

# EXCAVATION AT A SUSPECTED ROMAN VILLA AT HEAGE, DERBYSHIRE 2011-2013

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## INTRODUCTION

Excavation work began in 2010 after the discovery of a 3rd century AD coin hoard by metal detectorist David Beard (DB) (Plate 1; Appendix II). An interim report on Trench 1 was published (Palfreyman and Ebbins 2012) and then further small-scale excavation was agreed with the farmer. A general location of SK368514 can now be given (Fig. 1).

The purpose was to find the extent of the main wall (F1) in Trench 1 and to determine the type of structure to which it belonged. It was necessary to ascertain if the hoard, and other finds from 2010-11, lay inside the room of a building and if there were earlier phases, Keith Foster's 2011 resistance survey having indicated further buildings. It was also hoped to confirm the overall dating of this area from the pottery assemblage and other finds. The term 'villa' is still tentative, but will be used unless conflicting evidence appears. It may have been sited within a type of *fundus* or working estate with various activities other than agriculture.

This work also addresses the lack of information on settlement types in the area to the south of the Pennines, highlighted by Taylor (2006, 143, 151-3), noting building and pottery traditions, as well as trading patterns. Settlement in the Amber Valley is of particular interest to the writers in relation to their study of Roman industry in the middle Derwent area. A quern and quarry survey on the Ashover Grit was begun in 2006 (Palfreyman and Ebbins 2007; 2011) and a forthcoming article will extend the quern-making area. Use of Millstone Grit for building and of local clays for pottery-making in Roman times is well-recorded but this site is situated on the Coal Measures, giving access also to ironstones.

Research Objectives listed in Knight, Vyner and Allen in *East Midlands Heritage* (2012, 71) are followed. Any remaining radiate coins from the hoard were bagged according to context and passed to DB for processing and then via Rachel Atherton and Charlotte Burrill at Derby Museum to Ian Leins and Eleanor Ghey at the British Museum. The final total was 3631.

## THE EXCAVATION

### **Trenches 1W and 1S**

Initially 1m wide strips were dug to the west (T1W) and south (T1S) of the backfilled Trench



Plate 1: Copper-alloy coins from the hoard. Most were 4-12mm diameter; the official *antoninianus* would have been 18-20mm. Despite this the obverse usually carries a depiction of a radiate-crowned head and some of the reverses are identifiable (Appendix II).  
 Photograph with permission of David Beard.

1, to extend its area (Fig. 2). The debris layer (C2) was encountered in both at a depth of 8-10cm, with four types of roof tile; orange clay *tegulae* and *imbreces*, Charnwood slate and two local sandstones. Occasional Roman grey ware, Derbyshire ware, a hammerhead mortarium, small samian fragments, colour-coated ware and more of the large orange storage jar from Tr.1 were present (Appendix I, Fig 7. 11), and an animal molar. Also part of a box flue tile, scored with diagonal crossed lines lay at the base of C2 in T1W, the first evidence of a hypocaust heating system nearby.

Along the western edge, after the removal of much overlying stone and a large mortar spread (C3), large packed gritstone emerged, forming a west wall (F3), joining wall F1 at right angles. Both T1W and T1S were extended, exposing the south-west and north-west corners of a room (Room A), c.4.5m wide. A third wall (F4), parallel to F1, had adjoining stonework on the north side, c.40cm from the corner and branching off north-eastwards which has not yet been examined. An east wall is needed to establish the full size of Room A. Wall F1 continued west beyond the F1/F3 T-junction and whilst F1 was a mortared wall with c.1m wide foundations, F3 and F4 were unmortared and slightly narrower at 75-85cm. All had

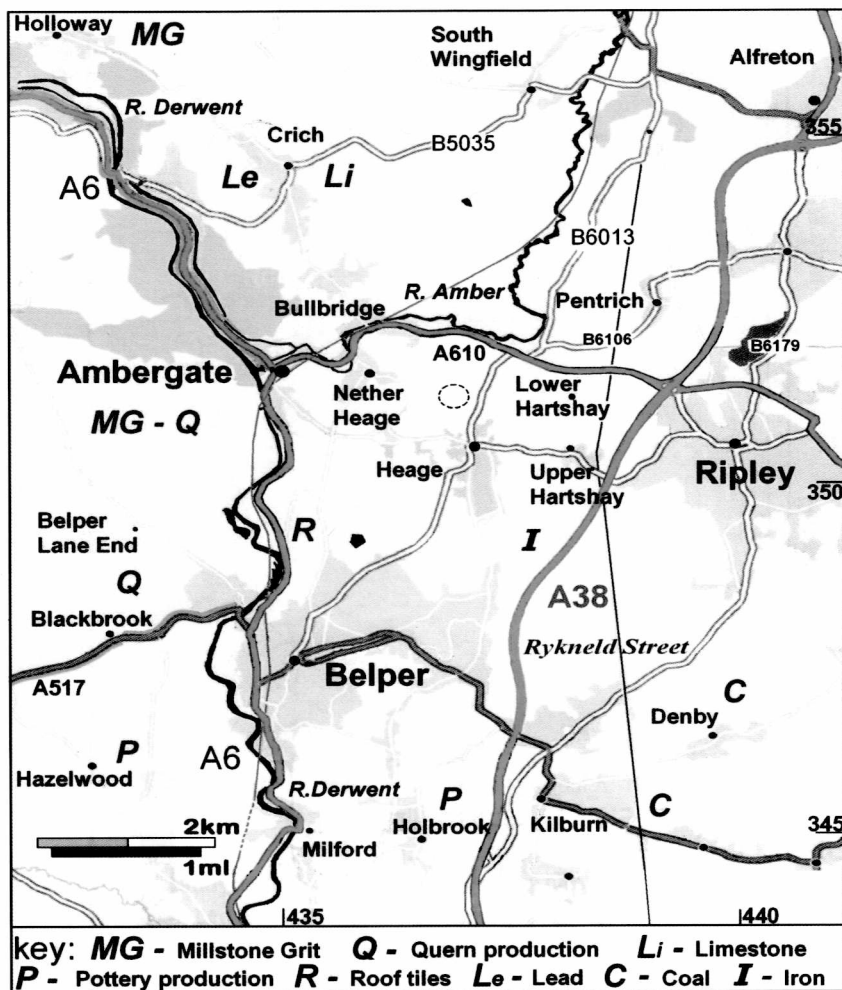


Fig. 1: Map of local area showing sources of raw materials. Site marked by broken circle.

facing stones of Millstone Grit and a little local sandstone with a rubble infill, and the outer stones were pitched slightly inwards (Plate 2).

The stone layer (C3) in T1W did not extend far on the west side of wall F3, where a hard gritty surface (C7), incorporating small charcoal fragments but little pottery, may have been part of a yard (F5). Large stones lying on C7 appeared to have been laid flat, although some had been disturbed, and two pieces of mammal scapula were found on F5. Below C3, inside the extended area of Room A, only two clay patches of the Roman floor (C5) survived, the rest was just a hard dirt surface.

In extension T1S again the C3 deposit ceased about 1m south of wall F1, with a possible rougher surface beyond. Below C3 much lime, mortar and random stone on and around F1 suggested that the wall had been robbed. Disturbance was noted to the south of F1 and several pieces of medieval pot were found, plus a piece of burnt sandstone with molten ferrous material adhering and a hobnail. Next to the south face of wall F1, below C3, a flat stone slab



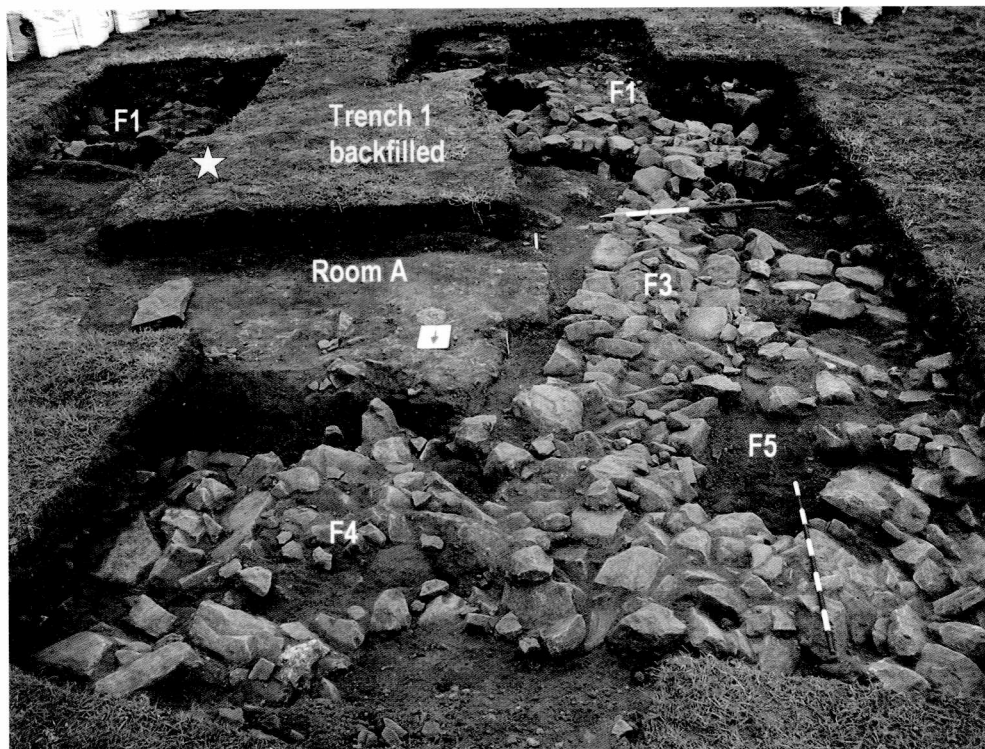


Plate 2: Extended area of Trench 1 showing exposed walls of Room A. The star marks the most concentrated area of the deposited coin hoard.

was set on an area of sandy loam with charcoal flecks. An oval pit next to the slab and in the foundation trench produced larger pieces of charcoal and coal, but no burnt ground. It had no packing stones for a post-hole and was difficult to define, the loose fill (C8) spreading 32cm down to the base of F1.

### F1 wall foundations

The south-east corner of old Trench 1 was re-opened to expose the F1 wall foundation below the C3 stone layer, where the position of the Hadrian *sestertius* found in March 2011 was still marked in the foundation trench. Layer C3 was removed eastwards, and the continuing line of wall F1 exposed on the north side. The abutting floor (C5) and the foundation backfill of natural yellow clay and thin sandstone slices were also removed. At the base of the foundation trench, 32cm east of the first Hadrian coin, a second Hadrian *sestertius* was excavated at the same depth. The rest of the footings were checked by DB, a signal was pinpointed and then carefully excavated to reveal a third Hadrian coin in the side of the cut, 3cm below floor level C5 and 33cm east of the second coin (Plate 3). Grey wares, some burnished, and flagon sherds were present on the adjacent floor. Nene valley colour-coated types included sherds of a late 3rd-4th century beaker with white-painted berry and scroll decoration, lying on C5 against the wall (Plate 4; Appendix I, Fig. 7. 2), and 3rd century scale-decorated beaker sherds came from the foundation.

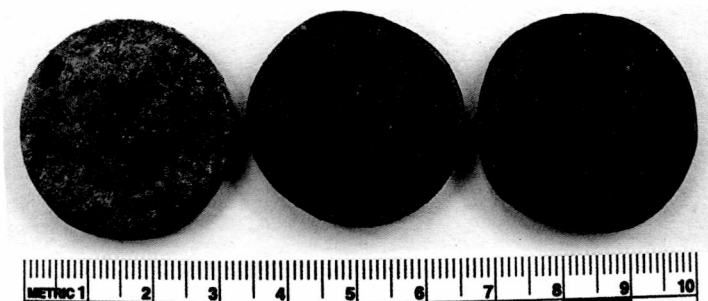


Plate 3: 3 worn *sestertii* of Hadrian, excavated from the F1 wall foundation in Trench 1 and 1E



Plate 4: Colour-coated beaker of Nene valley type with painted decoration.

As wall F1 was followed eastwards towards the field wall, it became clear that a suspected adjoining structure in the foundation was no more than local sandstone put into the trench as backfill, and sitting on the natural yellow clay. The wall itself seemed to peter out further east, with larger gritstone blocks missing and confirming robbing even to the footings. More pottery and two small thin shards of a blue-green glass vessel were recovered.

### Trenches 1E and 1N

A 1m wide strip was dug along the eastern side of the old Trench 1 (T1E). Stone layer C3 was undisturbed. Another flat 'flagstone' had been sunk into C3 at the south end, c. 1.2m from the one next to wall F1 described above. A Brackenfield-type glazed medieval jug/jar sherd lay on it (Young, Appendix I). Further north a shallow depression amongst the packed stone of C3 had a looser fill containing two large sherds of a white mortarium, and a blackened stone, with a cover of smaller stones. To the south in C3 was a rim sherd from an East Gaulish samian dish form Dr.32. Much pottery lay on the underlying floor C5, including two thick yellowish pieces of a mortarium and two more cream with painted rims (Appendix I, Fig. 7. 12, 13), grey

wares, several colour-coated vessels, one a 4th century Nene valley flagon with orange-brown colour coat and two bands of rouletting, another three rim sherds from the same samian dish form Dr.32 plus several sherds of a second East Gaulish dish (LUDSb) and one of a cream flagon. Black deposits noted on the two samian bowls are explained in Monteil, Appendix I. Two small pieces of red haematite pigment lay on a grey potsherd. Hoard coins were also recovered.

Another trench along the north side of Trench 1 (T1N) had a mass of tiles in the debris layer C2, particularly local red sandstone roof tiles. Several joining fragments of the samian dish form LUDSb and a fourth rim sherd from the form Dr.32 dish found in T1E, were recovered. To the west, the stone layer C3 petered out to a gritty loamy surface (C7) with some clay and a spread of plaster and mortar on it. To the east C3 was very sparse, and the odd chunk of mortar and plaster, one with a painted red stripe, lay on floor C5 of Room A. In the central area, just inside wall F3, a loamy layer below C2 containing larger potsherds (C2A), had perhaps built up against the wall and protected the sherds from later damage. More sherds were present of the large lattice-decorated grey ware and orange storage jars previously reported from Trench 1, plus a little Derbyshire ware, a grey ware lugged jar (Appendix I, Fig. 7. 8, 11, 9 respectively), various burnished grey wares, a Nene valley pentice-moulded beaker (Appendix I, Fig 7. 4), more of the rouletted flagon and several jar sherds with a blackish exterior and reddish-buff fabric. There were also animal bones and a tooth, snail shell, lead scraps and two hobnails. Over 220 hoard coins were recovered here, mostly from C2/C2A.

Nubs of coal and charcoal were found in T1E and T1N and around F3 and F1 walls. As in Trench 1, nails 35-70mm long were in almost all contexts; only a few were longer than 80mm.

#### **Test Pits 4, 5, 6 and 7**

To check if wall F1 continued westwards towards the scarp edge, Test Pit 4, 2m x 0.5m was cut north-south, 2.5m west of T1W (Fig. 2). At c.8cm depth, Millstone Grit and sandstone, some laid flat in a thin loamy matrix, and large areas of mortar rubble were encountered (C9). Nine coarse ware, two mortarium or flagon and three colour-coated sherds were found, plus one indented beaker sherd with a dark, highly-polished surface from Central Gaul, a small piece of flue tile with combed parallel lines, and nails.

Wall F1 could not be found immediately below layer C9 in TP4, so Test Pit 5 was cut 1m to the west, also on the projected wall line. C9 recurred with larger flagstones and mortar. Finds were three coarse ware sherds, a Nene valley sherd, a tooth, nails and daub. It appeared that layer C9 in both Test Pits 4 and 5 was part of the putative yard surface F5, lying west of wall F3. As the surface was intact in TP5, it was decided not to remove it and deeper probing was used instead. Solid stone was encountered at consistent depths in both test pits. Test Pit 7 was then cut between TP4 and T1W and excavated down to this level. The substantial stonework of wall F1, each up to 35cm square, appeared at c.48cm depth. Five potsherds, including two of an East Gaulish samian dish form Dr.36 with barbotine leaf-decoration, were found. Wall F1 therefore appeared to continue west to the scarp edge. In confirmation, a sondage dug in TP4 found wall F1 at c.50cm depth, and the footings at 70cm, with slices of local sandstone wedged in along its face, as seen in Trench 1, and more used to backfill the foundation trench. Therefore, if layer C9 is part of surface F5, it will have been laid after wall F1 was dismantled in this area.

Test Pit 6, 1m north of TP5, was only stripped of turf as stone was protruding from the surface. It revealed a heap of stone rubble on the scarp edge, probably tumble from the gradual

collapse of the building down the bank.

### Test Pit 8

This was cut 1m west of the field wall, to see if wall F1 also continued at the eastern end. Much loose rubble appeared at 20cm depth but there was no spread of roof tiles as in layer C2 in the larger trenches. Larger stone was uncovered at 30-42cm depth but less substantial than wall F1. Finds were ten Derbyshire ware sherds, two animal bones, part of an iron tool and a piece of flue tile or plaque with a double wavy-line pattern running along its edge. Another two small pieces of tile had impressed letter-stamps, too incomplete to decipher, and a brick end with an incised circular motif or letter 'O'. Part of a bronze arm ring was recovered (Appendix IV, Fig. 9a) at the south end amongst sandstone fill. Several plaster samples included two of a salmon-pink colour plaster, and two painted, with a rough mortar backing, both different to that in Trench 1. Natural ground was reached at 85cm. Crushed mortar lenses could be seen in 3 sides of TP8. This build-up of material suggested a made-up level by the occupants to counteract the natural slope.

As wall F1 was not found in TP8, a final effort was made to trace its line eastwards beyond T1S. This exposed some large foundation stones and wall F1 appeared to turn southwards but this needs further work.

### Trench 9

A 2.5m x 1.2m trench was cut into the eastern bank of the field wall in the adjacent field, c.1.5m south of Trench 1 (Figs 2 and 3). This was to check if the archaeology continued under the wall and to inform the proposed geophysics. Below modern humic soil the bank was made up of Roman demolition material (C12) comprising rectangular and trapezoidal gritstone building blocks amongst yellow-brown loam and included sandstone, slate and orange clay roof-tiles, flue tile, burnt limestone, mortar, Roman pottery and a radiate coin of Victorinus (AD 268-70). From its base emerged a pile of Swithland roof slates, most complete (Appendix III, Fig. 8). These had probably been prepared for re-use as the nails had been removed and the way that they were stacked did not suggest that they had fallen from a roof. They protruded from below the field wall and overlay a deposit of cream and pink mortar fragments, which sealed a Roman surface (C14). On this were scattered Wingfield flagstone fragments, Derbyshire ware, a hammer-head mortarium rim, pieces of a flagon, animal bone, charcoal, daub and limestone.

A north-west alignment of stone (F7) set straight onto the Roman surface was possibly a revetment enclosing the bank build-up and C14, probably an outside yard. At the north end a neat termination with a gap where the slate pile was situated was possibly an entrance but a large tree curtailed excavation here. A quarter silver penny of late 12th-early 13th century was found near to F7. East of this a Roman surface continued out into the field (C13) but was cut by a vehicle track. This was hard-trodden and gritty with occasional cobbles and part-paving slabs, and chips of charcoal, tile and limestone. A concentration of pottery here included Derbyshire ware, Nene valley, a grey shallow dish and a large portion of a Mancetter-Hartshill black-gritted hammer-head mortarium was buried, partially covered by a small flagstone.

To the south, Roman demolition material (C12) sealed an east-west wall (F6) 70-75cm wide, which the F7 revetment abutted. It was unmortared with two surviving regular courses of outer gritstone facing and a packed rubble core, again bedded on to the Roman level. It was traced from beneath the field wall and c.1m to the east where it had been destroyed by



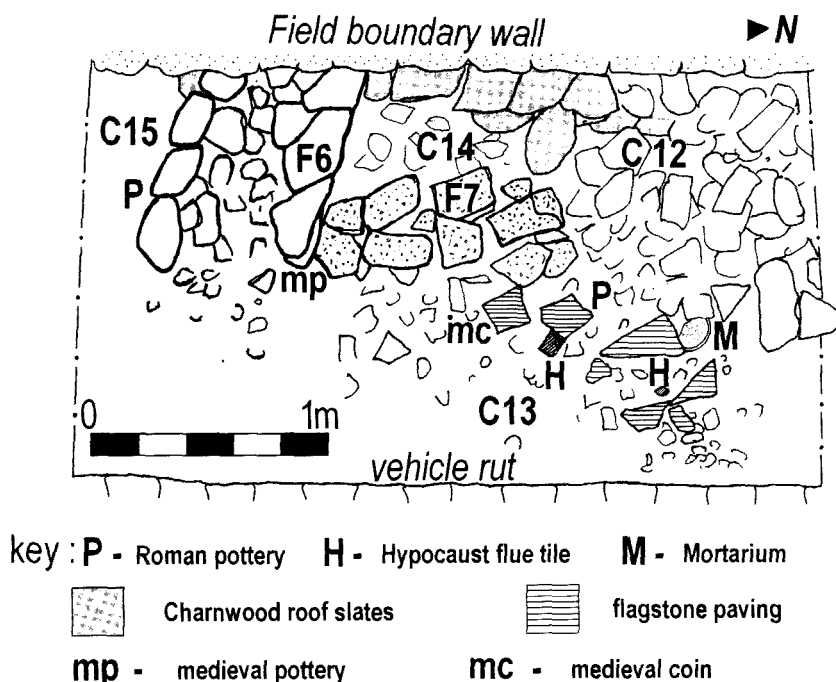


Fig. 3: Trench 9 plan; the remains of 2 Roman walls, floors/yards and the Charnwood slate stack underneath the present field wall.

ploughing or medieval robbing. A medieval jar sherd was found on top, as well as Derbyshire ware. To the west in a darker loam on the same level as C14 (C15) several potsherds from a grey flanged bowl, a grey-burnished dish and Derbyshire ware were consistent with the overall 3rd-4th century dating. A medieval potsherd came from the junction of bank and plough soil.

## Trench 10

### Upper layers

A 2m square was opened at the location of non-ferrous metal-working finds made earlier by DB, 16m south of T1 (Figs 4 and 5). 8-10cm of topsoil (C16) overlay 5-10cm of brown loam with the usual broken roof tiles of clay, sandstone and Charnwood slate plus nails (C17). Sherds of grey, shell-gritted and Derbyshire wares and animal bones were present. In the top of C17, at the eastern end, was a corroded arrowhead (Plate 5; Appendix V, Fig. 10). Below C17 a 5-10cm thick layer of crushed mortar containing part-burnt lime and brick/tile chips formed a hard surface 10cm thick all along the western edge of the trench which spread 90cm eastwards, thinning out to scattered lumps (C18). Two slots cut through at the west edge proved that it was laid onto the natural clay. A copper alloy ring of 3rd-4th century date, with a blue-green glass setting, was found 12cm from this edge (Plate 6a, Appendix IV), also two grey ware sherds and fragmentary animal bones.

A patchy Roman floor (C19) was below C17. The hard-trodden surface was brown, gritty sandy loam with small fragments of brick/tile, charcoal, coal, iron and other metal dross. Its depth was 15cm in parts with sandstone chunks up to 10cm loosely spread but packed more

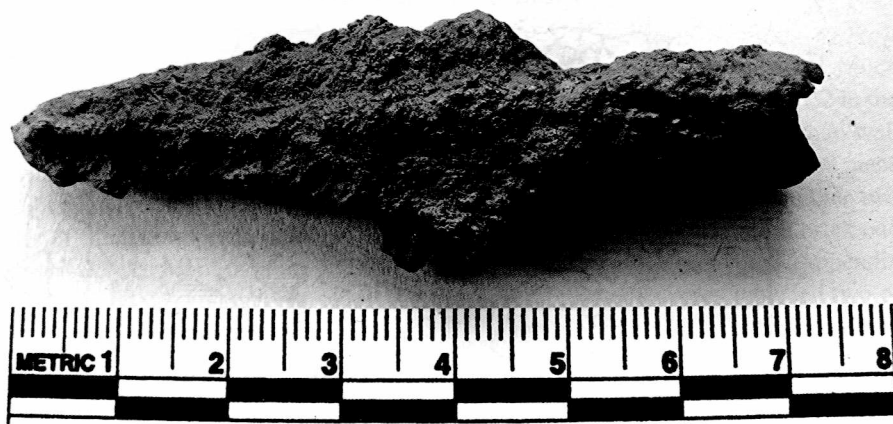


Plate 5: Iron arrowhead from the top of Roman levels in Trench 10 (Appendix V).



Plate 6: Finger rings compared; **a (left)** excavated from Trench 10, Heage, **b (right)** from Redhill Roman settlement on the River Trent, Derbyshire/Nottinghamshire border (Appendix IV).

closely along the northern edge and eastern half of the trench, and around the blocks of wall F9 further south. These areas had the appearance of a cobbled yard. Floor C19 was not found below C18 which could be a disturbed layer of the later phase of occupation. Several large sherds of a grey flanged bowl, other grey ware, Derbyshire ware with both rim types, a small piece of a mortarium and a smooth pale orange fine ware were found in C19. Other finds were cattle leg bone, two snail shells and small scraps of iron, lead and non-ferrous metal and a small fragment of a box flue tile. Small pieces of painted plaster and 25 more radiate copy coins were found in C17, 18 and 19.

### *Earlier phase*

Below floor C19, in the central area, was compacted natural clay with sandstone slivers packed down over an earlier wall foundation, 1.1-1.2m wide (F8), in order to seal and level it when

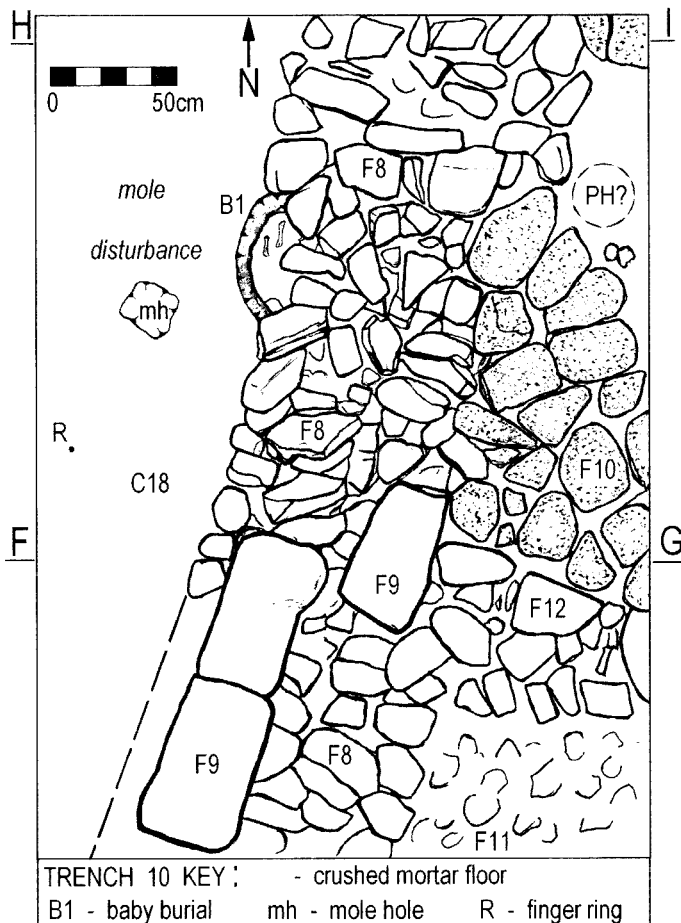


Fig. 4: Trench 10 plan; showing earlier features.

it when it had gone out of use (Figs 4 and 5). Wall F8 was made of large Millstone Grit and local sandstones pitched in on the outer edges with an infill of smaller stones. Some rounded quartz boulders were also used which would have come from the Amber or Derwent rivers, having been redeposited from glacial till upstream. Wall F8 was cut into the natural clay and aligned north-north-east by south-south-west. A 3.4m length was exposed after extending the trench east and north. Derbyshire and grey wares, nails and a cow molar were found on F8.

Below floor C19 and east of wall F8, in the north-east and central part of the trench, was an area of flat stone paving (F10). A 25cm diameter circular loam-filled gap in this yard, also noticed in C19 above and sealed by a patch of mortar, could represent a post-hole, but the loam fill was sterile. In the middle of paving F10 was a semi-circular area of flat wedge-shaped stones c.30cm long pointing inward. The wall stones here also seem to be of similar orientation, so possibly this part of F10 was integral with the wall. These stones had fairly smooth surfaces and may have been part of an entrance at this point.

In the south-east corner, below floor C19, was an area of rough close-packed stone cobbling (F11), less well-laid than F10, and perhaps a yard or work-room. Very little was found on F10 or F11.

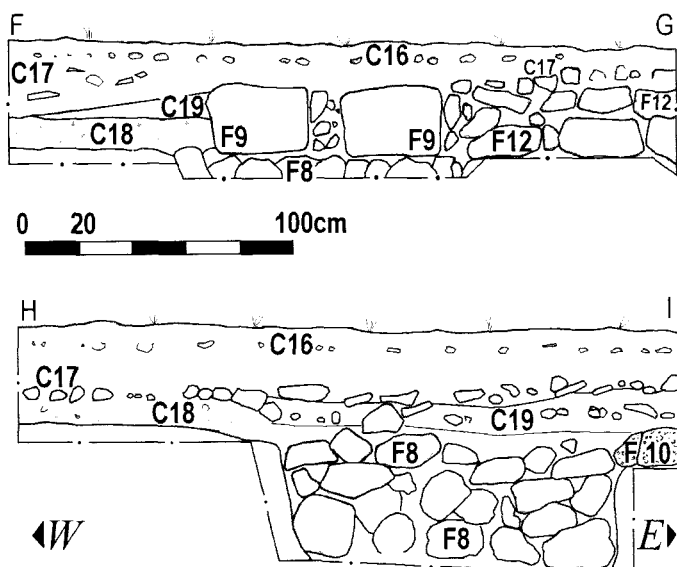


Fig. 5: Trench 10 sections F-G and H-I

Three large Millstone Grit blocks (F9) had been placed on top of the F8 wall foundation at the southern end (Fig. 4). They are broken and aligned with F8, one behind the other to the west and another to the east. They are between 50 and 64cm long, 34 to 38cm wide and 15 to 28cm thick. Surfaces C18 and C19 have been laid around but not underneath them, so they should be contemporary with wall F8 before it came down. They stand well proud of all the other stonework. Their original purpose is unclear without wider excavation to check whether there were more. Next to the north-east block was a cluster of potsherds, nails and roof slates. Abutting wall F8 on the eastern side and at right angles but made of smaller stone was probably the base of a sill-wall (F12) which separated the paved F10 and cobbled F11 areas to north and south. This wall was 50-55cm wide and only a 90cm length was exposed in this trench.

### ***The baby burial***

During work on surface C18, part of a small skull and a rib were recovered, the fragility and appearance of which alerted SE to the possibility of a neo-natal infant burial. Excavation revealed other skull parts in the clay packing over the wall (F8) and a hip bone from a mole hole just to the west in C18 suggested that moles had disturbed the burial. The other hip bone came from floor C19 at the southern edge above the cobbling (F11) (Plate 7).

Careful cleaning of the foundation trench on the west side of the wall exposed an oval pit c.35cm long and 14cm deep, dug into the natural clay. It contained several more pieces of skull pushed up against the wall stones, 2 long bones and 2 ribs in jumbled positions. It had originally been sealed by the mortar and the clay packing and so was associated with the original building. Clearly the mole runs had resulted in the redepositing of some bones in other contexts. The crushed condition of the skull in the pit may also suggest some damage during the later Roman levelling and laying of surfaces C18 and 19, when the burial's existence was either not noticed or not respected.



Plate 7: Incomplete skeleton of a baby from foundation of wall F8, Trench 10. Confirmed as neo-natal by Dr. Elizabeth Craig-Atkins, University of Sheffield.

### Test Pits 11 and 12

T11, 5m south of T10, was also intended to locate a metal-working area indicated by metal-detecting. A 1m square test pit was excavated down to the trodden, gritty Roman surface with similar topsoil and debris layers (C20, 21 and 22), corresponding respectively to C16, 17 and 19. A little Derbyshire ware, a grey shoulder sherd with zig-zag decoration plus 6 nails and a hobnail came from C21 and 22. No metal-working evidence was found to merit further work.

A hollow in the field 30m south of T10 was also targeted to check for iron-working as several blocks of slag had been built into the field wall close to it and the area had been cleared of much vegetation for the geophysics survey. A narrow 60cm trench was dug across the middle, from north to south (T12).

The topsoil (C30) contained much dark material due to recent bonfires. At 10-15cm it was mostly the natural subsoil except for a central area of c.1m, having a spread of darker loam with small Millstone Grit and sandstone rubble and small nubs of coal, charcoal and slag (C31). This deposit was no more than 5cm thick above natural sandstones and shales. The finding of a white pipe stem next to it suggests a late 18th-19th century date and only one abraded Roman sherd of coarse pottery was found in the whole trench. Six large pieces of slag, some adhering to burnt sandstone, were recovered from along the sides of the cut.

These and the material from the wall must have come from a large hearth/furnace. Further excavation here might establish if iron was worked here in the Roman period or brought in from nearby at a later date.

## INTERPRETATION AND DISCUSSION

### Evidence from the trenches

The pottery and coins suggest occupation well into the 4th century when access to Nene Valley type pottery was still very evident. Samian was imported and used into the 3rd century mostly from Eastern Gaul and the four stratified vessels identified in this assemblage all originate from production centres sited there (Monteil, Appendix I). Using samian to date context is unreliable as it is often curated from a considerably earlier date (Wallace 2006) and Monteil's comments on repairs and wear in this sample group may push their use into the late 3rd century. Some grey wares are similar to 4th century Lincolnshire types (Rowlandson and Darling Appendix I) and in Room A the proportion of grey wares to Derbyshire ware was much higher than is normally seen on rural sites in this area. The grog-tempered pot may have come from Buckinghamshire, but for most of the coarsewares we should be looking for a local pottery-making source that continued into the 4th century.

Earliest occupation of the site is unclear. Whilst the nine *sestertii* (counting those metal-detected prior to excavation) of Hadrian to Marcus Aurelius were minted in the 2nd century, they are without exception very worn and could have been brought on site in the 3rd century. Regarding the three Hadrians in T1, these were positioned along the foundation trench of the main wall (F1), almost equidistant from each other. This could be seen as a 'foundation deposit' of coins obsolete at the time the structure was built and do not help with dating the building. Overall dating of the artefacts found suggests 3rd to 4th century occupation, and no earlier structure has yet been located.

Trench 9 shows that the archaeology continues into the adjacent field and Chris Carey's gradiometer survey appears to support this (Fig. 11). Floors C13 and C14 are thought to be contemporary, although with different uses, and the 3rd-4th century pottery is of similar date to that in Trench 1, suggesting that they are part of the same range of buildings. The slate pile (Appendix III) appeared to have been stacked for re-use and probably was originally in a storage area strewn with plaster/mortar rubble and enclosed by walls F6 and F7, outside of Room A. Layers of other rubble in TP8 confirmed an area levelled-up by dumping.

Trench 10 contained a wall junction and three different areas, two perhaps interiors, with a mortared floor or corridor outside and a possible entrance, but difficult to interpret in this small area. The three large sandstone blocks found in an incongruous position on top of the wall foundation perhaps came from a main doorway or other architectural feature. The floors and substantial wall seem to be roughly contemporary but the time lapse between these and the later, rougher phase overlying them is uncertain. Artefacts from all contexts give only a broad 3rd to 4th century date range. Most of the total 525 nails, mainly from Trenches 1 and 10, are consistently 8cm long or less, their likely function being from the roofs and the timber frames of internal wattle and daub walls or part-walls on stone bases.

### Ageing the baby burial

Dr Elizabeth Craig-Atkins, University of Sheffield Department of Archaeology, has aged the Trench 10 baby skeleton by Scheuer's (1980) method to 40 weeks +/- 2.12 weeks; a full-term still-birth or dying soon after birth (Plate 7). Given its position in the F8 wall foundation, it

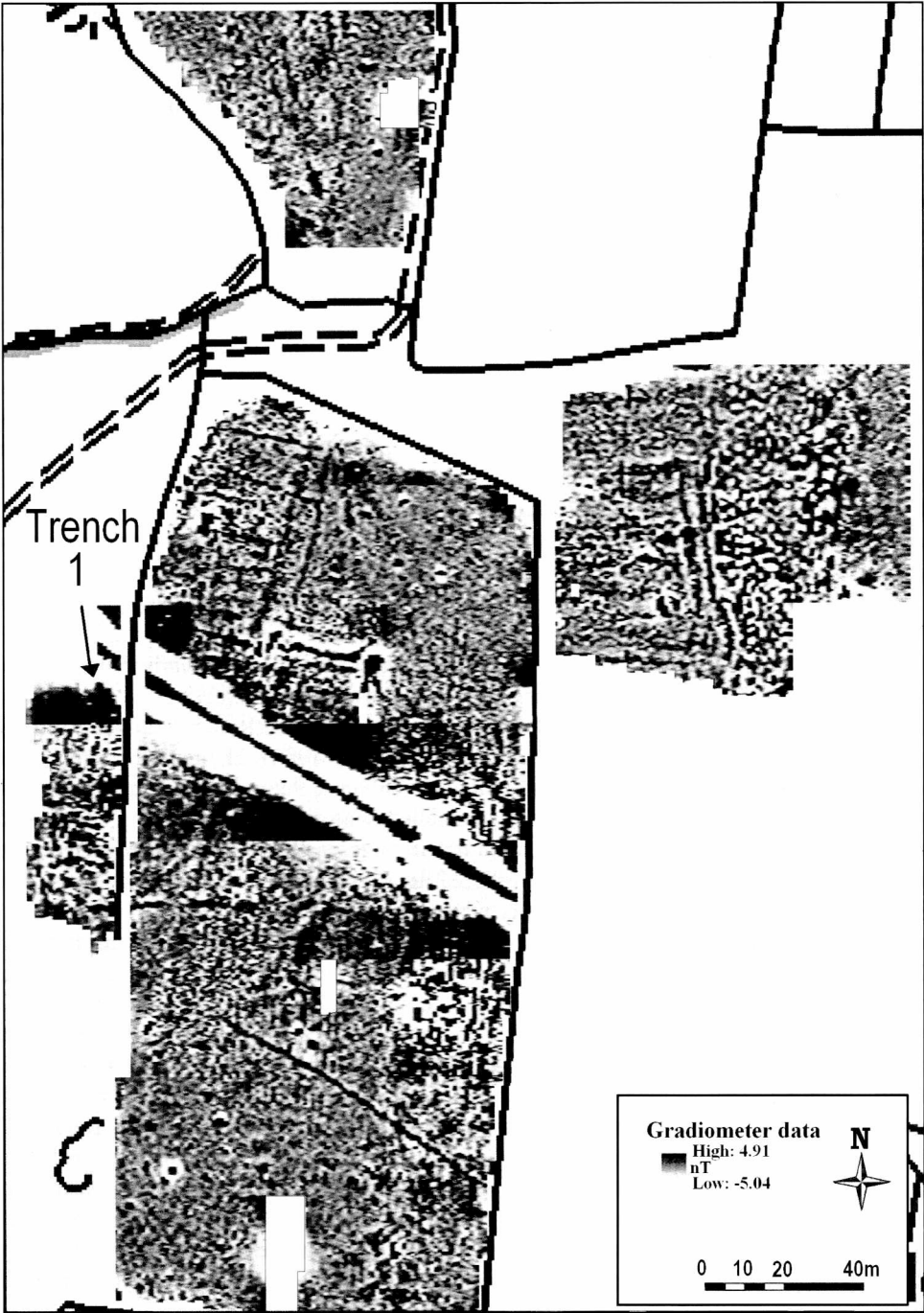


Fig. 11: Initial gradiometer survey data, March 2013. A water main, seen as a black line NW-SE, obscures the area of Trenches 1, 9 and 10. Further putative buildings are cut through by the water main in the middle of the field. Reproduced with kind permission of Dr. Chris Carey, Carey Consulting.

must have been laid there when the earlier-phase building works took place.

### **Coin copying on site?**

The Heage hoard of radiate copies, the unofficial minting of which was widespread in Britain in the late 3rd century, could have been made on site from melting down 2nd century *sestertii*, given the nine worn ones found on the site. This practice was discussed by Abdy (2003) when 61 *sestertii* and nine dupondii/asses were found at Longhorsley, Northumberland with a casting sprue. The latest *sestertii* to come to Britain, and which are present at Heage, were of the Antonine and Adoptive Emperors, and they circulated for many years afterwards, but by the late 3rd century would have had little value except as scrap. A radiate hoard of 313 coins, 186 hammered blanks and 114 cut pellets from Sprotborough, Yorkshire (Mattingley and Dolby 1982) demonstrated various stages of the process. Metal analysis on a production hoard of blanks, pellets, and a set of dies from Fenny Stratford, Buckinghamshire showed two types of coin-making and different controls over metal composition (Zeepvat *et al.* 1994). The striking of undersize radiates increased under Aurelian (AD 270-5) despite his reforms, becoming even smaller under Probus with a huge output of at the end of his reign (AD 276-282), eventually tailing off after Diocletian's reforms around AD 290.

No specifically coin-manufacturing debris has yet been found at Heage but metal analysis of the radiates could help to determine if they were made from *sestertii*.

### **Other contemporary Roman stone buildings in the area**

Whilst we are a long way from a full plan of the buildings, a brief look at nearby contemporary stone 'villas' may be useful, noting their varying degrees of success.

The nearest (7.2 miles or 11.5 km), is at Carsington, close to the Roman road from Buxton to Derby (Ling and Courtney 1981; Ling *et al.* 1990; Ling 1992). The main building, dated provisionally to the 4th century, was rectangular, 23.8m x 9.2m, divided into three parts by cross-walls with part of an underfloor channelled heating system surviving at the north end. A small heated bath-suite was added on to the south-east corner, and there were earlier outbuildings to north and south. A few scattered floor *tesserae* were found, but strangely no wall plaster. Overall dating was from mid-2nd to 4th century.

Fine wares showed a good standard of living for essentially a farming group. Ling and Courtney proposed a distribution centre for Derbyshire lead, as there was little evidence to suggest a lead-producing economy, although it may have served nearby lead workers in other ways. Pastoral farming, wool production and some cereal cultivation were evident, but environmental samples indicated an increasingly marshy area with almost permanent waterlogging possibly the reason for its eventual abandonment. Climate deterioration in the 3rd-4th centuries has been discussed elsewhere (Salway 1981, 555-562; Dark and Dark 1997, 18-26; Knight and Howard 2004, 116-7).

At Roystone Grange, near Hartington (Hodges and Wildgoose 1981; Hodges 1991), a 2nd to 3rd century timber aisled building was rebuilt in stone in the later 3rd century. Another five smaller buildings were also replaced with different structures. There was no Iron Age antecedent and Hodges saw this as an elite landowner farmer from the south-west, tempted by the 2nd century expansion, but a recession in the 3rd and worsening climate probably led to its abandonment in the 4th century. No evidence of high status in finds or structural debris exist. The lack of a navigable river nearby and the high costs of overland transport to this hill farm no doubt also contributed to its demise.



South-east of the county at Ockbrook (Palfreyman 2001) the Little Hay Grange aisled building was built over Iron Age enclosure ditches and a late 1st century predecessor and continued into the 4th, with a floruit in the 2nd century. The north end was divided into two rooms for minimal occupation and there was a considerable assemblage of imported pottery, but it remained essentially an agricultural building, with a corn drier being inserted into the interior in the 4th century. Being fairly close to the Roman road (Margary 182) from the River Trent crossing at Sawley to Little Chester fort, its success with grain production probably rose and fell with the army's occupation and trading at the fort.

At Great Wilne, only ½ mile (0.8 km) west of the Derwent-Trent confluence, Alan Palfreyman discovered evidence of a villa in 1968-9 (unpublished). A series of test pits, at SK 44953085 next to the old farmhouse, revealed areas of paving and other flooring and a metallised access. Finds of Roman *imbreces*, *tegulae* and Charnwood slate roof tiles, much local and imported pottery, bone, coal and charcoal on several of the floors, and three 3rd century coins, all pointed to a villa building. Flue tiles were found but the hypocaust was not located. He dated the building to the 3rd and 4th centuries and an underlying ditch probably as 1st to 2nd. The *tegulae* samples can now be dated as Type C (AD 160-260) and Type D (AD 240-300) (Warry 2006, 4, 63-4). Situated on a gravel mound, this villa would escape local flooding but would have rich grassland for grazing and access to the rivers' stocks of fowl and fish. A market at Redhill, 2.5 miles (4 km) away on the Trent, and from there to *Derventio* (Little Chester), 9 miles (14.4 km), would make this an excellent location.

At the Mansfield Woodhouse villa, Nottinghamshire, c.15 miles (24 km) north-east of Heage, settlement began c. AD 80 with three phases of wooden buildings up to c. AD 170, two being destroyed by fire (Oswald 1949). The first stone, winged building, dated c. AD 180-220, also suffered a fire but had a corridor and other additions in the 3rd century. A second 43m x 13m villa with baths was built between AD 300 and 360. Oswald compared these phases to Norton Disney, Lincolnshire and *Margidunum*, Nottinghamshire, which were also subjected to fires and violence. He put these 4th century events down to continual Pictish invasion eventually ending this occupation, but whoever were the perpetrators, the occupants were clearly resilient. Situated on the Coal Measures and perhaps supplying that industry, pastoral farming and wool production would seem likely and the 4th century aisled building may support this. Its central location, 20 miles (32 km) west of the Fosse Way and the Trent and 10 miles (16 km) east of Rykned Street did not hamper trade, shown by considerable pottery imports.

### **Similarities to Mansfield Woodhouse and Carsington**

The Heage finds were compared with Carsington and Mansfield Woodhouse, c. 7.2 miles and c. 15 miles away (11.5 km and 24 km) respectively. The authors viewed the material in Buxton and Mansfield museums and some similarities were apparent. Several burnished coarseware jars at Mansfield, with buff to dark exteriors and a reddish buff fabric, suggested a common source with Heage, that source as yet unknown. An almost whole reconstructed pot in Mansfield in this fabric mimics the Black-burnished jar form with everted rim. Similar sherds were found in a number of contexts at Heage. These seem to be local copies, keeping the tradition going in the late Roman period. Their Nene valley forms of the 3rd-4th centuries are very similar but there are 2nd century types that have not yet occurred at Heage. Mansfield's proximity to the Trent perhaps explains the slightly wider range of imports, but it was more extensively excavated than Heage.

The Carsington finds merit more discussion. Of the stone roof tiles from Carsington some were in the same distinctive dark red through to buff mica-rich rock as found at Heage, so alike that a shared quarry was suspected. After examining many different geological outcrops between Belper and Brampton, the writers traced the source to two quarries in Swinney and Wyver woods north of Belper, on the Chatsworth Grit. There this unusually fissile stone is still visible and close to both villas. Comparisons of samples from each were conclusive. Geologist Mike McGuire comments:

“Unlike the Ashover Grit, Rough Rock and Crawshaw Sandstone, which were deposited in huge river valleys producing very massive sandstones, the Chatsworth Grit is a deltaic sandstone, more likely to result in episodic deposition of thinner beds as pulses of sand-laden water flow out across the delta. During the much finer intermittent episodes, some deposits were slow enough for mica plates to deposit in thin layers making the stone fissile. The Chatsworth Grit is Upper Marsdenian, dated at 314.5 million years old. The overlying Triassic deposits were laid down ‘sub-aerially’ or in transitory lakes, so iron in them would be well-oxidised and hence red. This washes down into underlying Carboniferous strata.”

Hence the red/pink colour of these tiles and these particular outcrops were targeted by the Romans for this specific purpose. As well as the fine composition of the stone, one can imagine the aesthetic quality of the red shades with mica sparkling on the roofs. Although the Wingfield flagstone is nearer, finds of those tiles at Heage were well-outnumbered by the above.

The S-shape finger-signatures on *tegulae* at Carsington (Ling *et al.* 1990, plate 5, 47) appear on those at Heage, though fragmentary, and were possibly obtained from the same manufacturer. At Carsington, Ling *et al.* (1990, 53) concluded that the main house was roofed with the stone tiles but the bath-house with the orange clay type. No complete tiles of the sandstone or the orange *tegulae/imbreces* were found at Heage, but many fragments of all types were scattered in most of the trenches. Probably complete tiles were recycled when the buildings were dismantled.

There is no mention of Charnwood roof slates at Carsington, being perhaps too far from Rykneld Street, unlike Heage which certainly had those trading links (Appendix III, Fig. 8). Slates could have been transported by road from Leicestershire up to the riverside trading hub at Redhill, Ratcliffe on Soar, and across the River Trent to the Roman road to Little Chester (*Derventio*) where smaller loads could be sent up Rykneld Street, which passed east of the site. McWhirr (1988) concluded that most were transported on carts as it would be uneconomical and inconvenient to keep transferring from road to river. The Rivers Soar and Derwent would not have been viable for large loads or long distances. At c. 35 miles (56 km) from the Leicestershire quarry, this is one of the most northerly consumer sites for the slates, another being Norton Disney (Oswald, 1937) at 40 miles (64 km).

## CONCLUSIONS

Despite this being a good location for a fort, there is no military structural or finds evidence (discounting the arrowhead, Appendix V). Proximity to the Pentrich fort, does not appear to be relevant on present evidence, Pentrich having been abandoned early in the 2nd century. Nor is there at present evidence in plan or votive material for a temple. It could have been part of a villa, with evidence of a hypocaust system somewhere on site and painted wall

plaster in some rooms, although no floor *tesserae* have yet been seen. Room A contained some long-cherished samian, later storage jars, bowls and small decorated beakers, the fallen pile of abandoned radiates, a wall-hook and locks and keys for security. All of which suggests a storage room, perhaps adjoining a larger communal area. In both Trench 1 and Trench 10 there appear to have been at least two phases of use, both spanning the mid-3rd to mid-4th centuries.

As for the storage of the 3rd century coin copies in Room A and their purpose on site, one can only propose that, with the lack of official coinage at this time and having become accustomed to a monetary economy they were used in the occupants' daily trading until c. AD 280, or as 'tokens' to obtain goods within the industrial community of the Derwent Valley. This industry had its origins in the *Societas Lutudarensis* and the *Metalli Lutudarensis* of 1st to early 2nd centuries lead production and in the tradition of procuring local resources to produce building materials, pottery, querns, iron goods and coal which most likely continued to a lesser degree after the army moved on. It would seem that the coin hoard remained in the store room after it fell out of use and until the building was abandoned by the first occupants and was clearly of no value to the later inhabitants.

The question of what the hoard was originally contained in has to remain unanswered, despite speculation that they could have been in the large grey ware jar (Rowlandson, in Appendix I). The writers feel that the existence of a few coppery marks on two pot sherds is not convincing evidence for this, whilst the rest of the sherds from the same jar were unmarked, including two adjoining sherds. Moreover, coin marks were noted on a different vessel sherd and on roof tiles and the floor itself, where they had lain after they fell or were pushed to the floor. So marks on the grey jar sherd probably occurred after it was already lying broken on the floor. The possibility of a wooden container or a bag, long since decomposed, cannot be ruled out.

A stone platform south of Carsington villa (Ling R. *et al.* 1990, plate 2, 35, 37, not the collapsed wall) looks very similar to stone layer C3 in Trench 1 at Heage, neither showing any real evidence for a building having stood on it. A late threshing floor is a possibility. The Roman pottery found in this platform at Heage was probably incorporated from the Roman floor below when it was laid, and the small amount of Roman and medieval pot on top, suggests that the platform could be from late Roman to medieval in date. A late 12th to early 13th century quarter silver penny from Trench 9, just over the wall, is from a period of assarting which would have triggered medieval activity.

Two later coins of Magnentius and Constantine I, found by DB near Trench 10, probably also Roman copies, show continuation to the mid-4th century, similar to Mansfield Woodhouse and Norton Disney. Erosion of the west scarp and tumbled stone in several places could be due to incessant wet conditions, or to the building slowly collapsing after it went out of use. There is scope for environmental sampling in the next field to the east. Surplus material was deliberately spread at the northern, eastern and southern edges of Room 1 (particularly evident in TP8) to level the area. More excavation may show if the site's location further inland saved it from the destruction that Mansfield and the Trent Valley villas suffered. No evidence exists for this structure having burnt down, although small deposits of burnt debris were seen.

A geophysical survey carried out in March 2013 by Carey Consulting, funded by Derbyshire County Council, suggested that the excavated area was part of more complex structures which extend into the adjacent field and highlighted further areas of probable archaeological interest (Fig. 11). However, test-pitting carried out by Tom Parker as part of his University of

Sheffield degree dissertation on some of the peripheral areas in the adjacent field produced no further Roman stratigraphy (Parker 2014). This and other fields have known spreads of slag which may have been imported from the local Morley Park iron works in the late 18th to 19th centuries. Areas most likely to produce more structural data are in the north-west corner of this field and more extensive excavation in the area already evaluated by the writers. Dr Chris Carey undertook further magnetometer survey on two more fields in 2014.

Clay for pottery-making to the west, Millstone Grit for quern-making and building, roof tiles to the north-west, coal and iron to the east and north, and limestone to the north, would all have contributed to the prosperity of this settlement. It is a rare discovery in this landscape of cattle and sheep farming on the Millstone Grit, clays and Coal Measure Sandstones south of the Pennines and is a welcome addition to the Roman landscape of Derbyshire. It is unlikely that grain production was the primary activity and no Roman quern fragments, or spindle whorls were found in the excavation. However, the stone platform over most of Room A may have cleared some of its occupation debris, and more evidence may yet be forthcoming from elsewhere on the site.

The villas listed above have highlighted the importance of location and communications. Villa estates were still producing grain in the later 3rd and 4th centuries and trading links still flourished despite 2nd century expansion being followed by 3rd century 'crash'. So too did any links to a nearby fort or urban centre and especially when, like Heage, an estate was close to sources of local raw materials. Some in fact enjoyed an upturn in fortunes in the later 3rd to 4th centuries. The reasons for that are obscure, but the theory of immigration of wealthy Gauls to Britain c. AD 275 to escape continual barbarian destruction of their assets, still lingers (Salway 1981, 277-281). There is little information on how the Severan division of *Britannia* into *Superior* and *Inferior* and later reorganisation into 4 provinces under Diocletian affected the administration of villa estates. Perhaps incentives were given to the owners of some of those in *Flavia Caesariensis* province.

Heage survived the unstable economy and weather conditions that made some Derbyshire rural settlements inaccessible and uneconomical, and the inhabitants appear to have been still living comfortably up to at least the middle 4th century. Hopefully there will be more investigation of the buildings and activities on this settlement and the basis for this success will be revealed.

## ACKNOWLEDGEMENTS

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## APPENDIX I - THE POTTERY

This pottery report was kindly funded by the Council of the Derbyshire Archaeological Society from the Monica Pilling Award scheme.

THE SAMIAN  
By G. Monteil

Introduction

A small group of samian ware consisting of 28 sherds was analysed for the purpose of this report. Each sherd was examined, after taking a small fresh break, under a x 20 binocular microscope in order to identify the fabric. Each archive catalogue entry consists of a context number alongside fabric, form and decoration identification, sherd count, rim EVEs and weight. The presence of wear, repair and graffiti was also systematically recorded.

	Lezoux		Rheinzabern			Trier			Total		
	sherd	weight g	sherd	RE	weight g	sherd	RE	weight g	sherd	RE	weight g
Cu15 or 23	1	22	1		3				2		3
LUDSb			1	0.08	36	12	0.21	106	13	0.29	142
DR32			6	0.24	92				5	0.24	92
DR36			2	0.07	21				2	0.07	21
Unid			5		9				4		9
Total	1	22	15	0.39	164	12	0.21	106	28	0.6	292

Table 1: Samian vessels recovered from the site.

The assemblage

The assemblage is small with 28 sherds, 26 of which are stratified for a total weight of 292g, a maximum number of five vessels and a total rim EVEs figure of 0.6 (Table 1). The group is in fairly good condition with an average samian weight of c.12g though several vessels show heavily abraded slip and surfaces.

The range of forms and fabrics in the stratified assemblage is limited with only plain vessels represented, all of them dishes from two production centres in Eastern Gaul, Rheinzabern and Trier (Table 1). Most of the samian material comes from Trenches 1E and 1N with several fragments from two vessels found throughout the stratigraphy: there are joining fragments of vessel Dr.32 in C2, C3 and C5 and joining fragments from the Trier LUDSb in C2, C5 and C6. The high number of joining fragments across contexts argues for a single deposit or several rapid episodes of deposition.

There is an additional LUDSb rim sherd from Rheinzabern in context C5. The last two fragments were recovered in Test Pit 7 (C7) and are from a dish form Dr.36 from Rheinzabern. Finally a sherd from a Central Gaulish dish form Cu.15 or 23 was recovered unstratified.

Both of the main vessels, Dr.32 and LUDSb were repaired in several places; each displaying a number of filed slots indicative of dove-tail type repairs and a black glue deposit on some of their broken edges. Drilled or filed holes are the most common traces of repair found on samian ware in Britain (Willis 2005) and dove-tailed examples tend to be more common on 2nd century vessels than on 1st century ones (*ibid*, section 11.3). The additional use of glue is however more rarely recorded in Roman Britain (Marter-Brown; Seager-Smith 2012) and the presence of glue on both of these late samian dishes makes them amongst the latest as yet recorded in the Province (*ibid*). Repairs are often interpreted as symptomatic of difficulties in

obtaining replacements, either because supply is difficult to access or dwindling, or because of a lack of wealth. Since both of these vessels are 3rd century in date when samian ware imports were decreasing, these repairs are most likely attempts to keep them in use.

### Concluding remarks

In the absence of stamps it remains difficult to date the samian assemblage precisely. Both the Rheinzabern Dr.32 and the Trier LUDSb are most likely late 2nd to mid-3rd century AD in date and had been repaired and well-used when deposited. The complete absence of Central Gaulish material in the stratified assemblage and the date range of the Roman Pottery from the excavation in the late 3rd-4th century AD (Rowlandson, this article) strongly suggest that the samian vessels were residual possibly heirlooms when deposited.

The forms represented and the emphasis on plain ware in the group generally fit with typical samian functional profiles of rural sites in Britain (Willis 2005, section 8.2.6; Willis 2011) and, though later, seems to fit with other published evidence from villa groups in Derbyshire (Dickinson 2001, 94-5).

## THE OTHER ROMAN POTTERY

By I.M. Rowlandson with M.J. Darling

Upon first looking at the group of pottery it was clear that there was a limited number of vessels present within the assemblage many represented by large fresh sherds. Presented for study from the project so far was a total of 896 sherds weighing 16.763kg with a total of 5.65RE. A further twenty small fragments of tile (123g) were also recorded. From this group a maximum vessel count of 296 was established following extensively checking cross joining vessels throughout the bags, although this is possibly an over representation given the difficulty of attributing smaller sherds of Derbyshire ware to the same vessel. It was clear that many of the vessels were found throughout the stratigraphic sequence of the site with many joining or 'sherd families' established. The majority of the pottery would comfortably fit within the 3rd-4th century AD with the majority of sherds from the later 3rd-4th century AD.

The pottery has been archived using count and weight as measures according to the guidelines laid down for the minimum archive by *The Study Group for Roman Pottery* (Darling 2004) using the codes developed from the City of Lincoln Archaeological Unit-CLAU series (Darling and Precious 2014). Rim equivalents (RE) have been recorded and an attempt at a 'maximum' vessel estimate has been made following Orton (1975, 31) (Table 2). The illustrated vessels have been bagged separately for ease of future reference with a 'D' number. The tabulated archive is available from this author.

Summary dating information has been provided for the site report and is not duplicated here. Although there is a small proportion of pottery present that might date to the 2nd century AD the group has been considered as a whole. The pottery has been discussed by fabric group with catalogue entries included in the relevant section. The catalogue entries are followed by the contexts that the vessel was retrieved from and the drawing reference number that appears in the archive (D\*).

Roman pottery fabrics				
Fabric	Description	Sherd	Weight (g)	Total RE %
CGBW	Central Gaulish black ware	1	3	0
OXRC?	Oxfordshire Red colour-coated ware	2	30	0
CC	Misc. colour-coated wares	42	320	28
CC1	Colour-coated ware with light firing fabric	153	806	213
CC2	Colour-coated ware with orange fabric and dark surfaces	19	41	4
BB1	Black Burnished ware 1	2	11	5
BBT	Black Burnished ware 1 type wares	4	60	3
CR	Light firing oxidised wares	1	2	0
CR?	Light firing or abraded colour-coated wares	6	16	0
OX	Oxidised wares	29	128	40
OXFIN	Fine oxidised wares	1	2	0
DBY	Derbyshire ware	186	2511	169
GFIN	Fine grey ware	4	23	0
GREY	Grey wares	282	8126	94
GROG	Grog-gritted	121	3883	0
SHEL	Shell-gritted wares	1	11	0
MOMD	Misc. Midlands light-firing mortaria	1	4	0
MOMH	Mancetter/Hartshill mortaria	17	650	9
MORT	Misc. mortaria	1	2	0
MISC	Miscellaneous sherds	2	9	0
TILE	Tile	20	123	0
FCLAY?	Fired clay	1	2	0

Table 2: Roman pottery fabrics by sherd numbers, weights and rim equivalents.

### Colour-coated pottery

Decorated pottery strip (Fig. 6) - M. J. Darling

1. Two non-joining fragments of a triangular-sectioned irregular curved strip, approximate outer diameter 8 cm (*TR.1 C.4 Plaster spread West end, D0*, (Fig. 6). Very fine light red-brown fabric, fairly sparse mica flecks, occasional larger sub-rounded quartz, small red clayey inclusions, and black specks (Munsell 5YR 7/6), smooth inner surface; outer decorated with diagonal angular impressions, and covered with a darker red slip (Munsell 2.5 YR 5/8-4/8). This survives largely in the 'cells' of the impressions, but judging from an area on the exterior lower part of the smaller fragment, the slip may be an overall slip, rather than just on the decoration; certainty is impossible.

The appearance of the smooth inner surface suggests the larger fragment has perhaps flaked off part of a sloping part of a pot, such as, for instance, the shoulder area of a closed vessel, where the upper part could be c. 6-7cm diameter. The impressions on the exterior underside of the strips are significantly less regular and less carefully impressed, suggesting the strips were in place horizontally on the wall when the stamps were placed. Moreover, the impressions on the large fragment slope in the opposite direction to those on the small fragment. This indicates that two separate strips are involved, not fragments of a single applied strip. And the alignment of each fragment differs: there are slight lateral impressions on the inside of the smaller fragment showing a different alignment, suggesting it was applied towards the

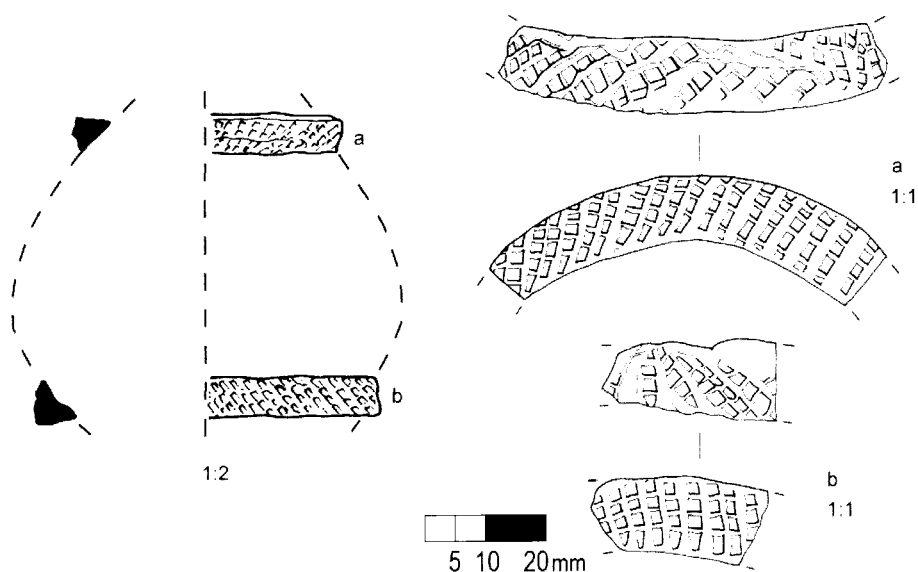


Fig. 6: Decorated strips from colour coated flagon or flask, probably later fourth century.

bottom of the vessel – the upper fragment slopes inward, the small fragment slopes outward. Also at the lower part of the interior of the small fragment is a very slight lateral bulge above a shallow groove being the negative of the vessel wall below, perhaps where part of the attached strip slightly overlapped a small ridge?

It was difficult to be certain that these are applied strips which have flaked off a vessel, rather than fragments of a raised cordon, with an unusually smooth fracture. The traces on the interior surface of the smaller fragment indicates the former, so these appear very unusual features. Such decorated strips might provide a decorative cordon, or embellish a carination – both of which would be more readily created in the throwing process of making a pot. The puzzle is compounded also by the difficulty involved in applying the stamps (presumably using a small block die), particularly on the underside of the feature, and the small diameter of the upper strip may be a significant factor in these being applied.

Stamp decoration, although dating back to the Iron Age (Elsdon 1975), is a relatively rare type of decoration, seen in Parisian and London wares, various stamped wares in the east of England, and at West Stow, Suffolk, but these are earlier in date than appears probable for this vessel. Stamp decoration reappears in the Nene Valley in the third century, becoming a feature of late fine wares, and the obvious candidate for stamps on a fine red slipped fabric lies with the later Oxfordshire red-slipped wares. The block stamp used here is not readily paralleled in the Oxford industry (*pers. comm.* Paul Booth), and the fabric of these sherds differs from the archetypal Oxford red-slip fabric. Oxford potters did use applied clay strips, the most notable example being an applied scroll stamped with the demi-rosette die on the large beaker C30.5 in the later fourth century, but these are rare (Young 1977, 154, fig 55: C30.5).

There is no evidence to be certain that this vessel came from the Oxfordshire kilns, the closest fine ware industry, but the fabric could well lie within the range of the variations in the red-slipped Oxford fabric, seen from different kilns (I am grateful to Paul Booth for discussion



of the Oxford fabrics). It definitely fits into the context of such late Roman fine wares. If, as seems probable from the traces on the back of the small fragment, these formed horizontal cordons, the diameter would suggest the vessel could be either a flagon, or narrow-necked flask, rather than a large beaker. Cordons on the junction of neck and shoulder of flagons are a common feature, and well-illustrated by a Nene Valley parchment ware face-neck flagon (Dövenner 2000, 127, Abb 211, type D). The cordon there is decorated on top and on the edge, a possible illustration of where the larger strip would have fitted on a flagon; estimation of diameter for the smaller fragment is impossible, but it probably lay below a decorated zone. On the basis of the evidence from both major late fine ware industries, the vessel from which these strips come is most likely to date to the later fourth century, and probably came from an Oxford kiln. As with other fine ware industries, unusual vessels occur, some of which would be special commissions. Given its find spot in Derbyshire, it would have been a personal possession rather than an object of trade.

### **The other colour-coated pottery (Fig. 7) – I. M. Rowlandson**

- 2 **CC1** A colour-coated beaker with thick white painted decoration. A type produced by the Nene Valley industry in the 4th century AD (*cf.* Symonds 2002, Fig. 41.230; Darling and Precious 2014, No. 194). *C5 (D4)*
- 3 **CC** A beaker with a tall neck and bead rim. *C3/C5 (D10)*
- 4 **CC1** A beaker, probably a pentice-moulded type. *C5 (D9)*
- 5 **CC1** A colour-coated Castor box with rouletted decoration, examples with slack profiles such as this were more commonly found in groups dated to the 4th century AD at Lincoln (Darling and Precious 2014, 36). *C3, C4, C5 & unstratified (D3)*

The majority of the colour-coated pottery present is from Roman-British production sources similar to the products of the Nene Valley workshops. Pentice moulded, slit folded and tall necked beaded types were the most common with only a single example of a vessel with a plain funnel rim. A range of larger vessels including: a straight sided bead and flanged bowl, perhaps as many as seven Castor boxes, two Castor box lids and larger closed forms including at least two flagons or handled jars. A single sherd from a folded beaker in a Central Gaulish black ware fabric from C7 was the only imported vessel present.

### **Oxidised wares**

- 6 **OX** A small globular beaker with an everted rim. *C5, C5/6 and C6 (D11)*

A limited range of oxidised wares were present, with the exception of the illustrated vessel a fragment from a bowl from F1 was the only other sherd that could be attributed to a vessel type.

### **Derbyshire ware**

- 7 **DBY** A Derbyshire ware jar with a grooved rim. Fifty-two sherds weighing 1.084kg with a total of 0.40 RE could be attributed to this vessel including basal fragments. *C2, C3, C3/5, C6, C7, C9, T1 Furrow and unstratified (D2)*

All of the sherds are from closed vessels, almost certainly all from jars. The majority of

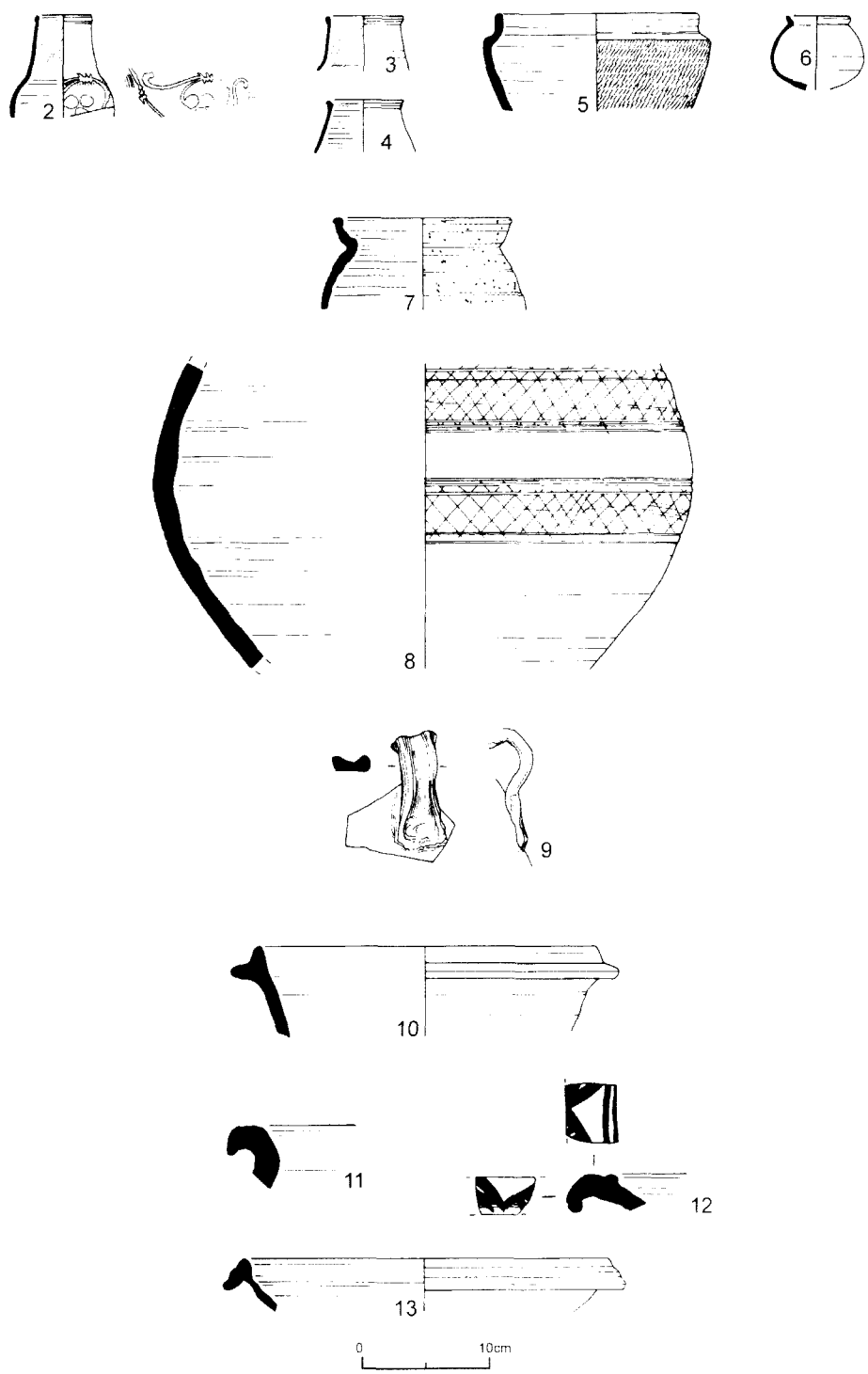


Fig. 7: Late Roman pottery from various contexts.

diagnostic forms present are typical ‘Derbyshire ware jars’ of the beaded cupped rim type (Gillam 1970, Type 152) with examples of the simpler cupped type also present. A single example of a vessel with a curved rim (Leary 2003, fig. 13.39) was found from contexts C1, C2, C3 and C5.

### Grey ware

- 8 **GREY** a large lattice decorated storage jar. A total of 73 sherds weighing 4.669kg were retrieved from the large grey ware storage jar. Sherds from this vessel are present in nearly all contexts. No rim sherds could be attributed to this vessel with certainty but the general form of the vessel would fit with a late Roman date. Sherds from this vessel near the rim suggest a rolled rim (*cf.* Darling and Precious 2014, fig. 109, 1071). Storage jars of a similar form were produced by the 4th century kilns at Swanpool and Messingham, Lincolnshire (Webster and Booth 1947; Rigby and Stead 1976), although it is likely that the vessel from this site was produced more locally (Leary 2001, 120, fig 8. 45). As well as the large proportion of the jar being present one sherd had surviving *verdigris* imprints of copper-alloy coins. Although this may be a chance occurrence it suggests that this vessel may have been the container that held the hoard. It is the opinion of this author that this vessel held the coin hoard for some time before it was deposited on the Roman floor surface. A rapid survey through publications of coin hoards in the East Midlands has shown that a large proportion of those that have been found were contained within pots (Palfreyman and Ebbins 2012, Appendix 3; Higginbottom, 1980; Winter 1979, 1910). Another radiate hoard has recently been found in a vessel with a similar profile and faceted burnishing from Little Morton, Nottinghamshire (Leary 2009, fig. 3, pl. 3) although it appears more likely that that vessel held the coins until disturbed by ploughing. *C1, C2 (A&B), C3, C3/C5, F3, F4 and unstratified (D1)*
- 9 **GREY** A handled jar. Similar forms are made by a number of the kilns in the East Midlands and examples of such vessels are also known from Little Chester (Symonds 2002, fig. 41.225) and Lincoln (Darling and Precious 2014, no. 1062). A number of body sherds were retrieved although it was not possible to reconstruct a full profile for the vessel with any certainty. *C2, C3, C5 and unstratified (D5)*
- 10 **GREY** a straight sided bowl with a bead and flanged rim. This form is ubiquitous in 4th century groups from Little Chester (Symonds 2002, fig. 40. 209). *C3/C5 (D6)*

Grey ware was the commonest fabric amongst the group on the basis of sherd count and weight. The majority of sherds retrieved were from large or storage type jars. Other jar types represented by individual vessels include narrow necked, handled, everted rimmed and late ‘cavetto’ curved rim types (form as Darling and Precious 2014, no. 1037). A single necked vessel decorated with a cordon may possibly represent 2nd century activity on the site. Bowls were poorly represented with only two large bowls noted along with two straight sided bead and flange rimmed bowls. A small number of undiagnostic fine grey ware sherds were retrieved that could not be attributed to a form.

### Grog-gritted pottery

- 11 **GROG** A large globular grog-gritted vessel. Only the rim is illustrated as a secure full profile of the shoulder of the vessel could not be established. Body sherds from the

shoulder of the vessel were decorated with burnished wavy lines. Marney illustrates a vessel with a similar rim that is considered to date to the late 2nd to late 3rd century AD in the Milton Keynes area (1989, fig. 27.1) where similar fabrics were common but Booth and Green have highlighted that away from the core area of distribution of this type, they appear in the later 3rd to 4th century AD (1989). Given the distance of this site from Buckinghamshire a later date is preferred for this example. *C1, C2, C2A, C2B, C3, C3A, C5, F3 & unstratified (D12)*.

A single vessel in this fabric was present. The vessel was predominantly hand built and wheel finished to produce a large storage jar. The fabric is broadly a good match for the Pink Grog-tempered ware (Tomber and Dore 1998, PNK GT), although without further analysis it is not certain that this vessel is a product of the Milton Keynes area or if it is a local imitation, however from a quick search of the literature, grog-gritted vessels dated to the late Roman period are rare in Derbyshire, although an example has been published from Leicester (Clark 1999, fig. 72.220).

### Shell-gritted wares

A single unstratified handmade Roman shell gritted sherd was retrieved that could not be more closely dated.

### Mortaria

- 12 **MOMH** a large hook-rimmed mortarium with orange-brown painted decoration. Although hook-rimmed forms are commonly made at Mancetter in the 2nd century AD painted examples such as this are typically of a later date, with examples of this type only occurring at Lincoln in deposits from the mid-3rd century AD onwards. A date in the later 2nd century AD would perhaps be the earliest possible date for such types although many of the published examples from the East Midlands have been found in contexts post-dating the middle of the 3rd century AD including: Little Chester (mid to late 3rd century AD - Hartley 2002, fig. 54.24), Leicester (4th century AD - Clark 1999, fig. 76.272) and Lincoln (mid 3rd-4th century AD - Darling and Precious 2014, 184, no. 1634-6). A further example was found during excavations at Mansfield Woodhouse villa, Nottinghamshire (Oswald 1949, pl. 1. 9, where it can only be dated to AD 180 or later). *CXX (D7)*
- 13 **MOMH** a similar vessel was found at Carsington (Ling 1990, fig. 9.53) a later 3rd to 4th century AD date would be appropriate for this vessel. This vessel was retrieved from C5 (D8), and a further vessel of a similar form was recorded from C1/2.

A limited range of mortaria were present amongst this assemblage all in light-firing fabrics typical of those produced during the later phase of production at Mancetter/Hartshill. The two illustrated vessels represent the only recognisable forms from the maximum of nine mortaria that were found.

### Discussion

The majority of the group as a whole appear to fit best with a 4th century AD date whilst some of the vessels might date as early as the middle of the 3rd century AD. A small number of sherds from the assemblage, including some of the samian and the fragment from

a Central Gaulish Black ware beaker, have production dates in the 2nd century but it ought to be remembered that such items of tableware were often repaired and retained for many years as heirlooms. A long period of production of Derbyshire ware has been widely acknowledged from the Antonine period until the middle of the 4th century AD, although it was relatively uncommon in assemblages from Derby 'before the late second/early third century phases' (Leary 2011, 156). It is possible that some of the Derbyshire ware from this site may date to the 2nd century AD but this is not supported by the other coarse wares present. To highlight this point one might contrast this villa assemblage with material reported on by Leary from the Roman building at Ockbrook (Palfreyman 2001). Amongst that assemblage were good groups dating from the 2nd century AD (Groups 3-4). At Ockbrook there was a range of necked and carinated grey ware vessels that accompanied the Derbyshire wares from the 2nd century AD groups (Leary 2001, fig. 7.33, 35 and 40, fig. 8.43, 46 and 50). With the exception of one possible example, these types were not present amongst this assemblage and, whilst some of the table wares from this site must have been produced in the 2nd century AD, it is difficult to suggest that pottery was disposed of in the 2nd century AD. A better comparison for this assemblage would be with the 3rd and 4th century material from Ockbrook Group 5, where similar finewares were present (Leary 2001, 120-1). Quantified assemblages of Roman pottery associated with the remains of rural stone built buildings are not abundant. Carsington would appear to provide the obvious parallel where 4th century pottery was retrieved from a large spread of stone which was considered to be a collapsed wall (Ling and Courtney 1981, fig. 10; Ling 1990; Ling 1992; Dearne *et. al.* 1995).

Grey ware was more common than Derbyshire ware by both sherd count and weight, even if the large grey ware storage jar (Fig. 7.8) is removed from the calculation. There was a greater quantity of Derbyshire ware by RE measurements, although this was increased by the retrieval of 40% of the rim from illustrated vessel number 7. Although the Derbyshire ware forms are typical of what might be expected it appears that the grey ware assemblage is a little unusual with a strong bias towards large storage type jars. This may perhaps suggest waste from a store room or the selection of large thick sherds for additional metalling material. There are few of the smaller grey ware bowls and dishes or larger bowls than might be expected from a group of this period. The presence of the large grog-gritted jar (Fig. 7.11), probably imported from the Buckinghamshire area, also suggests a bias in the assemblage towards storage jars.

The presence of sherds from an unusual Oxfordshire ware vessel is a rare occurrence in groups from Derbyshire (Fig. 6). An Oxfordshire ware bowl was identified from excavations at Carsington (Dearne *et. al.* 1995, fig. 10.31) and small quantities from Little Chester (Martin 2000, 216; Birss 1985, 115-6, 124), but these wares are seldom common and are more likely to occur in 4th century deposits and Darling (above) has considered the vessel from this site to date to the later 4th century AD. The range of colour-coated beakers present best fits with occupation at the end of the 3rd into the 4th century AD, with the pentice moulded and paint decorated vessels most likely to date to the 4th century AD along with the Castor box (Fig. 7.2-5). The range of flagons or handled jars and the straight sided bowl with a bead and flanged rim would also support a 4th century date. Although these vessels are found on rural sites of this period in Derbyshire they are seldom common and this group suggests that the inhabitants of the site had access to a good range of table ware. The large jars present amongst this assemblage also hint at the capacity to store a large surplus of material into the 4th century AD.

The presence of a range of pottery that ought to date to the 4th century AD appears at first glance to be slightly at odds with the dating of the coin hoard. Numerous interpretations of the association of the pottery with the coin hoard present themselves. This author is drawn to the observations by Reece about hoards of this period, that barbarous radiates may have continued to circulate until around AD320 as scruffy small change and may have been deposited in a pot and forgotten about when no longer useful (2006, 74-7). This could then happily place deposition of the pottery into many of the contexts well into the 4th century AD.

## THE POST-ROMAN POTTERY

By J. Young

### Introduction

A total of eight sherds of pottery representing seven vessels was submitted for examination. The material is entirely of medieval date and was recovered from seven different find spots. The assemblage was quantified by three measures: number of sherds, weight and vessel count within each context. The ceramic data was entered on an Access database using fabric code-names. Recording of the assemblage was in accordance with the guidelines laid out in Slowikowski, *et al.* (2001) and the Derbyshire Type Series created by Dr. C. Cumberpatch was consulted (Cumberpatch 2004a).

### Condition

The recovered pottery is in variable condition with some sherds being in a fairly fresh condition whilst others are abraded. Only one vessel is represented by more than a single sherd.

### The Pottery

In total seven vessels in a single medieval ware type were presented for assessment. All of the vessels have fabrics consistent with a Brackenfield source but only four of them can be attributed to a specific fabric type. Excavations at Brackenfield have revealed kilns of medieval date with a variety of fabric types (Cumberpatch 2004b), but it is also possible that the type was produced elsewhere. Dating of the type is still problematical with a date of c.1400 being proposed based on some of the excavated vessel forms. This date may need to be expanded however as some sites in Nottinghamshire have produced jugs in similar fabrics securely stratified in 13th century groups. The group from this site includes glazed jugs and a jar and unglazed jars.

### Site Sequence

Pottery was recovered from seven different find spots on the site:

TIE/C2 produced a small spalled body sherd from an unglazed jar in Fabric BRK001. The jar has a rilled shoulder typical of many of the jars recovered from the kilns and could come from the same vessel as that found in TIN/C3.

TIE/C3 contained a single small flake from the rim of an unglazed jar in Fabric BRK001.

TIE/C5 produced a small burnt body sherd from a small jug or jar. The vessel is glazed with a reduced green glaze that has blistered from the heat. It is possible that this sherd is from the same small jar as that found in TIW/C2.

TIN/C3 contained a spalled sherd from an unglazed jar with a rilled shoulder. The jar is in Fabric BRK001.

TIS/C2 produced a small sherd with an internal glaze from what is probably a bowl. The fabric is the coarsest of those recovered from this site (Fabric BRK002).

TIW/C2 contained a rim sherd from a small jar with a thin heavily pocked reduced green glaze. This sherd appears to have been burnt.

TIW/C3 produced two sherds from a single jug with a thick reduced green glaze. The sherds are in a fairly fresh condition and have what may have been intended as decoration, but may just represent poor manufacture.

## Discussion

This is a small group of pottery of medieval date. No chronologically significant vessels occur so only a general date of *c.* 1400 can be given for the deposition of the vessels. The assemblage should be kept for future study.

*Some pottery from Trenches 9 and 10 was excavated too late to be submitted for this report. It did not affect any of the information given by the authors here and will be included in a future article. – SE.*

## APPENDIX II – THE HOARD

### THE AMBER VALLEY HOARD, DERBYSHIRE

BM ref: 2010 T747; PAS ref.: DENO-A6AE06

By Dr. Eleanor Ghey

### The coins

Amongst the group were four official-issue Gallic Empire radiates:

Postumus (AD 260-9)	1 fragment ( <i>Normanby</i> type 1341/4 (Bland and Burnett 1988)
Victorinus (AD 269-71)	1 ( <i>Normanby</i> type 1412)
Tetricus I (AD 271-4)	2 ( <i>Normanby</i> type 1506 and another fragment)

There were also four standard sized ancient forgeries of the emperors Tetricus I and Tetricus II, from their size and appearance more likely to have been contemporary copies intended to pass as genuine, and a small number of medium-sized copies of coins of recognisable emperors (Claudius II, Gallienus, Victorinus and Probus).

However, the majority of the 3631 radiates were of the type commonly referred to as a 'barbarous' radiate. This denotes a coin of local production rather than an official imperial issue. They are crude copies that were not intended to pass as convincing forgeries, being of a much smaller size (typically *c.* 6-8mm in diameter) and lower weight (0.33g on average). They probably functioned as currency to fill a gap in the official coin supply in Britain during the unstable late third century AD.

The designs range from recognisable copies of standard types to the schematic and often abstract. They tend to copy types dating from *c.* AD 260 to 280 but their exact period of production is unclear as the types may have had a long circulation. The latest datable prototype for this group is from the reign of the emperor Probus (AD 276-282, two inscribed with his name), suggesting that the group dates to the late 3rd century AD or later.

### The barbarous radiates

Although the irregular nature of the coinage meant that it was not possible to produce a

traditional catalogue, the hoard was studied with the aim of identifying any recognisable prototypes. They were sorted by approximate reverse types, and the few with notable inscriptions/identifiable types were separated out and listed separately below (Tables 3 and 4). The presence of a recognisable design was not determined by the size of the flan, though coins with inscriptions were usually larger.

The vast majority had a ‘head’ on the obverse, often reduced to a spiky crown, and some sort of reverse design, the definitive features of a ‘coin’. Recognisable obverse legends were rare, in some cases consisting of a series of strokes or circles. Some heads had a considerable amount of detail, with recognisable faces and beards, but drapery on the bust was not normally present.

It was frequently difficult to identify the intended reverse type. Coins on which the reverse was obscured by dirt, wear or corrosion were recorded as illegible (22%). Those classified as uncertain (36%) had designs too rudimentary or abstracted to be categorised, or partly off the flan, although many of these were probably parts of standing figure designs. The designs were often considerably larger than the flans.

Reverse design	Percentage
Uncertain	35.6
Standing figure (including with sceptres, cornucopiae etc.)	28.7
Illegible	21.8
Altar	5.0
Priestly implements	4.7
Abstract / symmetrical	1.8
Spes	1.0
Eagle	0.3
Sol, Laetitia, Blank, Sacrificing figure	0.2 each
Pax, Salus	0.1 each

Table 3: Reverse designs from the coin hoard.

Standing figures were frequently present as the most common design (29%). Again, these were often schematic but some were highly detailed, with flowing drapery, often with a radiate head and prominent breasts. Spes (as Spes Publica of Tetricus II) appears to be the most common recognisable prototype for standing figures, although still a small proportion at 1%. Sol, Laetitia, Pax, Salus, Fides and Virtus were also identified in small numbers, all common Gallic Empire types. Otherwise crude imitations sometimes even have mintmarks. A star in the field is clearly derived from the reverse types of Victorinus, even when the attributes of the figure are not clear.

A square motif, sometimes concentric squares or with internal dots and cross motif, probably representing the altar of a Divus Claudius ‘Consecratio’ type was also common (5%), as were the priestly implements of Tetricus II (5%). The eagle of Divus Claudius was rarely identified but it is probably under-represented in this study due to the similarity between schematic figures and birds. In their abstract form the figures can also be difficult to distinguish from the vase in the priestly implements type, depicted as an oval shape with curved arms or handle. Indeed the vase often appears here as two-handled, rather than the original single-handled vessel.

Two recurring types were recognised as being of the same dies, making a total of 65 coins



with one or other of these types. No systematic die study was attempted but the distinctiveness of these designs made them recognisable. The first consists of a very crude head and the reverse of an equally crude figure with a wide rectangular body marked with a number of dots and thin legs. Later in the sorting process, another reverse type (a standing figure with radiate head in a border of dots) with the same obverse die was identified. Although similar die matches were not sought out, a number of other recurring reverse designs were noted, including a very abstracted curving ‘vessel’ of symmetrical form. So it is likely that other groups could be found. Whether this is indicative of local production remains to be seen.

Such a quantity of coins would not be expected to be recovered from a Roman building as a result of casual loss (excavated villa assemblages tend to number in the hundreds at most, and represent a range of chronological periods). These coins are copies of types one would expect to find circulating together in the AD 280s and thus are probably a hoard of that date or later.

Obverse design	Obverse legend	Reverse design	Reverse legend	Prototype of?
Radiate head r.	None	Pegasus r.	None	Gallienus?
Radiate head, r.	[...] (partly off flan)	Eagle, head r.	[...]	Divus Claudius
Radiate, draped bust, r.	None	Eagle?	IIIIII/XXX	Divus Claudius
Radiate bust r.	[.]NVS P I AV[G]	Sol adv. l. star in l. field	I[...]	Victorinus
Radiate head, r.	[...]CTO.]	Stg. figure	[A..]	Victorinus?
Radiate bust r.	[I]MP TETRICVS P F AVG	Salus stg. l. feeding snake on altar and with vertical sceptre	P [.]IC	Tetricus I (Victorinus rev) large module
Radiate head, r.	[...] (partly off flan)	Stg. figure holding wreath (Laetitia?)	None	Tetricus I
Radiate, bearded bust, r.	[...]AVG]	Laetitia stg. l.	[E..IAAVG]	Tetricus I
Radiate, bearded head, r	[.VS P..]	Laetitia stg. l.	None	Tetricus I
Radiate, bearded head r.	None	Stg. figure with branch and vertical sceptre	None	Tetricus I? Pax
Radiate head, r.	None	Priestly implements	CV upwards (or AC)	Tetricus II
Radiate head, r.	INIIC	Priestly implements	None	Tetricus II
Radiate head, r.	[...]LLDICVSCAV]	Spes adv. l.	S	Tetricus II
Radiate head, r.	[ICL.]	Spes adv. l.	C	Tetricus II
Radiate head, r.	[.VE..TITE...]	Illegible	None	Tetricus I /II
Radiate head r.	[...]RIC[.]	Stg. figure	[...]	Tetricus I /II
Radiate head, r.	[.]SITRI[.]	Stg. figure	C A	Tetricus I /II
Radiate head, r.	None	Stg. Figure (resembles Salus or Laetitia)	S[P]E S	Uncertain Gallic
Radiate head, r.	[.]PROBV[...]	Spes adv. l.	V	Probus
Radiate head r.	[.]ROBVS	Stg. figure with branch in left hand.	None	Probus

*Table 4: Coins with notable inscriptions/ recognisable prototypes.*

Related finds

A second group of coins brought to the museum with the main find comprised second century *sestertii*. Six coins of this denomination were found by metal detection in an area that had not yet been excavated. Three further coins of Hadrian (AD 117-138) were uncovered by subsequent excavation in this area. *Sestertii* are known to have been recycled for the production of barbarous radiates (Ponting 2005; Abdy 2003). These are not considered to be associated with the radiates at present and are too few in number to count as a hoard under the terms of the Treasure Act, but have been recorded for the PAS database.

APPENDIX III – THE CHARNWOOD ROOFING TILES

Complete Charnwood roof-slates (Fig. 8)

The pile of Leicestershire roof slates uncovered in Trench 9 provides a small sample for study. To facilitate comparison with McWhirr (1988, table 1) measurements for heights were taken from the nail-hole to tip, and equivalents given in inches (Table 5). Those without nail-holes marked \* are total height, top to tip. D = drawn.

Nos.	Height Mm., In.	Width Mm., In.	Thickns. Mm., In.	Skirt	Nail Hole	Mortar	Comment
1	216, 8 <sub>5/8</sub>	214, 8 <sub>3/8</sub>	25, 1	127, 5	Yes	No	
2 D	272, 10 <sub>7/8</sub>	260, 10 <sub>3/8</sub>	40, 1 <sub>5/8</sub>	138, 5½	Yes	No	
3 D	264, 10 <sub>5/8</sub>	195, 7¾	26, 1	164, 6½	Yes	No	Narrow-cut
4 D	160, 6 <sub>3/8</sub>	252, 10 <sub>1/8</sub>	20, ¾	None	Yes	Back	Eaves-tile
5 D	276, 11	255, 10¼	18, 11/16	139, 5½	Yes	No	
6 D	235, 9 <sub>3/8</sub>	217, 8 <sub>5/8</sub>	23, 7/8	135, 5¼	Yes	Front	Nail in hole
7 D	217, 8 <sub>5/8</sub>	192, 7 <sub>5/8</sub>	24, 15/16	121, 4¾	2	No	Re-cut tile
8 *	262, 10½	175, 7	24, 15/16	130, 5 <sub>1/8</sub>	No	No	
9 *	347, 13 <sub>7/8</sub>	238, 9½	23, 7/8	181, 7¼	No	Front	
10	208, 8 <sub>3/16</sub>	126, 5	21, 13/16	112, 4½	Yes	No	Narrow-cut
11	185, 7 <sub>3/8</sub>	185, 7 <sub>3/8</sub>	18, 11/16	139, 5½	Yes	No	Cut-away l.
12 D*	286, 11½	260, 10 <sub>3/8</sub>	28, 1 <sub>1/8</sub>	104, 4 <sub>1/8</sub>	No	Back	
13	288, 11½	252, 10 <sub>1/8</sub>	25, 1	175, 7	Yes	Back	
14 D	270, 10¾	250, 10	23, 7/8	138, 5½	Yes	Back	
15 D*	288, 11½	325, 13	31, 1¼	None	No	Back	Eaves-tile
16 D	232, 9¼	205, 8 <sub>1/8</sub>	22, 7/8	94, 3¾	Yes	No	
17	260, 10 <sub>3/8</sub>	260, 10 <sub>3/8</sub>	22, 7/8	130, 5 <sub>1/8</sub>	Yes	Front	
18 D	184, 7 <sub>3/8</sub>	224, 9	27, 1 <sub>1/16</sub>	94, 3¾	Yes	No	
19 D	255, 10¼	240, 9 <sub>5/8</sub>	25, 1	100, 4	Yes	No	
20 D	280, 11 <sub>3/16</sub>	268, 10¾	21, 13/16	156, 6¼	Yes	No	
21 D	252, 10 <sub>1/8</sub>	244, 9¾	17, 10/16	112, 4½	Yes	No	
22*	265, 10½	185, 7 <sub>3/8</sub>	34, 1 <sub>3/8</sub>	90, 3½	No	Front	

Table 5: Sizes of Charnwood roofing slates from Heage, given in metric and imperial measurements.

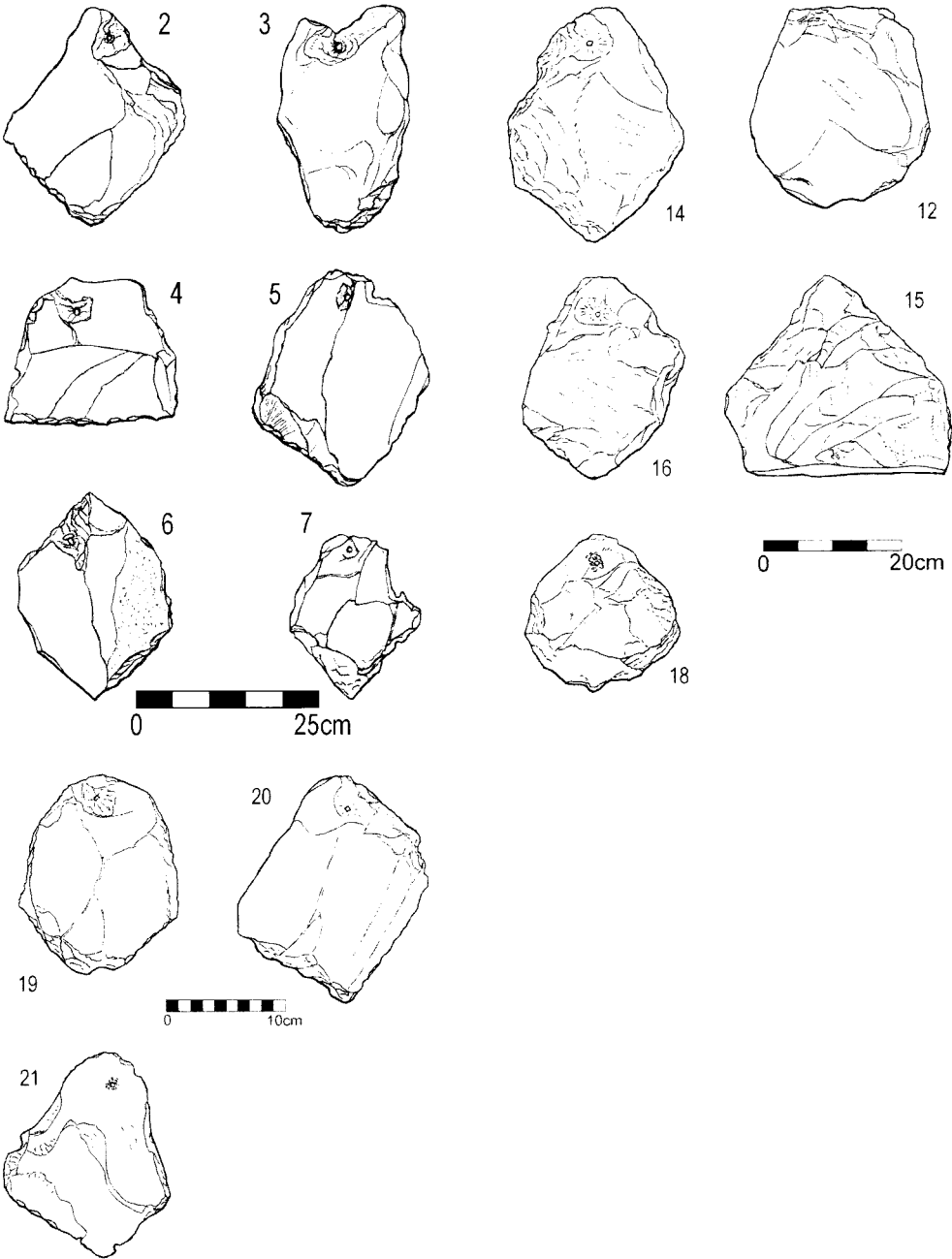


Fig. 8: Selected Charnwood roof slates found stacked in Trench 9.

These may have come from different buildings, hence the range of sizes, but clearly 4 and 15 have been made to fit on the edge on the eaves or at a gable-edge and 3, 10 and 11 have been cut to fit in a narrow space, probably in the angle of a roof junction. So not all are the standard diamond-shape, indeed 12 and 18 are quite rounded and 19 almost oval. The smallest, 18 and largest, 13, and the general thickness, fall in with McWhirr's samples. However the skirts (area at bottom visible when hung) at 3½-7¼ ins. are larger than his at 3-4½ins. Also his weights are slightly less at 800g to 2850g (1.76 to 6.28lb) compared to the above at 1445g to 3070g (3.2 to 6.8lb). There were another 8 less complete tiles and around 50 fragments from T9. Concerns about undermining the field wall prevented the total removal of the pile, so more were left in situ and there were many more small pieces from the other trenches.

#### APPENDIX IV – PERSONAL ORNAMENTS

##### **Copper alloy Arm-Rings (Fig. 9a and b)**

- a. Just less than half remains and it is slightly splayed outwards at one end. It has some corrosion, but the decorated end looks intact and has no evidence of a fastening or welding, suggesting a penannular form. The plain end is broken off and it tapers down from c.5 to 3mm in width, the decorated end having transverse grooves, a plain panel, and then two wider grooves at the terminal. Internal diameter 48mm, length 76mm. From TP8, in Roman made-up ground east of T1.

Very similar to a penannular example from Balcerne Lane Colchester (Crummy 1983, fig. 44, no.1683) and also two examples from Butt Road graves (*ibid.*, nos. 1688 and 1689), all 4th century contexts. Others are in Bushe-Fox (1949, 142-3, no. 177 and plate XLIX no. 15) from the inner ditch, Richborough, dated late 3rd-4th century and in Ellis (2000, fig. 4.8, nos. 52-5) from Insula 5 at Wroxeter dated 4th century.

- b. A more corroded fragment with different decoration was metal-detected by David Beard in the next field east, approximately 10m north-east of the above. It has a pattern of two raised concentric rings alternating with a zig-zag line of smaller rings. It is only 40mm long, but one with an identical design is in Crummy (1983, fig. 47 no. 1731), again from a Butt Road grave at Colchester. That one is plainer towards the terminals, with a hooked clasp, and dates to period 2, AD 320-450.

##### **Copper alloy Finger Ring (Plates 6a and b)**

The ring is small with a maximum 16mm internal diameter and the band is 1.5mm, widening to 4mm at the shoulders, which have two moulded steps across them before flattening out towards the bezel. A plain 2mm high collar holds the blue-green glass insert which is conical in shape, the tip smoothed off. From T10, C18 mortar floor

Henig produced a typology (1974, 49-50) from an important corpus of high status rings and the common 3rd century bronze types usually found on rural sites are copying these types. This is type VIII, like Henig's no. 630 from Montgomeryshire found with Victorinus and Gallienus coins; no. 471 from Godmanchester, with coins up to Allectus; and no. 729 from the Sully Moor hoard, Cardiff, deposited early 4th century.

This ring is identical to one recorded by the writers from the Redhill site project on the Trent/Soar confluence at Ratcliffe on Soar in 2002 (Palfreyman and Ebbins 2003). SE has

not traced any other provenanced parallel. Possibly these two are from the same itinerant craftsman working along the Margary 182 road and the Rykneld Street, trading at the Redhill or Little Chester markets in the late 3rd or early 4th century.

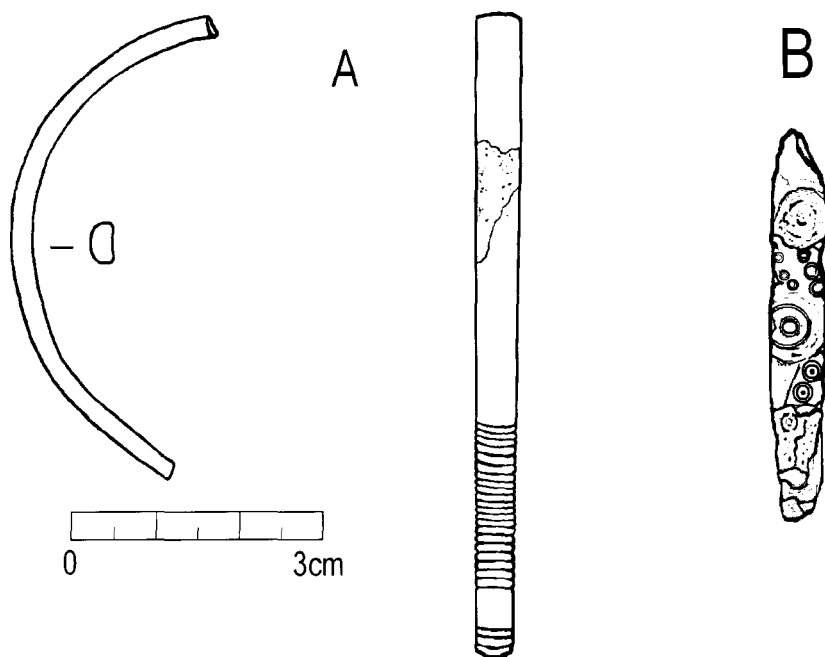


Fig. 9: Pieces from 2 different arm-rings; **A** excavated in TP 8, **B** metal-detected in next field 10m away.

#### APPENDIX V – THE ARROWHEAD

This is made of iron and has corroded accretions (Fig. 10; Plate 5). The head, which has four protruding vanes is 50mm long and the round-section socket has broken off at 19mm. Roman pottery amongst the roof tiles etc. was noticed in other trenches and this may be further evidence to suggest continued use of the ruinous buildings in the later 4th century. It is possible that it is a military arrow, later used in hunting activities. From T10, C17 debris layer.

Coulston, (in Bishop (ed.) 1985, 265) wrote that socketed arrowheads with 3 or 4 vanes were probably replacing the earlier tanged trilobite types in Britain by the early 3rd century. Five of these were excavated in the Severan workshop III at Corbridge (Bishop and Coulston, 1993, fig. 97 nos 2, 3; 139) being made with other weapons. Also 3 and 4 vaned types were predominant in a late 3rd century deposit in the back of the rampart building at Caerleon, where 22 examples were found (Nash-Williams, 1932, 70, fig.9).

Information kindly supplied by Oliver Jessop (1996) gave a comparison with all of his Medieval arrowhead types, in case this was a later intrusion. The criteria did not match closely any of the Medieval types. The only other close example traced by SE unfortunately was also thought when found to be possibly Medieval, due to intrusive pottery in the same deposit, although no comparable Medieval type was cited (Ellis 2000, 108, 121, Fig.4.6 no.2). This was from the Roman baths precinct at Wroxeter. Thirty other military objects are listed from

that excavation, several from the same context as the arrowhead. Having viewed some of the Roman arrows in National Legionary Museum, Caerleon, including a modern reconstruction, SE is inclined towards a late Roman origin but the corrosion prevents certainty.

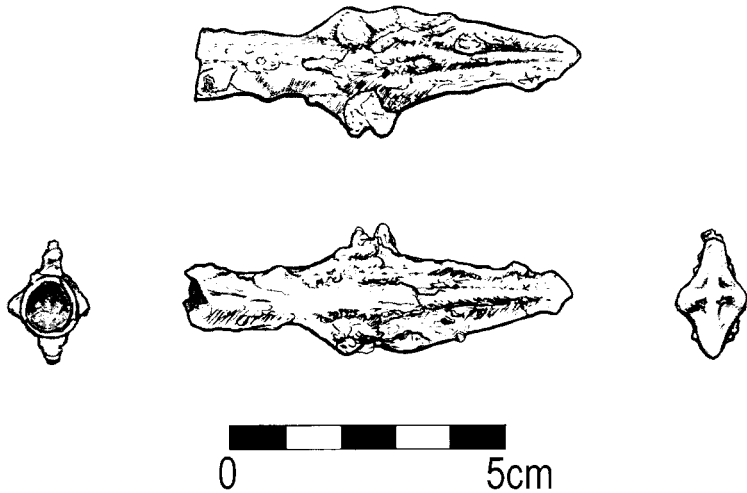


Fig. 10: Iron arrowhead from top of C17, Trench 10. Possibly used for hunting.

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