

# Late Iron Age and early Roman settlement at School Lane, Hartwell

by

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with contributions by

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## Abstract

*Archaeological excavation was carried out by Northamptonshire Archaeology (now MOLA Northampton) in 2010–11 on an area of late Iron Age to early Roman settlement, occupied for a short period around the late 1st century BC to the middle 1st century AD, with abandonment shortly after the Conquest. Arcs of deep curvilinear ditch apparently formed façades to two enclosures but with no surviving features to define the remainder of the circuits. Behind these façades were some subsidiary linear and curvilinear gullies, and a few pits. The features produced a small assemblage of late Iron Age hand-built wares and a larger group of wheel-finished vessels dating to the early to mid-1st century AD, largely dumped in the upper fills of the enclosure ditches, apparently part of an episode of site clearance at abandonment. The deposition of two complete upper stones from rotary querns may relate to the abandonment of Iron Age customs and the adoption of a Romanised lifestyle at a new location. The environmental evidence suggests that this was probably a pastoral settlement, perhaps seasonal, with the surrounding landscape a mixture of grass and woodland, and perhaps subsidiary to a main settlement.*

## Introduction

### Background

Northamptonshire Archaeology, now MOLA (Museum of London Archaeology) was commissioned by Bellway Homes to undertake archaeological mitigation work on a site of proposed development off School Lane, Hartwell, Northamptonshire (NGR SP 789 503, Fig 1). Geophysical survey and trial trench evaluation (Burke *et al* 2010) were undertaken in response to an application submitted by Bellway Homes for new housing and a balancing pond, and following this mitigation works were required. Fieldwork was undertaken between November 2010 and April 2011. An Assessment Report and Updated Project Design was produced by Walker and Burke (2012). All works were undertaken in accordance with the Brief prepared by the Northamptonshire County Council Planning authority (NCC 2010).

## Location

The development area is located on the eastern edge of Hartwell village within the northern half of an arable field, with the balancing pond extending to the south (Fig 1). The area designated for housing occupies an area of approximately c.2.2ha and the balancing pond c.0.15ha. The north-western boundary of the site is formed by the Hartwell Church of England Primary School, and a modern housing development. To the north-east is the Community Centre and playing fields. The site is bounded to the south-east and south-west by arable fields.

## Topography and geology

The site lies on a superficial geology of Mid Pleistocene glacial till formed of sticky brown to grey clays with clasts of sandstone, ironstone, quartzite and flint. The underlying bedrock is formed of Middle Jurassic Great Oolite group Blisworth limestone formation, not exposed in the development area. The soil type is seasonally waterlogged, and fine iron-stained network of cracks in the tills on several parts of the site may be caused by frequent drying and shrinkage events (Walker and Burke 2012).

The site slopes down gently from the northern to the southern corner, from about 125m above Ordnance Datum to 116m aOD at the level of the proposed balancing pond.

## Acknowledgements

The project was managed by Adam Yates for Northamptonshire Archaeology, acting on behalf of Bellway Homes, who have funded the excavation and post-excavation programmes. The excavation was supervised by James Burke, assisted by Adrian Adams, Paul Clements, Sam Egan, Jonathan Elston, Robin Foard, Karl Hanson, Liz Harris, David Haynes, Peter Haynes, Luke Jarvis, Lazlo Lichtenstein, Dan Nagy, Robyn Pelling, Dan Riley, Myk Riley, Heather Smith, Rob Smith, Angela Warner and Yvonne Wolframmm-Murray.

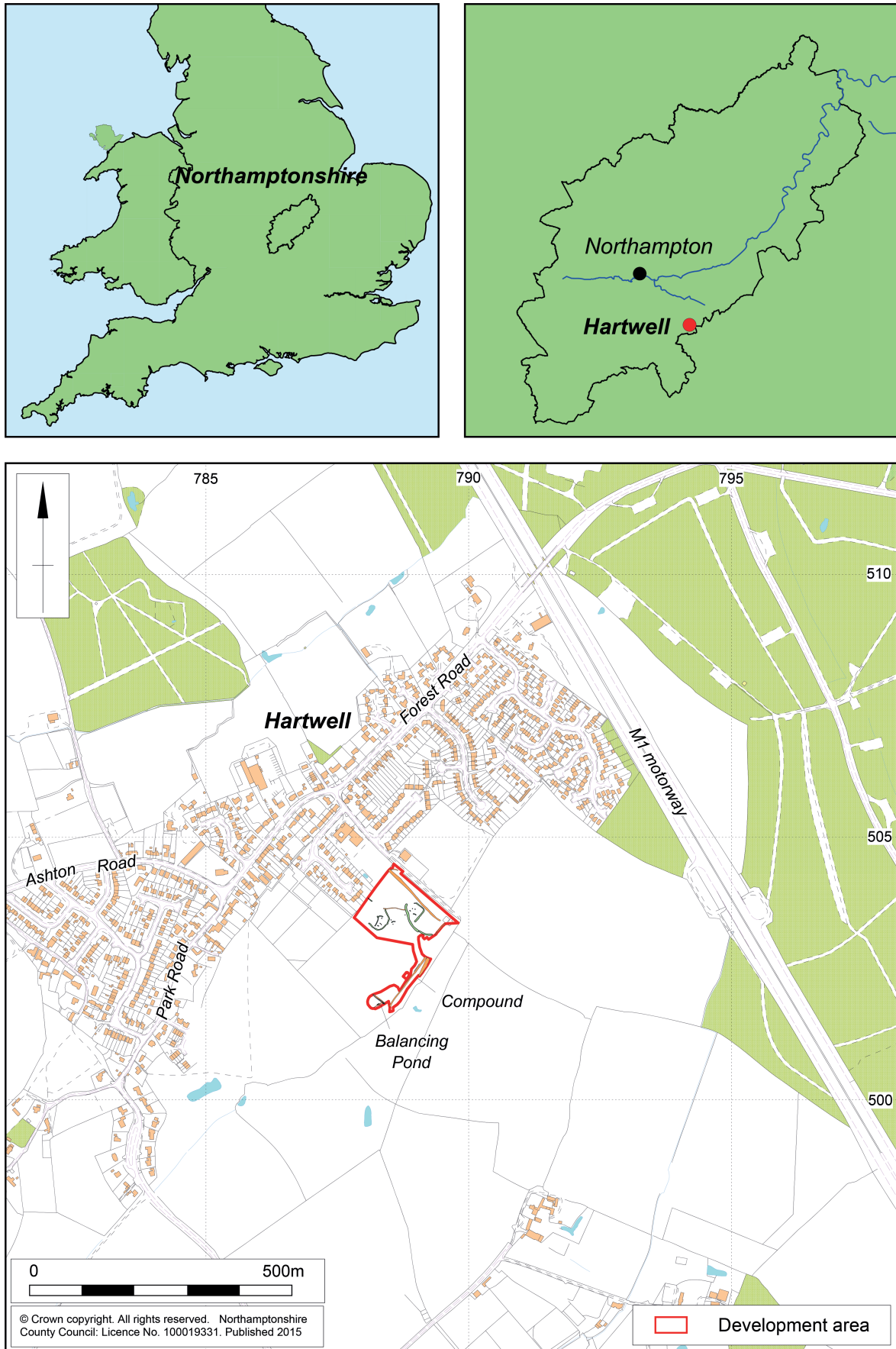


Fig 1: Site location

The client report was prepared by Claire Finn and Andy Chapman utilising the assessment report prepared by James Burke and Charlotte Walker (Finn *et al* 2015). The client report has been edited and condensed for publication by Andy Chapman. Remains of a small late medieval building, probably part of a dispersed settlement alongside a hollow-way, are reported separately (Walker 2019, this volume). The illustrations are by James Ladocha, Amir Bassir and Andy Chapman. The Iron Age pottery has been examined by Andy Chapman and the Roman pottery by Rob Perrin. Other finds have been examined by Andy Chapman, Pat Chapman and Ian Meadows. The animal bone is reported on by Karen Deighton. The full reports and tabulated data on the molluscs by Mike Allen and the charred plant remains by Ellen Simmons are available in the client report, and only summaries are provided here.

### Archaeological background

Evidence for Iron Age to Roman activity within the near landscape of School Lane is somewhat scattered, although there is more evidence for Roman activity. Surviving earthworks comprise a defended Iron Age oval enclosure, known as the Egg Rings, within Salcey Forest, around 1.2km to the east (Woodfield 1980; HER 5414). The presence of this enclosure would indicate that the forest is not ancient, and at least post-dates the Iron Age (Hall 1995). Further possible enclosures in the area, including potential ring ditches 1km to the west (HER 4793, SP781 497 and 4792, SP782 494), have been identified by aerial photography or other survey methods, and may also date to this period.

Roman coarsewares and part of a quern have been found at Bozenham in the south-west of the parish (SP76786 48299) (HER 5415/0/0), and find spots of unstratified Romano-British material were recorded through the Portable Antiquities Scheme (PAS) (8073/0/0, 5071/0/0). The possible courses of two Roman roads can be found 1.3km to the south-east (HER 4804/1/1) and 1.4km to the east (HER 4826/1). This latter road may have led to the villa at Piddington, around 4.5km to the north-east.

### Previous archaeological work

A geophysical survey, using Bartington fluxgate gradiometer and Geoscan FM256 magnetometers, undertaken by Northamptonshire Archaeology (now MOLA) in 2010 identified several linear and discrete anomalies of potential archaeological origin (Fig 2). These anomalies were further investigated by a programme of trial trenching later in the same year, which confirmed that the enclosures were of late Iron Age/early Roman date.

### Excavation methodology

The mitigation strategy was designed following discussions between Bellway Homes, Liz Mordue the Assistant County Council Archaeological Officer, and Northamptonshire Archaeology (now MOLA Northampton).

A total of 1.48ha was designated for set piece open area excavation. Removal of the topsoil and other overburden was carried out by a tracked 360-degree mechanical excavator, fitted with a toothless ditching bucket, operating under archaeological supervision. Mechanical excavation proceeded to the natural substrate or the first significant archaeological horizon.

### The late Iron Age/early Roman settlement

Two adjacent areas of activity, enclosure E1 to the east and enclosure E2 to the west, were both partially defined by curvilinear ditches notable for their depth (Fig 3). As both ditches only partially enclosed these areas, it is possible that other means were employed to form complete enclosures, perhaps hedges and/or banks, as there seems little point to these substantial façades if they did not front fully enclosed spaces.

Within the area behind each façade ditch were less substantial gullies that may have sub-divided the enclosed areas. Scattered pits and short lengths of gully were concentrated within the enclosure areas. No clear remains of buildings were recovered, but the finds indicate that there was domestic occupation on the site, even though the environmental evidence suggests that this was at a low level, or perhaps of short duration. There was also evidence of industrial or craft activities in the recovery of two rotary querns, an iron block anvil and loomweight fragments. Occupation began in the late 1st century BC and continued until shortly after the Roman Conquest, mid-1st century AD.

### Enclosure E1

Enclosure 1, to east, was defined by a curvilinear ditch in two lengths, 75 and 278, extending a total of 80m north to south-east (Fig 3). The longer northern end 75 was consistently around 3.0m wide and 1.0–2.0m deep. The two arms abutted each other, and the shorter and shallower ditch 278, to the south-east, was possibly a later addition. If the remainder of the enclosure was defined by a physical barrier, a hedge and/or bank perhaps, this had left no recoverable evidence in the natural.

Once both ditches had near fully silted, they were recut. The upper fills of the recuts were largely dumped deposits of occupation debris; dark soils containing quantities of pottery, animal bone and other finds, all dating to the early-mid 1st century AD. In places there were also quantities of limestone within the fills, perhaps derived from a stone revetment to an adjacent bank.

Within Enclosure E1 an internal division was defined by an L-shaped ditch, 268. Inside this area were three small pits or postholes and a short length of gully.

### Ditch 75

Ditch 75 was 60m long. At the northern terminal, 248, it was 2.8m wide by up to 1.98m deep, with a steep-sided U-shaped profile (Fig 4, S.51), but it became gradually shallower to the south. At the southern terminal, 54, it was still 3.0m wide but only 0.95m deep, with eroded sides and a broad flat base.

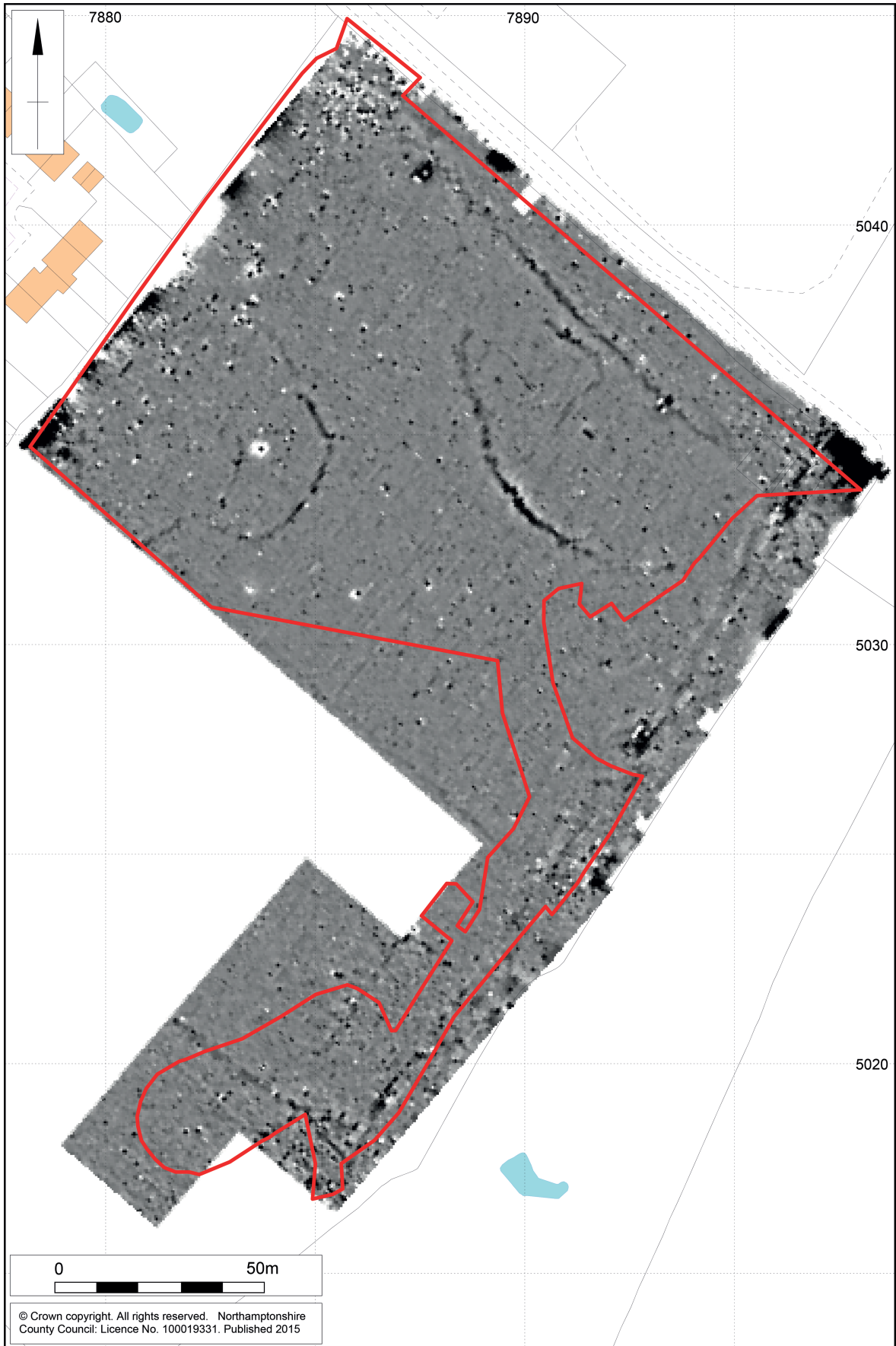


Fig 2: Geophysical survey results

At the deep northern terminal, 248, up to 0.65m of silts (251) had accumulated rapidly, and above this a thin dark secondary fill (252) was overlain by a thin layer of mixed brown and orange clay (253) containing some late Iron Age pottery (Fig 4, S.51). The upper 0.90m of the ditch fill was a homogeneous deposit (256/257) of orange-brown to grey-brown clays, perhaps a deliberate infilling of the ditch.

When only a shallow hollow survived, there was a steep-sided, U-shaped recut, 2.2m wide by 1.25m deep. The preservation of the steep edges indicates that soon after excavation it was filled to a depth of 0.75m with a distinctive dark grey-black silt (259) containing much occupation debris of pottery and animal bone, and a particularly charcoal-rich deposit (258) against the east side. The overlying deposits (260–263) were similar, but less dark, and these were sealed by a final fill (264) of dark grey silt, also containing pottery and animal bone, perhaps a final dump of occupation debris. There may have been a later shallow recut, with a fill of dark brown-grey clayey silt (265).

To the south the sequence of fills was less clearly defined, but it is likely that the recutting had carried through from the terminal, although the fills of the recut were less dark and contained less domestic debris. However,

the secondary fills of the recut did contain a quantity of limestone slabs, perhaps derived from an adjacent structure, such as a revetment along the front of a bank along the inner edge of the ditch.

Further south, in ditch 66 the sequence was similar to that at the northern terminal (Fig 5). The original ditch was 2.9m wide by 1.33m deep, and above the primary silts the secondary fills were quite homogeneous grey-brown clays (69). The lower levels were also tinged blue, as a result of chemical action due to prolonged waterlogging. The recut 70 was V-shaped, 1.7m wide by 0.85m deep. The upper secondary fill (73) was dark grey-brown silty clay containing occupation debris. This included the largest single deposit of pottery from the site, making up a third of the pottery and a half of the vessels in the entire late Iron Age/early Roman assemblage, and also a Hod Hill brooch.

At the southern terminal, ditch 54 was broad and flat-bottomed, 0.95m deep, with no apparent recutting. The secondary fill (58) contained quantities of limestone slabs, 0.20–0.30m long, but this and the upper fills were less dark and did not contain quantities of other occupation debris, suggesting that the major recutting from the north had stopped short of the original southern terminal. This may suggest the provision of an entrance between

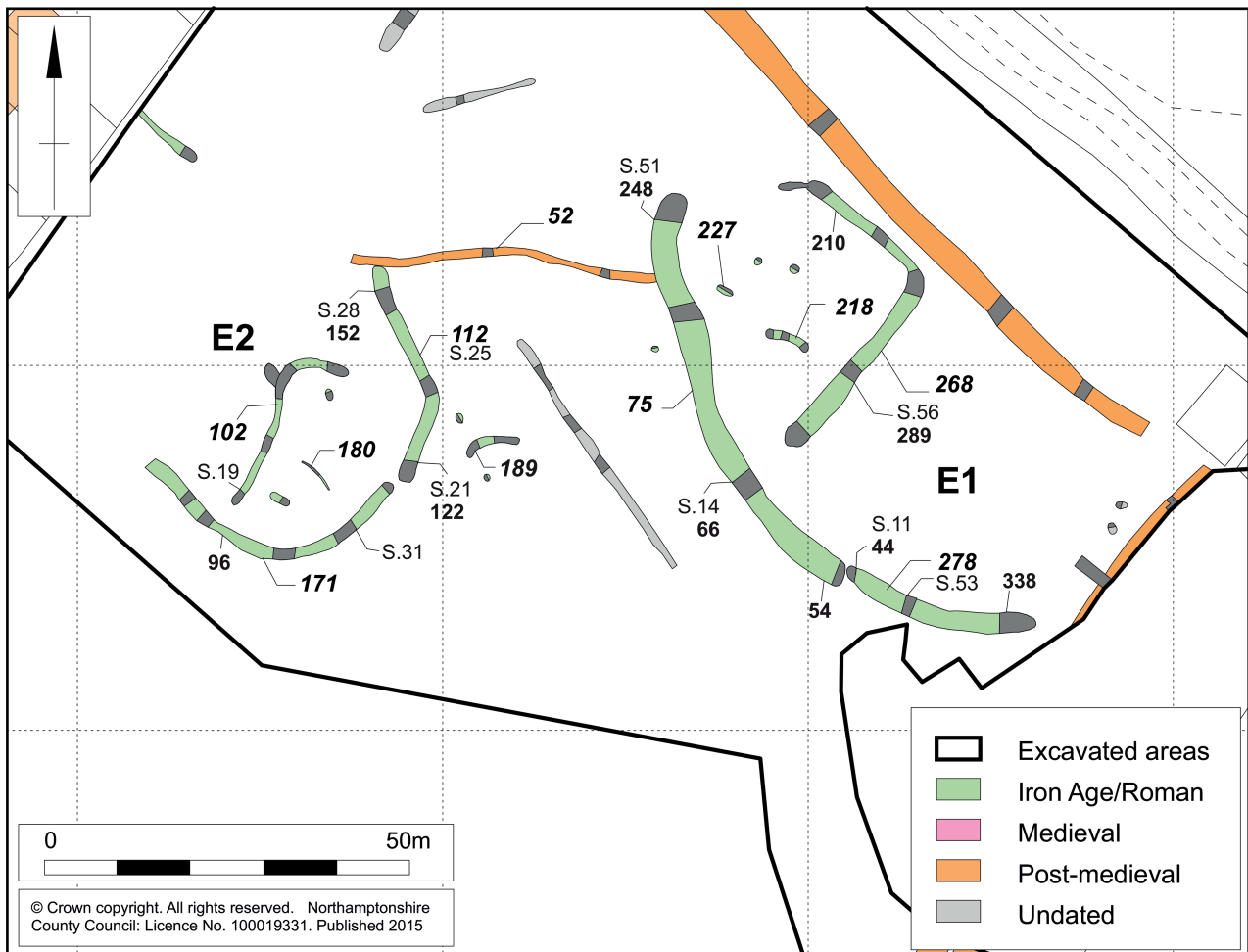


Fig 3: The Iron Age and Roman enclosures

**Section 51**

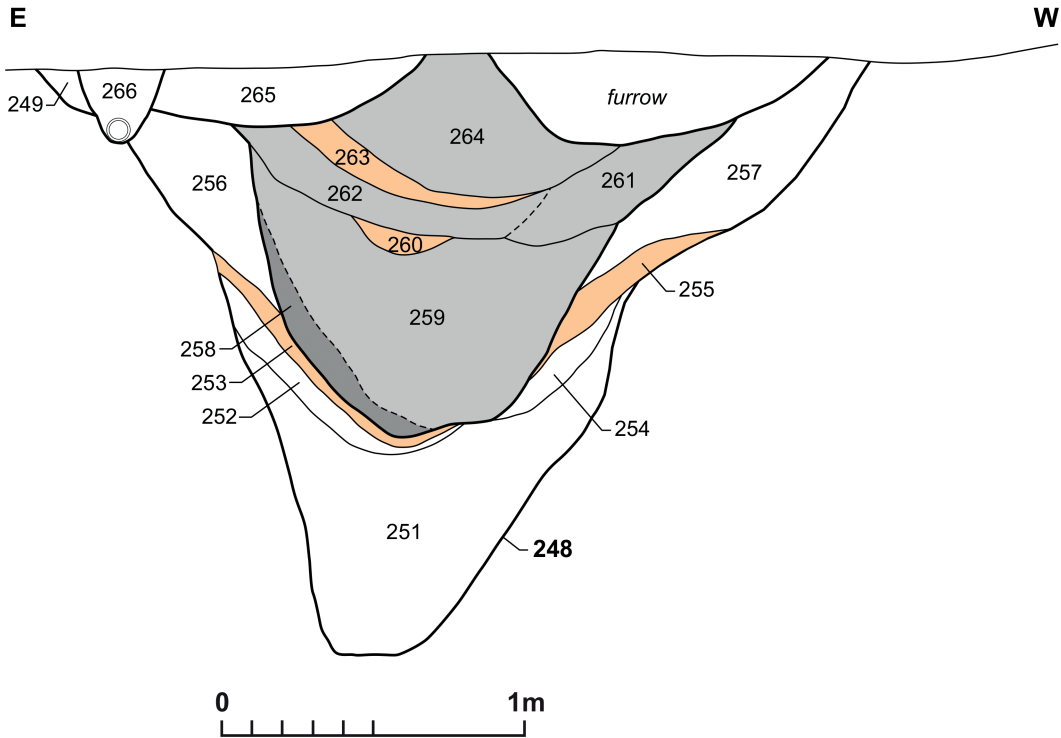


Fig 4: Section of ditch 248, enclosure E1

Key (applicable to all sections): orange =clean fills;grey/dark grey=dark loams containing charcoal, pottery and other finds

**Section 14**

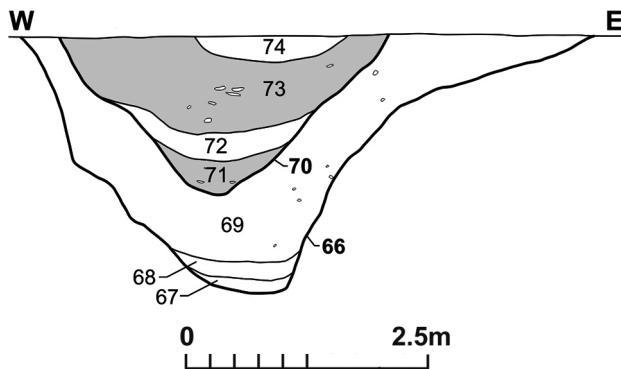


Fig 5: Section of ditch 66, enclosure E1

the recut terminal of ditch 75, lying someway north of the original terminal, and the northern terminal of ditch 278. A narrow, steep-sided recut 61 on the inner edge of ditch 54, 1.0m wide and 0.50m deep, may be related to this postulated entrance, perhaps part of a timber gateway.

**Ditch 278**

The south-eastern extension of the curving ditch system of Enclosure E1, was 27m long, c.1.5m wide and up to 1.2m deep (Fig 3). The western half of the ditch was recut, with the recut containing dark soils and occupation debris, but this recut did not extend to the eastern terminal. Of

particular interest are two intact upper stones from beehive querns. The deliberate deposition of otherwise usable and valuable querns suggests this was a final act of deposition that, along with the broader acts of dumping, perhaps also marked both the abandonment of the settlement and the Iron Age way of life.

The western terminal, ditch 44, was narrow and steep-sided, 1.6m wide by 1.2m deep. It probably silted quite rapidly, with the secondary fills producing no finds (Fig 6, S11). A U-shaped recut, 50, into the upper fills, 1.15m wide by 0.5m deep, contained a dark fill that produced pottery, animal bone and some ceramic tile.

Towards the centre, ditch 278 was up to 2.5m wide by 1.1m deep, with a U-shaped profile and eroded upper edges (Fig 6, S53). There was probably a broad recut, 1.35m wide by 0.83m deep, through the secondary fills, which contained dark soils (280) with some pottery and animal bones. In the top of this there was a deposit of particularly dark, charcoal-rich soil (281), from which came the two rotary quern upper stones (see Fig 15), as one of the last acts in the deposition of occupation debris at the abandonment.

At the eastern terminal, ditch 338 was 2.3m wide by 1.35m deep, with eroded upper edges. This area was particularly wet, with the blue tinge of the lower fills indicating that it was permanently waterlogged. There was no evident late recut that contained quantities of occupation debris, although the upper fill of orange-brown clay did contain some pottery.

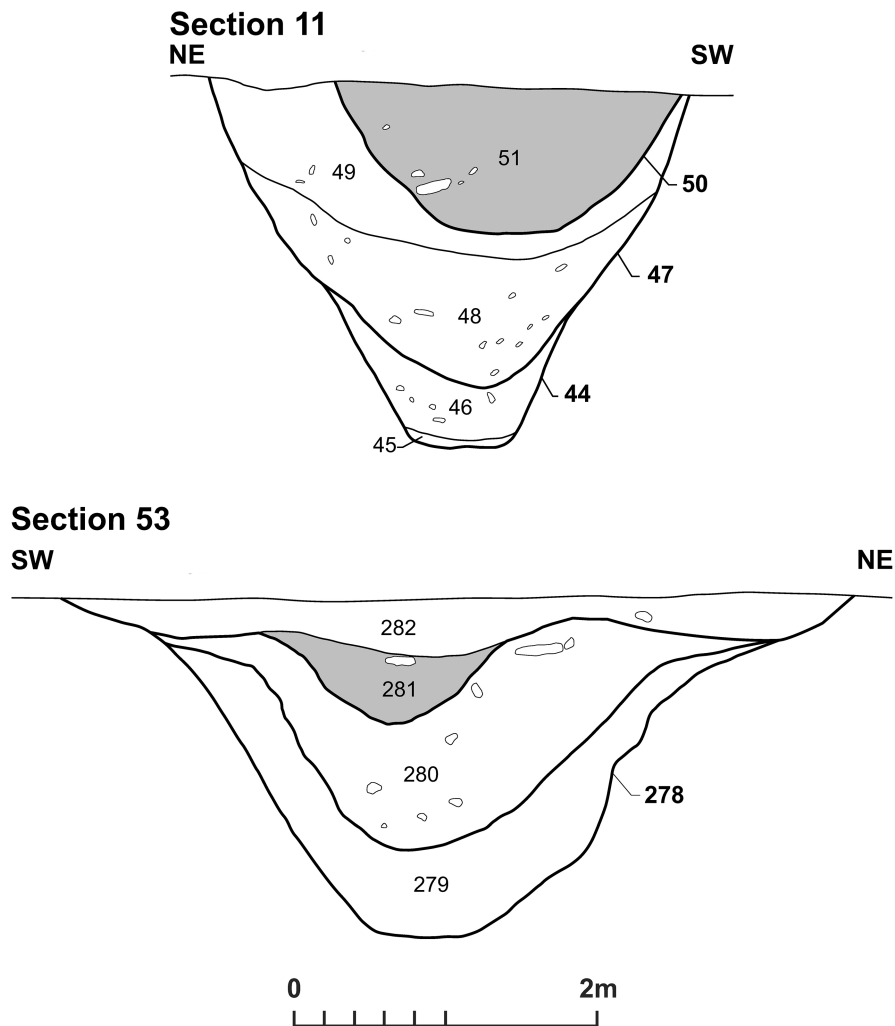


Fig 6: Sections of ditch 44 and 278, enclosure E1

### ***L-shaped ditch 268***

The sub-division within enclosure E1, extended 30m by 20m with the ditch up to 1.6m wide by 1.3m deep, with a steep-sided U-shaped profile, even undercut in places, probably as a result of side collapse (Fig 7, 268).

To the south, ditch 289 was 1.86m wide by 1.4m deep; the narrow steep-sided cut had silted rapidly (Fig 8, S56). Some pottery dating to the late Iron Age (1st century BC) came from the secondary fills (293), (294) and (297). This contrasts with the later material (early-mid 1st century AD) in dumped fill (301) within the recut ditch 299, which was narrow and steep-sided, 1.05m wide by 0.90m deep. The bulk of the fill (301) was of grey clayey silt with some charcoal and also pottery and animal bone, probably contemporary with the dumped deposits in the main ditch system to the south and west. At the southern terminal the ditch was 1.2m wide by 0.9m deep, with a possible recut almost the same depth as the original ditch.

The northern arm was narrower and shallower, 1.3m wide by 0.9m deep, but retained the same profile. At the terminal, ditch 210, a recut through the upper fills, 1.0m wide by 0.5m deep, again contained occupation debris of pottery and animal bone in grey-black silty clay, with

charcoal. A small gully extended beyond the northern terminal for a further 3.5m.

### ***Features inside enclosure E1***

In the area delineated by the enclosure ditch and the L-shaped ditch was a small group of features comprising two shallow scoops and two short stretches of deep steep-sided gullies, 227 and 218. The two scoops were circular up to 1.0m across, but no more than 0.2m deep, with fills of dark silty clay.

An elongated pit, 227, was 2.12m long, 0.60m wide by 0.64m deep, with steep to nearly vertical sides and a concave base. After a short period of silting, the pit was filled with dumps of charcoal-rich silty clay containing pottery and bone (229); the pit was later recut at least once.

Gully 218 was 6.6m long, 0.32m wide by 0.30m deep, with steep sides and a flat base. The fill of charcoal-rich clay contained a dump of cobbles and pieces of limestone in the base at the western end. The upper fills of both pit 227 and gully 218 included burnt material, perhaps deriving from domestic or occupation activity.

A long U-shaped gully, 52, aligned east-west, may have linked enclosures E1 and E2. However, no dating



Fig 7: Ditch 268, looking south-west, enclosure E1

### Section 56

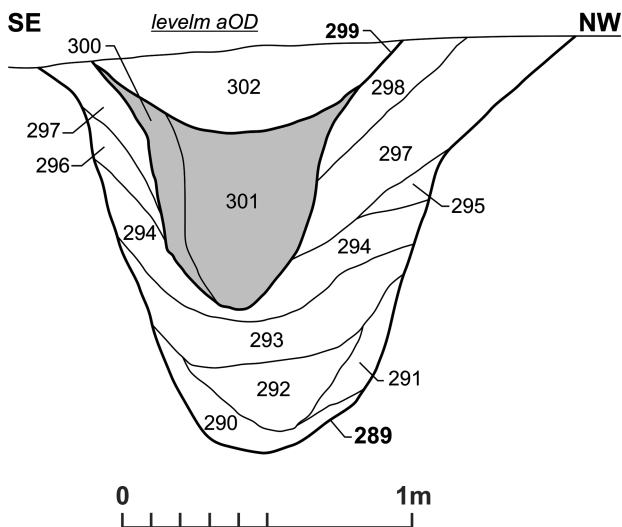


Fig 8: Section of ditch 289, enclosure E1, L-shaped ditch

evidence was recovered leaving it uncertain whether this feature was contemporaneous to the enclosures or of a later date.

### Enclosure E2

Enclosure E2 comprised a curvilinear ditch with a central, narrow, south-easterly facing entrance just over 1.0m wide, with a stone surface on the entrance causeway (Fig 3). The area enclosed by the ditches was *c.*41m long by *c.*26m wide. As with Enclosure E1, the north-western side of the enclosure was undefined by any surviving feature. The depth of the excavated ditches makes it unlikely that any other substantial cut feature had been destroyed by ploughing, and it therefore seems probable that the enclosed area was partly defined by a hedge and/or a bank,

or some other method that left no archaeological trace.

Inside the enclosure was a curvilinear ditch which may have served to sub-divide the area. This enclosure produced a much wider range of material goods dating to the late Iron Age/early Roman period, showing a level of Romanisation, and was probably the focus of occupation towards the middle of the 1st century AD, perhaps even following the backfilling of the ditches of enclosure E1 with occupation debris from the original late Iron Age settlement.

### Ditch 112

The north-eastern arm was 32m long. To the south it was 2.10–2.40m wide by 1.12–1.27m deep with steep sides and a narrow base, while to the north the ditch was shallower with very different fills.

At the entrance terminal, 122, the ditch was at its deepest, 2.40m wide by 1.27m deep, and significantly deeper than the opposing terminal, with a broad-based U-shaped profile (Fig 9, S21). The primary fills of this ditch (123) were blue-grey, as a result of waterlogging. There was a broad recut 127, 0.75m deep, the same depth as the opposing terminal, and a distinctive final fill (130) of dark-grey clayey silts containing pottery and animal bone.

Further north, the steep-sided, flat-bottomed profiles of both the original ditch 112 and the recut 117, were well preserved, as a result of rapid silting and dumping (Fig 9, S25). Both the upper secondary fill (120) and the final fill (121) contained pottery, with the final fill a distinctive black silty clay with occupation debris. At its northern end, the ditch was shallower, 152, and had not been recut (Fig 9, S28).

### Ditch 171

The western arm was 40.0m long, up to 2.10m wide by 1.25m deep (Fig 3). At the eastern entrance terminal, 133, the ditch had a broad U-shaped profile, 1.3m wide by 0.75m deep. The secondary fills in this area appeared to be largely the result of natural silting and there was no clear evidence of recutting. The final fill (135) was of darker grey-brown clayey silt, which contained pottery, animal bone and other finds, presumably from a final backfilling with occupation debris.

There was a similar sequence to the south, although here the ditch, 171, was V-shaped, 1.15m wide by 1.25m deep (Figs 10 and 11, S.31). The primary fill (172) contained a triangular loomweight, and the secondary fill (173) was dark grey and contained pottery. As at the terminal, the final fill (174) was of dumped black silty clays. Similar sequences of deposits were also seen further to the west, and an iron bar came from the dark final fill (100) of 348, a recut of 96 at the southern corner of the ditch.

The narrow south-eastern entrance was just over 1.0m wide with a causeway of compacted stone (131), which included pieces of limestone and chalk (Fig 12).

### Internal ditch 102

The sinuous internal ditch, with the north-eastern end curving to the east, was over 28m long and up to 0.78m wide by 0.60m deep. It had a wide U-shaped profile to the south but was particularly steep-sided to the north.



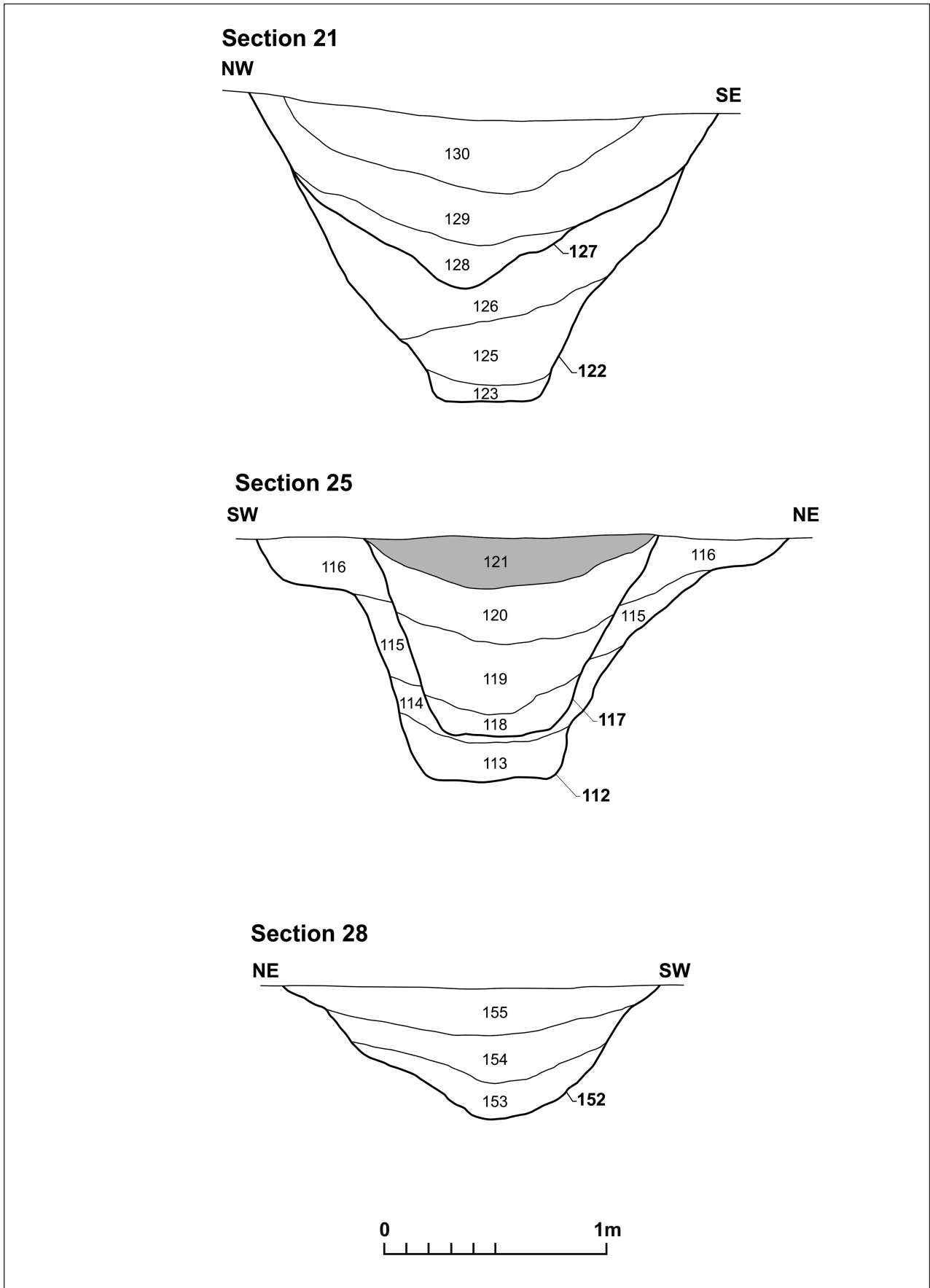


Fig 9: Sections of ditch 112, enclosure E2



Fig 10: Ditch 171, enclosure E2, looking south-west



Fig 12: Surfaced entrance (131) to enclosure E2

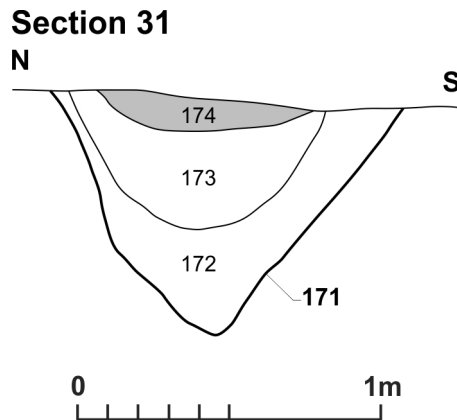


Fig 11: Section of ditch 171, enclosure E2

### The Iron Age pottery by Andy Chapman

Twenty-eight contexts produced 290 sherds of hand-built Iron Age pottery, weighing 4.15kg (Table 1). Much of this material can be attributed to the 1st century BC, but the group also includes large thick-walled storage jars dating to the early 1st century AD, contemporary with a range of wheel-finished vessels, reported on separately. Some of the smaller vessels are also likely to date to the 1st century AD. This site therefore shows a transition from hand-built wares in traditional shelly fabrics to the wheel-finished forms of the early 1st century AD, although also including the new forms manufactured in the old shelly fabrics.

#### Fabrics

**Fine shell:** containing sparse finely-crushed shell, measuring no more than 1mm, and used for small jars and bowls, usually thin-walled and well finished, often with smoothed to burnished surfaces. 86 sherds, 29.7%

**Medium to coarse shell:** containing dense medium to coarse shell, measuring 2–7mm, and used for a wide range of jars, with the coarser shelly wares usually thick-walled storage jars. 98 sherds, 33.8%

**Grog:** containing pellets of grog sometimes combined with finely-crushed shell. Occurs in some smaller jar and bowl forms and particularly distinctive in thick-walled, well finished storage jars that date to the 1st century AD. 86 sherds, 29.7%

**Sandy:** containing sand, with inclusions of small quartz grains. Two contexts produced sherds from a couple of thick walled, well-finished storage jars. 8 sherds, 2.8%

**Calcareous and flint:** containing small rounded pellets of chalk and some angular flint. A single vessel, 12 sherds, 4.1%

As would be expected of a Northamptonshire assemblage, nearly two-thirds of the material, 63.5%, is in shelly fabrics, covering the usual range from sparse finely-crushed shell in the smaller thin-walled jars, up to dense

There were quantities of pottery, charcoal, animal bone and burnt clay in the dark upper and final fills, particularly at the southern end. From the southern terminal there is an iron anvil block (see Fig 18); and near the northern terminal there was half of a bottom stone from a rotary quern (see Fig 17), dumped after being split in two to render it unusable.

It can be suggested that the curving northern half of ditch 102 might have flanked a roundhouse, perhaps 7–8m in diameter.

#### Features inside enclosure E2

Within the area defined by the enclosure and internal ditch were a small number of other features. A short length of gully 180, 6.0m long, 0.54m wide by 0.18m deep, had steep sides and a flat base. The upper fill contained moderate amounts of charcoal and burnt stone as well as some pottery. There were a small number of other shallow features. None of these appeared to be structural.

#### External features

To the immediate east of enclosure E2, a length of curving gully 189 contained some fragments of broken up querns.

Table 1: Quantification of Iron Age hand-built pottery

Fabric Feature group	Shell fine	Shell coarse	Grog	Sandy	Flint	Total Sherds	Weight (g)
<b>Enclosure E1</b>							
<b>Sherds</b>	<b>25</b>	<b>72</b>	<b>63</b>	<b>2</b>	<b>0</b>	<b>162</b>	<b>2615</b>
% of all fabric	29.1	73.5	73.3	25.0	0.0	55.9	63.0
<b>Enclosure E2</b>							
<b>Sherds</b>	<b>32</b>	<b>26</b>	<b>13</b>	<b>6</b>	<b>12</b>	<b>89</b>	<b>1103</b>
% of all	37.2	26.5	15.1	75.0	100.0	30.7	26.6
<b>Other features</b>							
<b>Sherds</b>	<b>29</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>433</b>
% of all	33.7	0.0	11.6	0.0	0.0	13.4	10.4
<b>Total</b>	<b>86</b>	<b>98</b>	<b>86</b>	<b>8</b>	<b>12</b>	<b>290</b>	<b>4151</b>
%	29.7	33.8	29.7	2.8	4.1		

inclusions of large shell fragments in the thicker-walled storage jars. Also, it should be noted that the proportion of shelly wares would have been even higher if it hadn't been for the presence of many grog tempered storage jars, and also in two instances in sandy fabrics, all dating to the 1st century AD. The calcareous and flint tempered fabric appears in a single vessel, see below.

### Forms and chronology

The single calcareous and flint tempered vessel from gully 180 in enclosure E2 is unlike any of the other material from the site. The fabric has a grey core and interior and an outer surface that is mottled light grey to light brown with fine impressions of grass or other vegetable matter. The vessel is crudely-made and thick-walled, 10–13mm thick, with straight sides and a rounded and uneven rim, giving a cylindrical profile, perhaps some 200mm in diameter (Fig 13, 1). This vessel is unique in the assemblage and the nature of the fabric indicates that it has been imported. This may have been a cylindrical container for transporting salt, a *briquetage* vessel, although the sherds show no sign of bleaching from the chlorine in the salt. The fabric would be closest to the shelly limestone-gritted Fenland fabric, which was in use during the Iron Age (Morris 2001, 351–375).

The vessel forms, when evident, include a significant proportion of smaller jars and distinctive thin-walled rounded bowls, with simple rounded or beaded rims, generally in fabrics containing sparse finely-crushed shell. A majority of these smaller vessels are dark grey-black throughout, usually with smoothed to burnished surfaces (Fig 13, 2). Unusually, on a vessel from the recut of ditch 171, enclosure E2, the body had been deliberately roughened or rusticated with dense near vertical scoring, set beneath a plain upright rim (Fig 13, 3). This vessel might be a hand-built bowl dating to the early 1st century AD.

The smaller vessels with smoothed/burnished surfaces also include a number in fabrics with oxidised external surfaces, including a closed globular bowl with a simple rounded rim from ditch 268 in enclosure E1 (Fig 13, 4).

The assemblage also contains a range of jars, finished less well and in fabrics containing coarser shell inclusions, such as a shouldered jar from ditch 47 (Fig 13, 5). These also have simple rounded or flattened rims, and flat bases.

A large mixed group from pit 227 in enclosure E1 comprised several vessels displaying a range of forms from the late Iron Age (1st century BC), such as thin-walled globular bowls with everted rims in a grey-black fabric and smooth surfaces. Some thick-walled jar sherds with scored decoration are also part of this assemblage, alongside grog-tempered vessels, and a well-finished, thick-walled storage jar, which probably dates to the early 1st century AD.

The thicker-walled sherds from larger storage jars fall into two distinct groups. There are body sherds and a few rim and base sherds from coarse storage jars containing dense large shell inclusions pieces of shell erupting through the surfaces, with walls up to 12mm thick. These are typical of middle to late Iron Age assemblages. This vessel type contrasts with even larger jars, such as those from pit 227, within enclosure E1. These are all very thick-walled, with body sherds 15–20mm thick, and are usually in a variation of the grog fabric or more rarely a shelly fabric. While hand-built, they are better finished than the earlier storage jars, perhaps finished on a wheel. They often have uniform oxidised external surfaces, bright orange-brown in colour, which contrast with the mottled uneven surfaces of the earlier storage jars. These larger storage jars date to the early 1st century AD, and are contemporary with the smaller wheel-turned vessels.

A small bowl, from soil layer (175) within enclosure E2, is in a late Iron Age fabric and bowl form. However, the rim has a shallow channel and fine oblique incisions around the outer edge, placing it as an early example of a channel-rim jar from the earlier to mid-1st century AD, but manufactured within the Iron Age potting tradition (Fig 13, 6). Several similar vessels are also present within the late Iron Age/early Roman assemblage, but usually showing signs of at least wheel-finishing. It could be suggested that the globular bowl, often uniformly grey-black with smoothed to burnished surfaces and sometimes with curvilinear decoration, which is so

characteristic of the late Iron Age in the 1st century BC, was perhaps largely supplanted in the early decades of the 1st century AD by similarly sized globular bowls, often still grey-black and burnished, with the addition of channel-rims and sometimes oblique slashes around the outer edge of the rim. The transition seems to have been gradual, with early examples hand-built in the Iron Age tradition, later examples in the same Iron Age potting tradition, but wheel-finished, and finally evolving to the

fully-developed wheel-turned channel-rim jars by around the middle of the 1st century AD.

### Pottery distribution

The curvilinear boundary ditch of enclosure E1 produced late Iron Age hand-built pottery in small quantities from the primary and lower secondary, with larger quantities of

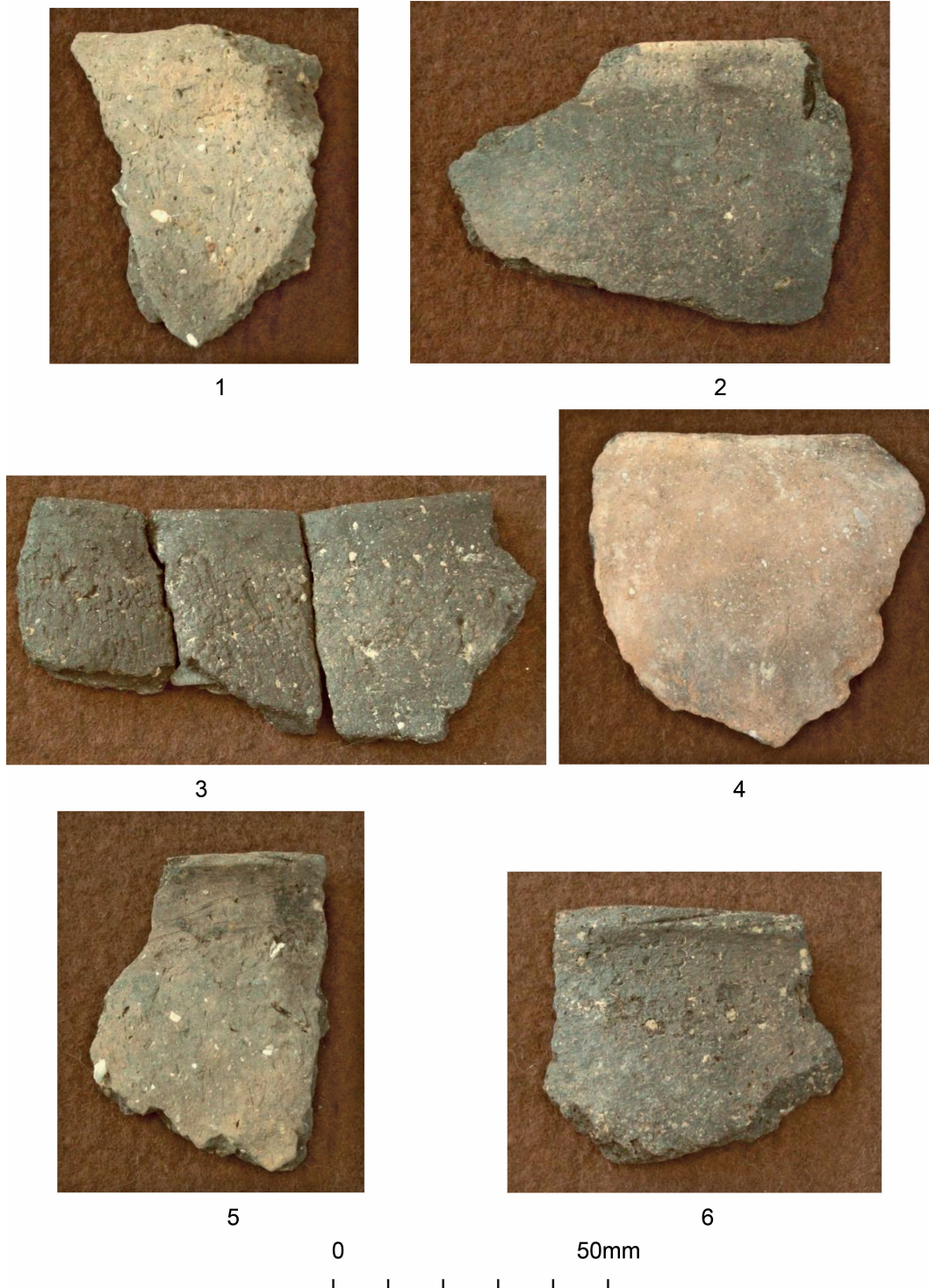


Fig 13: The Iron Age hand-built pottery

wheel-finished pottery or the early to mid-1st century AD from the upper fills of the latest recuts.

In contrast, the fills of the curvilinear boundary ditch for enclosure E2 tended to produce wheel-finished pottery of the early to mid-1st century AD along with some residual hand-built pottery.

This suggests that enclosure E1 was in use in the 1st century BC, with recutting probably occurring in the early 1st century AD, perhaps at the same time as the addition of a second enclosure E2.

### The late Iron Age and early Roman pottery by Rob Perrin

A number of cut features, comprising ditches, gullies and pits, together with other layers or surfaces, provided an assemblage of some 1426 sherds of wheel-finished pottery weighing 21.5kg, with an estimated vessel equivalent (EVE), based on rims, of just under eight.

#### Fabrics

The fabrics represented are various grogged, shell-gritted, reduced and oxidised wares. No regionally-traded wares or imports from continental sources are present (Table 2). At least ninety percent of the pottery comprises grogged wares, shell gritted wares and fabrics with a combination of both tempers. Similar fabrics occur in the Iron Age (see Chapman, this report) and it is possible that some of the pottery discussed here is of Iron Age rather than later date.

A number of sub-types occur in the grogged wares, defined by colour rather than noticeable variations in the grog temper. A dark brown grogged ware and a reddish-yellow ware with a grey core are the two most common fabrics.

Three varieties of shell-gritted ware occur, based on the size of the shell inclusions. The colour of the fabrics is predominately dark brown or black, though some vessels have oxidised surfaces and, occasionally, different fabric core colours. Most of the fabrics are a mixture of grog and shell temper and are also dark brown in colour, though a reddish-yellow fabric with a grey core also occurs. The

ratio of grog to shell temper varies and one fabric contains very large shell pieces.

The oxidised wares comprise a range of buff, pink, reddish-yellow and red-brown fabrics. A lot of the oxidised wares have a reduced grey core. The reduced wares include sherds in a grey micaceous fabric and a coarse dark brown fabric.

#### Forms

The vessel forms were recorded using simple form codes. Approximately 62 vessels were noted, based on a count of separate rims, comprising 44 jars, 11 jars or bowls, five bowls, one beaker and one dish. Twenty-eight occur in grogged wares, 22 in shell-gritted wares, six in mixed grog and shell wares and six in oxidised wares (Fig 14).

Within the grogged wares, many of the 20 jars and four jars or bowls are noticeably globular in shape. Some of these have no neck and a simple bead rim and one vessel has diagonal notches on the rim. Other jars have either short or long necks with more definite curved rims and neck or shoulder cordons. Some sherds have vertical scored or combed decoration, sometimes within panels. The grogged ware jars also include three large storage vessels, some only represented by bases. The remaining grogged ware vessels comprise a sherd from a possible butt-beaker, a dish and a bowl with plain rims and a bowl with a plain rim, reminiscent of a samian ware form 30, but having a cordon in place of an ovolo.

Most of the 17 jars and four jars or bowls in the shell-gritted wares are also globular in shape and neckless. Twelve have a slight lid-seating and five have diagonal notches on the rim; one has a rim with impressed finger-tipped decoration. Two of the jars are of storage vessel size and the other shell-gritted ware vessel is a bowl with a bead rim. A few shell-gritted ware sherds have scored decoration or panels of diagonal close rilling between horizontal grooves and one sherd has a horizontal row of finger impressions around the girth.

The vessels in fabrics with a mixture of shell and grog temper comprise two jars and a jar or bowl with slight lid-seating, a storage jar, a curved-sided bowl and a jar or bowl with a flat-top rim. All of the jars and jars or bowls

Table 2: Summary of the late Iron Age/early Roman pottery

Fabric	No	%site	W (g)	%site	Rim	%site	Base	%site
Grogs	597	41.9	11378	52.8	309	39.4	434	58.4
Shell	388	27.2	5028	23.3	264	33.6	169	22.8
Grog + Shell	313	22.0	4492	20.8	145	18.5	107	14.4
Oxidised	118	8.3	575	2.7	59	7.5	33	4.4
Reduced	4	0.3	28	0.1	8	1.0	–	–
Reduced + grog	6	0.4	58	0.3	–	–	–	–
<b>Total</b>	<b>1426</b>		<b>21559</b>		<b>785</b>		<b>743</b>	

are globular in shape and two have diagonal notches on the rim; one of the latter was used as a cremation urn. A base sherd is from a vessel with a definite footring.

Two of the four jars in oxidised wares have triangular or slightly undercut rims and a slight lid-seating; the other two have simple plain or bead rims. Two of the jars and a jar or bowl, have neck cordons. The remaining oxidised ware vessel is a possible bowl with a flat-topped rim. There were no rims in the reduced ware fabrics, but one sherd had a cordon and traces of decoration comprising barbotine vertical lines.

### Sources

It is likely that most of the pottery was locally produced. There are a large number of known kiln sites within a 15km radius of Hartwell, in the vicinity of modern-day Northampton, including Hardingstone, Hackleton, Little Houghton and Quinton, (Swan 1984, 144–6) which together produced a range of wares and vessel types. Some of the pottery may not have been fired in kilns, however, and their production may therefore have left little obvious or permanent traces.

### Chronology

The globular vessels with simple plain or bead rims are essentially Iron Age in form and some of the fabrics appear similar to those described in the report on the Iron Age pottery. Numerous parallels from local sites can be cited for the jars with diagonal notches on the rim, eg Weekley (Jackson and Dix 1986–7, fig 39, 139), Quinton (Friendship-Taylor 1974, fig 10. 26–33; Friendship-Taylor 1979, fig 82, 44–7), and Wootton Hill Farm (Jackson 1988–9, fig 13, 18–19). Vessels with impressed finger-tipped decoration also occur at many local sites, such as Twywell (Jackson 1975, fig 24, 12 and 17), and Hardwick Park (Foster *et al* 1977, fig 12, 40). Vessels with a horizontal row of finger impressions around the girth also occur at Hardwick Park (Foster *et al* 1977, fig 15, 20) and Moulton Park (Williams 1974, fig 16, 78), though these vessels also have scoring below. All of the above parallels are from contexts spanning the Conquest period.

The curved rim vessels with neck and shoulder cordons conform to types commonly called ‘belgic’ and, together with the possible butt-beaker and possible imitation samian form 30, suggest at least some Roman influence.

Overall, the range of fabrics, the predominance of grogged and shell-grogged wares and the predominant vessel forms, together with the absence of regional and continental imports, suggest an early to mid-1st century date range for most of the assemblage.

### Site function and status

The pottery has an average sherd weight of around 15g, though this may partly be due to the presence of the lower parts of a number of vessels. The figure does suggest, however, that the assemblage does not just comprise material that had been lying around for some time before it was deposited. The range of wares and vessel form range, together with the lack of traded wares, suggests that most of this activity was basic utilitarian domestic and agricultural. The lack of traded wares also suggests little contact outside of the local area.

### Selected group and pottery of intrinsic interest

Only one deposit warrants further discussion, though there are some other vessels of intrinsic interest. The fill (73) of the re-cut 70 of ditch 66, on the northern length of enclosure E1, contained around a third of all the pottery and half of the vessels, based on the count of separate rims, of the site assemblage as a whole (Table 3).

Shell-grogged wares account for around a third of the deposit by sherd count and weight, while grogged wares comprise a further third by sherd count but a half by weight. All of the vessels are jars excepting a buff grogged are possible butt-beaker and a dark brown grogged ware dish or lid (Fig 14, 4). Seven of the jars are in the reddish-yellow grogged ware and include two storage jars, a lid-seated (channel-rim) jar with diagonal notches on the rim and a narrow-mouthed jar (2). Six more jars are in the dark brown grogged ware (including 1) and another vessel in buff grogged ware has a horizontal row of finger impressions around the girth with a cordon above (3).

Table 3: Quantification of the late Iron Age/early Roman pottery from Enclosure E1 recut 70 of ditch 66

Fabric	Sherds	%	Weight (g)	%	Rim (g)	%	Base (g)	%
Red–yellow grog	62	14.7	1304	18.5	83	18.7	40	22.4
Dark brown grog	71	16.8	776	11.0	99	22.3	–	–
Buff grog	22	5.2	708	10.1	24	5.4	37	20.7
Other grog	7	1.7	736	10.5	–	–	–	–
Grog and Shell	7	1.7	158	2.2	21	4.7	–	–
Small shell	82	19.4	1550	22.0	126	28.4	37	20.7
Large shell	54	12.8	952	13.5	55	12.4	32	17.9
Oxidised	86	20.4	294	4.2	30	6.8	–	–
Other	31	7.4	560	8.0	6	1.4	33	18.4
<b>Total</b>	<b>422</b>		<b>7038</b>		<b>444</b>		<b>179</b>	

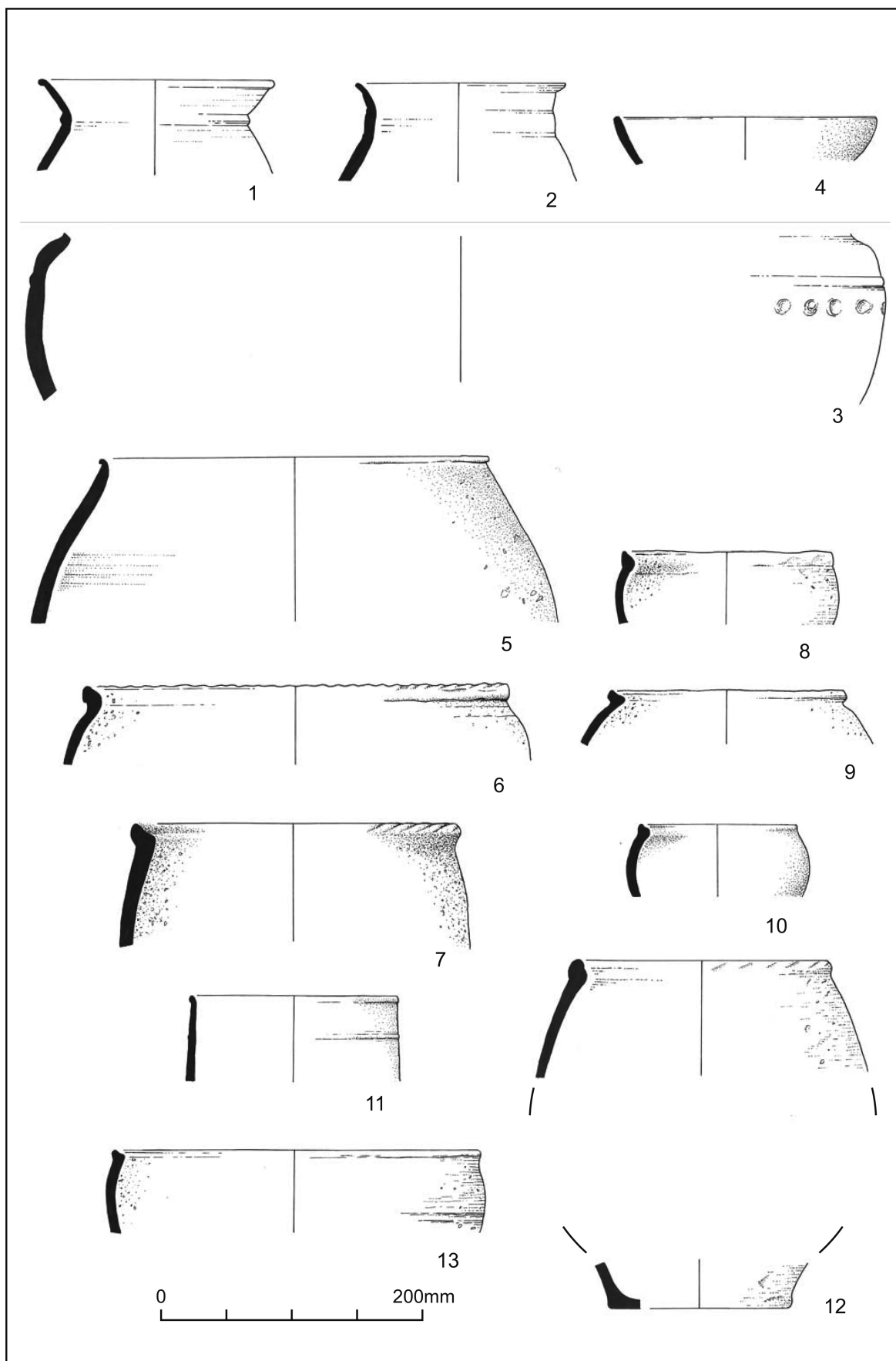


Fig 14: The late Iron Age/early Roman pottery

The shell-gritted ware includes a storage jar and seven lid-seated jars (6–10), three with diagonal notches on the rim. Another shell-gritted jar has no neck and a simple bead rim (5). There is one vessel with a triangular rim and short neck, possibly a beaker, in an oxidised reddish-yellow ware. It is decorated with zones of close vertical lines or combing, separated by horizontal grooves or cordons (11).

### Catalogue of illustrated late Iron Age/early Roman pottery (Fig 14)

#### Pottery from fill (73) of enclosure ditch re-cut 70 of ditch 66, enclosure E1

- 1 Necked jar, grogged ware, burnished and grey external surface. Munsell 10YR4/2 with 10YR6/4 core edges and N4 core
- 2 Necked jar, grogged ware, orange-brown surfaces. Munsell 2.5YR6/6 with N4 core
- 3 Very large jar/bowl, grogged ware, light brown to orange-brown surfaces, fingertip impressed decoration. Munsell 7.5YR6/4 with 10YR4/1 core
- 4 Shallow dish/lid, grogged ware. Munsell 10YR3/2, 4/2
- 5 Large jar, shell gritted, light brown external surface with grey patches, grey interior. Large shell >6mm. Munsell 10YR4/2–5/2 with 7.5YR6/2–6/4 external surface
- 6 Channel-rim jar, hand finished, orange internal surface and blackened exterior, shell gritted. Medium shell >3mm. Munsell 7.5YR4/2 externally and 2.5YR6/6 internally
- 7 Channel-rim jar, hand finished, light greyish-brown surfaces, diagonal slashes on rim, shell-gritted. Mainly small shell but some >4mm. Munsell 7.5YR6/4 with a 10YR5/2 core
- 8 Globular channel-rim jar/bowl, wheel-finished, brown-grey surfaces, shell-gritted. Small shell. Munsell 10YR3/1–3/2 with 2.5YR4/4 patches internally
- 9 Globular, channel-rim jar/bowl, grey surfaces, shell-gritted ware. Small shell. Munsell 10YR3/1–3/2
- 10 Small globular, channel-rim jar/bowl, grey surfaces, shell-gritted. Small shell. Munsell 10YR3/1–4/1
- 11 Reddish-yellow ware. Munsell 5YR6/6, 7.5YR6/4 with a N4 core (Small pieces, not illustrated), cf Hardwick Park (Foster *et al* 1977), fig 12, 45 for form and fig 12, 44 for decoration

#### Vessels of intrinsic interest from other contexts

- 12 Large jar, orange surfaces, diagonal slashes on rim, grog with large shell >5mm. Vesicular, abraded. Munsell 2.5YR5/6, 6/6 with a 10YR5/2 core. Cremation urn. Fill (121) of re-cut 117 of 112, east arm of enclosure E2
- 13 Channel-rim jar, wheel-finished, dark grey surfaces, shell gritted, horizontal groove on body. Small shell. Munsell 10YR3/1–3/2. Fill (130) of re-cut 127 of 122, east arm of E2

### Ceramic building material

by Pat Chapman

There are 18 sherds of Roman tile, weighing 562g. One sherd, from fill (51) of ditch recut 50, enclosure E1, is the heavily abraded flange from a shellyware *tegula* roof tile. Ten small friable sherds, probably from one floor type tile, 35mm thick and made from fine sandy silty reddish clay with a brown surface, comes from fill (71) of ditch recut 70, E1. The remaining six sherds, from fill (84) of recut ditch 80, fill (120) of recut ditch 117, enclosure E1, and residual from furrows, are undiagnostic body sherds no more than 13mm thick, made from fine silty pinkish-orange clay with cream streaks and occasional tiny grog and shelly inclusions. The fabrics have some similarities to tile fabrics found at the Romano-British settlement at Quinton (Friendship-Taylor 1979, 121–124), only five miles to the north of Hartwell.

### Querns

by Andy Chapman

From an upper fill (281) of ditch 278 towards the south-eastern terminal of enclosure E1, there are two near complete upper stones from Iron Age beehive rotary querns.

One is in Spilsby sandstone from Lincolnshire (Fig 15, SF21). This stone is notable for being both heavily worn and extremely asymmetrical, with the hopper at 60 degrees to the grinding surface. As a result, it had been necessary to add a second handle socket as the first was becoming so low as to be unusable. In the handle socket there was an iron spike which may have reinforced the wooden handle (Fig 16). The other stone is in a dense, hard quartzite and has a collar encircling the hopper (Fig 15, SF32). In the base of the stone the central feeder hole retains an iron fitting that is probably the pivot broken off from the lower stone.

From the fill (158) of ditch 156, the northern end of internal ditch 102 within enclosure E2, there was exactly half of a lower stone in Millstone Grit. This is to 330mm diameter and 140mm thick, with a flat grinding surface. The small diameter would suggest that it was used with a beehive upper stone (Fig 17).

The two complete upper stones are classic Iron Age beehive querns and the half lower stone was probably also used with a beehive upper stone. Beehive querns appear to have been rapidly replaced by flat rotary querns following the Roman Conquest, and this process is perhaps being seen at Hartwell in the deposition of these stones. The deposition of these stones may mark the social transition of the inhabitants from Iron Age culture to being subjects of Rome and Roman customs shortly after the Conquest.

### Catalogue of querns

#### SF21, fill (281), ditch 278, enclosure E1

This stone is fine-grained sandstone from Spilsby, Lincolnshire; characterised by its pale greyish-white colour and the presence of distinctive black mineral inclusions. The stone has a simple beehive form, with



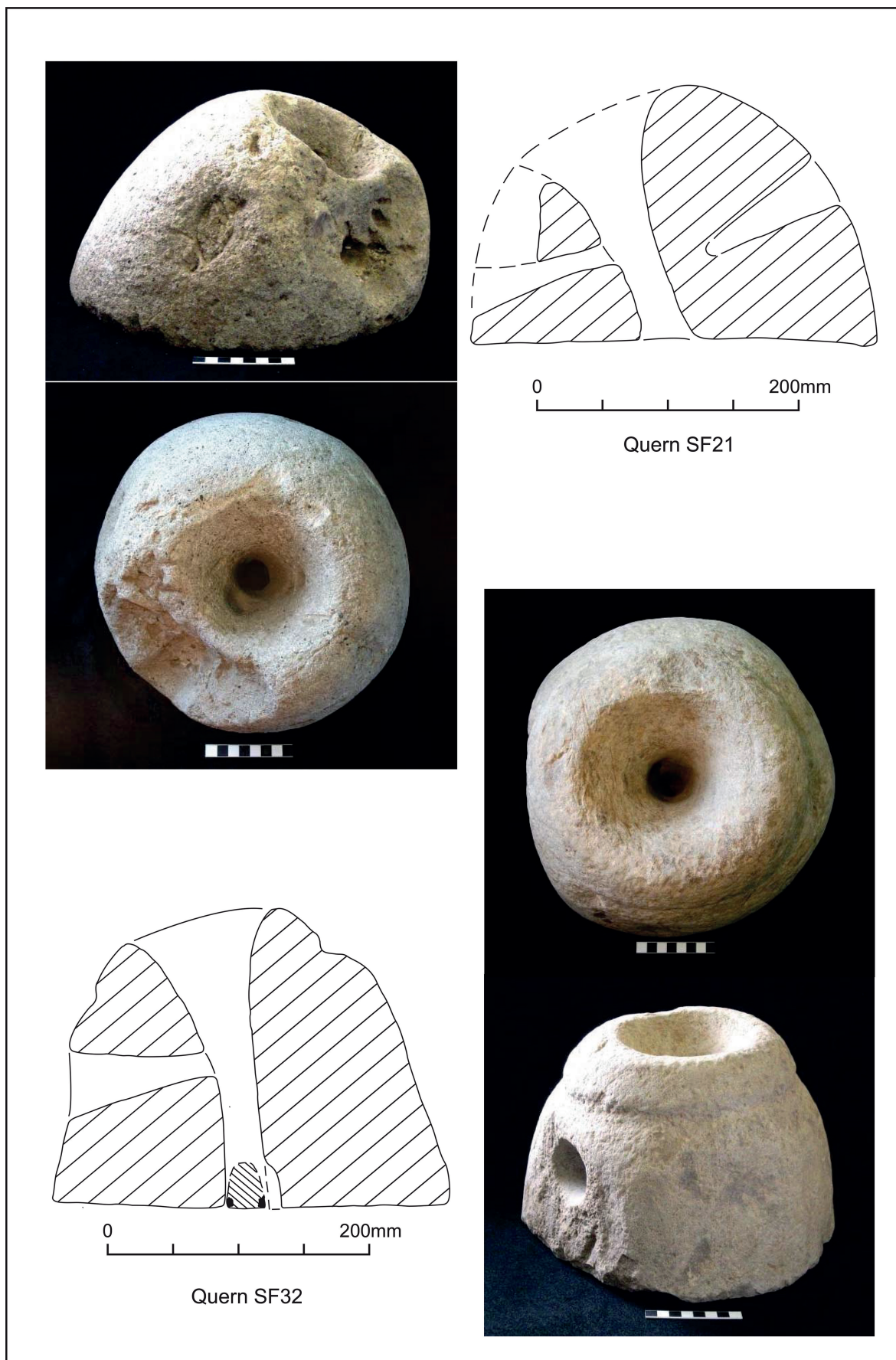


Fig 15: The beehive rotary quern upper stones from enclosure E1



Fig 16: Iron pin from handle socket of quern, SF21  
(Scale 20mm)



Fig 17: Plan and section views of rotary quern bottom stone, SF18 (Scale 50mm)

smoothly curving surfaces. It stands 200mm high and is elliptical in plan, measuring 305–330mm diameter and weighing *c.*23kg (*c.*50lb) (Fig 15, SF21). The oval shape is a result of the extreme asymmetry of the stone, with the hopper at *c.*60° to the grinding surface. While this is a common feature of beehive rotary querns, this example is at an extreme asymmetry, with the longest axis along the line of the opposed handle sockets. The base of one socket is only 25mm above the grinding surface while the other is 100mm above it. The complete handle socket is sub-square, 40x40mm, and is 95mm deep, terminating within the body of the stone. The other handle socket has been largely lost where a section of the quern had broken away, but it penetrated to the central feed pipe. There are fossil shells in the face of the fractured surface and it is possible that these, along with the handle socket, were points of weakness along which the fracture developed. The hopper is 125mm in diameter and the feed pipe tapers

to 30mm at the grinding surface. The grinding surface is worn smooth and is slightly concave, 5–6mm deep.

Embedded in the clay within the intact handle socket, there was an iron pin. This is 89mm long, with a rectangular section, measuring 10x8mm at its thickest, but tapering to a blunt point at one end (Fig 16). The corrosion products encasing the pin retain wood impressions, perhaps suggesting that the pin was *in situ* and had been set into the end of a wooden handle, with the pin running the entire depth of the handle socket, and still in place when the quern was deposited.

The position of the handle socket only 25mm above the grinding surface is a clear indicator that the extreme asymmetry of the stone is a product of wear and not an original feature, at least not in this extreme form. The location and angle of this handle socket would eventually have made it very difficult to turn the stone, and the second handle socket was probably a later addition to prolong its useful life. The fractured surface around the lower handle socket is also worn and not fresh, suggesting that the stone had fractured around the handle socket and that its later use was after the fracture had occurred and the new handle socket was cut. The asymmetry may have become more extreme in this later use as a result of the weight imbalance caused by both the fracture and the developing asymmetry.

#### *SF32, fill (281), ditch 278, enclosure ditch E1*

This stone is hard, dense and fine-grained sandstone, possibly an orthoquartzite (sandstone subject to low pressures and temperatures where the spaces between the sand grains are filled with silica cement). The stone is of beehive form, with a shaped collar, 50mm deep. The stone stands 230mm high and is up to 330mm in diameter, weighing *c.*30kg (*c.*65lb) (Fig 15). In the plane of the handle socket, a diameter of 300mm can be measured due to areas at either side of the handle socket being cut back to form a flattened face. The base of the handle socket is 60mm above the grinding surface. The socket itself is oval, perhaps worn down from a rectangle, measuring 65mm wide by 55mm high. It penetrates through to the hopper. The hopper is 115mm in diameter, tapering gradually into a feed pipe 28mm diameter below the handle socket. The hopper is some 12° off vertical, as is common on many beehive rotary querns. The grinding surface is worn smooth through use and is, unusually, slightly convex rather than concave.

In the grinding surface the central feed pipe retains an iron fitting some 30mm in diameter and perhaps 35mm high, although in its surviving corroded form the fitting is more rectangular than circular. This is perhaps the original iron pivot that would have been embedded in the lower stone, with the upper stone rotating around it. Adjacent to the fitting the central hole is broader, perhaps to enable grain to feed past the pivot.

#### *SF18, fill (158), internal ditch 156 (ditch 102), E2*

A bottom or bed stone in Millstone Grit, up to 330mm diameter and 105–140mm thick, split almost exactly in half. The surviving half weighs *c.*12kg (*c.*23lb), indicating a total weight for the complete stone of *c.*24kg (*c.*46lb) (Fig 17). The grinding surface is well worn and almost flat.

The circumference has been neatly worked, with small dimpled tool marks still visible, but the base has been left uneven. The central pivot socket is 18mm diameter by 40mm deep. The small diameter of the stone indicates that it would probably have been used in conjunction with a beehive upper stone.

Four other querns fragments, weighing some 6.6kg, were recovered from the fill of gully 189.

### **Other late Iron Age/early Roman finds** by Ian Meadows

A variety of small finds were recovered from the Iron Age/Romano-British settlement, of which a small number of objects are closely dateable. These generally indicate a date in the 1st century AD.

From the area of enclosure E1, small finds were recovered from recuts of the main enclosure ditch 75. Fill (73) produced two highly corroded fragments from a copper alloy brooch (SF9). The larger piece, measuring 29mm by 8mm, appears to be part of a flat foot with traces of the catch plate; it could be derived from a Hod Hill type brooch or a plate brooch. The remaining piece is part of a hook fixing for the spring of a brooch. Neither piece is sufficiently diagnostic to be closely dateable. From fill (67) of enclosure E1, ditch 66, two small copper alloy pieces were recovered (SF5, SF7). Fill (84) of recut 80 of the enclosure E1 produced a complete Colchester derivative brooch comprising a plain bow, catch plate and wings. The piece is 55mm long, and the spring is held in position by an axis bar. The piece is dateable to the third quarter of the 1st century (SF2). A similar Colchester brooch, comprising the bow and head with fragments of catch plate and pit, dating to the mid-1st century AD, was unstratified.

A highly unusual find is an iron block anvil (SF10) found in the primary fill of ditch 102, in the interior of enclosure E2. The anvil, which weighs 3.29kg, has a concave upper surface 90mm across and thinning from 80–65mm wide. The anvil is 160mm long, and tapers towards the base, with three sides slightly concave (Fig 18). At its base the piece measures 60mm by 20–22mm with a slight waist. There are substantial concretions of corrosion products low down on both faces of the anvil in a position where other examples would have a large hole (Manning 1985). A larger example from Nassington, weighs 6kg and has a working surface 120mm square (Challands 1979).

Iron nails, shanks, and straps were also common finds, with two (SF25 and SF31) from fill (121) of recut 117 of enclosure E2; another two (SF17 and SF24) from fill (159) of gully 156; and five (SF26, SF27, SF28, SF29 and SF30) from layer (175). This latter group contains a square-headed stud, a 'fiddle key' nail and a possible fragment of blade.

Other unusual finds from enclosure E2 include what was possibly a shaped piece of shale (SF19, context (169)), and three large fragments of a triangular fired clay loomweight. These have perforations through each corner, and were found in the fill (172) of ditch 171. The fabric of the weight contains crushed burnt flint along with some flint pebbles; there are also several small

vesicles which were possibly where organic material had burnt out during firing. Weights of this form are generally interpreted as loomweights and are assigned an Iron Age date. Owing to its fragility, it is unlikely that the weight moved far, so it is perhaps an indication of settled activity on the site in the Iron Age, including weaving.

### **Animal bone** by Karen Deighton

A total of 11.6kg of animal bone was collected by hand during the course of excavation. This material was analysed to determine the level of preservation, the taxa present, and to aid the understanding of the site. The material was firstly sorted into recordable and non-recordable fragments then quantified, following Halstead after Watson (1979) and using minimum anatomical element (Min AU). The following were recorded for each element: context, anatomical element, taxa, proximal and distal fusion, side, preservation, fragmentation, modification, butchery evidence and sex (where appropriate). Vertebra and ribs (with articulating ends) were counted and noted as small or large ungulate but not included in quantification. Partial skeletons are not included in quantification in order to avoid over representation.

Epiphyseal fusion follows Silver (1969). Ovicaprid teeth were aged after Payne (1973), cattle after Halstead (1985), and pigs after Bull and Payne (1982). Recognition of butchery is after Binford (1981). Schmid (1972) and Von den Driesch (1976) were also consulted. Material from sieved samples was included.

### **Preservation**

Fragmentation was moderate and largely the result of old breaks and is possibly the result of trampling or compaction before or following burial. Bone surface abrasion was also moderate. Thirty-five examples (17.5%) of canid gnawing were noted, which could attest to the presence of dogs/foxes at the site. This level of canid gnawing is high enough to result in preservation bias against smaller bone elements (ie completely destroyed by canids). Six possible examples of butchery were noted, including sawing. Evidence for burning was noted from only three contexts which suggest this was not a preferred method of disposal.

### **The animal taxa**

The presence and proportions of taxa present was quantified by species and location (Table 4).

### **Ageing and metrical data**

Data were insufficient to allow a study of age at death patterns. Very little metrical data (4 measurements from a single bone) were available due to the nature of fragmentation and canid gnawing.



Fig 18: The iron anvil SF10 from ditch 102, enclosure E2

### Discussion

Analysis of the animal bone has shown a small assemblage of common domesticates which is broadly compatible with other local Iron Age sites. Cattle were the dominant taxa, followed by sheep/goat, then horse. Cattle were utilised for meat, traction and milk. Sheep/goat provided meat, milk and wool. Horse was used for transport and meat, and also as a status symbol.

Material from Iron Age/Roman contexts is reasonably diverse. Deer are also present in this period but represented by antler fragments with a burr only, chopped and smoothed, which indicates collection of shed antlers for craft working, as opposed to hunting. Dog was also noted. Apart from uses such as hunting and guarding, dog meat was also eaten at this time. Although the assemblage is too small for bodypart analysis to be undertaken, the mixed nature of the assemblage both in terms of taxa and

Table 4: Animal taxa by feature (Iron Age/Roman)

Fill/cut	Cattle	Sheep/ goat	Pig	Horse	Dog	Deer	L. ung	S. ung	Bird	Totals
<b>E1</b>	29	16	2	9	–	–	3	–	–	<b>59</b>
<b>E1 pits</b>	3	8	–	–	–	–	1	1	–	<b>13</b>
<b>E1 L-shaped gully</b>	19	17	1	2	1	1	3	–	–	<b>44</b>
<b>E2</b>	16	9	2	5	–	–	2	–	1	<b>35</b>
<b>E2 gully</b>	8	5*	1	3	–	–	–	–	–	<b>17</b>
<b>E2 cobbled surface</b>	–	–	–	1	–	–	–	–	–	<b>1</b>
<b>Other Areas</b>	2	–	–	1	–	–	–	–	–	<b>3</b>
<b>Totals</b>	<b>77</b>	<b>55</b>	<b>6</b>	<b>21</b>	<b>1</b>	<b>1</b>	<b>9</b>	<b>1</b>	<b>1</b>	<b>172</b>

\* 1 specimen comprises partial skeleton, consisting of pelvis, vertebra, radii, humerii, metacarpals and phalanges

Table 5: Animal bone: ageing and metrical data

Fill/cut	Taxa	Element	Side	Wear stage	Age class
E1.51/50	Sheep/goat	3rd molar	Right	H	6–8 years
E1.85/80	cattle	3rd molar	Right	J	Old adult
E2.135/133	Sheep/goat	3rd molar	Right	H	6–8 years
E1 229/227 pit	Sheep/goat	Mandible	Left	C+	6–12 month+
E1.259/248	Cattle	Deciduous 4th premolar	Left	A	0–1 months
E1.L.287/285	Cattle	Mandible	Right	I	Senile
E1.L.293/289	Sheep/goat	Mandible	Right	I	8–10 years

anatomical parts suggests the origin to have been kitchen waste.

Inter-site comparisons could only be made for the Iron Age and these are tentative due to the small size of the assemblage, but do suggest that the current site fits a local pattern for the taxa present. Sites on A43 new road, around Towcester (Deighton 2007), show a similar range of taxa, although sheep/goat was the dominant taxa. A similar taxonomic range and a dominance of cattle was seen at Mallard Close, Earls Barton (Deighton 2004a), and a similar range of taxa at Higham Ferrers (Deighton 2004b) and Newton Bromswold (Deighton 2006).

#### The ecofactual evidence by Mike Allen and Ellen Simmons

Forty-one bulk soil samples were taken from a range of Iron Age and Romano-British contexts. All samples were processed by Northamptonshire Archaeology by standard flotation methods where flots and residues were retained on at least 0.5mm mesh. A targeted series of 12 samples were selected for analysis. The aims of the analytical programme was to characterise the local environment, land-use and farming economy, and attempt to define any activities performed on site and potentially the role of the site.

#### The molluscs by Mike Allen

The site is located on the Blisworth Limestone Formation with localised superficial deposits of Diamicton of the Oadby Member; a Mid Pleistocene glacial till. It supports pelostagnogely soils of the Ragdale Association with typical calcareous pelosols of the Hanslope Association and (Jarvis *et al* 1984) directly over the limestone outside the investigation area. The area is subject to high localised groundwater conditions (due the glacial till) and standing water (localised bodies of water) and surface drainage (small streams and rivers) locally.

The aim of the mollusc analysis was to characterise the local environments, landscape character and land-use, and examine changes through time. Two elements in particular are addressed; the wet nature of the features in view of high numbers of aquatic species in the assessment, and the shady (possibly woody) environments (*cf.* Allen 2012) which would be unusual for a late Iron Age and Romano-British occupation area.

Eight samples were analysed, covering features associated with enclosure E1, including the main curvilinear ditch and the L-shaped enclosure ditch, and enclosure E2, including both the curvilinear ditch and a linear gully and ditch.

### **The lowland environment**

Aquatic species were present in high levels; 26–72% of the total assemblages. Two aquatic/amphibious species *Galba truncatula* and *Anisus* cf. *leucostoma* dominated the freshwater assemblages indicating the presence of standing water in the ditches, and in the local lowland environment as a whole, and that these were subject to seasonal drying.

Both species are typical of small bodies of water, small rivers, streams and ditches, as well as marshy grassland and damp places in fields (Macan 1977; Kerney 1999). *Hippeutis complanatus* and the Pisidium bivalve *Pisidium personatum* were also present in very low numbers, and are typical of well-vegetated places in drainage ditches (Kerney 1999).

The accompanying slum species (*Oxyloma elegans*, the relatively rare *Vertigo angustior* and the ubiquitous occurrence of *Zonitoides nitidus*) indicate wet base-rich meadows and marsh. The occurrence of *V. angustior*, a rare marsh species (Evans 1972, 146), is very limited in its distribution (Kerney 1999, 101), but requires open permanent shallow water conditions and inhabits short vegetation, and mosses such as in wet base-rich meadows; and *Z. nitidus* lives on *Phragmites* and *Carex* litter often in zones of emergent vegetation and, like other species here, is virtually amphibious.

### **Land use**

Although the assemblages largely reflect the micro-environments of the ditches, they do represent that of the wider environs. What is clear is that this is not a xerophillic, open dry trampled short grassland and bare earth typical of intensive occupation and activity.

Instead, the land-use is one of longer grassland and scrub with damp pools and local marshy areas. This suggests a low intensity of occupation and one perhaps more related to summer pasture for especially the larger herbivores (cattle), but also possibly sheep grazing. There is little indication from the molluscan evidence of cultivation of the immediately adjacent landscape. This evidence tends to suggest that perhaps the majority of the features here relate to stock enclosure and management, rather than domestic settlement and occupation.

An open mosaic of land-use and local vegetation is suggested by assemblages from the upper fill (59) of early Roman ditch 54, part of the main curvilinear ditch of E1, and that from upper fill (100) of the Iron Age gully 348, enclosure E2, which are both dominated by open country species (78% and 69% respectively), and whose assemblages do suggest the presence of shorter, possibly lightly grazed but damp grassland. The very open nature of the assemblages may indicate slightly later assemblages, and seem slightly at odds to some of the very shady local habitats indicated by other assemblages from, in some cases, the same ditch.

### **Change through time; Late Iron Age to Early Romano-British**

Defining change through time is difficult, but the aquatic species seem to be particularly dominant in later features and the later fills of earlier features; such as the upper fills of late Iron Age ditch 338 (E1), the upper fills of

Iron Age ditch 348, and secondary fills of late Iron Age/early Romano-British ditch 117 (E2). This may suggest increasing wetness and or standing water during the Roman period. This coincides with the growth of loner herbaceous vegetation and scrubby plants growing in the ditches and the wider environs.

There are hints of a drying landscape in the later periods if the upper fill (69) of the Iron Age gully 70 and fill (59) of early Roman ditch 54 are later, and perhaps belong to later Roman phases of ditch silting.

### **Charred plant remains and wood charcoal** by Ellen Simmons

Analysis was undertaken on two samples for charred plant remains (Table 6) and three samples for wood charcoal (Table 7).

#### **Charred plant remains**

Limited interpretative information was available from analysis of the charred plant assemblage due to the poor preservation and low density of the remains.

Barley and wheat were present in deposits of late Iron Age and late Iron Age/early Roman date. It could not be determined which wheat species was present, although emmer wheat or bread/club wheat or both was present in a Late Iron Age ditch fill and spelt wheat or bread/club wheat was present in a late Iron Age/early Roman ditch fill.

Barley and all three wheat types have been recovered at other Iron Age and Roman sites in the region (Monckton 2006, 270, 274). The cereal grains from Hartwell are likely to have been charred accidentally during food preparation or as a result of accidents during drying before storage or milling. Some smaller grains may also form a component of crop processing waste which was burnt.

Wild or weed plant seeds associated with the cereal grains include taxa commonly associated with fertile disturbed soils and cultivation and are likely to have been harvested along with the crops and charred as crop processing waste. Wild or weed plant seeds which may also represent arable weeds but are commonly associated with grassland or waste ground were also present. Other sources of wild or weed plant seeds may include kindling, waste roofing or flooring material and animal fodder.

#### **The wood charcoal**

Preservation of wood charcoal fragments was generally good, with less than 10% of fragments being unidentifiable due to poor preservation.

The wood charcoal assemblage from late Iron Age and late Iron Age/early Roman deposits exhibit a degree of consistency in the fuel woods utilised. Underwood, scrub or woodland margin taxa are well represented along with open woodland taxa (Table 7).

The woodland taxa present may also, however, represent tress growing as a component of hedgerow or scrub. The predominance of strong ring curvatures of the wood charcoal fragments from Iron Age ditch 47, enclosure E1, and late Iron Age to early Roman ditch 117, enclosure E2, indicate the use of smaller branches or twigs. The

Table 6: Summary of charred crop material and wild or weed plant seeds from the curvilinear ditch (Enclosure E2)

	Phase/date Feature	late IA ditch 155/152	late IA – early Roman ditch 121/117
<b>Cereal grain</b>			
Barley grain ( <i>Hordeum</i> sp.)		2	11
Wheat grain ( <i>Triticum</i> sp.)		4	3
Indeterminate cereal grain		3	3
<b>Other economic plants</b>			
Probable apple seed (cf. <i>Malus sylvestris</i> )		–	1
<b>Wild or weed plant seeds</b>			
pale persicaria/redshank ( <i>Persicaria lapathifolia/maculosa</i> )		–	1
curled/clustered/broad-leaved dock ( <i>Rumex crispus/conglomeratus/obtusifolius</i> )		1	–
vetch/pea ( <i>Vicia/Lathyrus</i> sp.)			1
cleavers ( <i>Galium aparine</i> )		–	1
probable field gromwell (cf. <i>Lithospermum arvense</i> )		1	–
probable greater plantain (cf. <i>Plantago major</i> )		–	1
probable thistle (cf. <i>Carduus/Cirsium</i> sp.)		1	–
rush ( <i>Juncus</i> sp.)		–	1
small seeded grass family (<2mm Poaceae)		1	–
probable brome grass (cf. <i>Bromus</i> sp.)		1	–
unidentified wild or weed plant seeds		4	2

Table 7: Summary of wood charcoal

	Phase/date Enclosure Type Feature Number of fragments	Iron Age E1 ditch 48/47 No	L Iron Age E1 ditch 269/268 No	LIA/ER E2 ditch 121/117 No
Oak ( <i>Quercus</i> sp.)		16	1	11
Hazel ( <i>Corylus avellana</i> L.)		1	–	4
Blackthorn ( <i>Prunus spinosa</i> L.)		2	9	3
Wild/bird cherry ( <i>Prunus avium/padus</i> )		12	40	12
Hawthorn/Sorbus group (Pomoideae)		12	–	5
Field maple ( <i>Acer campestre</i> L.)		5	–	4
Ash ( <i>Fraxinus excelsior</i> L.)		–	–	7
Indeterminate		2	–	4
<b>Total</b>		<b>50</b>	<b>50</b>	<b>50</b>

charcoal assemblage from late Iron Age ditch 268 of main curvilinear ditch 234, E1, was relatively homogeneous in composition, in comparison to the others. A high proportion of wild/bird cherry charcoal was present with a high proportion of intermediate ring curvatures, indicating the possible preferential selection of intermediate branches of wild/bird cherry for use as fuel, possibly for a single burning event.

The suite of taxa present in the charcoal assemblage is consistent with palaeo-environmental evidence for the nature of the landscape in the Iron Age and Roman period in central southern Britain which indicates an increase in woodland clearance and therefore an increased likelihood of the availability of scrub or hedgerow taxa.

### Environment, land-use, farming economy and activity by Mike Allen

Following this limited environmental analysis programme, a few simple concluding comments can be made about the environment, land-use, farming economy and site activities.

#### Local lived-in environment

Of particular note was the overall lack of intensive activity. Charred plant and charcoal remains were generally sparse (see above and Allen 2012), and the molluscan evidence indicates a local environment with long herbageous vegetation and scrub (hazel, blackthorn, cherry etc). This contrasts with many other sites where short trampled dry grassland and perhaps bare earth are present indicating high levels of activity and trampling locally.

The high groundwater levels during the use of the site through the Iron Age and Roman periods led to the ditches holding water and to pools of standing water across the area in wetter months. Overall, this gives the impression of perhaps seasonal fluctuation in the intensity of use and activity here and even then that the sampled areas of the site were not a focus of high levels of domestic and settlement activity and crop processing.

### **Farming**

The crops of barley and wheat were harvested, but seem to have been grown on dry soils as there is no evidence in the few charred weed seeds recovered of any reeds, rushes, or wetland plants, nor any of damp ground. This may suggest that the crops were grown in fields slightly away from the site on higher dry ground, or that the site remained very dry during spring to autumn months and that the high water tables, damp ground and wet ditches were entirely a winter phenomenon.

### **Site activities**

The setting of fires of young wood from scrub and hedges indicates the collection of local wood and that these are domestic fires rather than for any high-temperature burning or firing activities.

Limited crop processing occurred, but the remains here are accidental, or indeed incidental burning, possibly of just waste cereal grains, but may possibly indicate accidental charring resulting from drying grain for milling or storage. The low number of grain here (barley 13; wheat 7, indeterminate 6) and their presence in only two of 21 samples confirms the scarcity of these remain on this site.

### **Role of the site**

Overall, the environmental evidence from molluscs, charred plant remains and wood charcoal, suggests a low level of activity, which may have been seasonal. The density of remains and the more utilised site conditions seen at many domestics and occupation sites is not seen here.

We may tentatively suggest that the enclosures here may relate to stock management, rather than domestic settlement and occupation. Even if that was the case, there is no evidence of intensive grazing.

## **Discussion** by Andy Chapman

### **The nature of the settlement**

Enclosure E1 was probably created in the late Iron Age, 1st century BC, and continued in use to the mid-1st century AD, with the ditch being recut. Enclosure E2 may have been slightly later in origin, late 1st century BC to early 1st century AD, and also continued through to the mid-1st century AD.

The ditch defining the south-western side of enclosure E1 was of substantial size and depth, *c.* 3m wide and often in excess of 1.5m deep as originally cut, especially considering that there were no further surviving features to define the boundary of an enclosed area extending beyond

this ditch. However, it is presumed that the function of this ditch was to form the highly visible façade to a space otherwise enclosed by a hedge and/or a bank that left no surviving below ground evidence. Also, as the site sits on clay deeper ditches would have been relatively easy to cut, but would also have silted up quite rapidly, with all the deeper lengths of ditch having gleyed primary fills, with the characteristic blue-grey colour, showing that these fills were at least seasonally if not permanently waterlogged. The molluscs present also confirm this picture of at least seasonal wetness. It is also probable that the rapid silting of these seasonally wet ditches created the requirement for recutting, rather than any longevity of use, which was probably 100 years at most from the mid-1st century BC to the mid-1st century AD.

The smaller enclosure, E2, was flanked by a ditch on three sides, with the eastern side having a narrow central entrance surfaced with stone. This arrangement leaves little doubt about the presence of an enclosed space, so it must be presumed that a hedge and/or bank had defined the western side.

Given the paucity of environmental evidence it was suggested that these may not have been domestic enclosures, and that perhaps the site was only used seasonally. However, the quantities of pottery and animal bone leave no doubt that these were centres of domestic occupation. In addition, the recovery of two near complete rotary quern upper stones and half of a bottom stone, items that cannot be regarded as easily portable, would suggest the presence of at least two or three domestic households, even though there are no features that can be interpreted as indicating the presence of roundhouses. There is only the curving arc of gully in enclosure E2 that might have flanked the western and northern sides of a roundhouse with a doorway to the east facing towards the enclosure entrance. However, if there was no encircling ring ditch a large roundhouse could leave virtually no below ground evidence behind.

One possibility is that this may have been an ancillary settlement, for seasonal use only, with the roundhouses perhaps more lightly built, or even portable, and therefore not leaving any recoverable ground evidence.

The environmental evidence, as might be expected on such heavy clays, suggests the area was not one of arable farming. With a surrounding landscape of grassland and woodland and the ground wet through the winter months, it seems most likely that the focus was pastoral perhaps as a seasonal centre for grazing during the drier months of the year.

### **The abandonment of the settlement**

The most interesting aspect of this site, however, is its demise. The final fills of the main ditch of enclosure E2, the L-shaped ditch and some of the smaller features contained dumps of burnt organic material in charcoal-rich layers that also contained quantities of pottery and bone.

Rather than the daily deposition of settlement garbage, this material may largely have come from a single act of systematic abandonment, levelling and destruction, a



site clearance. At least one length of the curvilinear ditch produced charcoal largely from a single species, wild/bird cherry wood, suggesting a single burning event, with perhaps a collection of domestic material dumped in the ditch and burnt, rather than just abandoned, although in other deposits the source wood had come from more diverse species.

Also, towards the south-eastern terminal of enclosure E1 two intact and usable upper stones from rotary querns had also been deposited in the upper ditch fills. In a similar fashion in enclosure E2, a lower stone from a quern was split in half to render it useless before it was dumped. The latter example, with the stone split in two, might just denote that the stone had reached the end of its useful life, as upper stones similarly split in two are common finds, such as the two recovered from a late Iron Age settlement at Earls Barton (Chapman and Atkins 2004, 43–44). However, given the thickness of this stone there is no practical reason why it could not have continued in use for many years.

The deposition of two upper stones in the same deposit cannot be seen as an end to the natural lives of these stones, as both were intact, and although one had seen many years of use, with the provision of a replacement handle socket to extend its usable life, the other stone still had a long potential life ahead of it. The deposition of intact rotary quern upper stones can be associated with the Iron Age to Roman transition at other local sites such as Wootton Fields, Northampton, where a complete upper stone was found in a late Iron Age pit on the site of a small Roman villa (Chapman *et al* 2005, 105).

The only viable interpretation is that the stones were buried at the same time as part of the broader process of settlement levelling and clearance, with the settlement razed to the ground and at least a proportion of the material possessions of the inhabitants, from pottery to querns, dumped into the ditches, while the accompanying grey-black soils with charcoal suggest that organic goods, including items in wood and perhaps the actual timbers of the houses, were burnt at the same time.

This may have been just the abandonment and clearance of an ancillary settlement sometime after the Roman Conquest, but an alternative explanation is that it was an enforced abandonment, with the destruction of property, including the usable querns, a dramatic marker that the Iron Age way of life was at an end. This may perhaps have occurred prior to an enforced relocation to a new settlement and a Romanised way of life, where querns were flat and not domed, and where so much else was also to be very different to their previous way of life.

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