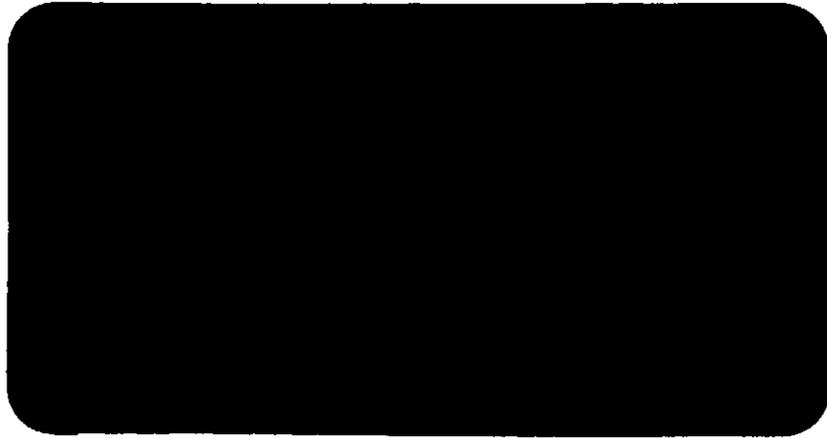


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Archaeology Section  
Hereford & Worcester  
County Museum

EXCAVATION AT THE  
COMMUNITY CENTRE,  
LEINTWARDINE

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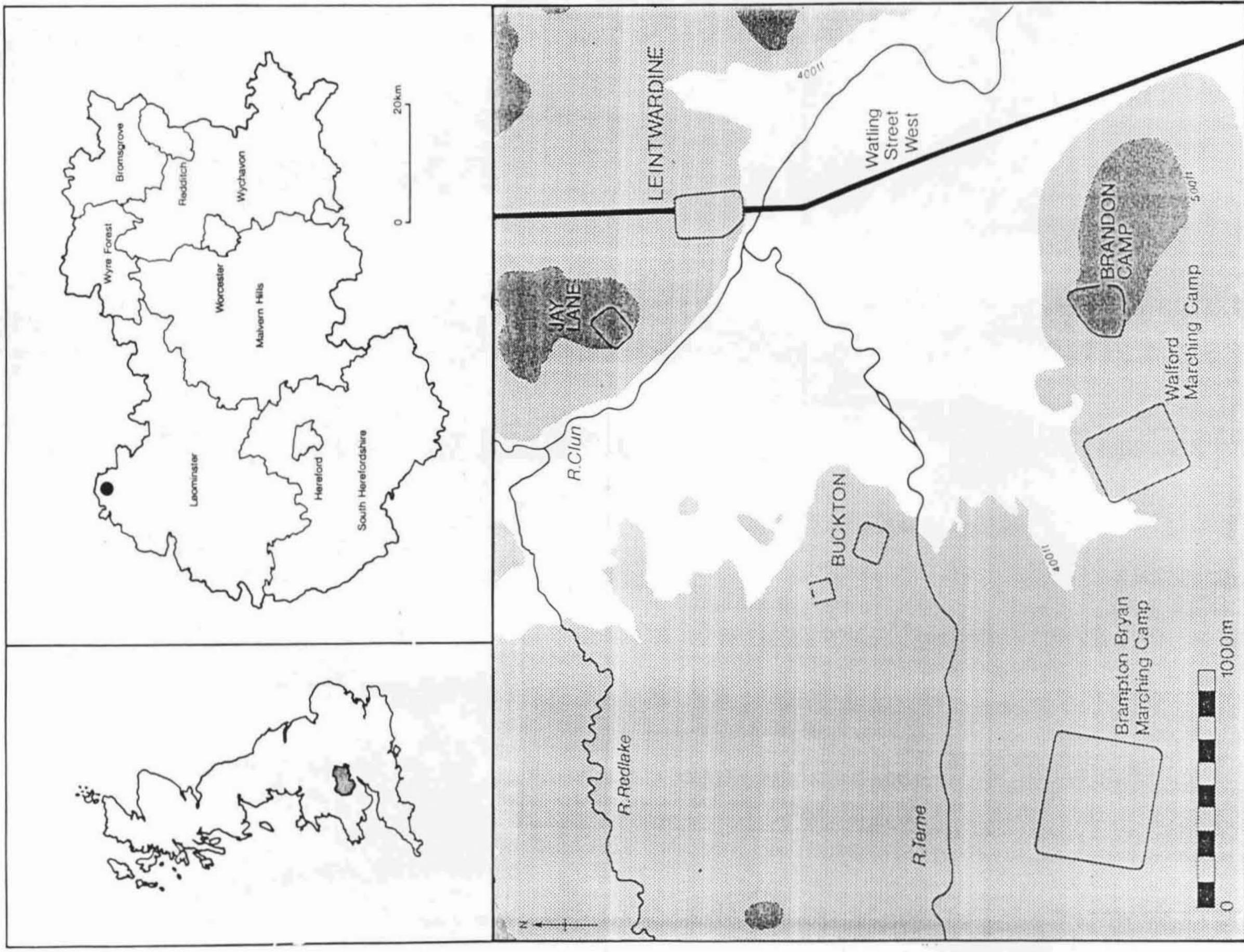
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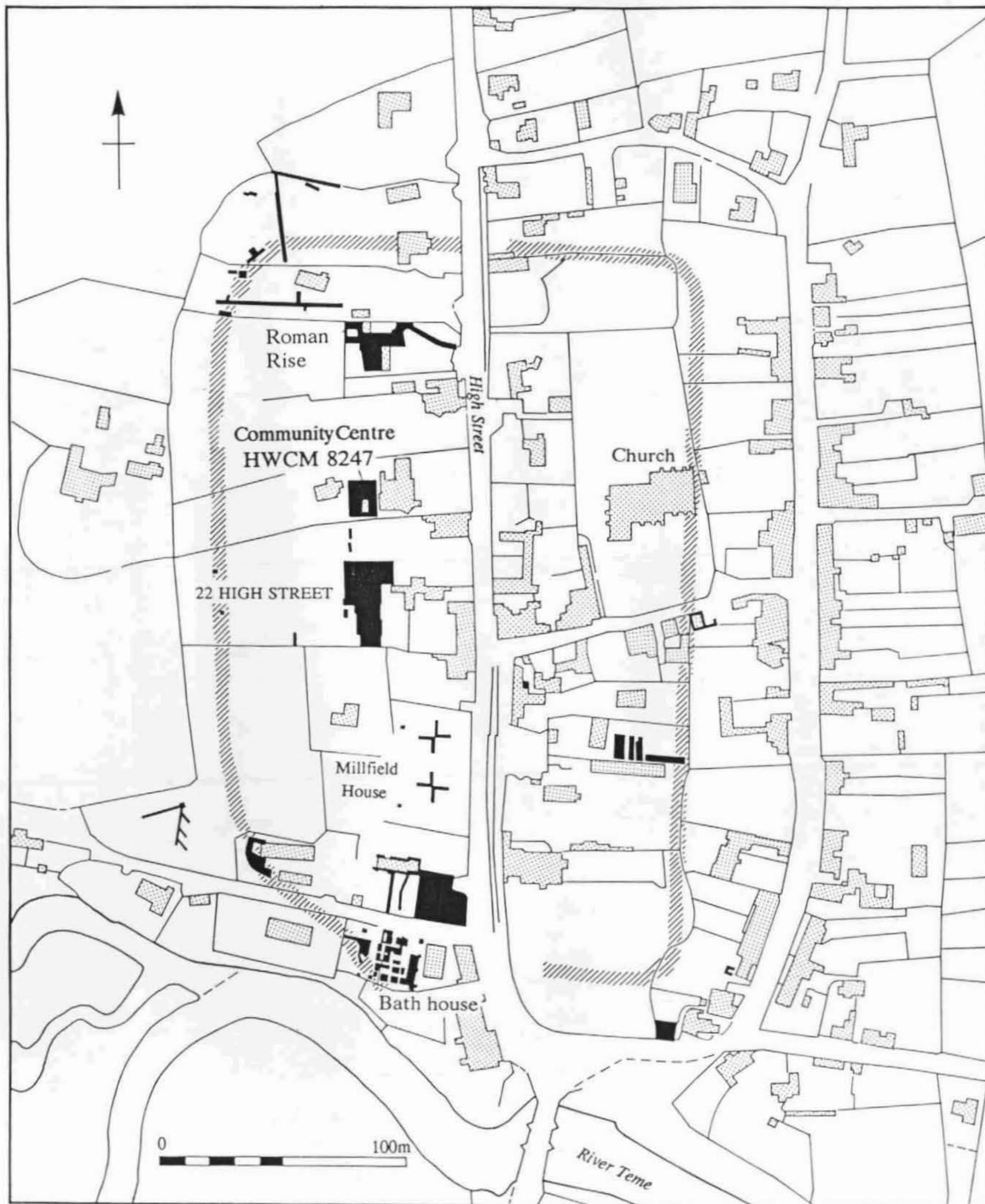
Figure 1



Leintwardine Community Centre Excavations, HWCM 8247

Location of Leintwardine in relation to military sites

HWCM 8247 - Location Of Community Centre Excavation



# Excavation at the Community Centre, Leintwardine

Duncan L Brown

## 1 Summary

*Excavation at the Community Centre (NGR SO 40257300) has proved the value of archaeological fieldwork at Leintwardine. It has added to our understanding of Roman occupation gained from excavations within the rampart. These suggest that Leintwardine was a substantial civilian rural settlement, which due to its strategic importance, was defended with a rampart in the AD 190s. The settlement may have acted as a local centre for trade and administration, as well as having a wide agricultural hinterland.*

*Evidence from the excavation suggested the presence of a building aligned east to west in the southern part of the site, and pits and postholes further to the north. A complex of successive, intercutting pits included one containing large quantities of domestic rubbish, a clay lined pit, and a backfilled cesspit or well. Evidence for truncation of deposits by soil re-working is presented, as well as reasons for a greater degree of truncation over the northern part of the site than to the south.*

*Important finds included sherds of imported erotic pottery of the Roman period, which have been widely reported in both the local and national press. Other finds include Roman coins, brooches, a quernstone, vessel glass and 457 sherds of Roman pottery.*

*The environmental samples from this site represent the first occasion on which a structured sampling policy has been carried out at Leintwardine. This environmental data provides significant new information about the rural economy of Roman north Herefordshire. In addition information may be derived from finds amongst the residues of the environmental samples which included hobnails, burnt bone, fired clay and slag.*

## 2 Introduction

This excavation was undertaken as a condition of scheduled monument consent (DoE ref: HSD9/2/1693 Pt8) given in advance of the construction of public conveniences and changing rooms behind the community centre at Leintwardine (NGR SO 40257300). This area formed the back yard of Leintwardine School, which has now moved to new premises. It was used as the school playground and courtyard, with a boilerhouse or washhouse between, which is now demolished. More recently the area has been waste ground in the backyard of the library and community centre. This site is within a scheduled ancient monument (County Monument number Here and Worc 28), and is also registered on the County Sites and Monuments Record (reference number HWCN 8247).

Leintwardine is in the central Welsh Marches close to the north boundary of the county of Hereford and Worcester. The village lies on the north bank of the River Teme just below its confluence with the River Clun, where there is a river crossing of long standing. The ground rises gently to the north-west where Jay Lane fort was positioned, leaving Leintwardine sited on a south-east facing slope looking down the Teme valley. To the east lies Tatteridge Hill, beyond which lies Ludlow. North of Leintwardine there are a series of ridges respecting the alignment of Wenlock Edge, while to the south lies the undulating plain of the Teme and Lugg valleys with the Aymestrey gap giving access to the central Herefordshire plain.

The village lies in an area of Silurian bedrock, notably Wenlock Limestone and the Ludlow Series, the uppermost of which are Whitcliffe Beds above Upper and Lower Leintwardine Beds. Lower Leintwardine Beds

are mainly olive-grey calcareous flaggy and shaly siltstones with layers of thin shelly limestone. Upper Leintwardine Beds include more thickly bedded flaggy siltstones forming a transition to the Whitcliffe Beds which are thickly and irregularly bedded grey calcareous coarse to medium grained siltstones (Earp and Hains 1971). The bedrock is overlain by a glacial fine clayey till and coarse silty and stony terrace and outwash deposits which give rise to the brown earth soils of the Rowton-Hamperley complex which occur around Leintwardine (Hodgson 1972, 82-6).

Leintwardine's geographical position was of great military importance in the early years of the Roman occupation of the area (Fig 1). The supply base reusing Brandon Camp hillfort, excavated by Frere and St Joseph (Frere 1987), and the Jay Lane fort (Stanford 1968, 230-7), are both of possible Neronian origin. A military presence was maintained close to the river crossing at least until c AD 130 when Buckton fort was dismantled (Stanford 1968, 253-4). Watling Street West, which passes through Leintwardine, seems to have been the main axial route for the advance into Wales, since it joins legionary bases at Caerleon and Chester, and links earlier forts at Gloucester and Usk in the south with Wroxeter (Davies 1980). It remained the main north to south route along the Welsh border into the 4th century.

The position of the settlement midway between Wroxeter (*Viroconium*) and Kenchester (*Magnis*), on this important route, led to its inclusion in the Antonine Itinerary as the road-station of *Bravonio*. However the etymology of this name has been questioned, because in the writings of Ptolemy, a Greek geographer of the provinces of the Empire, and in the Ravenna Cosmography, it appears as *Branogenium* (Rivet and Smith 1979, 275) referring to a personal name *Brannogenos*, incorporating the Celtic word for a crow or raven *bran*. This name may have survived in the locality as the name of the nearby hillfort, Brandon Camp, and in Brampton Bryan, which appears as *Bruntune* in the Domesday

Book (Thorn and Thorn 1984). *Bravinio/Bravonio* may have appeared due to a copyist misunderstanding an abbreviation of *Branogenium* (Rivet and Smith 1979, 275).

Much of the archaeological fieldwork in Leintwardine has been undertaken and reported by Stanford (1968). More recently, however, most work has been undertaken by Hereford and Worcester County Council's Archaeology Section (Brown forthcoming). This indicated a *vicus* settlement containing a bath-house and a probable *Mansio*, associated with the adjacent cavalry forts at Jay Lane and subsequently Buckton, datable from c AD 70 to c AD 130. Settlement at Leintwardine seems to have continued after the withdrawal of the army. Subsequently (after c AD 170) the settlement was enclosed by a timber-laced clay rampart, probably datable to the AD 190s (Frere 1984, 71-2; Brown forthcoming). No evidence for occupation at Leintwardine exists between the excavated evidence for the late 4th century (Young 1980, 160; Brown forthcoming) and the 11th century entry in Domesday Book (Thorn and Thorn 1984), although some undated features may reflect activity in the intervening period, for which datable finds are scarce (Brown, forthcoming).

Several excavations and other pieces of fieldwork have been undertaken close to the Community Centre, both to the north and the south (Fig 2). At Roman Rise (Stanford 1968, 268-76) excavations beneath the present house and drive in 1964 located a succession of structures of Roman date, using posthole, sill-beam, post-in-trench and pitched stone foundations. The latter of these foundations was interpreted as a high status courtyard building. This may be the *Mansio* (official road station), mentioned above, although this interpretation remains open to question (Brown forthcoming). In 1959 the position of the rampart was located in the butchers shop field at 22 High Street (Stanford 1968, 276-7), which provided valuable evidence for its alignment. The area of a proposed extension to the abbatoir at 22 High Street (HWCM 1061) was excavated in

1980 (Sawle 1981, 82-7; Brown forthcoming). This also indicated the presence of Roman structures, principally with posthole, post-in-trench and stake-in-gully foundations, rubbish pits and a cistern, as well as providing the first evidence for early medieval settlement in the village. In 1988 further salvage recording was necessary due to enlargement of the abattoir slurry pit (Dinn 1988). This added little new information about Roman Leintwardine, although the significance of soil formation processes, truncation and deposition was highlighted. An investigation in 1982 of service trenches for the new Community Centre, adjacent to the Village-Hall identified no features of Roman date, although an almost complete samian vessel was recovered from the spoil (Brown forthcoming).

This report acts as an archive report for this excavation. Further specialist information is to be added, notably an analysis of the mortaria and the quernstone, to complete the archive. A synthetic excavation report will be produced for publication, probably in the *Transactions of the Woolhope Naturalists Field Club*.

### 3 Aims

The aims of the excavation were to locate and record significant archaeological deposits within the area of the proposed building.

### 4 Method

The area of proposed ground disturbance for the construction of these buildings (Fig 2) was laid out by representatives of Leominster District Council. Some areas were not excavated archaeologically due to the presence of surviving building foundations, services and a large tree stump which obstructed access.

Firstly, modern deposits, including tarmac, topsoil, cobbling and hardcore were removed by small mechanical excavator. Subsequently

a considerable depth of relatively homogenous soils were removed with more care by the same means. These soils were removed in strips of c 0.20m depth, from each of which finds were recovered in an attempt to distinguish vertical changes in date of deposition not indicated by the physical appearance of these soils.

When these homogenous soil deposits had been removed, the whole area was cleaned by hand and threatened areas were selected for excavation. Features and deposits were hand excavated and recorded according to standard Archaeology Section recording practice (Archaeology Section Recording System 1988 as amended).

Environmental samples taken were prioritised for examination. The samples were wet sieved using a Siraf system flotation tank. The residues were sorted by hand to recover environmental and artefactual remains. The flots were examined using a low-power microscope to enable recovery and identification of archaeobotanical remains.

### 5 Analysis

All features identified were phased stratigraphically, a matrix was produced (Fig 11) and an initial examination of finds was undertaken to assist with dating. A total of four principal phases were identified.

#### Phase 1 Natural deposits

Deposits which had only been disturbed by archaeological features, were identified as of natural origin. These were present beneath as much as 0.9m of disturbed soils, although in parts of the site they were as little as 0.25m below the surface. These deposits varied markedly, between compact gravelly areas of either stone or pebbles, and similarly compact fine sandy or silty patches. All these deposits were fairly uniformly coloured, being a pale orange-brown, although the gravelly areas drained far more quickly in dry weather, thereby suggesting the presence

of features which were not in fact archaeological. This description appears to accord with the description of 'coarse silty and stony terrace and outwash deposits' above (see page 2).

### Phase 2 Roman deposits (Figs 4-5)

A total of 20 features were excavated which produced evidence datable to the Roman period. These included a linear slot (143 and 148), a complex of intercutting pits and postholes (133, 135, 137, 139, 162, 180, 182 and 189) and a group of pits and postholes (110, 112, 120, 126, 128, 130, 141, 160 and 167/175). A further group of undated cut features are also interpreted as of Roman date, and are included here.

#### Linear slot

A linear slot (143 and 148) was regularly cut, steep sided, and had a flat-bottom. At the western end of the slot a later pit (141) was cut almost at right angles to it, and may therefore have been associated with the termination of the slot. The eastern part of this slot could be associated with two shallow, flat-bottomed rectangular postholes to the south of it (145 and 173).

Dating evidence from this slot included three sherds of samian ware (Hereford and Worcester County fabric series, fabric 43) dateable to the mid to late 2nd century. Other finds included seven sherds of mortaria (Fig 8, 16), six sherds of Severn Valley ware (fabric 12), nine sherds of grey ware (fabric 14; Fig 8, 12-14), two sherds of miscellaneous white wares (fabric 41), a sherd of a red-slipped oxidised ware (fabric 12?; Fig 8, 15) and a rolled piece of copper alloy sheeting (Fig 9, 2). Fragments of Roman glass were also present. This apparently early assemblage of vessel types, and the absence of Black-burnished ware (fabric 22) which appears in bulk in this area in the AD 130s-140s, suggests a date in the early to mid 2nd century. From the residues of the environmental samples, tiny pieces of burnt bone and slag were recovered.

No fragments of tile or burnt clay were recovered from the linear slot or its associated postholes. However many other features, including the pit cutting the west end of the slot (141), and the cobbled area overlying it (146) contained fragments of Roman roof tile and fired clay, much of which is likely to have been the burnt remnants of daub.

#### Pit complex

A complex of pits and postholes included eight separate cuts, from which six fills were fully excavated and one fill sampled. Two features (182 and 189) could not be fully excavated due to the constraints of time and safety. Samples of their fills were taken, and an attempt was made to assess how deep the soft fill of the former (182) was.

A sub-rectangular, almost square, flat-bottomed pit (133) was excavated as the latest feature in the sequence. This was filled by a fine grey-brown silty loam containing four sherds of mid 2nd century samian (fabric 43). Other finds included seventeen sherds of Severn Valley ware (fabric 12), a sherd of Black-burnished ware (fabric 22), four sherds representing two different mortaria and a fragment of a Roman glass vessel.

A sub-circular clay lined pit (189) was sealed beneath the bottom of the rectangular pit and appeared to have been truncated by it. The circular pit was excavated down to the clay lining (179), but was not fully excavated. It contained four sherds of Severn Valley ware (fabric 12), two sherds of grey ware (fabric 14), a sherd of Black-burnished ware (fabric 22), fourteen fragments of a crushed mortarium, a tiny fragment of copper alloy sheet, a scrap of lead waste, three iron hobnails and several pieces of slag.

A stone-lined posthole (137) and a stone-packed posthole (139), both filled with a grey brown sandy clay loam occurred at a similar level in the stratigraphy to the sub-rectangular pit (133). This need not mean that any of these three features were

contemporary, but nor does it tell us if they occurred in any specific sequence. The stone-lined posthole (137) contained a sherd of Severn Valley ware and five sherds of decorated 'Rhenish' ware (fabric 44; Fig 6, 1) dateable to the late 2nd century. The stone-packed posthole (139), included a broken fragment of a quernstone in its packing and also contained a scrap of copper alloy sheet, ten sherds of Severn Valley ware (fabric 12), a sherd of Black-burnished ware (fabric 22), two sherds of white ware (fabric 41) and 36 fragments of one mortarium which had been crushed, probably by the pressure of the post-packing and the weight put onto it.

A shallow sub-rectangular feature (135), was cut by the square, flat-bottomed pit (133) and the two postholes (137 and 139). Although part of this feature lay beneath the wash-house its form could be made out. This had gently sloping sides and a flat-bottom, filled by a fine grey-brown silty loam containing occasional relatively large pieces of shale flags. This was partially superimposed above another sub-rectangular feature (162), and may therefore represent an attempt to recut the same feature. Finds from this feature included two sherds of 'Rhenish ware' (fabric 44) dateable to the late 2nd century, ten sherds of samian (fabric 43) suggesting a date in the early 3rd century, three sherds of handmade Malvernian ware (fabric 3), 25 sherds of Severn Valley ware (fabric 12), six sherds of grey ware (fabric 14; Fig 8, 19), two sherds of Black-burnished ware (fabric 22; Fig 8, 18) and three sherds of miscellaneous white wares (fabric 41).

A roughly rectangular pit (162), with steep sides and a flat bottom was significantly truncated by its successor (135). Part of this feature also lay beneath the wash-house, which could not be excavated. It was filled with a reddish brown sandy clay loam with fragments of angular shale, river pebbles and flecks of burnt clay, charcoal and decayed bone. It contained a mass of pottery (210 sherds), representing nearly half the Roman pottery found on site. Imported pottery

included nineteen pieces of samian (fabric 43) including a decorated fragment (Fig 6, 2), and others suggesting a date in the early 3rd century, three sherds of Rhenish ware (fabric 44) dateable to the late 2nd century and two sherds of amphorae (fabric 42). Other less diagnostic pottery includes four sherds of handmade Malvernian ware (fabric 3), 43 sherds of Severn Valley ware (fabric 12; Fig 7, 1-3), 77 sherds of grey ware (fabric 14; Fig 7, 4-6), seventeen sherds of Black-burnished ware (fabric 22; Fig 7, 8-10), ten sherds of miscellaneous white wares (fabric 41; Fig 7, 11) and 35 fragments of a single mortarium (Fig 7, 7). Other finds include an iron nail, two fragments of different Roman glass vessels and a pennanular brooch (Fig 9, 3).

Cut by this rectangular feature was a truncated sub-circular feature (182), of which only a segment survived above the base of the later feature (162), although a considerable further depth survived beneath it. No finds of pottery were present in the limited amount of fill available for excavation, although a hobnail and pieces of slag were recovered from the sample residue. Evidence for its depth consisted solely of the distance to which a ranging rod could easily be pressed into its soft, organic fill (c 0.4m).

#### Pits and postholes

A sub-circular pit (110), with near vertical sides, was partly beneath the west section and could only be excavated to a depth of 0.35m, although it clearly continued downwards for some distance. It contained three sherds of Severn Valley ware (fabric 12) and two fragments of Roman tile.

An oval shallow scoop (112) filled with fine grey-brown sandy loam seems to have represented the amorphous base of a feature which was truncated leaving a maximum depth of only c 0.10m. Finds recovered from this feature included three sherds of grey ware (fabric 14), two sherds of Black-burnished ware (fabric 22) and a possible copper alloy fishhook (Fig 9, 1).

An amorphous scoop or shallow gulley (120) aligned east to west, was filled with fine grey-brown sandy loam and passed beneath the western edge of excavation. It too was heavily truncated, so it survived to a depth of only c 0.10m. Finds from this feature included eight sherds of Severn Valley ware (fabric 12) and seven pieces of Roman tile, some of which were vitrified.

A steep sided, flat-bottomed, oval pit (126), was c 0.45m deep and was filled with a homogenous mid grey-brown sandy clay loam with pieces of mudstone, pebbles and flecks of charcoal and bone. Finds included five sherds of Severn Valley ware (fabric 12), a sherd of grey ware (fabric 14), two sherds of Black-burnished ware (fabric 22), two iron hobnails and tiny fragments of slag. Archaeobotanical remains included large quantities of cereal seeds, but no evidence of chaff (Appendix 3).

A shallow sided, flat-bottomed pit (141), surviving to c 0.16m in depth, cut the western end of the linear slot (148). This feature was filled by a brown sandy clay loam containing pebbles, charcoal, tile and burnt clay. Ten sherds of pottery were recovered including five sherds of Severn Valley ware (fabric 12), three sherds of grey ware (fabric 14; Fig 8, 17), the only sherd of grog-tempered ware (fabric 16) from the site, and a sherd of mortaria, apparently from the same vessel as that from the linear slot. In addition three fragments of Roman tile were recovered, including a fragment of *imbrex*, and tiny fragments of fired clay and slag were recovered from residues. Some of the pottery was probably derived from the linear slot (148), where sherds of a similar character occurred, while the tile and burnt clay did not appear in the fill of the slot.

A shallow rectangular pit or posthole (128) with vertical sides and a level, flat base, was filled with a pale grey-brown sandy clay loam with occasional pebbles and flecks of charcoal, and survived to a maximum depth of c 0.21m. Finds from this feature comprised a single sherd of Black-burnished

ware (fabric 22) and fragments of tile.

A large post-pit (130), was filled with both a dark yellowish brown and a dark pinkish brown fine sandy loam. Both contained varying quantities of pieces of stone, pebbles and flecks of charcoal, burnt clay and daub. This feature initially proved enigmatic, but represented a near vertical sided posthole with a flat, compacted base c 0.56m deep, with horizontally laid stones in the lowest fill, and a post-pit for the insertion of the post and its packing c 0.36m deep. Much of this seems to have been disturbed, as though removal of the post had led to substantial re-excavation of the post-pit, perhaps to remove the post-packing, and immediate back-filling, thus masking the original shape of the feature. Pottery from its fills included two sherds of samian ware (fabric 43), thirteen sherds of Severn Valley ware (fabric 12; Fig 8, 23), three sherds of grey ware (fabric 14; Fig 8, 22), eleven sherds of Black-burnished ware (fabric 22, Fig 8, 20-21), and single sherds of mortarium, white ware (fabric 41) and handmade Malvernian ware (fabric 3). Other finds from its fills included a hobnail, fragments of Roman tile, burnt clay and bone, and thirteen fragments of sheep and cow teeth.

An oval posthole with re-deposited stone packing in its base (160), contained occasional pebbles, small pieces of stone and flecks of charcoal, as well as four large packing stones and four sherds of Severn Valley ware (fabric 12).

Another complex robbed posthole (167/175), showed evidence for removal of the post through the post-pipe following rocking of the post to loosen it. The post-pipe fills were dark grey-brown and dark greenish-brown silt loams, whereas the post-pit was a sub-rectangular feature c 0.48m deep filled with dark yellowish brown silty clay. The post-pipe fill contained a sherd of Severn Valley ware (fabric 12), a hobnail, tiny fragments of slag and burnt clay and a fragment of a Roman brooch (Fig 9, 4). The post-pit

contained no finds, although sample residues included fragments of burnt bone.

The general impression given by the pottery and other datable finds from these cut features is that there is a predominance of 2nd century pottery, with a little of late 1st century, and rather more of early 3rd century date. The presence of earlier pottery is difficult to assess, and may be limited to handmade Malvernian wares, which are clearly found in association with other finds of 2nd century date. Later 3rd and 4th century pottery and coins seem to be confined to layers of truncation, although following more detailed analysis some forms may be identified in isolated, heavily truncated features which may be allocated to this date.

#### Other features

A number of other features were also present which contained no specifically datable material. These comprised a total of sixteen postholes and stakeholes (113, 115, 118, 122, 124, 150, 152, 154, 156, 158, 164, 169, 171, 184, 186 and 188). A further five features (190-4) remained unexcavated, but were also likely to have represented postholes. Some of these showed evidence for compaction of gravels at the base (118, 122 and 124), indicating direct contact with the flat base of a post, while others showed evidence for post-packing (150). A few show disturbance in the side of the posthole, indicating the method by which the posts were extracted (118 and 124).

A few small features were not planned or excavated, since they represented root disturbance from the trees known to have stood on the site. No alignments of these were identified, so it was considered unlikely that any of these represented stakeholes acting as boundary markers.

A single stratigraphied deposit was identified within the Roman phase, represented by a cobbled area (Fig 4; 146). It consisted of thin, flat-laid local stone and small pieces of gravel, which had been pressed into the

deposits beneath, suggesting heavy usage. This overlay some features (130, 145 and 148), and had sunk into the soft fill of the gully (148). A similar stony deposit may have sunk into the silty post-pipe fill of some postholes (193 and 194), although the appearance of these unexcavated features may alternatively be explained by an unusually stony character of their post-pipe fills. The stony surface contained only heavily abraded sherds of Roman pottery, and may therefore be either later Roman or post-Roman. Finds from this surface include various fragments of Roman pottery, glass, fired clay and three hobnails.

#### Phase 3 Post-Roman soil processes (Fig 10)

None of the Roman features excavated survived intact, since all of them were truncated due to the effects of post-Roman soil processes. There is no firm evidence for the original depth of these features. The means by which this truncation took place are also not known. Although significant quantities of late Roman material were present in truncated deposits, no late Roman cut features could be identified.

Gradual changes in the quality of post-Roman deposits were visible in section, although no firm lines could be drawn as to where these changes occurred. The build-up of soils, and the method of excavating by machine in spits presented the opportunity to assess the change in ratios of pottery between each spit, which could suggest a vertical, non-stratigraphic differentiation of deposits by date. The crude retrieval method may have biased the results somewhat, but the general impression given appears to be reasonably correct.

Finds from the first spit (101 and 102) were entirely modern, and were generally not collected. This date was confirmed when it was learned from a local resident that rubbish, hardcore and soils were dumped as a foundation for the playground surface earlier this century. The second spit (103) was cut by a single feature (108), which, due to its late date, was not planned or further

recorded. Some of the finds from this feature were initially assigned to the first spit (102), although they are likely to have been derived from this pit; these are therefore included in the total of finds for the pit. It contained 101 sherds including substantial proportions of four vessels of post-medieval pottery, dateable to the 18th century. The third spit (104) contained three clay-pipe stems, and the only medieval pottery recovered. Other finds of Roman date included a 4th century coin, two pieces of tile and a piece of vessel glass. The fourth spit (105), contained a 4th century Roman coin, several Severn Valley ware forms (fabric 12; Fig 8, 26-28), a Black-burnished ware form (fabric 22; Fig 8, 24) and a single fragment of Roman tile. The post-medieval pottery from this spit is small, and may easily have arrived there as a result of contamination during machining.

In the eastern area of the site the cobble layer (106), which was removed before excavation of a full spit, contained hardly any finds, although one rim form of Black-burnished ware was present (fabric 22; Fig 8, 25). The principal spit (107), was considered to be the equivalent of the fourth spit in the western area of the site, although perhaps containing some similar material to the third. It contained an iron nail, fragments of mortar or plaster, three fragments of Roman tile and a piece of Roman vessel glass.

#### Phase 4 Post-medieval deposits

A single feature (177) was excavated, cutting natural (and Roman features), which was interpreted as being of post-medieval date due to its association with the mid-19th century drainage for the wash-house. This feature had steeply sloping sides and a flat bottom, and was overlain by two horizontally-laid tiles adjacent to the wall of the washhouse. The drainage system consisted of horizontally-laid tiles on a sand bed, above which would have rested inverted 'U'-shaped tiles. This system would readily carry away large quantities of waste water, but was designed to allow seepage into the surrounding soil, which was normally been

loosened to improve drainage. A similar mid-19th century drain was recently identified intact beneath the garden of the Diglis Hotel, Worcester (Brown 1990, fig 3).

One feature (108) was identified, cut into the second spit of soil removed (104). This was principally noticeable due to the concentration of large sherds of post-medieval pottery, and fragments of curved iron straps close to its edge. The latter suggested that it had originally been lined by a barrel, or a half-barrel tub. It contained 101 sherds principally of four large vessels of internally brown glazed buffware pottery dateable to the 18th century.

The wash-house itself was not recorded in great detail. It consisted of a rectangular concrete raft, surrounded by a rubble wall, resting c 0.2-0.3m above Roman cut features. The wall was constructed of unevenly coursed mortared flagstones and blocks of shale and mudstone. In some areas plaster survived on the interior face of the wall, which occasionally retained a yellowish paint. The 'oven' area was similarly constructed to the wall, although it was capped with a mortared brick arch, giving access to a compartment beneath which may have been the fuel store for the boiler. No signs of burning were present on the underside of the bricks, and no chimney hole was present at this level, although a rubble filled void existed at the rear of the compartment.

The retaining wall adjacent to the wash-house was also not recorded in detail, but was similar in construction to the wash-house wall. It had been built in front of a steep slope, and the resulting triangular void behind the completed wall had been backfilled with material containing pottery of the 18th or early 19th century.

The cobbling (106), comprised two areas, split by a line of long cobbles of local shale. This line was approximately level with the break in alignment of the back wall of the former schoolhouse. To the south of this line

the cobbling appeared fairly regular, although much disrupted to the south by the insertion of the two drainage pipes. The northern part appeared to have been much patched, with several areas of differing alignments. Only the southern part of cobbling was excavated since the northern part was not due to be heavily disturbed by building construction. This cobbling, and soils disturbed by it, contained a single sherd of post-medieval pottery datable to the late 18th or 19th century, and two sherds of Roman pottery.

Two pipes were identified running across the site which constrained the extent of the excavation. One pipe ran along the southern edge of the wash-house, and was identified during machining before it was damaged. It appeared to be the sewage pipe-trench from the school toilets. The other pipe ran from a drain adjacent to the doorway of the wash-house to join the first close to an inspection point adjacent to the library building. This cut off a triangle of post-medieval deposits which could not easily be machined away and so were left undisturbed.

## 6 Discussion

Discussion here will centre on evidence for the Roman period (phase 2) at Leintwardine. Little information of significance for the post-medieval period (phase 4) is provided by this excavation, while the evidence of post-Roman soil processes (phase 3) are discussed below in relation to the late Roman occupation of Leintwardine.

The Roman linear slot (148) appears to represent a trench for the insertion of a sill beam into which the superstructure of a building may be set. Sill beam construction, with stud and wattle walls set into the sill beam is a well known Roman construction method.

By analogy with the framing of 15th and 16th century houses of south-east England (which this type closely resembled), the studs would be fitted

to a top-plate and wind-braced with diagonal members. The panels between the studs were filled with wattles and, with the use of a float, the complete frame was encased in daub so that the outer faces of the studs were covered with about 50mm of daub....

Structurally, stud-and-wattle walls were very strong and probably were intended to support tiled roofs which by their nature would have been much heavier than thatch.

(Crummy 1984, 22)

There is evidence from some of the surrounding features for both burnt daub and roof tile, neither of which occur in the beam-slot. It is possible that much of this material derived from the demolition of this structure. It is difficult to see how the sill-beam itself could have been lifted without introducing such demolition material into its trench, suggesting perhaps that it remained *in situ*. Many of the posts which showed evidence of removal may also be associated with the demolition of this structure. The presence or absence of burnt clay and roof tile may also suggest that not all features here are contemporary.

Only one side of the building was identified, and no evidence for a return at right angles to it was present amongst the excavated features. Therefore it is probably safe to assume that it was the load-bearing long side of a building aligned east to west rather than an end wall of a building aligned north to south. The maximum single-span width for a timber-framed Roman building is thought normally to be up to c 8.5m although it may normally be expected not to exceed c 7m, (Morris 1979, 82). No comparable feature was found within c 8m to the north of the slot, so it seems likely that this represents the north wall of the building.

Several postholes on either side of the slot may be related to this building, either as internal and external features. Internal

features include some postholes which may have contained posts used as roof-supports (113, 115 and 164) or as internal divisions (145 and 172). External features include features such as scaffold placements, raking posts and eaves-supports (130, 175, 193 and 194). The later pit (141) may have been excavated to remove a large north-western corner-post that might be expected at the western terminus of the beam slot.

Perring (1987) and Hingley (1989) have drawn attention to the range of urban and rural domestic buildings (respectively) present in local centres such as Leintwardine. Similarly, a nucleated rural community would have possessed ancillary agricultural buildings (Morris 1979). Although no complete building plan (other than the bath-house, which is not a domestic building) has yet been excavated in Leintwardine, basic building types have been indicated, including huts, aisled halls, urban strip buildings and even a courtyard building. However, it is not possible to fit the relatively limited evidence for the building on this site into any one of these categories. The distance of the site from the modern road, which is probably close to, if not on the line of the Roman road, suggests that this structure may represent a structure towards the rear of a property. An alternative interpretation is that this building fronted onto a side street, although no such streets have yet been proven for Leintwardine (Brown forthcoming).

The complex of pits represent some problems of interpretation. One of them (189) may well have been used for water storage, or as a water-tight tank for some minor industrial process. A neighbouring feature (182), which was similarly unexcavated, appears to have been much deeper, and contained comparatively little refuse, suggesting a function as a well, or a cesspit. The proximity of one feature to the other might indicate a complementary function for these features, with the latter representing either a water source or a waste water repository. However, there is no evidence to confirm this, either from finds or stratigraphy.

Backfilling of this pit (182) appears to have involved relatively little cultural and organic remains, while the backfill of the clay-lined pit contained a number of finds.

Subsequent features, cutting both of these pits (133, 135 and 162) appear to have been used primarily for rubbish disposal, although only one (162) contains large quantities of refuse. The environmental sample from this deposit (Appendix 3) contained a mixture of charred seed remains at various stages of processing, suggesting domestic crop processing and waste disposal. Cereal seeds present consisted largely of spelt, bread or club wheat, a few seeds of barley and rye and various weeds, such as corn marigold and grasses. Other archaeobotanical remains included seeds of the pea or bean family and hazelnut shells, suggesting various possible dietary supplements. Other domestic refuse included pottery, an iron nail, vessel glass and a brooch. The other two features contained smaller quantities of similar cultural material, but since both cut this pit it is not certain whether they represent redeposition of material already deposited. Similarly the two postholes (137 and 139) cutting an earlier pit (135) contain more such material, largely unabraded. However, the presence of this sequence of successive pits, with stone-lined or stone-packed postholes suggest a relatively long sequence of events post-dating the disuse of the earliest features here (182 and 189). Since large pieces of brittle 'Rhenish' ware manufactured in the late 2nd or early 3rd century survived in the latest deposit in this sequence, the final use of this complex of features is unlikely to extend far beyond the mid 3rd century.

The five sherds of Central Gaulish 'Rhenish' ware beaker from the stone lined posthole (137), are decorated with two of six applied slip-moulded impressions of Bacchic scenes (Fig 6, 1; see Appendix 2). One of the scenes (Fig 6, 1b) shows a rather unusual Hercules, while the other (Fig 6, 1a) shows Pan or a satyr seducing a nymph or maenad (Catherine Johns pers comm). The excavation of the post pit, cutting the fill of two pits

(135 and 162) may have disturbed and redeposited these sherds. However, the size and lack of abrasion of the sherds suggest that they were deposited soon after breakage, and were not heavily disturbed following deposition. The decorated sherd of a samian bowl from the rubbish pit (162; Fig 6, 2) represents a quite well known figure-type. The detail of the scene depicted, a woman sitting on an altar or pedestal and her male partner, is quite clear (Fig 6, 2a), although its meaning is obscure (Johns 1988, 40). The discovery of fragments of vessels decorated with erotic scenes in one area of the site need not indicate anything of particular significance; Bacchic images were quite commonplace in Roman decorative art (Johns 1988), and the discovery of both close together may be entirely fortuitous.

Apart from these well-dated features, the presence of small quantities of Roman pottery need not be taken as firm proof of a Roman date for other features on the site. As has been highlighted at 22 High Street (Brown, forthcoming), even features with significant quantities of Roman pottery may also contain very few stratified medieval sherds of 10th-12th century date. Similarly, the five centuries during which no ceramic culture has been identified in this area may have resulted in the presence of some cut features which, with the evidence available, are indistinguishable from Roman features.

Most of these features represent postholes or post-pits. Only two features (110 and 126) suggested any other function. One (110) was sub-rounded and deep, suggesting that it might be a well. The other (126) contained large quantities of cereal processing remains, and may therefore be another rubbish pit, although used largely for organic kitchen waste. Some of the postholes suggested similarities of form and alignment, although from the limited available evidence only tentative associations can be made. Some (113, 115, 130, 141, 145, 164, 175, 193 and 194) have been discussed above in relation to the linear slot (148). Another association (137, 139 and 160) derives from the use of

stone packing and an approximate alignment.

Stratified Roman finds from this excavation present quite a limited range of dates for the cut features. No samian ware dateable to the 1st century AD was recovered from the site, and the general impression given by the coarse pottery was that relatively little datable specifically to the 1st century was present. Similarly, relatively few sherds of Oxfordshire red-brown colour-coated ware and various late forms in other wares were present which could indicate a date in the 4th century. There is significant occupation evidence elsewhere in Leintwardine for the 4th century, although at 22 High Street, at a similar distance from the main frontages, features of this date were limited solely to occasional rubbish pits (Brown forthcoming). An early or mid 2nd century date for some of the cut features may be suggested by sherds of handmade Malvernian ware, some of the forms of grey ware and Severn Valley ware, and the relative sparseness of Black-burnished ware. A later 2nd or early 3rd century date might be suggested for some features due to the presence of apparently late east Gaulish samian and Central Gaulish 'Rhenish' ware.

The presence of later Roman pottery, including a sherd of Oxfordshire colour-coated ware, a Black-burnished ware flanged bowl (Fig 8, 25) and other potentially late forms (Fig 8, 24 and 26-28) in the reworked soils indicates the continued use of the area, although no cut features could be identified. This may be interpreted as a build-up of soils during the Roman period, resulting in the extensive truncation or removal of features of this date by post-Roman soil re-working. This may account for the presence of some of the undated shallow features, which do not appear to relate to the more precisely datable features, and for which no other interpretation fits. An alternative to this hypothesis is that later Roman usage of these rear areas of properties fronting onto the High Street did not involve the excavation of large pits or the construction of substantial buildings. Various minor industrial,

agricultural and domestic activities may account for some undated shallow features.

The charred plant remains gave widespread evidence for the final processing of cereal crops in this area of Leintwardine (Appendix 3). This appears to represent domestic activity rather than large-scale storage and 'commercial' processing. The preliminary stages of crop processing (Table 3) are likely to have occurred away from houses as threshing produces large quantities of waste and dust; charring in this case is likely to have occurred at the drying stage, preparatory to milling with quernstones similar to the excavated fragment. Only one rubbish pit (162) produced large quantities of charred chaff and weed seeds in addition to the cereal seeds themselves. In this case use of the chaff as a fuel may be indicated. The environmental sampling also provided evidence for metalworking (Appendix 2: slag), fishing (Fig 9, 1) and a general spread of hobnails.

No clear estimate of the level of the Roman ground surface could be made. The relative absence of Roman cut features over the northern part of the site, upslope, compared with the southern and eastern part of the site, is reflected by a similar pattern demonstrated in the excavation at 22 High Street. The combination of evidence from these excavations suggest that the Roman ground surface sloped more evenly downwards to the south and east in this part of the village than it does today, where there are now lynchets at each of the field boundaries.

This lyncheting may have been partly as a result of soil movement by plough or by hand cultivation, although no indications of plough-marks or cultivation trenches were present. Some of this process may have begun as a result of leaving the land fallow, following the clearance of buildings, perhaps for grazing. This encourages soil fauna (including earthworms and *enchytraeids*) in topsoil, which, if undisturbed for a number of years are likely to rework the soil, removing all trace of cut features in up to c

0.30m (R Macphail pers comm). Successive episodes of deposition of organic matter and sporadic cultivation may have encouraged the resulting process which will have mixed successive deposits of soil and their accompanying artefacts, further removing traces of excavated features and successive archaeological deposits. Such a process is now well documented (Yule 1990) and has been recognised on other sites as the enigmatic 'dark earth' between Roman and medieval deposits. Here the process does not seem to have stopped before the 19th century, with the construction of the school and wash-house.

The depth of Roman cut features below the present ground surface was greater than initially expected. It occurred beneath c 0.8-0.9m of deposit in the western area of the site, where it was considered likely that deposits would have survived relatively well. However, similarly well preserved deposits also survived beneath the wash-house and cobbling, at a depth of c 0.2-0.4m beneath the present surface. This information will add to existing data on the profile of survival and erosion of Roman deposits and cut features.

Little significant evidence of medieval or early post-medieval Leintwardine is available from either the excavated evidence or the artefacts. Together with earlier evidence of medieval activity, notably from 22 High Street, this suggests relatively little settlement in these particular areas. A link might be made with the location of both the manor house (now Leintwardine House) and the church, as well as the apparent change in alignment of the main road through Leintwardine (Brown 1991).

## 8 Conclusions

The excavation at the Community Centre has proved the value of archaeological fieldwork at Leintwardine, and has tended to confirm the impression of the Roman settlement from the other area excavations carried out within the rampart. These have indicated a compact

settlement of the 2nd century AD which was defended with a timber-laced clay rampart in the 190s due to its strategic importance. This continued to be act as a local centre, for commerce and the administration of the area, as well as being a substantial farming community in its own right.

Only one wall-line of a building was identified during the excavation, although a number of postholes indicate the presence of other structures, perhaps of different dates in this area. A series of pits suggest cottage industry and domestic refuse disposal. Finds evidence indicates a date-range for these features from the early or mid-2nd to the mid-3rd century AD. However, later Roman finds occur in later soil deposits, indicating that evidence of occupation of this date may have been present. Soil fauna and cultivation are likely both to have erased evidence for the late Roman period in Leintwardine and assisted the process of levelling off the natural slope of the ground within each property, giving rise to the lyncheting which is visible today.

The erotic pottery recovered from this site, has been widely reported in the local and national press (Appendix 4). Some of the Bacchic decorations of the 'Rhenish' ware beaker (Fig 6, 1) appear to be unique in the country. However, the significance of the combination of finds is likely to be no more than the unique nature of the 'Rhenish' ware decoration. Bacchic images are relatively common in Roman decorative art and so are likely to be of relatively little significance.

The environmental samples from this site represent the first occasion on which a structured sampling policy has been carried out at Leintwardine. The bulk of environmental data provides significant and valuable information about the quality of occupation evidence within the area excavated, the status of the Roman settlement at Leintwardine and the rural economy of Roman north Herefordshire.

## 9 Acknowledgements

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Conservation of metal finds was carried out by Carol E Brown of Bristol City Museum and Art Gallery. Specialist advice on the Roman pottery was provided by Jane Evans of Birmingham University Field Archaeology Unit. Comments on the erotic pottery were kindly made by Catherine M Johns (Department of Prehistoric and Romano-British Antiquities, British Museum) and Robin Symonds.

## 10 Personnel

This project was coordinated by Simon Woodiwiss BA AIFA (Field Officer), who also edited the report.

The fieldwork was supervised by Rachel E Edwards MA AIFA and Duncan L Brown MA AIFA (Assistant Archaeological Field Officers).

Assistance on site was provided by Robin Jackson BA, AIFA (Assistant Archaeological Field Officer), Nigel Topping PIFA and Paul Godbehere (Archaeological Assistants).

Illustrations were prepared by Carolyn Hunt MAAIS, PIFA and Samantha Whitby (Archaeological Illustrators).

Other finds were identified by Gary Taylor (Post-excavation Analyst), Victoria Buteux AIFA (Assistant Project Director) and the author.

Environmental material was prepared by Nigel Topping and sorted and identified by Clare de Rouffignac MA GIBiol AIFA, (Environmental Archaeologist).

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## 12 Abbreviations

Numbers prefixed with 'HWCM' are the primary reference numbers used by the Hereford and Worcester County Sites and Monuments Record.

HWCC - Hereford and Worcester County Council

## Appendix 1 The archive

The archive consists of:

- 94 Context records AS1
- 3 Fieldwork progress records AS2
- 4 Photographic records AS3
- 1 Drawing record AS4
- 3 Context number records AS5
- 1 Matrix sheet
- 33 Context finds sheets AS8
- 21 Sample records AS17
  
- 13 Scale drawings
- 4 Boxes of finds

All primary records and finds are kept at:

Archaeology Section  
Hereford and Worcester County Council  
Tetbury Drive  
Warndon  
Worcester WR4 9LS

Tel Worcester (0905) 58608

A security copy of the archive has been placed at:

Hereford and Worcester County Museum  
Hartlebury Castle  
Hartlebury  
Near Kidderminster  
Worcestershire DY11 7XZ

Tel Hartlebury (0299) 250416

## Appendix 2 The finds

An assessment was made of the finds to enumerate the various categories of material and assess the available evidence from them. The finds were cleaned, sorted and identified where possible. Most items of copper alloy (including the coins) were conserved by Carol E Brown of Bristol City Museum and Art Gallery. Finds are presented below in order of materials (metals, stone, pottery, other ceramics and miscellaneous). Environmental and organic material is presented separately (see Appendix 3).

### Coins, Gary Taylor

#### Context 103

Jetton, French/Nuremburg, 14th-16th century.  
Cut or clipped.

#### Context 104

Constantine I, *centenionalis*. "Victoria Laetae" reverse.  
AD 317-330.  
Silver enriched copper alloy.

#### Context 105

Constantine I, copy of *Constantinopolis* type. Victory on prow reverse.  
AD 330-348.  
Silver enriched copper alloy.

**Other metalwork by Duncan L Brown, incorporating conservation notes by Carol E Brown.**

#### Context 102

Piece of iron strap, possibly part of a hoop (derived from the fill of context 108?).

#### Context 104

Iron nail, square section, round flat head.

#### Context 142

Fragment of rolled copper alloy sheet tube, both ends broken (Fig 9, 2). Folded edge missing at one end. Possible remains of mineralised organics in copper alloy

corrosion materials. Similar pieces to this have been found at Colchester (Crummy, 1983, 122, fig 133: 4108 and 4110) where they are categorised as bindings. The specific function for such pieces remains obscure.

#### Context 161

Copper alloy pennanular brooch with moulded terminals (Fig 9, 3). Pin broken off and missing, although loop attachment remains. Otherwise complete, in two pieces with clean break. This brooch is one of Fowler's type D and is dated from the late 1st century BC to the 3rd century AD (Fowler 1960, 151-2 and 176). Another brooch of this class has been found at Sutton Walls (Kenyon 1953, 58-9, fig 23: 8), although it is not especially similar to this example.

#### Context 161

Iron square sectioned nail, complete, but surface lost, or in corrosion material. Probable mineralised wood remains contained in corrosion products, particularly around the lower half of the nail.

#### Context 165

Lower third and foot of a copper alloy bow brooch, possibly tinned (Fig 9, 4). Interleaved relief dogtooth decoration on spine tapering to a squared off end.

#### Context 178

Iron head of a tack, some shaft remains.

#### Context 178

a single piece of slag, possibly smithing slag.

### Objects from environmental sample residues

#### Context 111

A bent rectangular section copper alloy pin, perhaps a fish-hook (Fig 9, 1).

#### Contexts 138 and 178

Scraps of thin copper alloy sheet.

#### Context 178

A scrap of lead waste.

#### Context 107

A square section iron nail, with round, flat head.

#### Hobnails

Ten iron hobnails of Roman type were recovered from the following residues: 125 (2), 129 (1), 146 (3), 166 (1), 178 (2), 181 (1).

Slag was recovered from residues of contexts 105, 125, 140, 147, 166, 178, 179, 181.

#### Stone

A substantial fragment of a quernstone was recovered from context 138.

Flint flakes were recovered from context 104, and the residues of contexts 129 and 147.

A sample of a paving flag was recovered from context 146.

Fragments of mortar were recovered from the residues of context 107.

#### Glass

Roman vessel glass was recovered from the following contexts: 104 (1), 107 (1), 132 (1 rim), 142 (1), 161 (2), while further slivers were recovered from residues of contexts 146 and 147.

Post-medieval glass was recovered from the following contexts: 103 (1), 104 (1).

#### Roman pottery

##### Samian ware (fabric 43), Gary Taylor

A total of 45 sherds of samian ware were recovered from all contexts. Some pieces were chips or tiny fragments too small to identify.

#### Context 103

3 unidentified fragments.

#### Context 105

2 unidentified fragments, probably Lezoux.  
1 piece Dr 18 or 18/31, early-mid 2nd century.

#### Context 107

1 unidentified sliver recovered from sample residue.

#### Context 129

2 unidentified fragments.

#### Context 132

2 pieces Dr 18/31, one with a rivet hole, early-mid 2nd century.

1 piece Dr 38, burnt, Hadrianic or later.

1 unidentified sliver recovered from sample residue.

#### Context 134

3 pieces Dr 33, one probably east Gaulish (?Trier), possibly 3rd century.

2 pieces Dr 18/31 or 31, early-mid 2nd century or Antonine.

1 piece Dr 37, large, mid 2nd century.

1 piece Dr 80, possibly east Gaulish, mid 2nd to 3rd century.

1 piece ?Dr 27.

1 piece ?Dr 18/31 or 37.

1 unidentified fragment, probably east Gaulish (?Trier), possibly 3rd century.

#### Context 147

2 joined pieces Dr 35,

1 piece ?Dr 44, mid-late 2nd century.

#### Context 161

10 joined pieces of Dr 18/31R, probably Lezoux, early-mid 2nd century.

2 pieces Dr 37. Decorated (Fig 6, 2), 2nd century.

1 piece Dr 33, probably east Gaulish (?Trier), possibly 3rd century.

2 pieces ?Dr 15/17.

4 unidentified fragments.

The samian is probably all central Gaulish other than where specified. There is no obvious south Gaulish samian and nothing

particularly early, the earliest dated pieces being probably early 2nd century. The presence of east Gaulish fragments, and late forms, suggests that all the groups are mid 2nd to 3rd century. In fact the appearance of some of the east Gaulish sherds suggests they may be relatively late since they are often pale and yellowish: 'The latest (mid 3rd century) fabrics of Trier and Rheinzarbern are often pale pink or yellowish, sometimes with thin pale and matt slips' (Webster 1987, 11).

The assemblage, although small, has a slightly unusual balance, with cups (Dr 27, 33, 35, 80) and dishes (Dr 18/31, 38) being more plentiful than the bowl, Dr 37, which is usually the commonest form in the 2nd century.

The single decorated sherd is from an Antonine Central Gaulish Dr 37 bowl (Fig 6, 2). The figure-type is quite a well-known Antonine Central and East Gaulish one. On Oswald's Plate XC, types F, G, H and I are all versions of it, but there are in fact many more. This example is a much reduced copy of type H. The meaning of the scene depicted is far from clear (Fig 6, 2a): the woman is sitting on an altar or pedestal, and her male partner appears in some versions to be wearing a hooded cloak (Catherine Johns pers comm).

### Mortaria and amphorae

Many of the sherds of mortaria recovered are likely to represent Oxfordshire white mortaria (fabric 33), although sherds of other industries may also be represented. Two sherds of an oxidised mortarium fabric, one with traces of a red colour coat may represent Oxfordshire red-brown colour coated mortaria, or products of the Severn Valley, Caerleon or 'South-Western' industries. A large proportion of the sherds from contexts 138 and 161 represent small laminated slivers from a single mortaria (Fig 7, 7) which appears to have fractured, perhaps following compaction in, or close to the stone-packed base of a posthole (139).

Sherds of mortaria were recovered from the following contexts:

103 (1), 105 (1), 129 (1), 132 (4), 138 (36), 140 (1), 146 (2), 147 (7; including Fig 8, 16), 161 (35; including Fig 7, 7), 178 (14).

A total of 102 fragments of mortaria or probable mortaria were recovered.

Four bodysherds of amphorae (fabric 42) were recovered, two each from contexts 146 and 161. The fabric of these sherds resembled that of Dressel 20 amphorae made for olive oil in the Guadalquivir region of Spain between the 1st and 3rd centuries AD (Peacock and Williams 1986, 136-40).

### Imported fine ware

Two vessels of central Gaulish Rhenish ware (fabric 44; Greene 1978) were represented, including:

5 sherds of a beaker with rouletted decoration represented in contexts 134 (2) and 161 (3), including a handle;

5 sherds of a beaker with applied moulded figures of Hercules and a satyr or Pan seducing a woman or nymph (Fig 6, 1), from context 136.

The latter vessel is very unusual, and no parallel has yet been found for it. Central Gaulish Rhenish ware is usually datable to the range c AD 150-200.

Both scenes represented on this déchelette 74 beaker represent Bacchic imagery discussed in detail elsewhere (Johns 1988; Catherine Johns pers comm).

The first scene (Fig 6, 1b) is of an unusual Hercules, with his typical muscular physique and his club in his left hand, with a lions cloak draped over his left arm. The item in his right hand is more unusual, and appears to be a severed head, or perhaps a mask, rather than the cup, which should be in his right hand. The head is presumably the head of Medusa, as though Hercules were masquerading as Perseus. This may be due to a misunderstanding of the iconography on the part of the ceramicist. A similar figure type occurs on Central Gaulish samian Dr 37

bowls (Déchelette 458/Oswald 782; discussed in Déchelette vol II, 75).

Within the venerable tradition of Bacchic iconography in Greek, Hellenistic and Roman times, the theme of the second scene (Fig 6, 1b), a female, whether nymph, maenad or Venus herself, being importuned by an amorous Pan or satyr is a recurring one. The subject therefore fits in well with the many isolated Bacchic figures which occur in simplified forms on Central Gaulish sigillata, but there is no known genuine parallel for this precise arrangement of figures (Catherine Johns pers comm).

### Other fabrics

Five sherds of handmade Malvernian ware (fabric 3; Peacock 1967) were recovered from the contexts 129 (1) and 161 (4), comprising four rimsherds and a base. A further three handmade bodysherds were recovered from context 134, but these are not typical of Malvernian manufacture.

Severn Valley ware (fabric 12; Webster 1976) occurred in a variety of different guises suggesting different places and methods of manufacture. Some sherds of organic tempered Severn Valley ware (fabric 12.2) were recognised, but these were not systematically identified. A series of sherds were categorised as grey wares (fabric 14) although many of them may equally be categorised as reduced Severn Valley wares (fabric 12R). Sherds with a white slip (fabric 12W) were recovered from contexts 106 (1), 109 (1), 132 (1), 134 (1) and 161 (4), while a single sherd with a red slip was contained in context 119. Many of these colour coated vessels, where distinguishable by form, represented flagons, although the sherd from context 106, atypical of the range of fabrics present, appears to have represented a dish. These sherds are included in the totals given below. Most of the Severn Valley ware rim-forms are illustrated on Fig 7, 1-3 and Fig 8, 23 and 26-8.

Sherds of Severn Valley wares (fabric 12)

were recovered from post-medieval contexts:

103 (12), 104 (5), 105 (27), 106 (1) and 107 (1).

Sherds were also recovered from Roman period contexts:

109 (3), 117 (1), 119 (8), 125 (5), 129 (3), 131 (10), 132 (17), 134 (25), 136 (1), 138 (10), 140 (5), 142 (2), 146 (10), 147 (4), 159 (4), 161 (43), 165 (1), 178 (2), 179 (2).

A total of 201 sherds of Severn Valley ware (fabric 12) were present.

Sherds of grey wares (fabric 14, but see above) were recovered from contexts:

105 (1), 107 (2), 111 (3), 125 (1), 129 (2), 131 (1), 134 (6), 140 (3), 147 (9), 161 (77), 178 (2).

A total of 107 sherds of grey ware (fabric 14) were present. Most grey ware rim-forms are illustrated on Fig 7, 4-6 and Fig 8, 12-14, 17, 19 and 22.

The large assemblage of grey wares from context 161 included a variety of groups of sherds from identifiable vessels. One of these included a cooking pot with burnished acute lattice decoration, similar in style to Black-burnished ware vessels and a grey ware parallel from 22 High Street (Brown forthcoming).

A single bodysherd of grog-tempered ware (fabric 16) was recovered from context 140.

Sherds of Black-burnished ware (fabric 22; Williams 1977) were recovered from contexts:

105 (3), 106 (1), 107 (1), 111 (2), 125 (2), 127 (1), 129 (3), 131 (8), 132 (1), 134 (2), 138 (1), 161 (17), 178 (1).

A total of 43 sherds of Black-burnished ware (fabric 22) were present. Where possible forms were dated (Gillam 1970). Most Black-burnished ware rim forms are illustrated on Fig 7, 8-10 and Fig 8, 18, 20-21 and 24-25.

Oxfordshire red-brown colour-coated ware (fabric 29) was present in very small quantities. Single colour-coated sherds were

present in contexts 105 and 147, while two possible sherds of mortaria were recovered from context 132. However considering the dating of the other material from contexts 132 and 147, the mid 3rd to 4th century date expected for Oxfordshire fabric seems not to apply to these sherds. Assigning these sherds to this fabric may therefore be mistaken, since fine oxidised red colour-coated wares were produced at Gloucester (G Taylor pers comm), and red colour-coated mortaria are known from Caerleon (Hartley 1982, 156). Consequently the sherd from the linear slot (context 147) has been categorised as Gloucester type Severn Valley ware (fabric 12; Fig 8, 15).

White wares (fabric 41) were present both as coarse and fine wares, and in several different fabrics. These included fabrics with hints of buff, yellow and pink. Surface treatments included thin yellow and red washes of slip, and red *épongé* and barbotine slip decoration (Fig 7, 11). The only vessel form recognised was the flagon.

Sherds of white wares (fabric 41) represented occurred in contexts:

103 (2), 104 (1), 105 (3), 131 (1), 134 (3), 138 (2), 146 (1), 147 (2), 161 (10).

A total of 25 sherds of white wares (fabric 41) were represented.

### Medieval and post-medieval pottery

Three sherds of medieval pottery were recovered from context 104, including two sherds of sandy cooking pot ware (fabric 55), probably from Worcester, and a single sherd of cooking pot in an unrecognised micaceous fabric (Victoria Buteux pers comm). A total of 194 sherds of post-medieval pottery was present in the post medieval pit (108) and the spits.

### Tile and fired clay

fragments of fired clay were recovered from the following contexts:

104, 105, 107, 109, 114, 117, 119, 127, 129, 132, 134, 138, 140, 146, 153, 161.

Identifiable fragments included the following:  
flue tile - contexts 107 (1), 132 (1);  
*tegula* - contexts 104 (1), 132 (1), 138 (1), 161 (2);  
*imbrex* - contexts 134 (1), 140 (1), 161 (1);  
probable daub - contexts 109, 117, 129, 146, 153.

Small fragments of fired clay were found in the residues of the following contexts:

105, 107, 109, 111, 127, 129, 132, 136, 140, 142, 146, 166, 178, 179.

Fired clay was NOT found during excavation or in residues of the following sampled contexts:

125, 147, 174, 181.

### Clay pipe

Context 103 - 1 fragment of stem.  
Context 104 - 3 fragments of stem.  
Context 108 - 1 fragment of stem.

### Appendix 3 The environmental material

Clare de Rouffignac

#### Animal remains

Context 102

Juvenile pig radius

Context 103

Six vertebrae, one possible pelvis fragment, one possible skull fragment of a large ungulate probably cow, all heavily butchered. Oyster shell

Context 104

Five teeth and eight related mandible fragments of a juvenile pig.

One carpal and one adult tooth of cow.

Context 129

Eleven sheep tooth fragments

Two cow tooth fragments.

Context 138

One small burnt fragment of limb bone from small ungulate (sheep?).

Context 146

Eight sheep tooth fragments.

Context 147

Twelve sheep tooth fragments.

Two cow tooth fragments.

Context 161

Sixteen sheep tooth fragments.

One small ungulate (sheep?) rib fragment.

One large ungulate limb bone fragment.

Burnt bone was recovered from sample residues of the following contexts:

105, 107, 109, 111, 125, 127, 129, 132, 136, 140, 142, 146, 147, 166, 174, 181.

The two residues from which burnt bone was not recovered were contexts 178 and 179.

Bone preservation in general is poor; generally only fragile fragments of teeth were recovered, similar in character to the finds from 22 High Street. An attempt was made to

test soil conditions and the potential for preservation of bone and other organic material. Using a Griffin pH meter model 50, two pH readings were taken on soil samples, which produced two slightly variant readings of pH 5.9 and pH 6.22.

The relatively low degree of acidity of soils from the sealed Roman features tested is belied by the degree to which animal bone has broken down. It is likely that the deposition of highly organic midden deposits (which are extremely alkaline) into the soils above have, over the years, caused a decrease in the natural acidity of the soil due to leaching. The relatively high degree of preservation in certain sealed deposits at Sawpit Bank (Brown forthcoming) may be explained by the density of deposition of bone, which may have caused a local change in soil conditions.

#### The plant remains

##### 1 Summary

*A series of samples were examined from various features including pits and wells. Charred plant remains were recovered from all the samples and gave evidence of agricultural practices employed during the Roman period. Domestic use of cereals is also discussed.*

##### 2 Introduction

Little environmental analysis has been carried out for the town of Leintwardine. A single soil sample examined from the Sawpit Bank excavations contained no identifiable charred remains when examined by Keepax (AML Report 2016) and two root disturbed samples from 22 High Street produced charred cereal and weed seeds (Brown forthcoming). However, deposits which appeared to contain charred remains have been noted over the years by various excavators (James Dinn pers comm).

It is difficult to find any records at all of

environmental research which has taken place in Herefordshire towns (Greig 1982). Apart from soil samples from the City of Hereford itself dating from the Saxon and Medieval periods, (de Rouffignac, 1990), very few areas of the county have been studied. A sample from Kenchester was examined by Hughes and was recorded as containing seeds of *Sorghum vulgare* (great millet) and at the time was the first recorded instance of imported cereals during the Roman period (Jack and Hayter 1918, 100). This is, in retrospect, a rather unlikely identification; the 'seeds' were probably fungal spores of *Cenococcum* spp. More recent work at Kenchester (Kenchester Archive 117) produced charred cereal and *Rumex* sp (dock) seeds (James Greig pers comm).

Elsewhere in the west midlands, extensive environmental sampling programmes have been carried out on various excavations in Roman towns. Alcester, Droitwich and Worcester have all produced plentiful charred plant remains (Moffett pers comm) which have enabled significant research on both the economy and environment during the Roman period.

### 3 Aims

It was hoped that plant remains from the Community Centre excavation would be recovered in sufficient quantity to enable:

- a) Identification of charred cereal grains,
- b) Determination of the stage of crop processing from which the charred remains came,
- c) Identification of plants of the local habitats.

### 4 Method

The samples were between approximately one and five litres in size. These were sieved, floated and sorted. The mesh size used was 500 $\mu$ m for the flots. The flots were completely sorted to recover all seeds and

other plant remains, both charred and uncharred. The sorted plant remains were then examined under a low power EMT-1 light microscope to enable identification.

The seeds were identified as far as possible using the Archaeology Section comparative collection, a seed identification manual (Bergren 1981) and an illustrated site report (Griffin 1988). Comparative descriptions of charred cereal seeds and chaff were obtained from Jacomet (1987). Habitats and common names of the plants were obtained from Blamey and Fitter (1987).

### 5 Results

Over 30 samples were collected from the excavations, but of these 21 were selected for analysis on a priority basis. Table 1 shows the numbers of plant remains from each sample, whilst Table 2 describes the habitats and common names of the plants.

#### Deposits sealing Roman features

##### Context 105

The charred cereal grains recovered from this sample were all in poor condition, with only five identifiable to species. These were from *Triticum spelta* (spelt wheat), *T aestivum/compactum* (bread/club wheat) and *Secale* sp (rye). A single gramineae (grass) seed was also identified.

##### Context 107

The majority of the charred cereal seeds were again unidentifiable, but it is probable that many of them were *T aestivum/compactum*. Several weed seeds were identified, including *Chrysanthemum segitum* (corn marigold) and *Vicia/Lathyrus* sp (pea/bean). A few uncharred seeds were also noted.

#### Roman features

##### Context 109

This sample contained only three indeterminate charred cereal seeds and four *Corylus avellana* (hazel) nutshell fragments.

Context 111

Apart from a single *Avena* sp (oat) seed, the charred cereal seeds from this sample were unidentifiable. Four probable gramineae (grass) seeds were also noted, but these were poorly preserved and could have also been *Avena* sp.

Context 125

Over a hundred carbonised cereal grains were collected from this sample. Of these, a small number were identified as *T spelta*, *T aestivum/compactum* and probable wheat or rye grains. A single fragment of a seed of *Agrostemma githago* (corn cockle) was also recovered, together with eight gramineae seeds.

Context 127

The cereal seeds from this sample were unidentifiable apart from one *Avena* sp. The weed seeds included *Vicia/Lathyrus* sp, *Trifolium repens* (white clover) and *Anthemis cotula* (stinking mayweed).

Context 129

Again the majority of the twenty cereal seeds were unidentifiable, but one *Hordeum* sp (barley) and one *T spelta* were recovered. One of the seeds had sprouted and the shoot was found detached in the flot.

Context 132

Twenty cereal seeds, about half of which appeared to be *T aestivum/compactum*, were recovered from the sample. A single *Avena* sp and two gramineae seeds were also noted.

Context 136

Only two charred cereal seeds were recovered from this sample.

Context 138

There were a number of charred seeds present, including seeds of *Hordeum* sp, *T spelta* and *T aestivum/compactum* and eleven indeterminate cereal seeds.

Context 140

The majority of the carbonised cereal seeds

recovered were indeterminate cereal seeds. Weed seeds were represented by a single seed of *Trifolium repens*.

Context 142

A seed of *Trifolium repens* was also recovered from this sample, together with another leguminous seed and some cereal grains.

Context 146

The charred seeds which were recovered were very poorly preserved. These included various weeds including *Chrysanthemum* sp (daisy type), *Vicia/Lathyrus* sp and a type of polygonaceae (dock/bindweed type). Several uncharred seeds were also identified.

Context 147 (top)

Both charred and uncharred seeds were identified from this sample. The charred seeds consisted only of cereals, including *T spelta* and *T aestivum/compactum*.

Context 147 (bottom)

Over fifty charred cereal seeds were recovered, but many were unidentifiable. Those which were identified included *T spelta* and *T aestivum/compactum*. Some weed seeds were also collected of such species as *Vicia/Lathyrus* sp, *Chenopodium album* (fat hen) and the gramineae.

Context 161

This sample was the most productive from the excavations. There were no mineralised seeds as one could have expected from a cesspit, but there were a large number of charred seeds and chaff. Over 150 cereal grains were recovered, of both *T spelta* and *T aestivum/compactum*. The chaff included rachis fragments, glume bases and culm nodes, mainly of *T spelta*. There were also some weed seeds present, including gramineae, *Chrysanthemum segitum*, and *Vicia/Lathyrus* spp. Fragments of *Corylus avellana* shells were also recovered.

Context 166

Charred cereal seeds and a *T spelta* rachis fragment were identified from this sample.

Two uncharred seeds were also collected.

#### Context 174

The charred cereal seeds which were recovered were mostly unidentifiable, apart from single grains of *T spelta* and *T aestivum/compactum*. Two charred weed seeds of *Vicia/Lathyrus* sp and a single uncharred seed were also collected.

#### Context 178

Many charred cereal seeds, consisting mostly of probable *T aestivum/compactum*, were identified. *T spelta* was represented definitely only by a single glume base. Only one weed seed was collected.

#### Context 179

Seven charred cereal seeds and a single seed of *Trifolium repens* were identified from this sample.

#### Context 181

Only a small number of charred seeds were recovered, consisting mostly of cereal seeds.

### 6 Analysis

The samples were found to be very rich in plant remains compared to previous material examined from excavations in Leintwardine. Every sample examined contained charred plant remains, suggesting widespread small scale processing of cereals. There was no evidence for large storage or processing areas such as a granary or threshing floor.

Charred plant remains occur as a result of either deliberate burning to dispose of crop waste or from accidental burning of crops being processed. Crops which are parched to free the grains from the husks, or malted for beer making may be accidentally burnt whilst being prepared. Drying of small quantities of cereal seeds may also take place before milling if the crop has become damp during storage and this too may lead to accidental burning (Green 1982, 40 and 43). The stages of crop processing which are normally encountered from archaeological material are

shown in Table 3.

Some of the samples contained what appeared to be aerobically preserved seeds of species which are common weeds of scrub and waste ground. It is certain that these seeds represent more recent contamination of the deposits as such aerobically preserved seeds do not apparently survive in the ground for more than two to three hundred years (Lisa Moffett pers comm).

The identification of the cereal seeds from the samples was somewhat problematic, as there was little chaff which is diagnostic of different wheat species. Many of the cereal seeds remained as 'cereal indeterminate'. The species of cereals which were identified were *Triticum spelta*, (spelt wheat), *Triticum aestivum/compactum*, (bread/club wheat) *Hordeum* sp (barley) and *Avena* sp (oats). *T spelta* was the most common wheat of the Roman period and appears to have almost completely disappeared during the 6th and 7th centuries (Green 1979, 188). It is a non-free-threshing species which requires parching to remove the husks from the grains. *T spelta* is a hardy autumn sown wheat, unlike *T aestivum/compactum*. This species was also fairly common at Leintwardine, whilst *Hordeum* sp occurred in far smaller concentrations for probable specific uses such as malt for brewing. It is difficult to actually determine if *Avena* sp was a cultivated crop or a tolerated 'weed' of wheat and barley fields.

A very small number of cereal seeds appeared to have germinated. This could be due to either deliberate encouragement of sprouting for malt production, or as a result of storage in warm, damp conditions.

The samples tended to contain few weed seeds or chaff fragments. The weed species which did occur were usually those with very small seeds. The only species which was noted with large seeds was *Agrostemma githago* (corncockle), but it was represented by a single small fragment. The lack of chaff and only small weed seeds suggests a fully

processed crop which was charred either accidentally during small-scale drying for domestic use or as a result of a fire which destroyed a larger storage area.

Nitrophilous weeds were noted in conjunction with cereal seeds and included *Chenopodium* sp (goosefoot type), *Vicia/Lathyrus* spp (peas/beans) and *Trifolium repens* (white clover). These species are capable of extracting nitrogen compounds from soils where there has been a high input of organic refuse. These species are particularly found growing around settlements, encouraged by the presence of domestic waste in middens (Hall 1988, 94). At Leintwardine, however, they could have found their way into processed crop remains as a result of dumping of domestic refuse onto the fields under cultivation. The high nitrogen levels produced by this activity would allow vigorous growth of the weeds. The weeds would be harvested with the cereal crop and then be mostly removed by processing, leaving only a few seeds in the cleaned crop.

There were few indicators of the types of land which were being exploited for agriculture. *Chrysanthemum segitum* (corn marigold) is a species of weed of cultivation which is found on light sandy soils, whilst *Anthemis cotula* (stinking mayweed) grows on heavy clay soils. No other species which are habitat specific were noted from the samples.

The assemblages of charred plant remains which were recovered from most of the samples were very similar, suggesting a general spread of charred material from similar sources. However, various exceptions were noted.

The charred remains from 105 and 107 (deposits sealing Roman features) were all very poorly preserved, probably indicating redeposition. Similar plant remains were recovered from 'dark earth' deposits at the Deansway excavations in Worcester, where Roman material was reworked in layers dating to the 8th and 9th centuries. Poorly

preserved plant remains were also noted from 146 (cobbled area), again indicating redeposition.

The fill of a possible well (109) contained very little charred material, but was unusual for the presence of *Corylus avellana* (hazel) nutshell fragments. These were only noted from two samples, the other being context 161. *Corylus avellana* was commonly collected from woodland and used as a winter food for both humans and livestock.

The charred plant remains from context 161 were very different to the material recovered from most of the samples. There were many cereal seeds, chaff and weed seeds; the cereal seeds were all large grains. The deposit appears to represent disposal of both a fully processed crop, and waste material from processing. The drying of crops before milling may have taken place on a small scale in the domestic dwellings, with chaff being used as a fuel. The chance of accidental burning of the crop would have been very high (Moffett forthcoming). The other artefactual evidence from this context suggests a general use of the pit for refuse disposal. The lack of mineralised seeds is unsurprising as the conditions for mineralisation are very specific, with aerobic conditions and low acidity being necessary.

Several samples came from deposits which are normally unlikely to contain charred plant remains. These included context 179 (lining of clay lined pit) and context 181 (possible cess-pit). It is quite likely that seeds could have found their way into the layers from the rich deposits above as a result of root action.

## 7 Conclusions

The plant remains from these excavations have enabled a quite detailed examination of Roman agricultural practice in the hinterland of Leintwardine. There were indications of the types of soils used for cultivation of cereal crops, probably the heavier soils being found on the river floodplain, and the lighter

soils occurring on the terraces and land beyond. The large numbers of nitrophilous weed seeds suggest that dumping of midden waste on the fields may have been a common practice.

The charred plant remains give evidence of widespread final processing of crops, but apparently on a small scale. This was probably taking place at domestic dwellings for 'personal' rather than commercial use. Unfortunately it was not possible to identify where the preliminary stages of processing were taking place. This is likely to have occurred away from the houses as grain is a bulky commodity and activities such as threshing produce vast quantities of waste and dust.

Few plants of the local habitat were identified. The presence of *Corylus avellana* is of interest as it is a useful food for winter and would have been collected from hedges and woods which were probably growing around the town.

It is to be hoped that future excavations in Leintwardine will include full environmental sampling programmes to enable further research into the agriculture of Roman Herefordshire.

### **Roman erotica found in Midlands**

An erotic Roman 'beer mug' has been discovered beneath a children's playground in the west Midlands, writes **Martin Bailey**. Fragments of the drinking pot, excavated earlier this month, show a well-endowed god seducing a busty nymph. The find was made when the local council in Leintwardine decided to build a public convenience on the site of the old playground. Because of the town's Roman origins, Hereford and Worcester archaeologists were called in to undertake a rescue excavation. Archaeologists are trying to discover whether they once belonged to a tavern, brothel or private aficionado. Last week the British Museum's expert in classical erotica dated the pottery shards to the late second century AD. The drinking pot, of which only fragments have been found, would have held just over a pint and a half. It would probably have been used for barley beer, although it could also have served as a communal vessel for wine.

The Observer, 26th May 1991

Table 1 Numbers of plant remains from each sample

Table 1

	105	107	109	111	125	127	129	132	136	138	140	142	146	147t	147b	161	166	174	178	179	181	
<b>Cerealiae</b>																						<b>Cerealiae</b>
<i>Triticum spelta</i>	2				9		1			2	2		1	3	7	6	4	1	1	4	1	<i>Triticum spelta</i>
<i>T spelta</i> glume bases																25			1			<i>T spelta</i> glume bases
<i>T spelta</i> rachises																10	1					<i>T spelta</i> rachises
<i>T aestivum-compactum</i>	2	2			13					1	2				2	2	4	1	8	1	1	<i>T aestivum-compactum</i>
<i>Secale cereale</i>	1	3																				<i>Secale cereale</i>
<i>Hordeum</i> sp							1		1	1		1				2			1			<i>Hordeum</i> sp
<i>Avena</i> sp				1		1		1														<i>Avena</i> sp
Wheat/rye					6										2	2			4			Wheat/rye
Cereal indet	18	40	3	40	>100	10	18	20	1	11	20	9	18	9	40	>150	12	16	48	2	6	Cereal indet
Straw nodes																2						Straw nodes
Chaff indet							1									20						Chaff indet
<b>Caprifoliaceae</b>																						<b>Caprifoliaceae</b>
<i>Sambucus nigra</i>					(1)								(4)	(2)								<i>Sambucus nigra</i>
<b>Caryllophyllaceae</b>																						<b>Caryllophyllaceae</b>
<i>Stellaria media</i>					(1)								(1)									<i>Stellaria media</i>
<i>Agrostemma githago</i>					1																	<i>Agrostemma githago</i>
<b>Chenopodiaceae</b>																						<b>Chenopodiaceae</b>
<i>Chenopodium album</i>														(2)	2		(1)					<i>Chenopodium album</i>
<i>Chenopodium</i> sp																						<i>Chenopodium</i> sp
<b>Compositae</b>																						<b>Compositae</b>
<i>Anthemis cotula</i>						1																<i>Anthemis cotula</i>
<i>Chrysanthemum segitum</i>		1																				<i>Chrysanthemum segitum</i>
<b>Corylaceae</b>																						<b>Corylaceae</b>
<i>Corylus avellana</i>			4														3					<i>Corylus avellana</i>
<b>Graminae</b>																						<b>Graminae</b>
Graminae	1	1		4	8	1		2		1		4			2	6					1	Graminae
<b>Leguminosae</b>																						<b>Leguminosae</b>
<i>Vicia</i> sp															1	1						<i>Vicia</i> sp
<i>Vicia/Lathyrus</i> sp		2				1							1		1			(2)	1			<i>Vicia/Lathyrus</i> sp
<i>Trifolium repens</i>						1					1	1				1					1	<i>Trifolium repens</i>
<b>Polygonaceae</b>																						<b>Polygonaceae</b>
<i>Polygonum</i> sp													1	(1)								<i>Polygonum</i> sp
Polygonaceae																						Polygonaceae
<b>Ranunculaceae</b>																						<b>Ranunculaceae</b>
<i>Ranunculus</i> sp		1																				<i>Ranunculus</i> sp
<b>Rosaceae</b>																						<b>Rosaceae</b>
<i>Rubus fruticosus</i> agg																	(1)	(1)				<i>Rubus fruticosus</i> agg
<b>Urticaceae</b>																						<b>Urticaceae</b>
<i>Urtica dioica</i>													(2)									<i>Urtica dioica</i>
<b>Violaceae</b>																						<b>Violaceae</b>
<i>Viola</i> sp					(1)																	<i>Viola</i> sp
Other indet. seeds													3		3	14						Other indet. seeds

Aerobically preserved seeds are noted in brackets

Leintwardine Community Centre Excavations HWCM 8247

Table 2: Habitats of plant remains recovered from samples

**Cerealiae**

*Triticum* sp - free-threshing wheat - cereal crop.

*Triticum spelta* - spelt - cereal crop common in Roman period.

*Secale cereale* - rye - cereal crop.

*Hordeum vulgare* - barley - cereal crop.

*Avena* sp - oats - can be either a cereal crop or weed of cereal crops.

**Carylophyllaceae**

*Agrostemma githago* - corncockle - was a common weed of cultivated crops, now very rare

**Chenopodiaceae**

*Chenopodium album* - fat hen - nitrophile, abundant on disturbed ground.

*Chenopodium* sp - goosefoot type - usually nitrophilous, on disturbed ground.

**Compositae**

*Anthemis cotula* - stinking mayweed - weed of cultivation found on heavy clay soils.

*Chrysanthemum segitum* - corn marigold - weed of cultivation.

**Corylaceae**

*Corylus avellana* - hazel - tree of woods, scrub and hedges.

**Graminae**

Graminae - grasses - many varied habitats.

**Leguminosae**

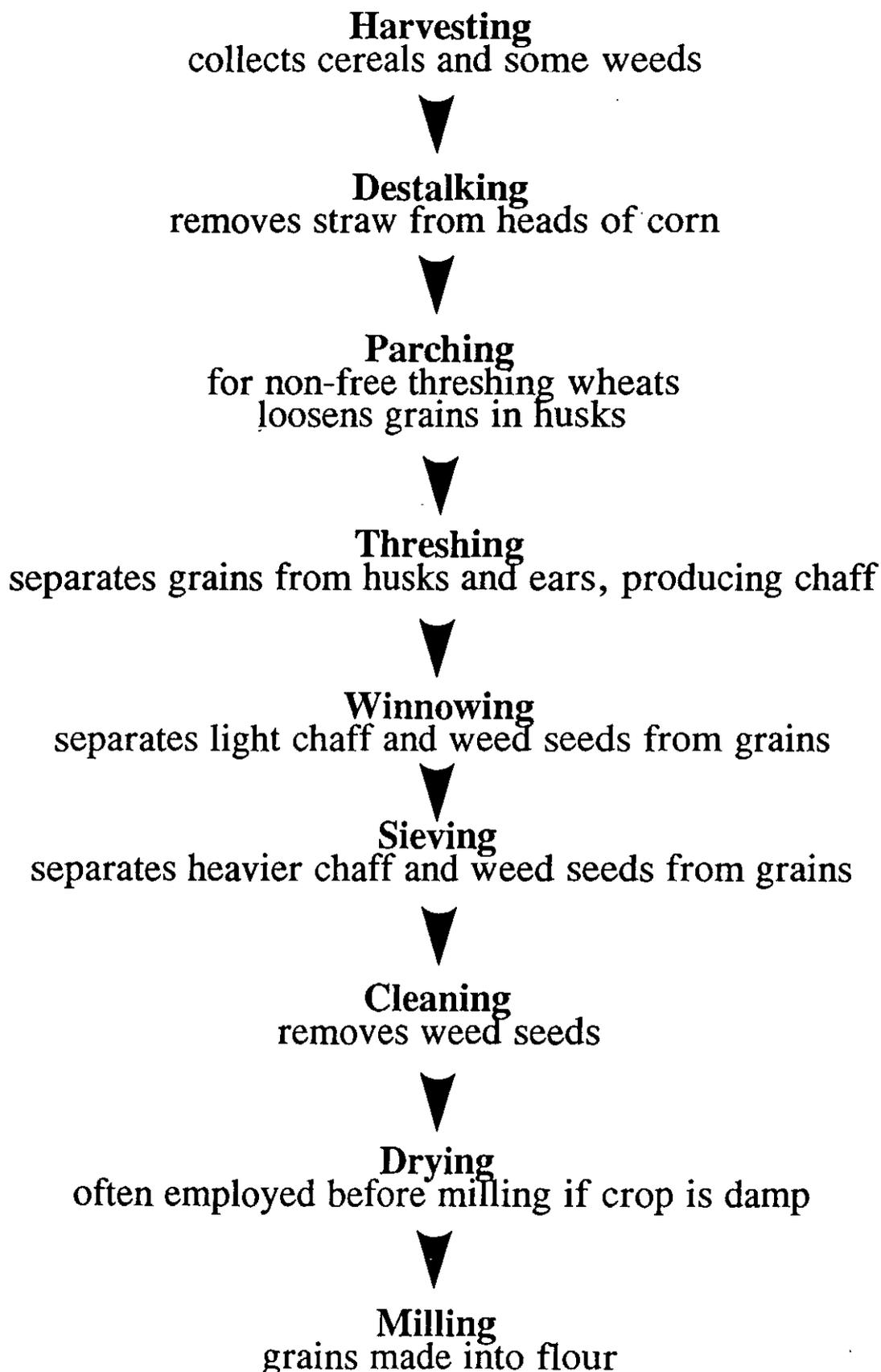
*Vicia* sp - bean - all nitrophilous, various habitats.

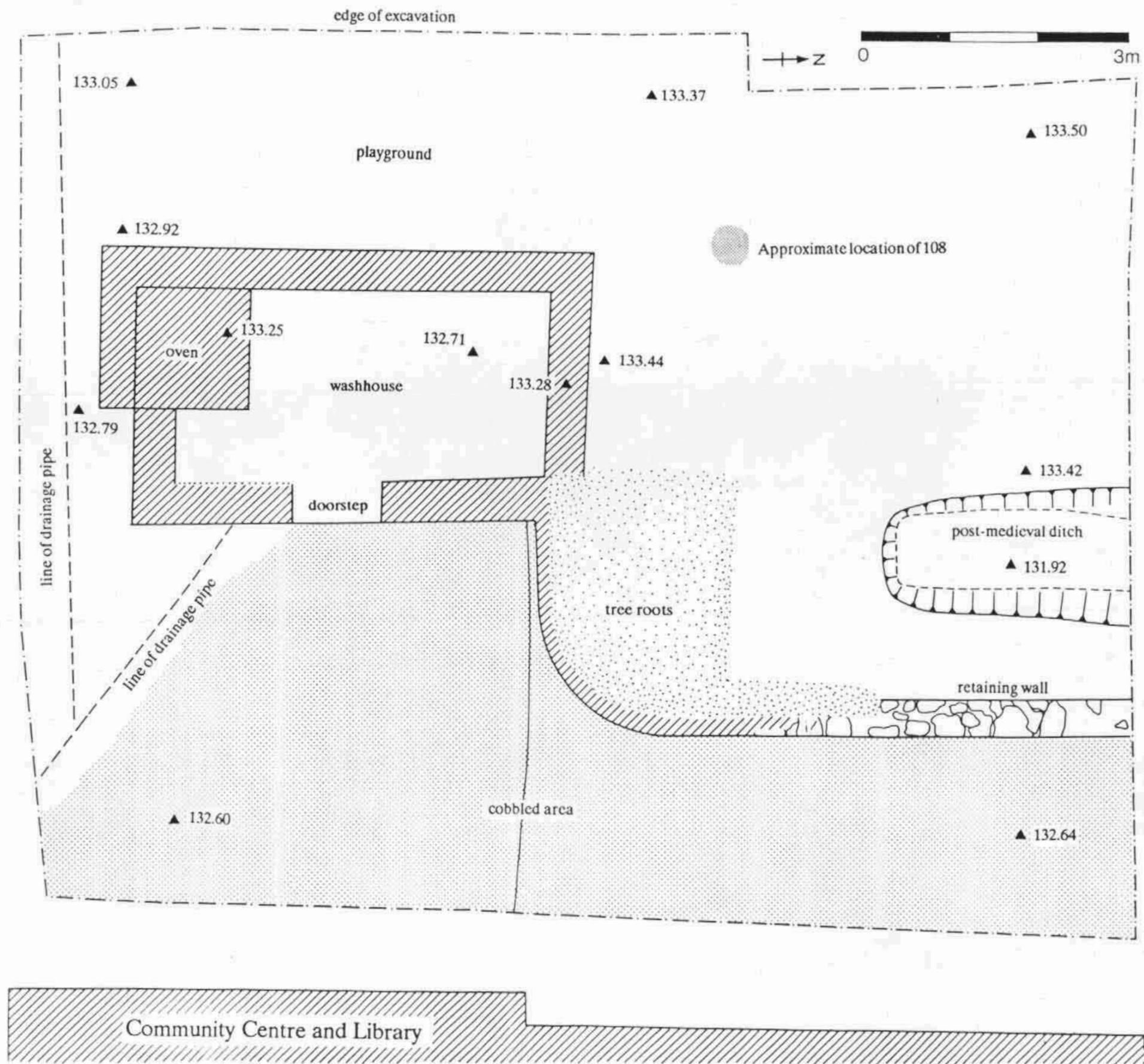
*Vicia/Lathyrus* sp - bean/pea type - all nitrophilous, various habitats.

**Polygonaceae**

*Polygonum* sp - knotgrass type - weeds of cultivation and waste ground.

**TABLE 3: STAGES OF CEREAL CROP PROCESSING**





Leintwardine Community Centre Excavations, HWCM 8247 Post-medieval features

Figure 3

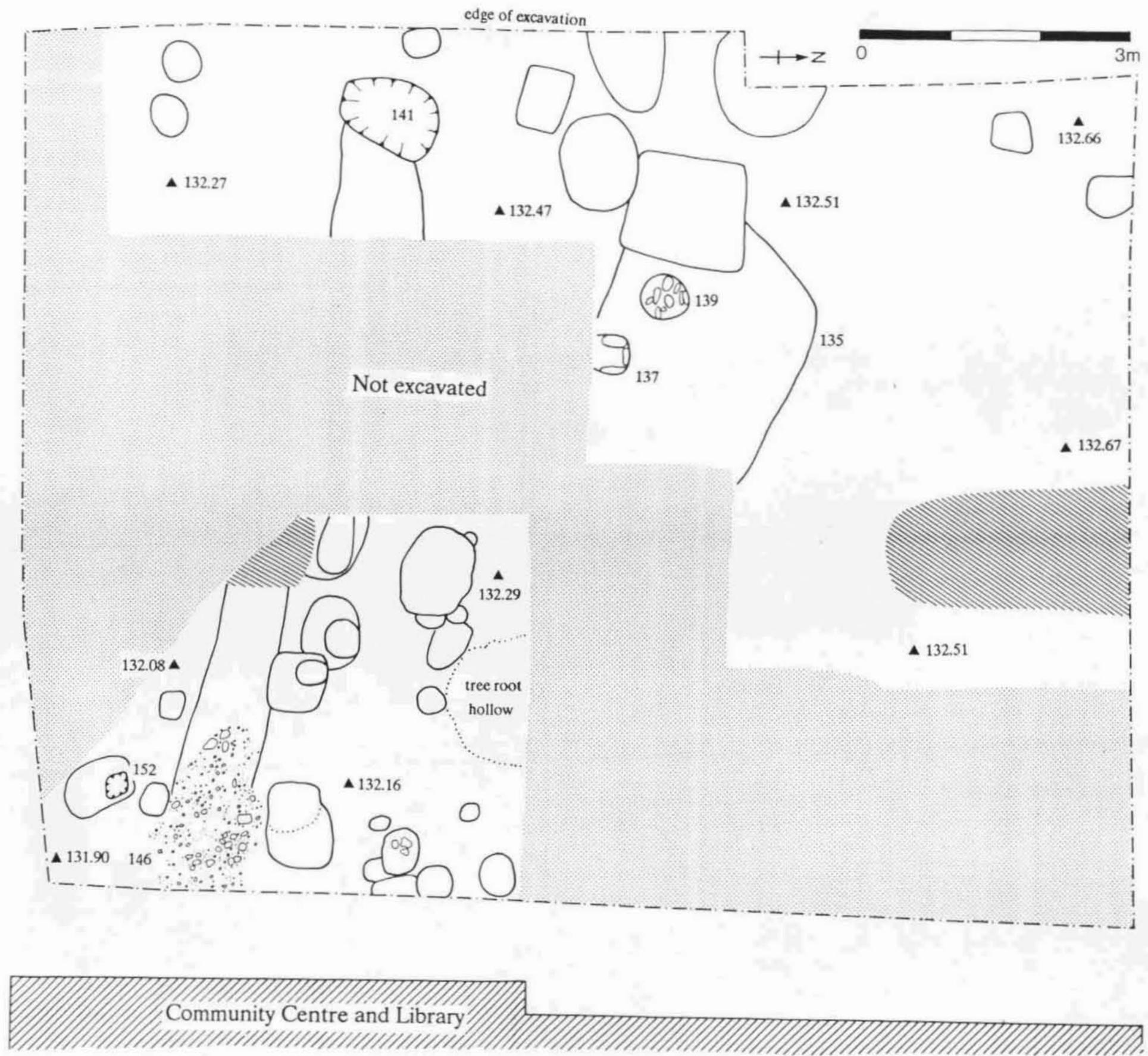
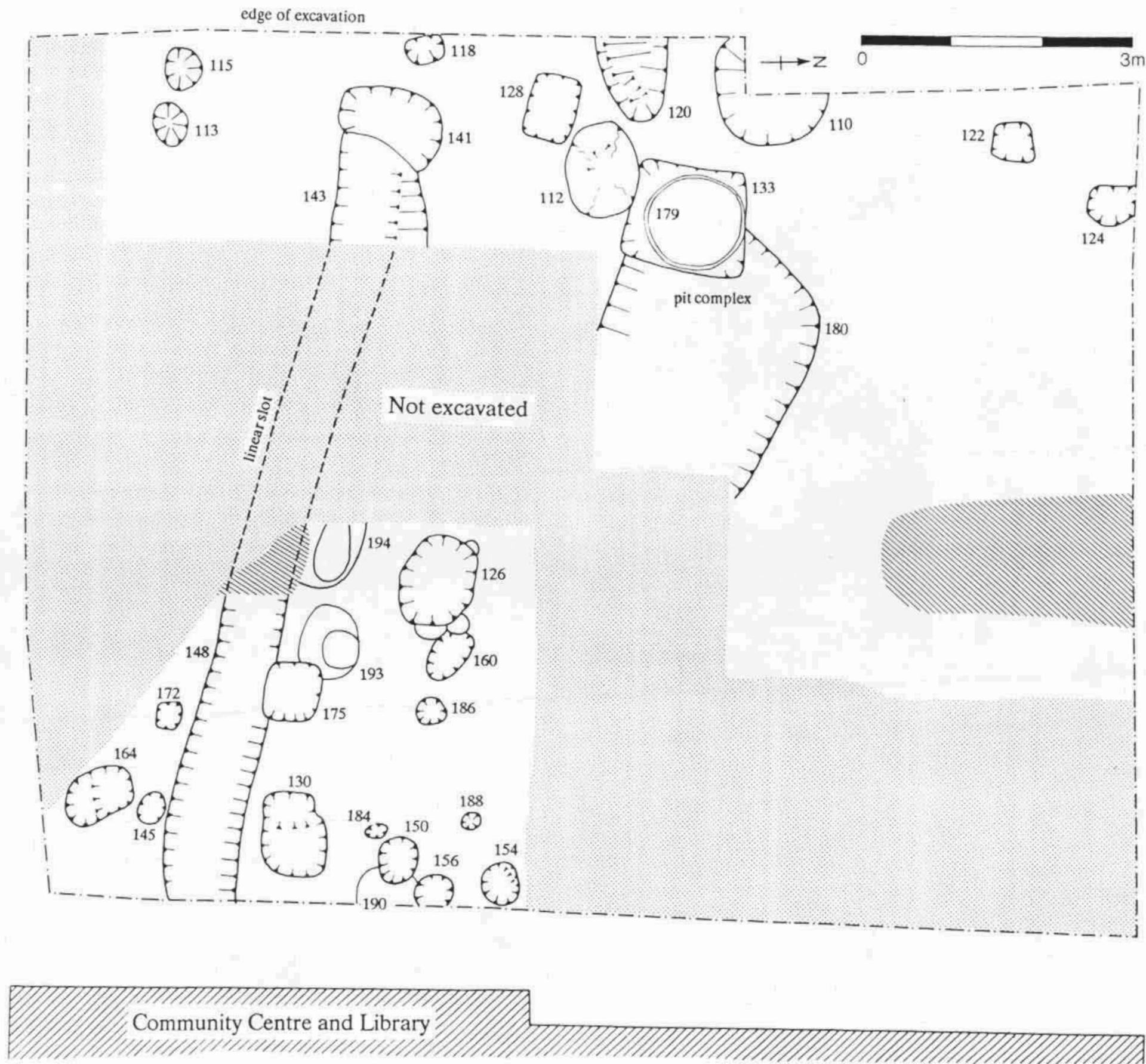


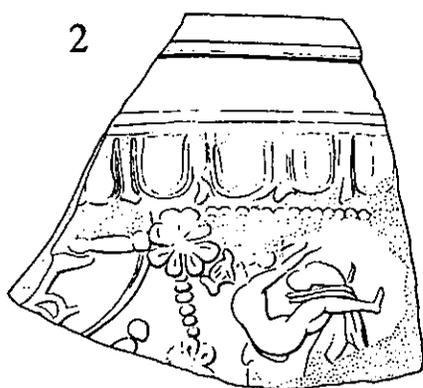
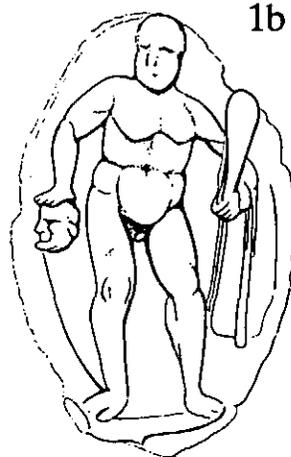
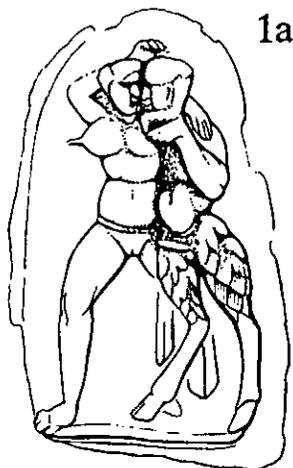
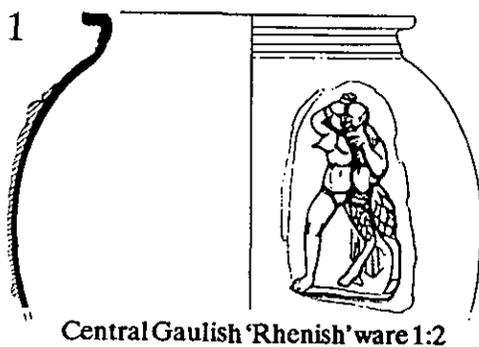
Figure 4

Leintwardine Community Centre Excavations, HWCM 8247 Roman features - before excavation



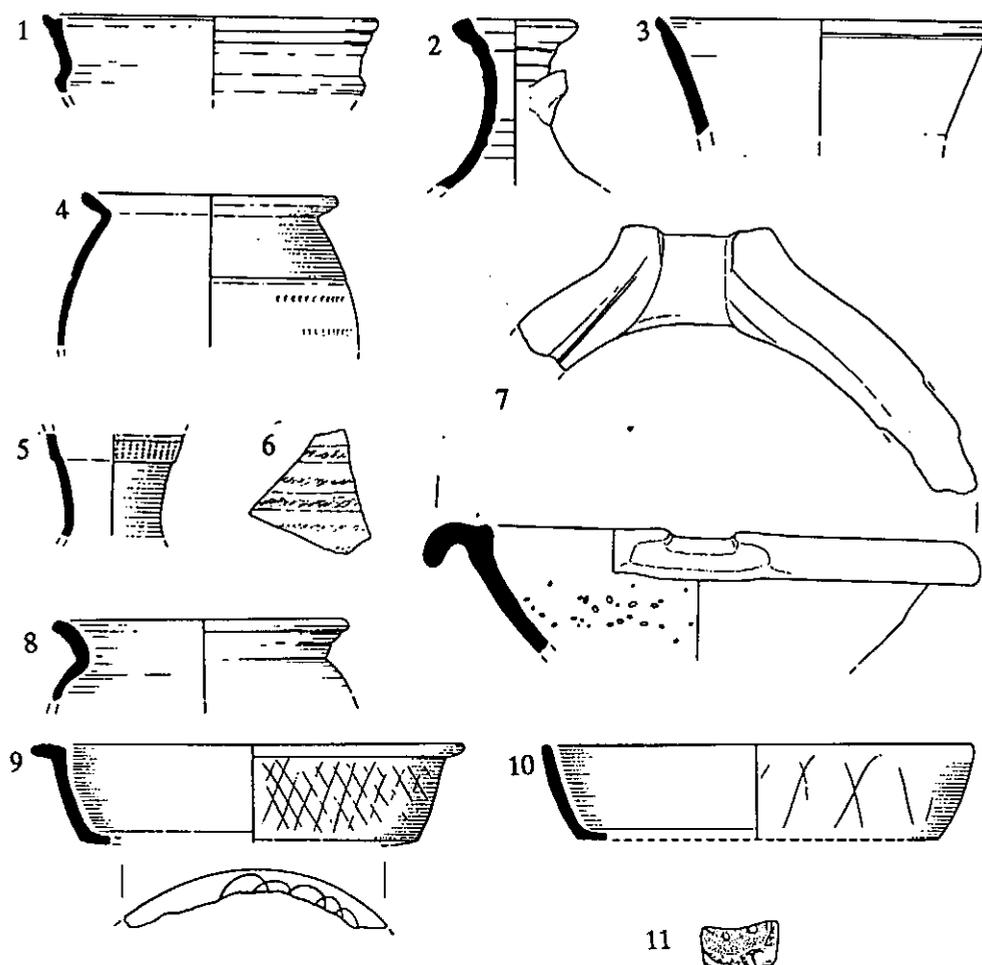
Leintwardine Community Centre Excavations, HWCM 8247 Roman features - excavated

Figure 5



Leintwardine Community Centre Excavations, HWCM 8247

Imported Roman pottery

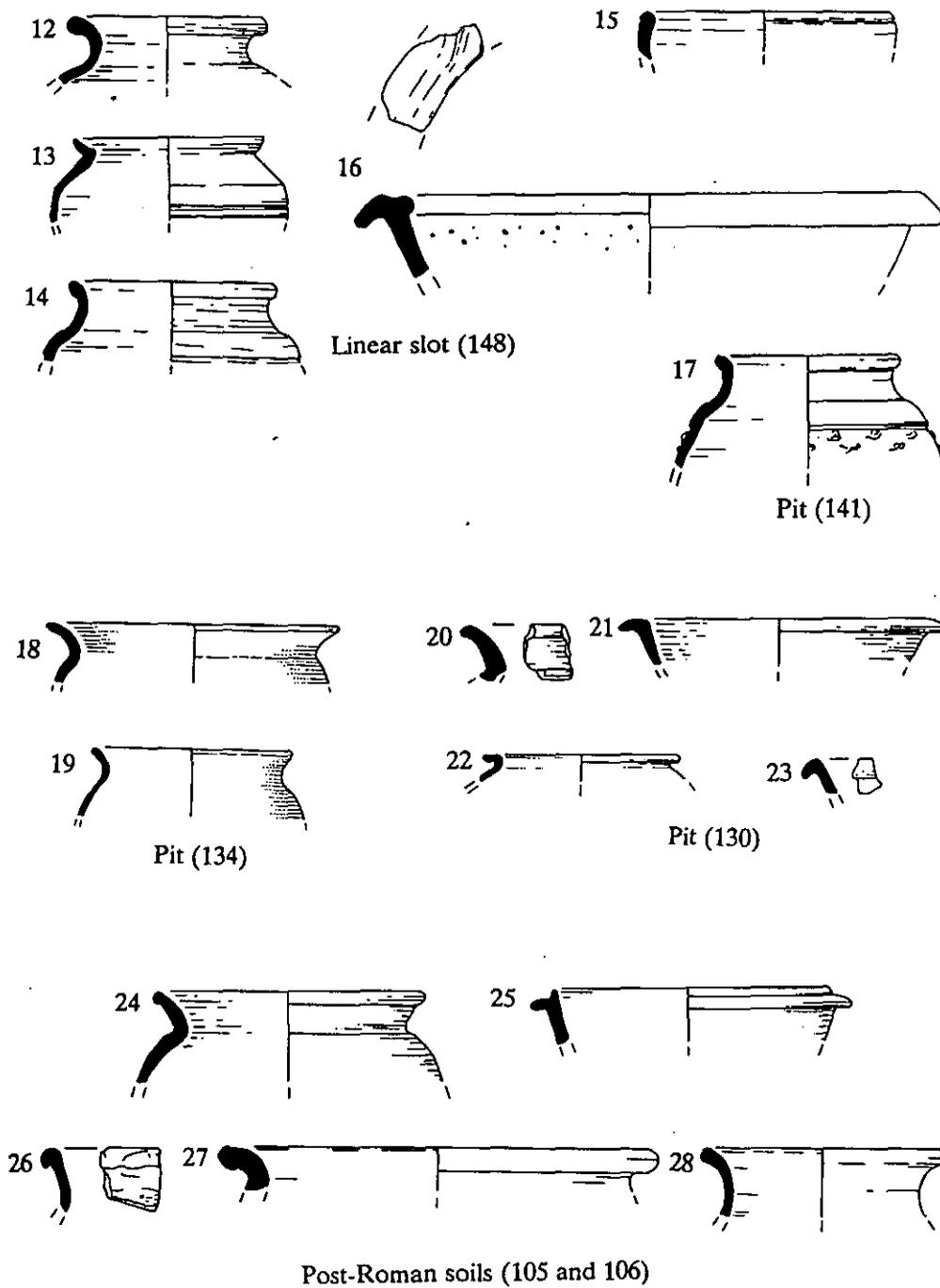


Leintwardine Community Centre Excavations HWCM 8247

Roman pottery from rubbish pit (context 162)

1:4

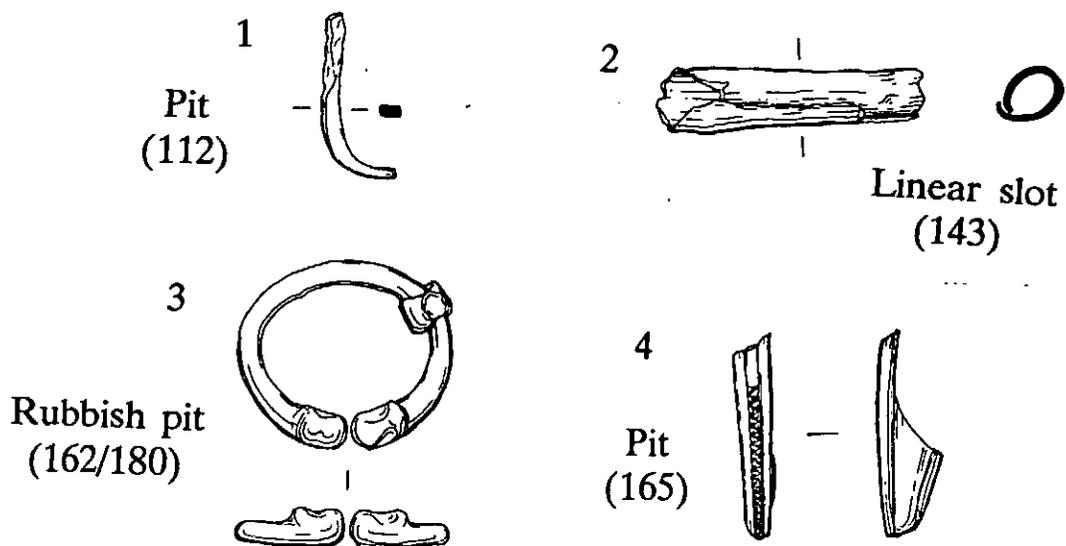
- 1-3 - Severn Valley ware (fabric 12)
- 4-6 - fine grey ware (fabric 14)
- 7 - mortarium
- 8-10 - Black-burnished ware (fabric 22)
- 11 - white ware (fabric 41) with red barbotine and eponge decoration



Leintwardine Community Centre Excavations HWCM 8247

Roman pottery from all other features 1:4

- 12-14, 17, 19 and 22 - fine grey ware (fabric 14)
- 15 - red-slipped (Gloucester type) Severn Valley ware (fabric 12)
- 16 - mortarium
- 18, 20-21, 24-25 - Black-burnished ware (fabric 22)
- 23, 26-28 - Severn Valley ware (fabric 12)



Leintwardine Community Centre Excavations HWCM 8247

Finds of copper alloy

1:1

Figure 10

# Pottery in post-Roman soils

