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# Investigation of a cropmark complex at Limes Farm, Landbeach

Lawrence Billington and Matt Brudenell

With contributions by Ian L. Baxter, Nina Crummy and Paul Sealey

Illustrations by Gillian Greer and Jon Cane

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*Strung along the western bank of the River Cam and extending westwards towards the modern village of Landbeach, to the north of Cambridge, are some of the region's most notable cropmarks. They lie in an area well-known for its association with Roman settlement and industry. Archaeological work at Limes Farm in 1999 targeted one such complex. Here, surface collection above the cropmarks was limited to Roman material, although the excavation of two small areas unexpectedly revealed the complex remains of a later Iron Age settlement (spanning the Middle to Late Iron Age, c. 350 BC to AD 50). Other trenches confirmed the presence of features mapped by aerial photography, revealing that many are indeed of Roman date. Beyond providing important evidence for the origins and development of these notable cropmarks, the results of the fieldwork expose some of the challenges inherent in attempting to understand such extensive and complex sites through programmes of fieldwalking and small-scale excavation.*

## Introduction

During the late summer of 1999 the Cambridgeshire County Council Archaeological Field Unit (CCC AFU; now Oxford Archaeology East) undertook small-scale excavations at Limes Farm, Landbeach (TL 482 644; Fig. 1). The fieldwork was designed as a training excavation as part of a joint initiative between Cambridgeshire County Council and the Cambridge University Board of Continuing Education, and targeted a dense complex of cropmarks relating to trackways and enclosures of various forms covering an area of over 25ha. This paper is supplemented by digital archive reports which are freely available online at <<https://library.thehumanjourney.net/4225/>>.

## Background

Limes Farm's cropmarks form part of a series of similar major complexes lying on the extensive terrace gravels on the western side of the lower Cam Valley (Fig. 2; CHER 11175, 08312, 08317). Located between the modern settlements of Landbeach, Milton and Waterbeach, the remains are bounded to

the west by Akeman Street – the major Roman road linking Cambridge and Ely – and to the east by the River Cam and the Old Tillage (formerly known as Cambridgeshire Car Dyke), a major Roman canal linking the Cam and the Old West River (J. Evans *et al.* 2017, 6–8, 120–122). Many of the sites lie close to the river and evidently relate to intensive Roman settlement, agriculture and industry, dating to the 2nd and 3rd centuries AD. These sites are particularly notable for their association with the production of Horningsea-style pottery, best known from the kilns at Eye Hill Farm, Horningsea (CHER 05546; Walker 1912; J. Evans *et al.* 2017, 39–51).

First observed in the early 1960s, the Limes Farm cropmarks were briefly assessed by Tim Malim in the late 1980s: he suggested that the presence of regular rectangular enclosures organised around several trackways, together with records of Roman finds from the area, made in the mid-20th century (CHER05888), indicated a Roman date for the complex as a whole (Malim 1990, 73–4). Fieldwalking over the northern part of the site in the course of the Fenland Survey recovered only a few sherds of Roman pottery (CHER 11568; Fenland Survey Site LAN5), but a denser scatter of Roman pottery and other finds came from an area further south (CHER 11567, Fenland Survey Site LAN4).

Little more than 500m east of the Limes Farm complex are the cropmarks of two small discrete rectilinear enclosures or paddocks with associated trackways (CHER 08325, 08328, 11561). Fieldwalking of these sites by the Fenland Survey identified an area of very dark ploughsoil containing Roman pottery which corresponded to the northernmost small enclosure (CHER 11561; Fenland Survey Site WTB5, Hall 1996), whilst burnt stone and some possible Iron Age or Anglo-Saxon pottery was found close to one of the mapped trackways (CHER 11560; Fenland Survey Site WTB4). The enclosures saw limited trial trenching in the mid 1990s, which located an enclosure ditch containing Roman pottery and exposed two Horningsea-style pottery kilns (Robinson and Guttman 1996).

Further east, small-scale excavations at the junction of the Old Tillage and the River Cam revealed evidence for several Roman structures, including a



Figure 1. Location of the excavation areas and trenches at Limes Farm, Landbeach.

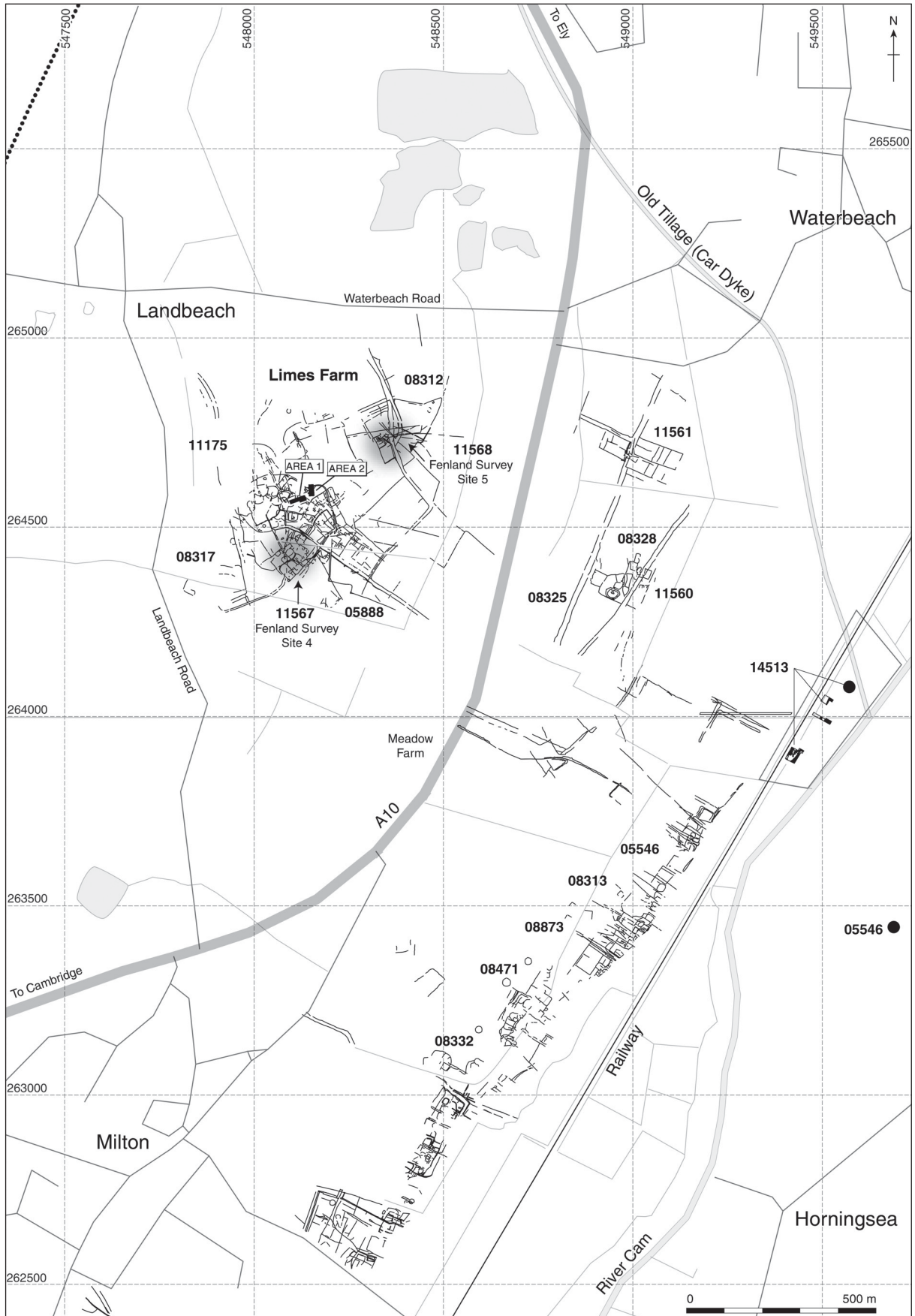


Figure 2. The cropmark complexes, showing associated sites from the Cambridgeshire Historic Environment Record.

probable warehouse, presumably related to the storage and transport of goods along the river and canal (CHER 14513; J. Evans *et al.* 2017, 25–31). To the south-west lies an extraordinary linear swathe of cropmarks of rectilinear enclosures running broadly parallel to the Cam (and the modern Cambridge to Waterbeach railway line), extending for over 1.5km to the eastern side of Milton. Elements of the northern part of this cropmark complex (CHER 08313, 08873, 08332) were investigated on several occasions during the 1990s, revealing what have been interpreted as a series of farmstead enclosures and associated field systems, two inhumation cemeteries and a single Horningsea-style pottery kiln – largely dating to the 2nd and 3rd centuries AD (Robinson and Guttman 1996; J. Evans *et al.* 2017, 23–4). Adjacent to these sites, lying slightly further back from the river, is an area of more dispersed cropmarks including at least three probable ring ditches (CHER 08471).

## Fieldwork results

### Introduction

Fieldwork at Limes Farm was informed by a reappraisal of the cropmarks by Rog Palmer of Air Photo Services (Palmer and Connor 2000), which reinterpreted aspects of the aerial photography and provided new mapping that superseded earlier plots published by Malim (1990) and Hall (1996). Eighteen trenches, targeted on specific elements of the cropmarks, were opened by a mechanical excavator, two of which were extended to form small excavation areas (Areas 1 and 2; Fig. 1). These were targeted on particularly complex remains in a location deemed likely to have high potential for obtaining stratigraphic sequences, permitting phasing of elements of the broader cropmarks. Excavation in both areas unexpectedly revealed relatively dense activity during the later Iron Age (c. 350 BC – AD 50).

Features exposed in the remaining trenches (Trenches 3–13) were described and planned, but with little associated excavation. This work yielded useful results in terms of confirming the veracity of the cropmark features (further comments are made in the concluding discussion). Given the lack of excavation, finds were limited but post-medieval pottery was recovered from the surface of ditches exposed in Trenches 4, 8 and 14, whilst Roman pottery came from the features recorded in Trenches 10, 11 and 12.

### Areas 1 and 2 (Fig. 3)

#### Area 1

This rectangular area (measuring approximately 10m by 6m) exposed numerous intercutting features, with associated pottery consisting exclusively of handmade later Iron Age forms: there was no definitive evidence for any earlier or later activity in the area.

The earliest features were a sequence of intercutting east to west aligned ditches in the northern part of the trench (140, 147 and 149), which produced no finds, aside from a flint end scraper. These features had been largely infilled when they were cut by a sequence of narrow gullies (134, 70, 63 and 41) and pits (61, 116, 118, 82, 177 and 175). To the north-east lay a series of curvilinear gullies (9, 11, 13, 1, 65, 60, 125 and 80), representing multiple phases of a roundhouse(s). Further south, an east to west aligned ditch (20) produced a single sherd of later Iron Age pottery. Several of these features were cut by a large sub-circular pit (52), cut below the modern water table, which probably served as a waterhole. The latest features consisted of a pair of parallel east to west aligned ditches (28 and 25) (one of which cut across the upper fills of the waterhole), which may have defined a narrow trackway or a double ditched banked/hedged boundary.

A substantial assemblage of 242 sherds (5,989g) of pottery came from this area, alongside a small quantity of animal bone. Many of the finds derived from the upper backfill of the waterhole, including 118 sherds of pottery (2,437g). Other features produced much smaller amounts of material, with only gully/ditch 134 and pit 177 producing slightly larger groups (29 sherds, 912g and 39 sherds, 1,688g respectively). The various gullies relating to the putative multi-phase roundhouse produced only a few sherds of pottery. The largest quantities of finds came from the southernmost slot excavated through gully 13, which produced seven sherds of pottery (272g) alongside an iron knife blade (SF 1). The only other notable find was a clay spindle whorl (SF 4) from ditch 41.

#### Area 2

The second excavation area lay approximately 10m to the east of Area 1, measuring approximately 12m by 6m. Again, the features appeared to relate exclusively to a sequence of later Iron Age activity. The earliest remains were three intercutting ditches on an approximately north-west to south-east alignment (84, 107, 108): these yielded over a kilogram of later Iron Age pottery (83 sherds). Once infilled, the ditches were cut by a T-shaped arrangement of ditches (72, 87, 188), at the convergence of which was a discrete deposit of bone, including four cattle skulls, semi-articulated and disarticulated long bones and a single bone from a human infant (Fig 4, see Baxter, below). Further to the south-west (in the upper fill of ditch 87) was a semi-complete, articulated juvenile pig skeleton, lying on its left side with its head at the north. This ditch was sealed by a thin layer of buried soil (55), which covered the southern part of Area 2 and produced a fragment of a triangular clay loomweight (SF 5). Later features, consisting of a single pit (83) containing a very substantial pottery assemblage (99 sherds weighing 2380g) and a steep-sided linear feature (146), cut into this buried soil.

On the same alignment was a large boundary ditch which had been recut at least three times (111, 162, 163 and 164). Its largest iteration (164) was up to 4m wide and at least 1.7m deep, and produced a Late Iron

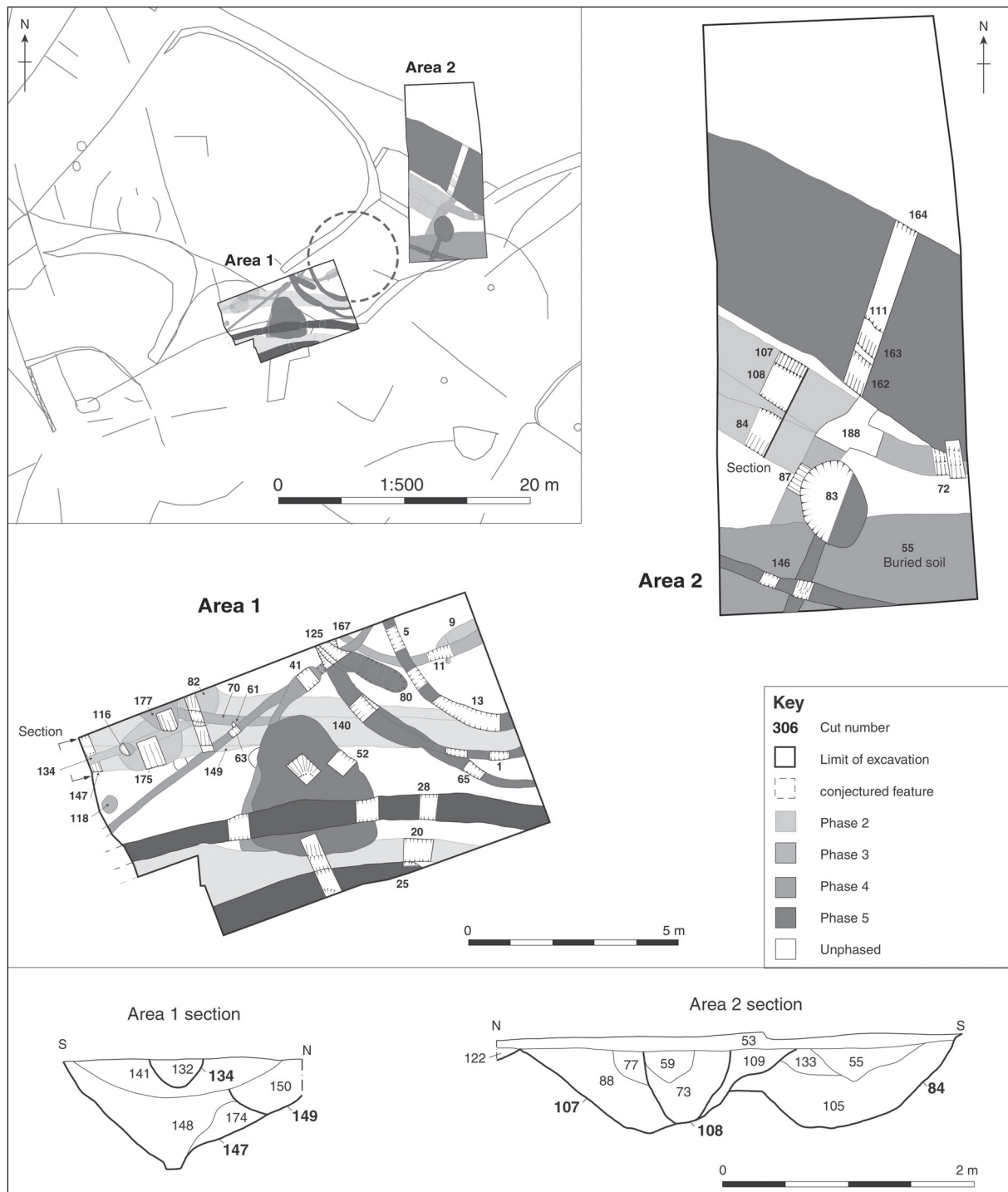


Figure 3. Phases of Iron Age activity within excavation Areas 1 and 2.

Age brooch from its upper backfill (SF 3). The latest deposits identified were several discontinuous layers of thin silty clay (53, Fig. 3), which sealed some of the earlier features and produced very small quantities of pottery notable for including several wheel-thrown and/or grog-tempered sherds of Late Iron Age date.

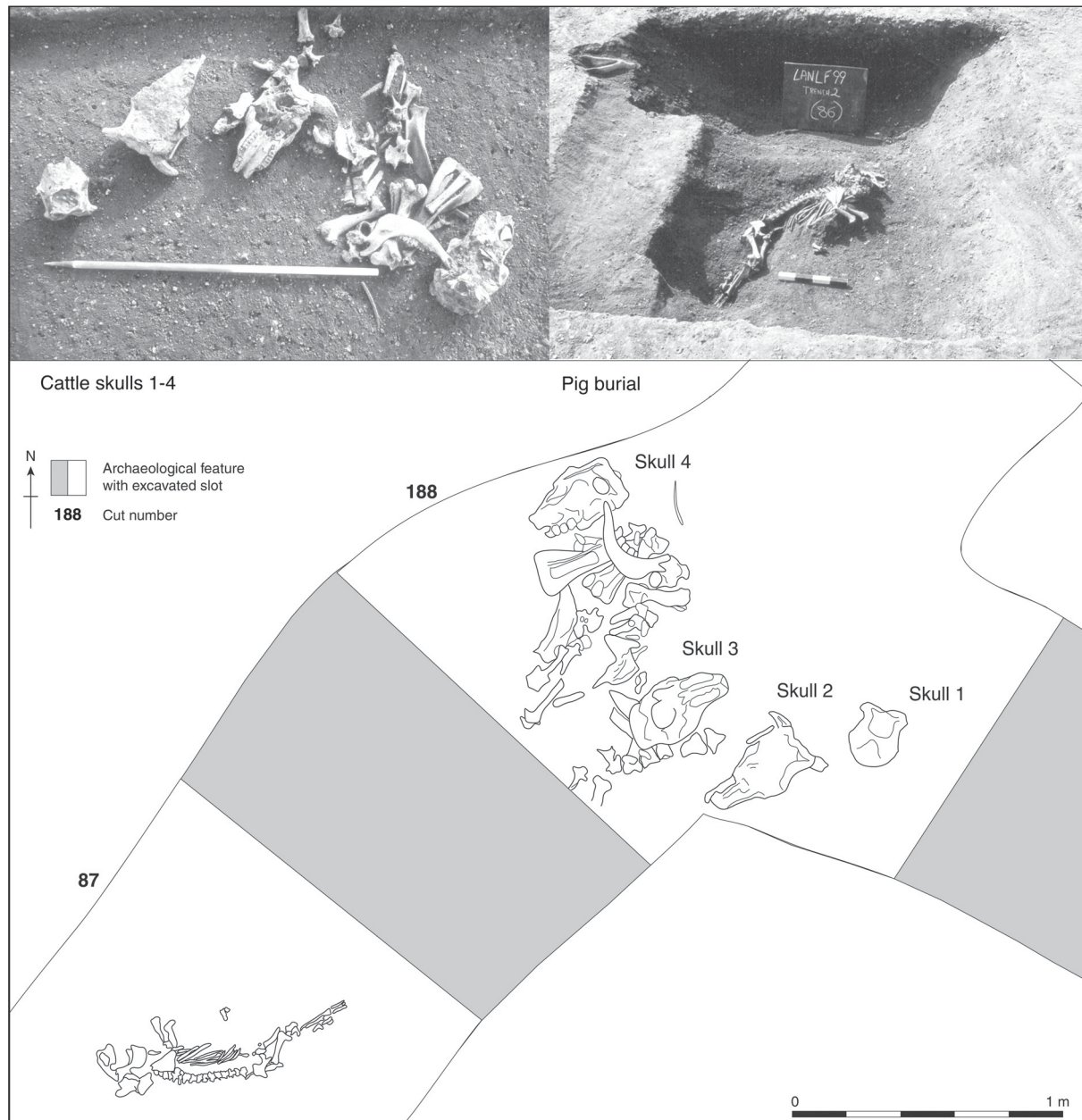


Figure 4. Detailed plan of the animal burials in Area 2.

## The Finds

### Later Iron Age Pottery

Matt Brudenell and Paul Sealey

The excavations produced 681 sherds of later Iron Age pottery (13,243g; Figs 5–8), with a high average sherd weight of 19.4g. In total, five stratified Iron Age pottery groups were distinguished, containing a total of 585 sherds (13,341g) – the remaining pottery was unstratified (85 sherds, 1,699g) or residual (11 sherds, 203g). Whilst the material from Area 1 was exclusively handmade in the Middle Iron Age-type tradition (c. 350–50 BC) at least three of the groups from Area

2 contain pottery that is typologically Late Iron Age, and include a small number of wheel-made ceramics and other diagnostic attributes, such as grog tempering, cordons or combing. The bulk of the assemblage from Area 2 may therefore be of Late Iron Age origin (c. 50 BC–AD 50), despite the fact that most of it is handmade.

This report provides a summary of the stratified Iron Age assemblage, and draws exclusively on the quantification and original reporting on the assemblage undertaken by Paul Sealey in 2001.

### Assemblage characteristics

Seven basic fabric groups were identified. Sandy wares of one form or another dominate, principally

sherds with just sand or sand and organic matter in the clay matrix, followed by those with sand and iron stone (Table 1). Sherds with shell or sand and shell constitute just 2.8% of the assemblage by weight, with sherds with grog/grog and sand accounting for less than 1%. The dominance of sandy wares is typical of later Iron Age pottery groups from the Cam Valley, the Isle of Ely and southern Cambridgeshire generally; the frequencies here are paralleled in published assemblages from sites such as Wardy Hill (Hill and Horne 2003), Hurst Lane (Percival 2007), Longstanton (Woodwood and Edwards 2015), the Milton Landfill and Park & Ride sites (Brown *et al.* 2015), Trumpington Meadows (Brudenell 2018) and Duxford (Percival 2011).

This list of assemblages also shares a similar but restricted repertoire of handmade and wheel-made ceramic forms, dominated by jars. Those from Limes Farm have gently rounded or slack, s-shaped profiles, often with high shoulders and unemphatic necks. Only a few vessels have approximately straight sides that rise steeply from the base (*e.g.* Fig. 5, No. 15), whilst some of the rims rise directly from their shoulders without any neck constriction. Pots identified as being made on the wheel are scarce, although Area 2 yielded a handful of examples (Figs 7–8, Nos 31 and 45), mostly deriving from stratigraphically late contexts. These are all sandy wares, although a small number of grog-tempered sherds were found in the earliest stratigraphic groups.

Rim forms are more diverse. The majority are either rounded or flat-topped, but several have been thickened to give something approaching a bead rim (*e.g.* Fig. 6, No. 22), occasionally with an outer downward angle (*e.g.* Fig. 6, No. 23). Bases are invariably flat, sometimes with a splayed outer edge, whilst one Late Iron Age pot has a hand-made foot-ring base (Fig. 7, No. 31). More unusual for the region is a lug-handled vessel (Fig. 6, No. 30), with the handles set low on upon the walls of the pot.

Around one in five of the rim sherds are decorated (ten of the 55 rim sherds, 18%) with fingertip/nail impressions on the rim-top, or by the tool incisions set obliquely across the rim. Across the entire Iron Age assemblage (including unstratified and residual material), 86 sherds (1,798g) have some form of combed or scored surface decoration (12.6 % by sherd count and 13.6 % by weight). These vary in the detail of application and execution, ranging from neat combed

patterns of shallow fine lines set close together, often in curving arcs (*e.g.* Fig. 7, No. 37), to deeply scored straight or curved lines made with a sharp edge, sometimes forming lattices or a network of randomly applied overlapping lines (Fig. 5, Nos 5–7 and 13). The more unstructured patterns belong to handmade Scored Wares of the East Midlands tradition (Elsdon 1992), whilst the combed sherds are more likely to derive from Late Iron Age jars, which can be either hand- or wheel-made. The distinction between surface treatment and affinity to ceramic tradition is not always clear cut, and has not been defined along hard lines here. In all probability the ‘true’ Scored Wares are likely to constitute less than 10% of the pottery. This would be a frequency broadly characteristic of this area of Cambridgeshire, which lies beyond the Scored Ware heartlands of the county, located along and to the north of the lower Ouse Valley and western fen-edge (see Knight 2002, 133, fig. 12.4 for distribution).

#### Discussion

The pottery from Limes Farm constitutes a fairly typical group of later Iron Age pottery from southern Cambridgeshire, dominated by weakly shouldered handmade jars in dense sandy fabrics, found alongside a small number of Scored Wares. Chronologically, such vessels are known to have a long currency between c. 350–50 BC, and continued to be made alongside wheel-made pottery and other diagnostic Late Iron Age ‘Belgic’-related ceramics, introduced into the domestic ceramic repertoire from c. 50 BC. Both these potting traditions persisted until the mid-1st century AD and, whilst this part of Cambridgeshire was generally receptive to the adoption of wheel-made ceramics and associated ‘Belgic’-related pottery, the process was piecemeal and protracted, with only a limited range of new types being widely utilised. This is evident at Limes Farm, where wheel-made pottery forms a relatively minor component of the group as a whole, and is still made in sandy fabrics. However, wheel-made ceramics are present in some of the earlier stratified groups from Area 2, suggesting the pottery is later than that from Area 1. Overall, the individual significance of the Limes Farm pottery assemblage has somewhat diminished since the time of its initial analysis. What was considered a large, unusually well-stratified group of later Iron Age ceramics in 2001, worthy of detailed publication,

Table 1. Quantification of basic fabrics from stratified Iron Age assemblages.

Fabric group	No. sherds	Weight (g)	% by Weight
Sand (S)	406	5738	50.6
Sand and organic matter (SV)	105	3713	32.7
Grog/grog and sand (G/SG)	7	37	0.3
Sand and flint (SF)	2	15	0.1
Sand and iron stone (SRG)	48	1524	13.4
Shell (SH)	7	241	2.1
Shell and sand (SSH)	10	73	0.6
<b>Total</b>	<b>585</b>	<b>11341</b>	<b>99.8</b>

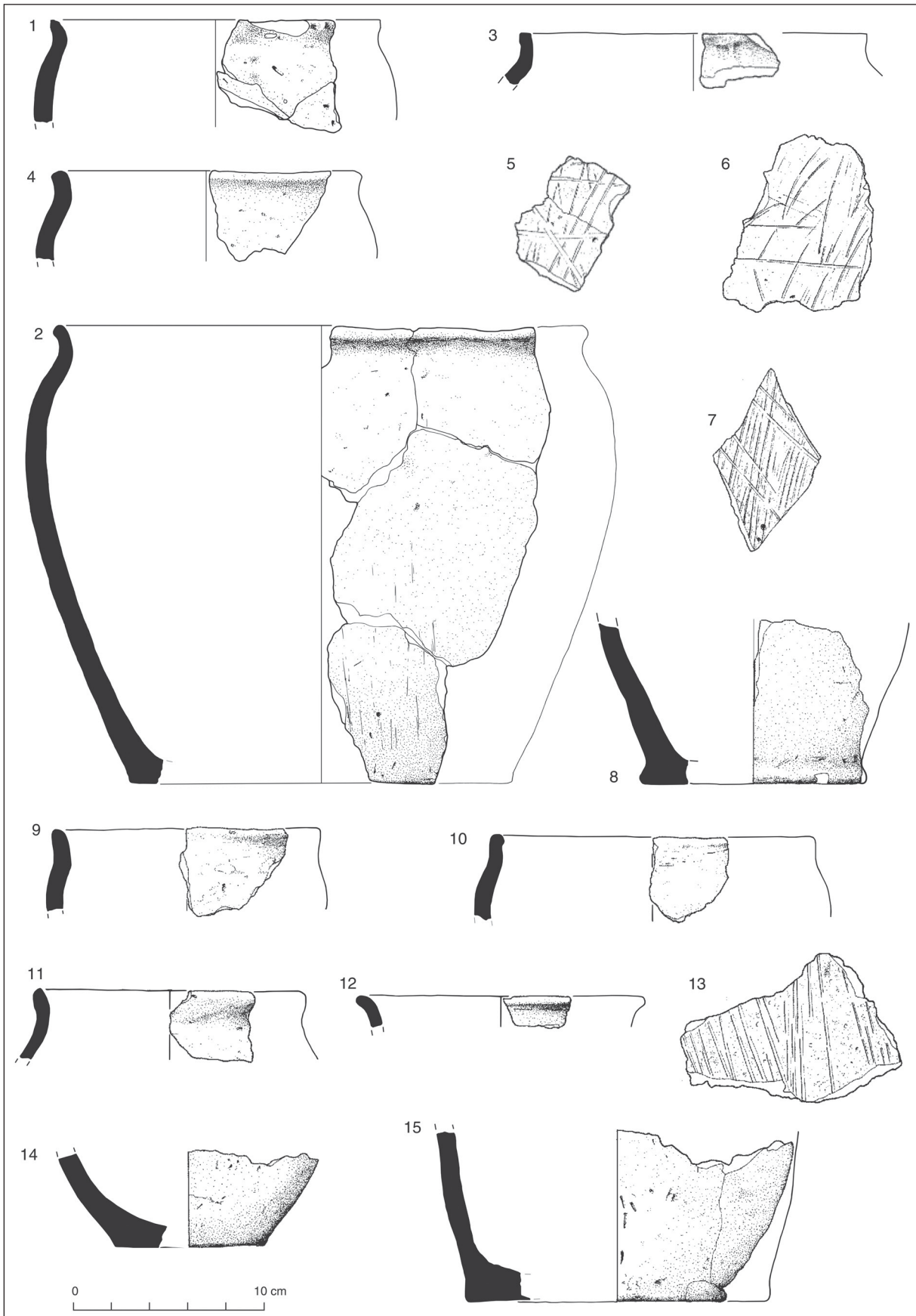


Figure 5. Iron Age pottery from Area 1, Nos. 1-15. For more information see p. 43.



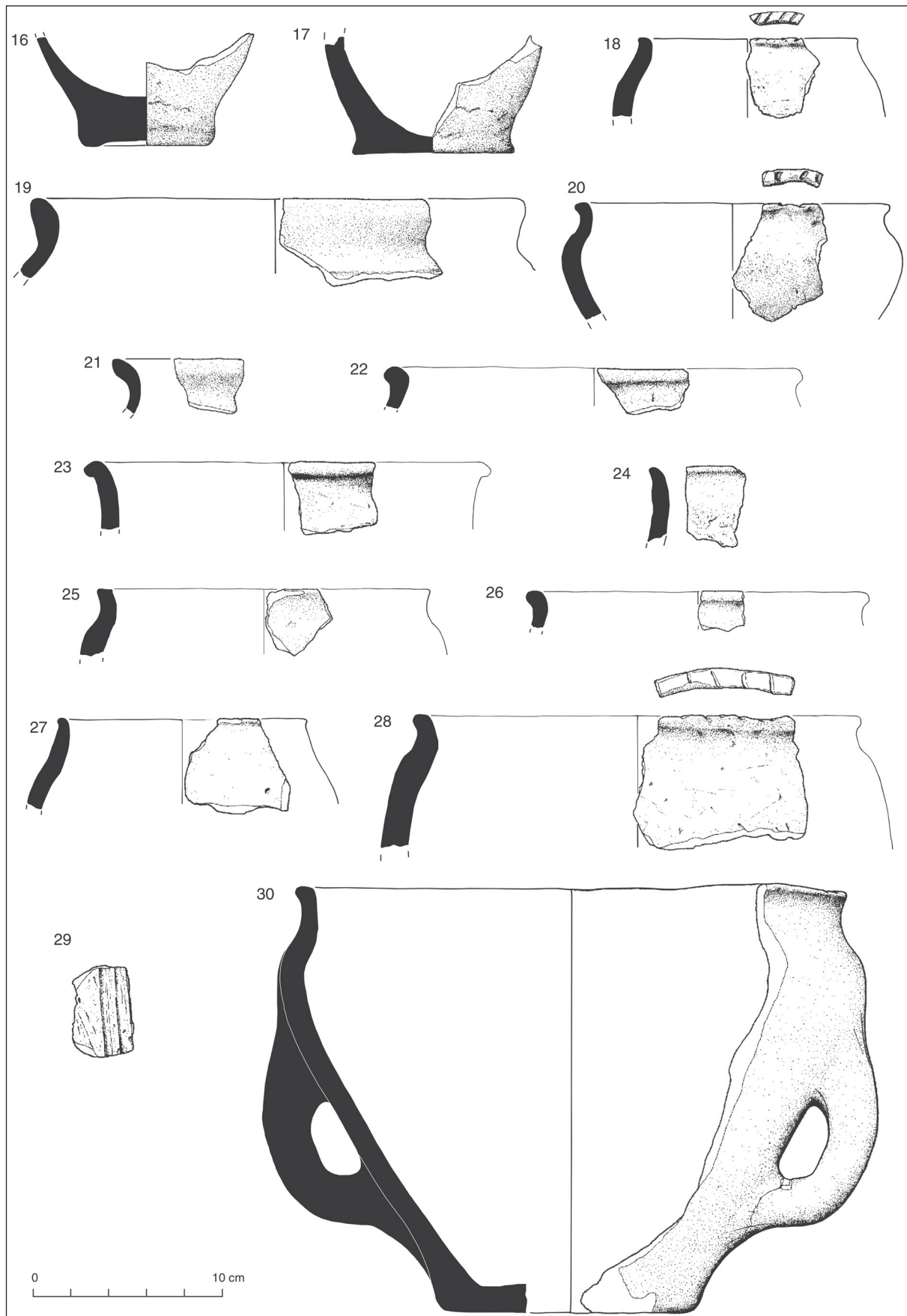


Figure 6. Iron Age pottery from Areas 1 and 2, Nos. 16-30. For more information see p. 43.

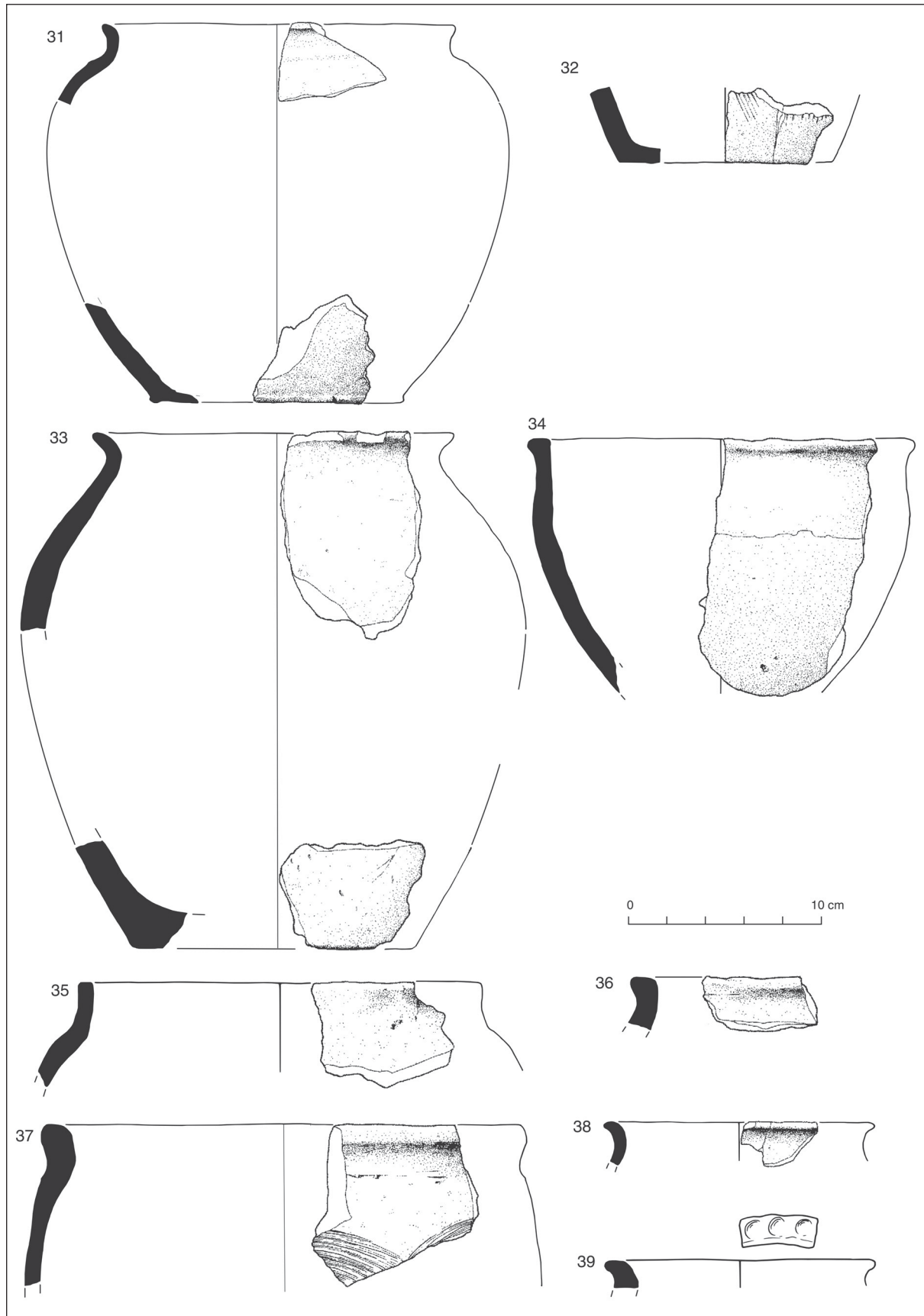


Figure 7. Iron Age pottery from Area 2, Nos. 31-39 For more information see p. 43.

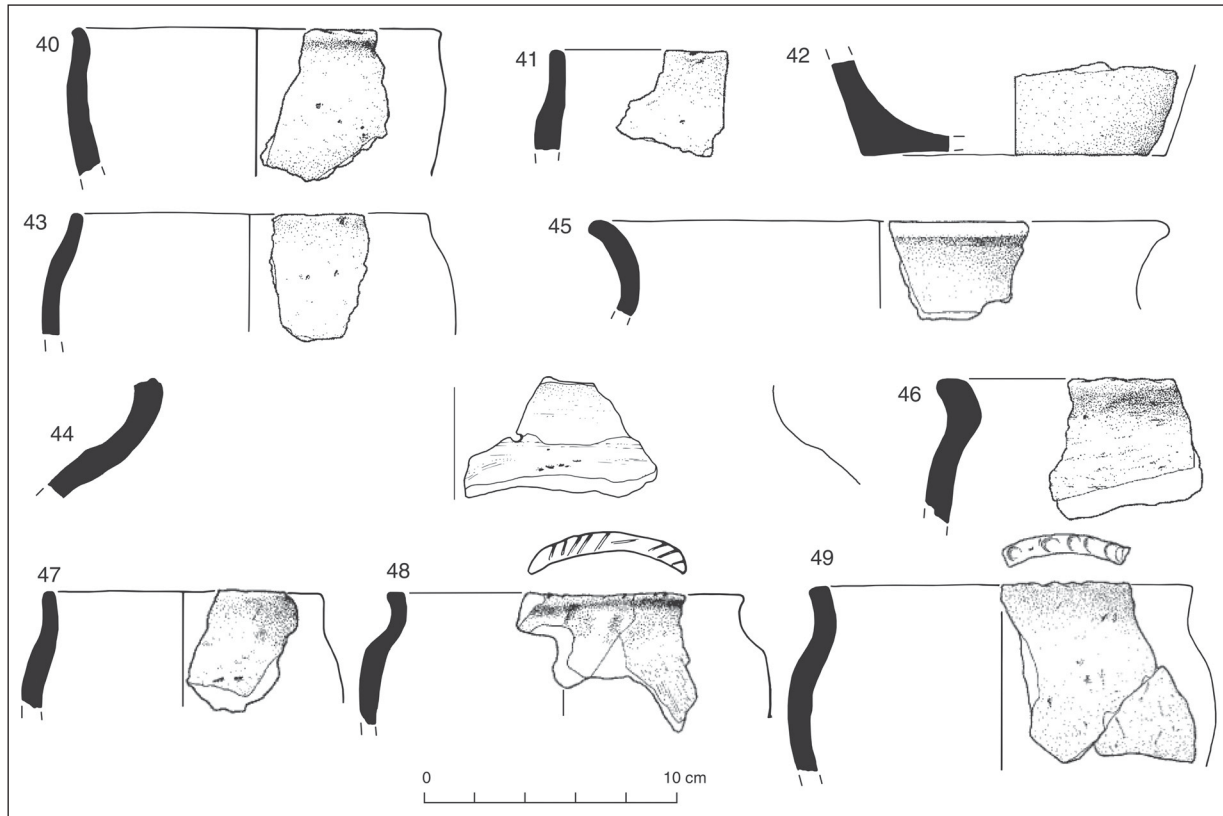


Figure 8. Iron Age pottery from Area 2 and unstratified, Nos. 40-49. For more information see below.

Iron Age Pottery from Areas 1 and 2 shown in Figures 5-8.

**Fig. 5. Iron Age pottery from Area 1 (Nos 1-15)**

1. Fabric SH. Area 1. Gully 134.
2. Fabric S. Area 1. Gully 134.
3. Fabric SRG. Area 1. Gully 134.
4. Fabric SH. Area 1. Gully 134.
5. Fabric S. Scored Ware. Area 1. Pit 177.
6. Fabric S. Scored Ware. Area 1. Pit 177.
7. Fabric SV. Scored Ware. Area 1 Pit 177.
8. Fabric SV. Area 1. Pit/Waterhole 52.
9. Fabric S. Area 1. Pit/Waterhole 52.
10. Fabric SV. Area 1. Pit/Waterhole 52.
11. Fabric SV. Area 1. Pit/Waterhole 52.
12. Fabric S. Area 1. Pit/Waterhole 52.
13. Fabric SH. Scored Ware. Area 1. Pit/Waterhole 52.
14. Fabric SV. Area 1. Pit/Waterhole 52.
15. Fabric SV. Area 1. Pit/Waterhole 52.

**Fig. 6. Iron Age pottery from Areas 1 and 2 (Nos 16-30)**

16. Fabric SV. Area 1. Pit/Waterhole 52.
17. Fabric SV. Area 1. Pit/Waterhole 52.
18. Fabric SV. Area 1. Tool impressed rim-top. Pit/Waterhole 52.
19. Fabric S. Area 1. Gully 5.
20. Fabric SV. Fingertip impressed rim-top. Area 1. Ditch 28.
21. Fabric S. Area 1. Ditch 28.
22. Fabric S. Area 2. Ditch 107
23. Fabric S. Area 2. Ditch 107.
24. Fabric S. Area 2. Ditch 107.
25. Fabric SFL. Area 2. Ditch 107.
26. Fabric S. Area 2 Ditch 107.

27. Fabric S. Area 2. Ditch 107.
28. Fabric SV. Fingernail impressed rim-top. Area 2. Ditch 84.
29. Fabric SH. Scored Ware. Area 2. Ditch 84.
30. Fabric S. Area 2. Ditch 72.

**Fig. 7. Iron Age pottery from Area 2 (Nos 31-39)**

31. Fabric S. Wheel-thrown. Area 2. Ditch 72.
32. Fabric S. Combed. Area 2. Ditch 72.
33. Fabric SV. Area 2. Pit 83.
34. Fabric S. Area 2. Pit 83.
35. Fabric S. Area 2. Pit 83.
36. Fabric S. Area 2. Pit 83.
37. Fabric S. Combed. Area 2. Pit 83.
38. Fabric S. Area 2. Layer 53.
39. Fabric S. Fingertip impressed rim-top. Area 2. Layer 53.

**Fig. 8. Iron Age pottery from Area 2 and unstratified (Nos 40-49).**

40. Fabric SV. Area 2. Pit 83.
41. Fabric SRG. Area 2. Layer 53.
42. Fabric SV. Area 2. Layer 53.
43. Fabric SV. Area 2. Layer 53.
44. Fabric S. Area 2. Layer 53.
45. Fabric S. Wheel-thrown, rippled neck. Area 2. Layer 53.
46. Fabric S. Unstratified.
47. Fabric S. Unstratified.
48. Fabric S. Tool impressed rim-top. Unstratified.
49. Fabric SV. Fingertip impressed rim-top. Unstratified.

would be cast as a fairly small-sized assemblage from a key-hole excavation, if unearthed today. Far larger pottery groups have certainly been excavated, radiocarbon dated and published in the intervening years. Yet whilst a coherent, up-to-date statement on the development of Iron Age pottery in Cambridgeshire is long overdue, studies have moved into an era where no single assemblage is likely to provide a platform for synthesis in the way that type-sites did in the past, as was originally envisaged for Limes Farm.

This need not imply the individual groups are of little or no value, but rather that they have a significance in different and less dramatic ways today. Foremost, they serve to build and further an understanding of trends in the local archaeological record, most of which were entirely obscure less than a quarter of a century ago. The fact that the Limes Farm pottery can now be paralleled with at least six published contemporary and 'culturally-related' assemblages from southern Cambridgeshire (see above) is testament to progress on this front. This figure is set to more than double in the next five years, which will undoubtedly nuance understandings of pattern and variability at increasingly refined geographic and temporal scales. It is therefore important that assemblages do still continue to reach publication, even if even the wait (as in this instance) is nearly two decades.

#### *Ceramic small finds*

*Nina Crummy*

Landbeach, in common with many Middle and Late Iron Age settlement sites, produced evidence for the production of cloth in the form of a single spindle-whorl (SF 4, from fill 48, ditch 41, Area 1) and part of a loomweight (SF 5 from the buried soil (55) in Area 2). Spindlewhorls are generally rare in Britain throughout the prehistoric periods, and occur far less frequently than loomweights. A similar variation in deposition was noted as far back as the 4th millennium BC at Delley-Portalban on Lake Neuchâtel, Switzerland, where the number of loomweights recovered far outnumbered that of spindlewhorls of clay, antler and stone (Médard 2000, 4, 32–3). The reason for this difference in deposition rate no doubt lies both in the manufacture of the two types of artefact and in their usage. Loomweights are quite crudely made and received considerable stress in use, while greater care, and in the case of the non-ceramic materials also greater time, was invested in the making of spindlewhorls, and their use placed little stress upon their fabric. Each whorl was a vital part of the equipment used for spinning and can thus be seen as a carefully-crafted and valued implement, while loomweights were effectively disposable machine-parts used in sets and individually easily replaced.

Triangular loomweights continued in use for some decades after the Roman conquest of Britain (Wild 1970, 63; Lambrick & Robinson 1979, 57). They were used on an upright warp-weighted loom, and the fibre most commonly used was undoubtedly wool, although vegetable fibres such as flax may also have

been produced. They can be perforated on one corner, two, or all three, and wear around the holes of loomweights from Burgh, Suffolk, and Orsett 'Cock', Essex, suggests that triply-perforated weights were attached to the warp by two holes and suspended with the unthreaded third point downwards (Martin 1988, 63; Major 1998, 106). Experimental work has shown that this enables the weight to ride freely up or down the threads, while a string attached to the third hole might be used either to move the weight backwards or forwards or to attach it to a frame (Wilhelmi 1977, 180–84).

#### *Colchester brooch*

*Nina Crummy*

A copper-alloy Colchester brooch, lacking its spring and pin (SF 3) came from the fill (145) of ditch 164 in Area 2. Manufactured within the territory of the Catuvellauni and Trinovantes, as shown by unfinished examples as well as by distribution (Stead and Rigby 1986, 122–3; Bayley and Butcher 2004, 36), the Colchester series as a whole is typical of Cunobelin's reign, having a broad date-range of *c.* AD 10–41/3, although SF 3's large catchplate opening crossed by a stepped bar suggests a date fairly early in this period. Production of Colchesters ceased either with the death of Cunobelin or at the conquest, with the majority, as demonstrated by both burial and site finds, then being in the ground by *c.* AD 50/5 (Stead and Rigby 1989, 89–91; Mackreth 1992, 122; 2011, 245; Crummy 2003, 108; Crummy and Popescu 2014, 202–4). They are not found on the continent, where the earlier/contemporary continental form was the Simple Gallic, distinguished by a downward kick at the head (Riha 1979, 64–7, type 2.2; Feugère 1985, 262–7, type 14a). In Britain the distribution of the indigenous Colchester series is concentrated in Hertfordshire, Essex and southern Cambridgeshire, spreading into the neighbouring zones of Catuvellaunian influence, and those found in Kent and Hampshire, for example, can be seen as a reflection of the expansionist policies of Cunobelin and his sons (Mackreth 2011, 37–43, 234; Crummy 2018, 110–15). Similarly, the scatter across Southern and Central England into the west and north may reflect either pre-conquest trade and travel or the flight of refugees after the invasion; the very few found in early military contexts, *e.g.* Richborough (Bayley and Butcher 2004, 61–5), are mainly shorter and later examples that may have come from prisoners or been taken as loot.

#### *Iron knife*

*Nina Crummy*

An iron knife blade missing its tip (SF 1) came from the fill (15) of roundhouse gully 13 in Area 1; the back is straight apart from towards the point, where it curves upwards very slightly, and the edge is convex, gradually rising up towards the point. The total length of blade is 122mm, and it has a maximum width of 32mm. It appears to have been deposited

intact, or very nearly so: its point is missing and the head of one rivet is broken off, but this damage is very minor and would not have made the tool unserviceable. The tip may have been lost due to corrosion during burial. The survival of the head on the other rivet suggests that the handle was still attached when the object was buried.

The knife lay horizontally in the upper fill of the roundhouse ditch, a context exactly matched by that of an iron shortsword from Pennyland, Buckinghamshire (Jope 1993; Williams 1993, 23, roundhouse 7). While the Pennyland blade was believed when excavated to be domestic refuse, the impression given both there and at Landbeach is that the blades were carefully placed in their contexts as part of a formal rite. There is a strong resonance between the contexts of the Landbeach and Pennyland blades and those of hoards of iron currency bars (a type of smith's blank usually referred to as trade iron), deposited in or close to the boundaries of Iron Age settlements. The main focus of the formal deposition of currency bars in such contexts lies in the west of the country (Hingley 1990, 98–103; 2005, 190–2, fig. 2), but there is increasing evidence that the same practice also occurred in the east (examples occur at Hinchingsbrooke, Cambridgeshire and Stanway, near Colchester, Essex; *ibid.*, 205, nos 5 and 7).

The similar contexts of the Landbeach and Pennyland blades may reflect issues relating to personal rather than communal boundaries. As knives and shortswords could double up as both personal tools and edged weapons, in a votive deposit they could be perceived as both formally defining areas of individual/small unit influence and making clear an intention to defend that area in an aggressive manner.

#### *Animal bone and human skeletal remains*

*Ian L. Baxter*

A small assemblage of 264 bones (NISP; 26 kg) was hand collected from the excavated areas. The identifiable bone was dominated by sheep/goat, but cattle and pig were also frequent. Horse was infrequent and canids only represented by immature remains of fox or domestic dog. Bird bones were rare and probably belonged to wild duck species. The most interesting aspect of the assemblage was the presence of two possible 'special animal deposits' from Area 2; the skeleton of a juvenile pig within ditch 87 and four small-horned cattle crania associated with articulating vertebrae and complete but disarticulated long bones from ditch 188. A total of 122 countable bones were recovered from these two deposits, as detailed in Table 2.

The primary deposit in ditch 87 comprises the partial skeleton of a juvenile pig found lying on its left side (Fig. 4). A total of 89 bones belonging to this skeleton were recovered. Missing elements include the lower right fore limb and small bones such as carpals, tarsals and associated sesamoids. These small bones may have been lost during excavation. The lower dP<sub>4</sub> is well worn, the M<sub>1</sub> is in wear but the M<sub>2</sub> is not

erupted. The animal was aged over six months and less than nine months at time of death (Sisson and Grossman 1953). No pathologies were seen affecting the skeleton and cause of death is unknown. There are no butchery marks. Other fragments in secondary deposition in ditch 87 include a very fragmentary cattle cranium, the left innominate of a cow, a cattle metatarsal with unfused distal metaphysis, the mandible of a sheep aged less than 12 months, and adult pig lower I<sub>1</sub>, and the hoof bone (P3) of a pony-sized horse. Several of these fragments have been gnawed by dogs.

Table 2. Ditches 87 and 188, number of identified specimens (NISP).

Taxon	Ditch		Total
	87	188	
Human ( <i>Homo sapiens</i> )	-	+	+
Cattle ( <i>Bos f. domestic</i> )	3	19 <sup>1</sup>	22
Sheep/Goat ( <i>Ovis/Capra f. domestic</i> )	1	5	6
Sheep ( <i>Ovis f. domestic</i> )	(1)	(3)	(4)
Pig ( <i>Sus scrofa</i> )	90 <sup>2</sup>	2	92
Horse ( <i>Equus caballus</i> )	1	1	2
Total	95	27	122

"Sheep/Goat" includes the specimens identified to species. Numbers in parentheses are not included in the total of the period. "+" means that the taxon is present but no specimens could be "counted" (see text).

<sup>1</sup>Includes three articulating bones from a fore limb.

<sup>2</sup>Includes eighty-nine bones from a partial skeleton.

Four upturned cattle crania were found in ditch 188 in association with cattle postcranial elements from the axial and appendicular skeleton. The crania were allocated numbers during excavation (skulls 1–4; see Fig. 4). Unfortunately, the crania are in poor condition which has reduced the number of measurements that could be taken on them, but three could be identified as adults, two of which were short-horned cows. Associated cattle postcrania include several (mostly thoracic) vertebrae and ribs, at least some of which were articulated when deposited, a sacrum, a right mandible, a right scapula, the articulating left humerus, radius and ulna of an animal approximately 115–116cm high at the shoulder (Matolcsi 1970), a left femur belonging to a similar sized beast, a left radius from an individual around 119cm at the shoulder, and a left radius from one 109cm at the withers. Other less complete cattle fragments include the right scapula of a juvenile with the coracoid process unfused, a distal left tibia and left ulna with unfused proximal epiphyses. The femur has canine punctures in both ends and a proximal metacarpal fragment has been butchered with multiple transverse chop marks on the posterior surface of the shaft. No evidence of butchery was seen on the more complete cattle bones. Several sheep/goat fragments were recovered alongside the cattle remains, including three ewe horncores and associated cranial fragments, a distal tibia fragment with epiphysis unfused, a pig lower deciduous

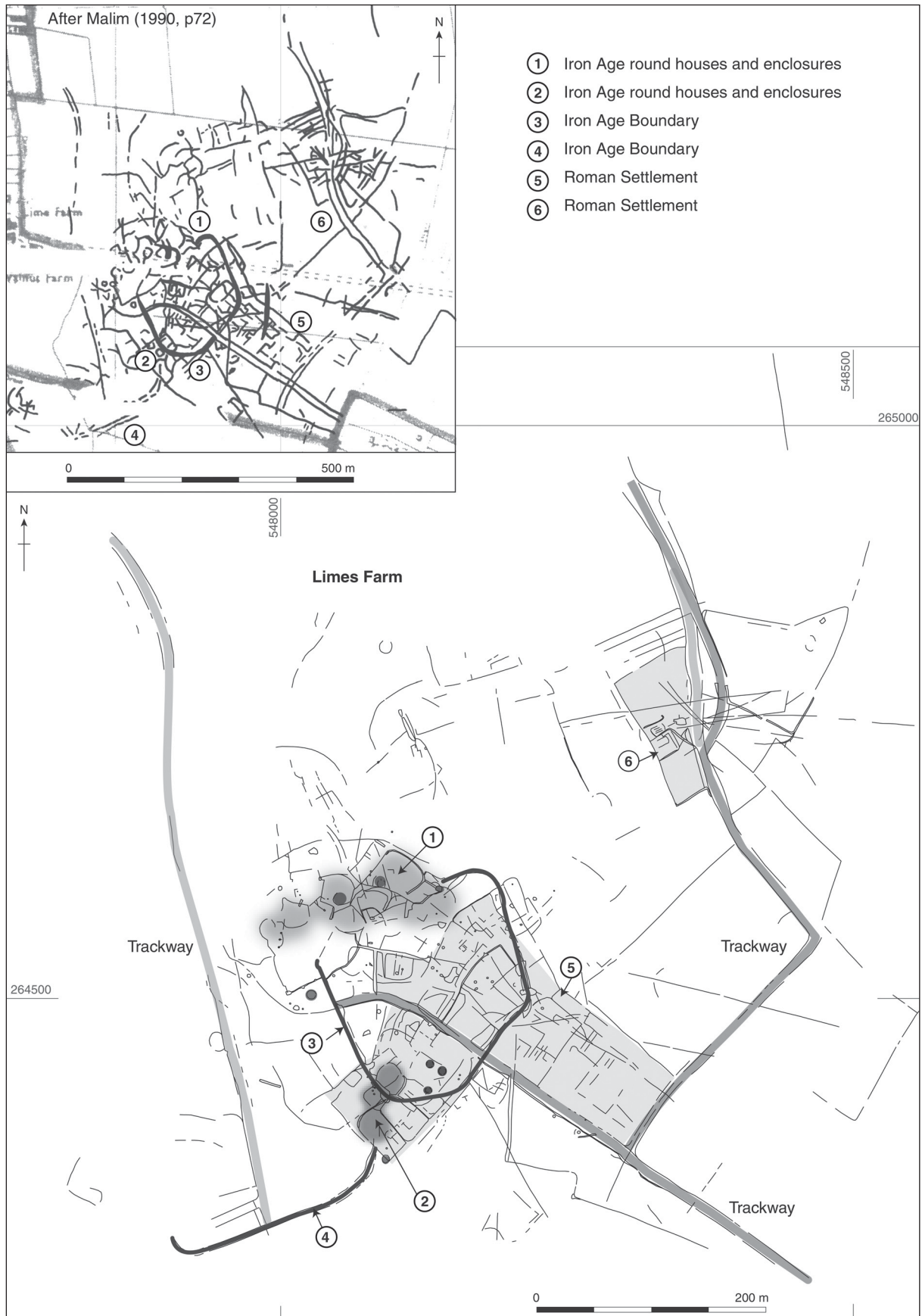


Figure 9. Interpretation of the Limes Farm cropmark complex.

incisor, a subadult pig mandible and the metacarpal of a pony-sized horse of approximately 12½ hands (May 1985). The proximal part of the horse metacarpal is gnawed. The proximal left tibia of a perinatal human infant was also recovered.

## Discussion

The small scale of the investigations at Limes Farm exposes some of the difficulties of grappling with the complexities of large later prehistoric and Roman cropmark complexes within the limited exposures provided by widely spaced trenches and small-scale area excavation. Whilst in some of the outlying trenches a simple correspondence could be demonstrated between the mapped cropmark features and those exposed during the fieldwork, this was not the case in the two main areas of excavation (Fig. 3). First and foremost, it would have been difficult to predict the sheer density of cut features within the two areas on the basis of the cropmark plots alone – and many of the features, including substantial ditches (such as 164 in Area 2) were not visible on aerial photographs. One point of particular frustration is that it has not been possible to equate any of the linear features in Area 2 with the substantial curvilinear boundary/enclosure ditch plotted immediately to the east (see below and Fig. 9).

These difficulties and ambiguities notwithstanding, the excavations are of considerable significance in demonstrating that virtually all the features encountered in the relevant area of the cropmark complex relate to activity during the later Iron Age (c. 350 BC – AD 50). The pottery is overwhelmingly dominated by handmade pottery of later Iron Age type and grog-tempered and/or wheel thrown Late Iron Age forms were very rare – entirely absent from Area 1 and only recovered in small quantities from Area 2, where they derived largely from superficial layers overlying the features – suggesting that the vast majority of the cut features have an origin in the Middle Iron Age (c. 350–50 BC). The assemblage appears to include a relatively high proportion of Scored Wares (c. 10–12%) in comparison to other sites in eastern and southern Cambridgeshire, where scoring typically occurs on less than 5% of sherds, contrasting with sites along and beyond the Ouse valley to the north and west, where Scored Ware assemblages (typically with well in excess of 20% scored sherds) dominate (Webley 2013, 194–7, table 5.19; C. Evans *et al.* 2013, 247–8, fig. 5.50). It has been suggested that there may be a chronological as well as spatial/regional dimension to these differences in potting traditions in Cambridgeshire, with earlier Scored Ware assemblages later giving way to Plain Ware assemblages (*ibid.*), but, given the lack of precise chronologies for the later 1st millennium BC, these patterns remain equivocal. Meanwhile, the small assemblage of diagnostic Late Iron Age pottery and the Late Iron Age brooch (SF 3) from the substantial enclosure ditch in Area 2 do suggest that activity in the area continued

in some form into the early years of the 1st century AD.

Whilst the precise date and duration of the Iron Age activity remains obscure, the substantial amounts of pottery, alongside other domestic items (including the loom weight fragment and spindle whorl) leave little doubt that this involved sustained settlement. This impression is reinforced by the recognition of a series of gullies belonging to one or more roundhouse(s) in Area 2. When combined with the recut enclosure/boundary ditches, pits and waterhole, these form a now familiar suite of features seen across a large and growing number of investigated Later Iron Age sites in Cambridgeshire.

### *Towards an interpretation of the cropmark complex*

While any detailed understanding of the layout and organisation of settlement is restricted by the small scale of the excavations and the multi-phase nature of the remains, the results permit some general observations and tentative interpretations about the wider cropmark complex.

Firstly, the Iron Age activity in Areas 1 and 2 appears to be located at the eastern half of a series of interconnected curvilinear enclosures, aligned broadly east-west and covering a total area of c. 0.7ha (Fig. 9, No. 1). Around eight or more individual compounds are discernible in the complex, most appearing to be 25–50m in diameter; a range typical for later Iron Age enclosures in the region. Three possible ring-gully defined roundhouses are also visible within the enclosures, with six similar structures identified in the wider cropmark complex. Around 120m to the south is a second smaller group of at least three linked curvilinear enclosures of comparable form and size (Fig. 9, No. 2), also likely to be Iron Age. These appear to be located at the eastern end of a boundary ditch or trackway (Fig. 9, No. 4) heading westwards away from the centre of the cropmark complex.

More enigmatic is the cropmark of a large, long curvilinear ditch, which seems not only to enclose the space between the two foci of Iron Age settlement described above, but also to connect them (Fig. 9, No. 3). This is c. 175m in diameter, bounding an area of c. 2.2ha, and is marked very clearly in the original published plot of the cropmark complex (reproduced for reference in Fig. 9). Physically linked in this manner, it is not impossible to imagine that the two settlement foci may have been contemporary, and were perhaps socially and economically linked as a farming unit – the enclosure space between possibly forming a shared livestock corral. This may be pushing the evidence to the limits of inference, but does provide a model for future investigation.

Away from Areas 1 and 2, the trenching revealed no further evidence of Iron Age activity, and served largely to confirm that other parts of the enclosure system to the south (exposed in Trench 10 and the discrete set of enclosures sampled by Trench 11) were of Roman date. The results from Trench 10 correspond with earlier finds of Roman material from the southern part of the main cropmark complex (CHER 05888)

and to the scatter of Roman material recorded during the Fenland Survey as site LAN4. On this basis, much of the complex to the south and east of Areas 1 and 2 seems likely to be of Roman date.

Again, an attempt has been made to define these two core areas of Roman settlement in Fig. 9 (Nos 5 and 6), both of which appear to be organised into a system of rectilinear enclosures emanating from trackways. Whilst the core of the larger settlement (Fig. 9, No. 5, c. 4ha) overlaps with areas of earlier activity described above, it is possible that there was little or no antecedent Iron Age settlement at the enclosure investigated by Trench 11 (Fig. 9, No. 6), from which a few Roman sherds were recovered by the Fenland Survey (Site LAN5). This seems likely to represent an isolated/discrete trackside settlement (c. 0.6ha in extent) closely comparable with similar arrangements of cropmark features to the east (CHER 08328/11561; see Background).

It is an open question whether, or to what extent, any of the other major Roman cropmark sites to the south and east include an earlier Iron Age component but the evidence to date suggests that the vast majority of visible features are Roman. That said, there are ring ditches and other features in some areas (e.g. CHER 08322) which may point towards further Iron Age sites and, given the density of Iron Age settlement in many areas of the county, it would be reasonable to expect multiple foci of Iron Age settlement across these riverside terraces (see C. Evans *et al.* 2008; C. Evans 2012). A major issue raised by the recognition of Iron Age settlement in the area must concern tracing the development of a typical later Iron Age agrarian landscape to become, in the 2nd and 3rd centuries AD, what has been described by Jeremy Evans as an 'industrial enclave' which sat at the heart of important transport routes along the Cam and Old Tillage (J. Evans *et al.* 2017, 122). In this context, although probably a reflection on the piecemeal work undertaken to date, it is frustrating that there is very little clear evidence for activity between the latest Iron Age activity attested in Area 2 at Limes Farm (probably in the years immediately preceding the conquest) and the beginnings of extensive settlement and industry in the area from the late 1st century AD.

## Conclusion

Recognition of a dense and potentially long-lived area of later Iron Age settlement within the extraordinary complex of cropmark features on the western terraces of the Lower Cam Valley is significant in providing earlier context for better-documented Roman activity in this landscape. That Iron Age occupation was not firmly anticipated by previous analysis of the cropmark evidence or fieldwalking surveys (and our current very partial understanding of the character and extent of this activity based on small-scale excavation) highlights some of the difficulties in understanding such major site complexes in lieu of extensive area excavations. That being said, as shown

here, even limited trenching programmes can yield important results that further comprehension and provide a basis for distinguishing key components and a sense of date. Yet it must be stressed that the information is highly fragmentary. Therefore having provided evidence for what may be the earliest sustained occupation of the area, in the Middle Iron Age, many other outstanding research questions remain. At the fore are those concerning the definition and development of settlement in the years either side of the Roman conquest. Other unresolved issues include the fate of Roman settlement, industry and commerce in the later 3rd and 4th centuries, and the extent of any post-Roman activity at these sites in the context of the development of the surrounding villages. Additional fieldwork and thought would be needed to adequately address these, but it is abundantly clear that these sites hold the potential for these themes to be explored further.

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