justify further exploration of this area of the hill fort.

The Roman pottery comprised sherds of Severn Valley ware, sandy oxidised ware and a rim from a ring-necked flagon in white ware, probably dating to the first century.

Trench 4

This trench produced the most interesting assemblage of Roman pottery, including a number of diagnostic sherds and a wider variety of Roman fabrics. The best dating evidence will come from the imported wares. These included two sherds of very abraded samian, the rim from a beaker in Lyon colour-coated ware and an amphora handle. Lyon ware generally indicates a pre-Flavian date for activity on British sites. The amphora handle, like the samian, will require specialist analysis to identify source and date. The fragment has a rounded section and comes from a long, slightly curving handle that seems likely to be a first century type. Other fabrics included white ware and handmade Malvernian ware. The latter included an inturned rim from a tubby cooking pot, of a type dated by Peacock to the first or perhaps first to early second century (Peacock 1967, 18). The majority of the assemblage comprised Severn Valley ware, including the earlier organic tempered variants. Forms included a jar or jug with a pulley rim, with an internal lid seat. A similar form from Gloucester is dated by Rawes (1982, fig. 2.3) to the mid second to third century, although the use of the organic tempered fabric for this example suggests it dates to the first to early second. Other forms included a simple rimmed, wide-mouthed jar, a form dated by Webster to the first to second century (Webster 1976, fig. 4 C20); a flanged bowl and a short-necked jar, the latter in a very micaceous fabric.

It is always difficult to draw conclusions from such a small assemblage. However, the range of fabrics, including the imported wares, is not typical of a rural assemblage. This and the possibility that the assemblage dates to the pre-Flavian period hint at a military influence on the site. This date is consistent with the evidence from Stanford's excavations (Stanford 1970, 118).

Trench 5

This trench produced only Roman pottery, including Severn Valley ware, handmade Malvernian ware and three sherds of samian. The Severn Valley ware included a ring-necked flagon of a broadly first century type.

Trench 7

This produced a small assemblage of Roman pottery, including micaceous Severn Valley ware.

Unlocated

The assemblage included an 'unlocated' sherd that may also date to the late Bronze Age. This was a crudely made rim in a very coarsely tempered fabric, with inclusions

of igneous rock, quartz and plates of mica. This is possibly from the Malvern area, but would justify petrological analysis.

Suggestions for future work

The expansion of Trench 4 should, based on the sample excavated so far, provide good dating evidence for early Roman activity in the hill fort. The Late Bronze Age assemblages are of particular significance in the county. In future seasons it would be worth considering further excavation in the vicinity of Trenches 1 and 3, to characterise this early activity and enhance the Late Bronze Age assemblage. The 2007 season produced only one sherd diagnostic of late Iron Age activity, and none of the classic stamp decorated middle Iron Age pottery recovered by Stanford.

The need for petrological analysis should be considered when estimating budgets for future post-excavation work. The possibility of including burnt residues on sherds in any programme of C14 dating also needs to be considered, ensuring that sherds are washed with care during initial processing.

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Credenhill Hillfort, Hereford, Herefordshire, SO 451 445, (CH 08)

*Site visit report: geoarchaeology résumé and proposed palaeo-
environmental programme*

by *Michael J. Allen, PhD, MIFA, FLS, FSA*

version AEA 021.3.01
23rd July 2008

for:-

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Credenhill Hillfort, Hereford, Herefordshire, SO 451 445, (CH 08)

Site visit report: geoarchaeology résumé and proposed palaeo-environmental programme

Report based on site visit on 22nd July 2008
Michael J. Allen

1: Introduction

The site was visited on 22nd July 2008, and excavation and exposed section in trench 10 project described by Peter Dorling (Hereford Archaeology). Trench 10 was examined in detail and full field records made of the sedimentary and pedological sequence following standard pedological notation (Hodgson 1976) and basic summary interpretation provided (Part One). Full geoarchaeological sampling was conducted (Part Two) and recommendations for the palaeo-environmental investigation strategy in the immediate and medium term presented (Part Three).

PART ONE: GEOARCHAEOLOGY SUMMARY of TRENCH 10

2: Requirements

To provide describe, sample and provide advice on rampart section (trench 10) and indicate potential palaeo-environmental lines of enquiry and investigations. Specific questions addressed of the rampart profile in trench 10 are:-

1. *What evidence is there for the pre-hillfort history/environment?*
2. *What is the buried soil – what environment does it represent?*
3. *Was the buried soil intact when the rampart was constructed?*
4. *Is there evidence of any stabilisation phases within the rampart, and if they exist how long might they represent?*

3: Geology, soils and topography

The hillfort is located on an outcrop of Devonian lithology and overlooks low-lying land of the Welsh Marshes at the confluence of the Rivers Lugg and Wye. It attains an altitude of over 200m, and the bivalate hillfort encloses about 20ha. The hilltop supports typical argillic brown earths over Devonian silty shale and soft siltstones and occasionally coarse loamy soils over sandstone of the Bromyard Association (Findlay *et al.* 1984) under planted ancient woodland and ancient semi-natural woodland. Much of the mixed woodland currently extant, and being managed, was planted in the 1960s.

4: Geoarchaeology of trench 10

The rampart is impressive if only because of the varying and striking nature of the bank material. The variation in the local geology gives rise to clearly separable deposition phases. A well-developed buried soil exists beneath the rampart with an astonishing sharp boundary between the two (Fig. 1a).

The section was described in detail in four separate locations, two of them being selected for sampling. The profile descriptions are held in AEA field records and will be augmented by more detailed examination and description of the monolith sample (CH 03, monolith 2).



Fig 1a. Kubiena sample 1 (K1), sampling the sharp junction of the buried soil under the centre of the rampart at profile 2 and, 1b) Monolith 2 (M2), and kubiena samples K2 and K3 sampling the full well-developed buried soil at profile 1

5: Preliminary interpretative hypothesis

On the basis of the field visit and analytical descriptions a working hypothesis address, in outline, most of the questions proposed can be suggested. The buried soil or old land surface (OLS) seems to be a deep well-developed typical brown earth or colluvial brown earth soil with a clear organic horizon sealed beneath the bank. The distinct nature of the Ah suggests a grassland, and the sharp and smooth nature of the contact between it and the rampart, and lack of any other indurations seem to support this hypothesis. On this basis the following series of events are suggested

1. Coherent charcoal deposits low down within B horizon of the buried soil suggest activity at some considerable time prior to the construction of the Iron Age rampart [AEA profile 1].
2. We can postulate that this activity (??Neolithic) may have been associated with deforestation and/or cultivation resulting in local colluviation creating a minor plateau-edge deposit (*sensu* Bell 1981) [AEA profile 1].

3. This activity, and ensuing colluviation disrupted the former soil removing clear evidence of an argillic brown earth observed previously in trench 2 or that the argillic brown earth (brown forest soil) did not occur on the western side [AEA profile 1]
4. Gentle colluviation upslope and long-term grassland and the formation of a deep-well developed grassland soil – typical (colluvial) brown earth [AEA profile 1 and 2]
- 5a. Quarry pits were opened and the rampart was built directly on the grassland. Deposition was large enough to prevent virtually all biotic re-working (*contra* that under, for instance, Barksbury, Hampshire, Macphail 1986; 1995) [AEA profile 3]. Reduction of the organic (grassland Ah) horizon lead to grey colours (with bluish hues) at this contact – as also seen in the buried grassland soil beneath Silbury Hill (Allen pers. obs.).
- 5b. On the downslope side near the break in slope some disruption of the grassland surface did occur [AEA profile 4]. A clear charcoal lens lies above this disruption and in the lowest part of the bank provides an ideal opportunity to obtain a radiocarbon assay for this construction phase.
6. The bank was constructed initially primarily with reddish brown silty clays and was initially topped out with the stony dusky red (purple) marl. We assume this represent the reverse of the geological stratigraphy as encountered in the quarry pits [AEA profile 1 and 2].
7. A limited hiatus is indicated by both a slurry deposit indicating rainwash of the last marl deposit [AEA profile 1], and by the onset of a second phase of rampart construction. The latter is marked with a thin crumbly unconsolidated deposit of soil material (either B horizon or weathered parent material, Rw) [AEA profile 3], possibly indicating the extension or, or opening a new, quarry pit. The separation between these two ‘phases’ may be only hours or days, but could be conceivably be up to a couple of generations.
8. The remaining rampart and the stone at its frontage are emplaced.
9. Colluviation against the inside of the rampart

PART TWO: PALAEO-ENVIRONMENTAL SAMPLING

Not only were various portions of the section described in detail in four separate locations, but full geoarchaeological sampling was also conducted. the samples are listed below. and the potential questions they could address are outlined in part three.

AEA Profile 1 (Fig. 1b)

Monolith 2: a 50cm long monolith of undisturbed soil from beneath the edge of the rampart sampling; i) the base of the rampart, ii) the contact with the old land surface and potential turf horizon, iii)

the A and B horizon of the soil, iv) the area of burning low in the B horizon and v) the top of the weathered parent material, Rw.

Kubiena 1	a kubiena tin sampling the upper 12cm of that sampled in monolith 2 and encompassing; i) the base of the rampart, ii) the contact with the old land surface and potential turf horizon, iii) the A and the top of B horizon of the soil.
Kubiena 2	a kubiena tin sampling a portion represented by 29-41cm in monolith 2 and encompassing; the B horizon, the area of burning low in the B horizon and, the top of the weathered parent material, Rw
Soil Chem 1	A 100g sample of disturbed soil/sediment from the Ah horizon
Soil Chem 2	A 100g sample of disturbed soil/sediment from the B horizon
Soil Chem 3	A 100g sample of disturbed soil/sediment from the Rw horizon

AEA Profile 2 (Fig 1a)

Kubiena 3	a kubiena tin sampling the strikingly sharp boundary of the bank material and the AH of the buried soil under the centre of the rampart
Soil Chem 4	A 100g sample of disturbed soil/sediment from the Ah horizon

The monolith sample (monolith 2) following detailed description should be subsampled for pollen and magnetic susceptibility as was undertaken for monolith 1 from trench 2 (Allen 2007a& b).

PART THREE: PROPOSED INVESTIGATIVE STRATEGY

6: Suggested Palaeoenvironmental Programme

On the basis of the deposits observed in trench 10, a programme of palaeoenvironmental enquiry potentially involving pollen and/or soil micromorphological assessment/analysis should be considered.

- 1) Full geoarchaeological and pedological report on field descriptions
- 2) Detailed description of sampled sequence in monolith 2 to augment those made in the field
- 3) Full Subsampling of monolith 2 by AEA for pollen assessment, selection and pollen assessment of selected samples by AEA environmental specialists.

- 4) Full Subsampling of the monolith by AEA for magnetic susceptibility measurement, preparation of samples, measurements and reporting.

7: Environmental Enquiry

Pollen: Is pollen present in suitable quantities for analysis? If so then the following suite of questions may be addressed of this data.

- What is the pre-Iron Age rampart local vegetation history?
- Is there evidence of a former woodland, as tentatively suggested, for the sequence in trench 2 (Allen 2007a)?
- Is there evidence of clearance and/or cultivation (trench 10) in the pre-Iron Age hillfort phase associated with the charcoal low down in the buried soil and the colluvial brown earth?
- What was the immediate pre-burial local environment? Is this open long-established grassland as indicated by soil description?
- Is there evidence of immediate pre-rampart occupation, ie, cultivation or pasture?

Soil micromorphology: Appropriate samples (undisturbed soil samples in Kubiena tins; K1, K2 and K3) have been taken to enable the following lines of enquiry to be pursued.

- Is the buried soil well-developed colluvial brown earth supporting grassland? [K1, K2 & K3]
- Is there evidence of a former, disrupted, argillic brown earth (woodland soil) [K2]?, and is that due to deforestation and/or cultivation (colluviation and agricutans)? [K2]
- Was the soil de-durped or truncated prior to rampart construction? [K1 & K3]
- Is there evidence of pre-hillfort human activity – eg, animal trampling and pasturage, cultivation, burning and other anthropogenic activities?

If soil micromorphology is undertaken then simple soil chemistry should also be undertaken to complement this.

Geoarchaeology: The description and interpretation of the field records will provide a publishable and archivable reports.

Magnetic susceptibility: If soil micromorphology is undertaken then magnetic susceptibility profile would provide a signature and characterise the sequence (Allen & Macphail 1987) and aid in answering some of the questions posed above.

8: Recommendations

A series of 5 tasks have been defined. It is recommended that the initial tasks should be commissioned as soon as possible and ideally after completion of the 2008 excavation season enabling both the creation of a stable sample archive, but also facilitating archive reporting and information for any interim reports. The pre-post excavation tasks enable verification of pollen presence which will inform next seasons sampling requirements, and the palaeo-environmental post-excavation investigation programme.

Initial tasks

- a) that a geoarchaeological report and pedological archive report be commissioned, and that a section drawing be provided enabling context number cross-reference with this report
- b) that subsampling (pollen and magnetic susceptibility) of monolith 2 (trench 10, 2008) is undertaken comparable to monolith 1 (trench 2, 2007)

Pre- post excavation and full assessment tasks

- c) rapid assessment of pollen is recommended, to determine the presence of pollen enabling verification of the plausibility of the pollen enquires proposed
- d) manufacture of the soil micromorphology slides (which can take up to to 6 months), making them archive stable and immediately available for analysis when the post-excavation task is commenced

Post-excavation tasks

- e) that further analysis and reporting is consequent upon assessment results, and that an appropriate programme of work is considered and commissioned

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