

Excavations at Waterbrook Park

Ashford, Kent

1992-3 and 2007

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Executive summary

An unstratified assemblage of worked flint was found spread evenly across Area B. Only single pits dated to the Neolithic, Early Bronze Age and Middle Bronze Age periods. The first substantial activity took place in the Late Bronze Age and Early Iron Age, with roundhouses, pits and ditches indicating small scale settlement in Area A. In Area B, a cremation cemetery was radiocarbon dated to the Late Bronze Age, among scatters of pits and post holes. Enclosed settlement proliferates in the Late Iron Age and Romano-British period, with a series of ditched enclosure, trackways and roundhouses in Area A and pits, post holes and ditches in Area B. Later evidence is limited to ditches of medieval, post-medieval and modern fields.

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Introduction

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Introduction

This report describes the results of a series of archaeological works undertaken at Waterbrook Park, in the parish of Sevington, south-east of Ashford, first by the Canterbury Archaeological Trust for RPS TT in 1992–93 (Rady 1999) in advance of the proposed development of a lorry park and other industrial units, and then by Wessex Archaeology for RPS TT in 2007 (Wessex Archaeology 2007; 2008) in advance of the further developments within the site (Fig. 1). Together these works revealed evidence for activity dating from the Late Mesolithic to the post-medieval period and add significant new elements to the understanding of an archaeological landscape which in recent years has been subject to a number of large-scale excavations.

Background

Following a desk-based assessment by the Canterbury Archaeological Trust (Cross 1990), a 60 ha area was subject to evaluation by 147 trial trenches (equivalent to a 1.25 % sample) in 1992, which identified four areas of interest (Sites A–D). In 1993, Site A, which covered 0.7 ha centred on NGR 603140 139690, was stripped of topsoil, although due to adverse ground conditions only the eastern third was subject to detailed examination. It revealed evidence for Late Iron Age and early Romano-British occupation (Rady 1999). The excavation was followed by an intermittent watching brief during construction.

In 2007, Wessex Archaeology undertook the excavation of a further two areas (Areas A and B: Wessex Archaeology 2007; 2008). Area A, the southern part of which overlapped with the 1993 Site A excavation, covered 1.8 ha centred on NGR 603120 139750. For the sake of convenience, Site A and Area A are referred to collectively in this report as Area A (Fig. 2). Approximately 200 m to the north, Area B (which incorporated Site B) comprised two parts, one on either side of Waterbrook Lane, with a total area of 5 ha centred on NGR 603100 140150 (Fig. 2). Sites C and D (Rady 1999 Fig. 2) of the original evaluation by the Canterbury Archaeological Trust were not investigated further and do not feature within this report.

The excavated areas lie on the north side of the north-west flowing East Stour River (Fig. 2). Area A lies on the valley floodplain immediately flanking the river's present course at 39 m Ordnance Datum (OD), although with a slight rise to 40 m OD in the centre, characterised by an outcrop of glacial gravel. Area B lies on an area of raised ground on the north side of the valley, its highest point at 42 m OD in the middle of its north-west side, dropping down to the valley floor at 39 m OD to the south-east, east and north-east. The geology is mapped as Weald Clay Formation (Mudstone), with alluvium on the valley floor surrounding Area A and to the south of Area B (British Geological Survey).

The site occupies a landscape that has been subject in recent years to a number of large-scale archaeological excavations related to developments around Ashford (Fig. 1). The two areas lie immediately north-east of the large development site at Cheeseman's Green, which has produced evidence for activity dating from the Mesolithic to the medieval periods, with a particular emphasis on the occupation and organisation of the landscape in the late prehistoric

and Romano-British periods (Gittins, Leivers and Powell, forthcoming). Other sites in the area include the Middle/Late Iron Age to early Romano-British settlements south-east of Park Farm (Powell 2012), and another with evidence of high-status burials at Brisley Farm (Stevenson 2013). An extensive Romano-British settlement was excavated at Westhawk Farm (Booth *et al.* 2008), and further evidence has been found at Foster Road (Powell 2010; Powell and Birbeck 2010), Orbital Park (Philp 1991), West of Blind Lane, Sevington (Oxford Archaeology 1999), and Boys Hall Moat (Booth and Everson 1994). The projected line of a Roman road between Lympne and Maidstone passes within 1 km of Area A to the south-east. The area is one subject to considerable development pressure, and work in the site's environs continues, with further evaluative work in 2024 and 2025 to the north-east of Areas A and B.

Part One: the archaeology

Mesolithic and Neolithic

A large unstratified assemblage of worked flint was found spread evenly across Area B. This element of the assemblage comprised both flakes and blade cores and debitage, suggesting multi-period activity. The material sat directly above the natural geology, probably derived from no longer extant subsoil layers and features, and showed considerable edge damage, confirming reworking in the plough soil. With a single exception, no cut features of this date were identified during the excavations.

In Area A, Pit 701 (Fig. 3) contained the fragmented remains (143 sherds, 2030 g) of a near-complete pottery vessel and six worked flints of probable Early Neolithic date. The pit, which had been truncated on its north-west side, measured at least 0.42 m wide by 1.06 m long and was 0.24 m deep with vertical sides and a flat base. The contents of the pit may represent a placed deposit. The pottery vessel, which was not available for further analysis, was described as a flint-tempered bowl of probable Early Neolithic date, although a Late Bronze Age to Early Iron Age date could not be definitely ruled out. The flint, of which three pieces had been heat affected, were derived from the same good quality dark brown chalk flint and are likely to have been manufactured together. Both the pottery vessel and flint assemblage were in fresh condition.

Early Bronze Age

Only a single feature could be confidently dated to the Early Bronze Age. Pit 1129 (Fig. 3), isolated in the western part of Area B, was sub-circular in plan with steep straight sides and a flat base, 1.90 m wide and 0.24 m deep. Its two fills contained a sizeable assemblage of abraded Early Bronze Age pottery. The absence of material of other dates (only undiagnostic flint debitage and burnt stone were present, along with two sherds (16 g) of Romano-British whiteware from the upper fill) suggest that the Early Bronze Age pottery dates the feature.

Middle to Late Bronze Age

In Area A, a small assemblage (26 sherds, 249 g) of Middle to Late Bronze Age pottery was recovered from three features close to the western edge of the excavation. Of these, only pit 2833, cut by the ring gully (3063) of a later roundhouse, is likely to be of this potentially relatively early date; the ten sherds were the only finds (Fig. 3). The remaining sherds were recovered from two intersecting ditches (2537 and 3348) south-west of the roundhouse (nine sherds); ditch 510 (a single sherd weighing 1 g), and ditch 702 (five sherds, 42 g). In each instance this material was redeposited, found in association with Late Iron Age to early Romano-British pottery.

Late Bronze Age to Early Iron Age

The first activity leaving a substantial archaeological record on the site took place in the Late Bronze Age and Early Iron Age. A larger assemblage of pottery (421 sherds, 5174 g) was recovered, mostly from the same part of Area A as the settlement evidence.

Settlement

Within the excavated areas, settlement activity was concentrated towards the western edge of Area A (Fig. 4), centred on a roundhouse (3347). This structure is represented by two short lengths of curving gully with a projected diameter of 11–12 m; a third length, slightly off-line at the south-east, may also be associated. The structure was cut by a series of parallel ditches (3354, 3342 and 3344) defining enclosures and trackways of Late Iron Age to early Romano-British date, and had been heavily truncated, the gullies being 0.2–0.5 m wide and 0.05–0.15 m deep. Together they contained five sherds (19 g) of late prehistoric pottery.

There were three features inside the roundhouse. Just south-east of its centre was a sub-circular pit (3110), measuring 1.1 by 1.7 m in plan and 0.5 m deep. It contained 208 sherds (3287 g) of Late Bronze Age and Late Bronze Age to Early Iron Age pottery, as well as fired clay, burnt flint and animal bone. The two smaller pits or post-holes (3117 and 3244) in the interior contained single late prehistoric sherds. Pits 3110 and 3117 were both cut by ditch 3344: a slot (3114) through the ditch within the roundhouse produced a further eight redeposited late prehistoric sherds.

Immediately south of the roundhouse, a north–south line of four evenly spaced small pits or post-holes (2647, 2669, 2667 and 2663) as well as other undated examples close by (2645, 2638 and 2651) were potentially associated with it. One of them (2669) contained a single Late Bronze Age to Early Iron Age sherd; the others contained no finds. A further six sherds (plus animal bone) were recovered from a small pit (2503) 8 m west of the roundhouse. There was a spread of other undated (and unexcavated) small features in the same area, which may also have been associated.

Ditches

Four ditches west of the roundhouse may be associated with the Late Bronze Age settlement. Two of them (2537 and 3348) were, like the roundhouse, stratigraphically earlier than the parallel Late Iron Age to early Romano-British enclosure and trackway ditches (below). Of these two, the earlier (2537) terminated, possibly at a post-hole (3089), approximately 3 m west of the roundhouse. It was generally 0.8–1.0 m wide and 0.3–0.5 m deep with a variable profile, in most places with a single fill. It appears to have been either extended westwards, or recut at its western end to a depth of 0.6 m. In addition to the Middle to Late Bronze Age and late prehistoric pottery (10 sherds, 101 g) recovered from it, it produced 36 Late Iron Age to early Romano-British sherds, all but two of them from its eastern terminal which lay just 1 m from ditch 3344; these sherds are likely to be intrusive in the ditch's single fill, and reflective of the intense later activity in the immediate area. Also recovered were 21 pieces of worked flint and a piece of animal bone.

The three ditches (3348, 3351 and 3352) were arranged roughly perpendicular to ditch 2537. On its northern side was north–south ditch 3348 which contained pottery dated as Middle to Late Bronze Age (three sherds, 40 g). Its southern terminal cut ditch 2537 and was cut in turn by four later parallel ditches, as well as by an undated pit (3032) containing worked and burnt flint. On the southern side of ditch 2537, ditches 3351 and 3352 both terminated approximately 2 m from it. Ditch 3351, which lay perpendicular to 2537, was 19 m long: its southern terminal lay just west of two probably later ring ditches (2557 and 3331, below). Ditch 3352 lay at a slight angle to ditch 2537. Together 3351 and 3352 produced three small sherds (8 g) of late prehistoric pottery, and another, probably intrusive, of Late Iron Age or Romano-British date, along with 16 pieces of worked flint and one burnt flint fragment.

Other features

There were a small number of other features containing exclusively Late Bronze Age to Early Iron Age pottery in Area A. Toward the north, a largely isolated oval pit (2855), 0.7 m by 0.5 m in plan and 0.2 m deep, contained 51 sherds (916 g), most from a single apparently placed vessel at the southern end of the cut, although another vessel was also represented among the material. The pit had a charcoal-rich fill which also contained six pieces of animal bone. A sub-circular pit (2954) 38 m to the north, 1.5 m wide and 0.4 m deep, contained 10 sherds (793 g), along with 33 pieces of animal bone, two pieces of worked flint, and charcoal. Other pits in the same general area, which contained pottery datable only as late prehistoric, may also belong to this phase of activity (pit 2941, for example).

Pit 3185, near the centre of the excavated area, contained 73 late prehistoric sherds (323 g), along with two pieces of fired clay and two flints. Other sherds were found redeposited in later features, but with no evident concentration indicating a focus for activity.

Area B

Discrete small features occurred across Area B, concentrated in its north-western quarter, the majority of those that could be dated being Late Bronze Age. These consisted mainly of pits and post-holes, with some cremation-related features (Fig. 4), and appear to represent an area of open settlement, although no clear structures were identified. Many other similar features contained pottery datable only as late prehistoric, but these are considered likely to be of comparable date, having the same general distribution. A few features also contained pottery dated as Middle to Late Bronze Age or Late Bronze Age to Early Iron Age, but these are also of probable Late Bronze Age date. No diagnostic early Iron Age pottery was recovered; only two Middle Iron Age sherds and five of general Iron Age date were found (all from Late Iron Age ditches).

Radiocarbon dating indicated that the funerary activity (Fig. 26) in Area B belongs to the Middle to Late Bronze Age (1095 - SUERC-80711: 2941±24 BP, 1220-1050 cal. BC; 1570 - SUERC-80708: 2899±24 BP, 1190-1010 cal. BC; 1749 - SUERC-81618: 2913±28 BP, 1210-1020 cal. BC 1759 - SUERC-80710: 2911±21 BP, 1200-1020 cal. BC; 1841 - SUERC-80707: 2963±24 BP, 1260-1090 cal. BC; 1891 - SUERC-80709: 2954±24 BP, 1260-1060 cal. BC), with all dates in the final quarter of the second millennium BC.

The main concentration of Late Bronze Age (and late prehistoric) features extends over an area of approximately 120 m north-east to south-west by 80 m north-west to south-east. The features are not evenly distributed, some occurring in slight clusters while others are more dispersed. The inclusion of undated features appears to confirm this pattern. No roundhouses are discernible in the distribution of postholes, and although a small number of possible four-post structures can be suggested (for instance the example formed by post-holes 1533, 1535, 1563 and 1584: Fig. 4), it is possible that these square arrangements are due to chance.

It is also possible that the positions of structures are indicated by the distribution of pits. One group of features comprised at least six pits (1664, 1687, 1725, 1710, 1621 and 1605) and a post-hole (1666) in a 14 m long north-east to south-west line, with another three in a line running towards the north-west (1689, 1648 and 1668) with a fourth (1646) adjacent.

Several of these pits in this area (1060, 1079, 1347 and 1357) contained varied but generally quite small assemblages of pottery, fired clay, animal bone and burnt stone, suggesting domestic refuse.

Redeposited Late Bronze Age pottery was recovered from a large number of later features, in some of which the sherds constitute the only datable finds. These features include some of the field boundary and other ditches, but there is no clear evidence in Area B that any of these are contemporary with the Late Bronze Age settlement evidence. Ditch 2015, for example, which was 48 m long and aligned north-east to south-west, produced only Late Bronze Age pottery (49 sherds, 391 g), but it passed through the main group of Late Bronze Age features and cut a number of them. Similarly, ditch 2014 contained eight late prehistoric sherds and a single medieval sherd. Although these and other ditches in the area clearly represent more than one phase of land division and organisation their arrangements generally suggest a later date (see below).

Late Prehistoric

A small number of features in Area B could only be dated as late prehistoric, on the basis of sherds contained within their fills. None form recognisable patterns or clusters, and are likely to belong to one or more of the periods described above.

Late Iron Age to early Romano-British

Although landscape division and land use is apparent since at least the Late Bronze Age, the establishment of archaeologically-visible enclosed settlement does not take place at Waterbrook Park until the Late Iron Age (Fig. 5). Small quantities of Middle to Late Iron Age ceramics in a very limited number of features (see Jones, below) suggests that this activity may have begun at the very end of the Middle Iron Age or beginning of the Late Iron Age, but its *floruit* was clearly in the Late Iron Age and continued into the early Romano-British period.

Palaeochannel

A north-east to south-west aligned palaeochannel (524: Fig. 6), traversed the south-eastern corner of Area A. The palaeochannel measured between 16 m and 29 m in width and extended to a depth of 1.24 m to a surface of fluvial gravels (at 37.25 m OD). The presence of aquatic and waterside beetles, and specifically two species of elmids beetles (*Limnius vokmari* and *Oulimnius* sp.), recovered from undated alluvial sediments on the base of the palaeochannel (context 36) demonstrate that the watercourse had contained flowing, well-oxygenated water.

During the Late Iron Age to early Romano-British periods a series of ditches and associated settlement activity was established either side of the channel. This activity had a gradual but visible impact on the accumulation of silts within the palaeochannel, and between the first to mid second centuries AD the palaeochannel was gradually infilled. This infilling was unlikely to have been intentional (demonstrated by at least one attempt to establish a new drainage channel along its length: see below) and ultimately resulted in a reduced capacity for drainage and, consequently, later flooding.

The various enclosure ditches formed a part of a complex array of features spanning Area A from south-east to north-west. Many of these appear to be spatially related, and to represent a series of trackways and enclosures that were modified over time. Their phasing, however, is hampered by the very small number of stratigraphic relationships between them and the frequent similarities in their pottery assemblages. The following suggested sequence is therefore far from certain.

Enclosure A

What appears to be the earliest of the enclosures was defined by ditch 3345 on the western side of Area A (Fig. 7). The enclosure was irregularly shaped, measuring 35 m north-east to south-west, with two breaks in the ditch at the north. The narrower break was 1.3 m wide, the ditch terminals appearing to cut a smaller linear feature (2745) on the same line. A post-hole (2790) next to the western terminal, if associated, would have narrowed the entrance even further. The second break, which was at least 3.5 m wide, lay 10 m to the west, but only the eastern terminal lay within the excavation area.

The ditch varied considerably in size along its length, being only 0.7 m wide and 0.3 m deep with a single fill along the south-eastern side, but 1.4 m wide and 0.6 m deep at the south and north, with up to two fills recorded. At the terminal immediately east of the narrower gap it was 1.6 m wide and 0.7 m deep, with a series of 15 fills recorded. This variation may indicate that the ditch had been recut around some of its circuit, with feature 2745, between the terminals of the narrow gap, representing an earlier cut of the enclosure's ditch. In the deep eastern terminal of the narrow gap all the pottery from the lower fills was of Middle to Late Iron Age date (or identifiable only as late prehistoric), while that from the upper fills (from fill 2989 and above) was of predominantly Late Iron Age to early Romano-British date. Other finds included fired clay, crucible fragments, iron slag and fragments of human bone (from the eastern terminals of both gaps).

A shallow ditch (2802), less than 0.2 m deep, which lay outside and parallel to the enclosure's south-eastern side, merging with ditch 3345 at the south but not following its curving line at the north, may be associated with it, although their stratigraphic relationship was not established. No finds were recovered.

There was a concentration of pits, post-holes and curving gullies inside the enclosure. At least two, possibly three, circular structures, possibly roundhouses, appear to be represented. All of them overlapped, indicating a sequence of construction. A single small feature (1889), 0.4 m in diameter and less than 0.1 m deep, contained diagnostic Late Iron Age pottery (133 sherds, 566 g).

Possible roundhouse 3371

A small possible structure may be represented by two short lengths of gully (3129 and 3162) which appear to lie on an arc with a projected diameter of 4.7 m, although the fit is not precise (Fig. 7). Together they contained 11 sherds of Late Iron Age to early Romano-British pottery. The southern end of gully 3129 was cut by ditch 3359 (below), and although it had no direct stratigraphic relationship with any other features it seems likely that it was the earliest of the possible roundhouses within the enclosure.

Roundhouse 3360

The footprint of possible roundhouse 3371 overlaps with that of a larger (7.1 m diameter) probable roundhouse (3360) represented by gullies 3349 at the north and 3350 at the south-west (Fig. 7). The gap between the two gullies at the north-west was spanned by length of straight gully (3363) running north-east to south-west before curving towards the west, but its relationship with gullies 3349 and 3350 is unclear. The roundhouse gullies were generally 0.3–0.4 m wide and 0.1 m deep, but at their western and northern ends they were only 0.05 m deep, and it is possible that they had been entirely truncated around the north-west arc of the roundhouse. There was also no surviving gully at the east and south-east, the typical location for Iron Age roundhouse entrances. Together they contained 13 sherds of predominantly Late Iron Age to early Romano-British pottery, and 13 fragments of crucible and one piece of slag.

It is unclear whether gully 3363 was directly associated with the roundhouse, or a later feature, but it was recorded as cutting the north-west end of a length of straight ditch (3359) which bisected the footprint of roundhouse 3360. The ditch contained four late prehistoric sherds and 22 of Late Iron Age or Romano-British date, although the latter were all recovered from where the ditch was cut by Late Iron Age to Romano-British pit 2932. The position of the ditch in relation to the roundhouse is similar to a pattern also noted at South-east of Park Farm where a number of roundhouses were bisected by later ditches, perhaps representing some deliberate act of closure (Powell 2012). If so, gully 3363 would be later than the roundhouse. Alternatively, this relationship could be coincidental, ditch 3359 perhaps marking the subdivision of the enclosure.

There were a number of other features in the interior of the roundhouse but given the concentration of similar features around it within the enclosure, none could be shown to be definitely contemporary with it. They included one posthole (3190) containing five sherds of

Middle to Late Iron Age pottery, and three pits containing Late Iron Age to early Romano-British pottery, two of which (2932 and 2969) postdated the bisecting ditch (3359). In addition, the terminal of roundhouse gully 3349 was cut by a posthole (2841) containing another Late Iron Age to early Romano-British sherd, and a further 10 were recovered from a small pit (3082) to its immediate north.

Most of the small pits and postholes in this area, however, were undated. Some appear to form rough lines, one line aligned south-east to north-west, extending into the roundhouse (3147, 3169, 3171, 3188, 3213, 3211, 3238, 3104 and 3145), while another set aligned approximately east – west formed parts of three sides of a rough rectangle appended to its eastern side (3215, 3242, 3226, 3228, 3264, 3266, 2821, 3230, 3279, 2815, 3258, 3260 and 2847). It was not possible to determine whether these were earlier, contemporary with or later than roundhouse 3360, and a spread of possible postholes in the western part of the enclosure, only one of which (2750) contained a single Late Iron Age to early Romano-British sherd, were similarly poorly dated. It is possible that they are associated instead with the smaller possible roundhouse (3371) around which they appear to cluster.

Gully 3062 and ring gully 3063

Another circular structure lay to the immediate south of roundhouse 3360, comprising at least two phases of activity (Fig. 7). The earliest phase was represented by a length of gully (3062) with a rather irregular curvature, its central section describing an arc with a projected diameter of 8 m but splaying out slightly at both ends. It was 0.2–0.4 m wide and up to 0.15 m deep and contained 40 sherds of Late Iron Age to early Romano-British pottery and a piece of slag; it cut a pit (3019) containing further pottery of the same date.

Gully 3062 was cut at either end by gully 3063, which at the north also cut the gully of roundhouse 3360. Gully 3063, which was 7.7 m in internal diameter, had no clear break in its circuit, apparently describing a complete circle. However, in one slot on its western side there was the terminal of a possible recut extending to the north. The terminal was 0.45 m wide and 0.2 m deep, while the section of gully it cut was only 0.2 m wide and 0.05 m deep, and this less substantial cut continued around to the south where it widened again. No matching terminal for the recut was noted at the south, although it could have been obscured by either of two land drains which cut the gully at this point.

It is possible that the recutting of gully 3063 could have removed any originally south-east facing entrance, and replaced it with one facing south-west, but this seems unlikely as it would have involved a substantial redesign of the structure, rather than simply the cleaning out of its surrounding gully, which may have been a regular and repeated activity. Given the absence of a clear entrance gap, and the proximity of two ring ditches of comparable size some 40 m to the south, both considered to have had a mortuary function, there is the possibility that this ring gully had some other, non-domestic purpose; although ring gully 3331 (Fig. 5) was substantially deeper (0.5–0.7 m), ring gully 2557 (which had no surviving internal features) was less than 0.2 m deep. Gully 3063 contained 84 sherds of predominantly Late Iron Age to early Romano-British pottery along with fragments of fired clay and animal bone.

Possibly related to this structure's function was an insubstantial gully (3087), 0.15 m wide and 0.05 m deep, which appeared to divide its interior into two halves. This gully's north-western end was cut by a land drain but at the south-east it turned sharply to the south-west just 0.5 m from the ring gully. There were also a number of post-holes in the interior of the ring gully, which could potentially be associated with it, including an adjacent pair (2956 and 2958) towards the south and a short line of three (2939, 2937 and 2935) towards the north. None contained finds.

Ditches 510, 548 and 573

In the south-eastern part of Area A, in the vicinity of the palaeochannel, the earliest activity appeared to consist of three ditch segments (510, 548 and 573: Fig. 8). No clear morphology could be determined for these ditches. Ditch 510 was aligned east to west and had a visible length of 22.7 m, with a maximum width of 1.85 m and depth of 0.62 m. To its south, ditch 573 was aligned north-west to south-east and had a visible length of 9.5 m, extending to the northern edge of the palaeochannel, with a maximum width of 2 m and depth of 0.48 m; while ditch 548 was aligned north to south and had a visible length of 9 m, with a maximum width of 1 m and depth of 0.43 m. All three ditch segments were truncated by the later Enclosure E (ditch 509) and are likely to represent contemporary vestiges of a field drainage system. All three ditches contained pottery assemblages of Late Iron Age to early Romano-

British date (ditch 510: 154 sherds, 948 g; ditch 548: 12 sherds, 85 g; ditch 573: 165 sherds, 1254 g). Ditch 573 included probable redeposited pottery of a potential pre-Conquest date.

Mid- to late first century AD

Enclosure G

A sub-rectangular enclosure (Enclosure G: Fig. 9) was represented by ditches 509, 518 and 539. The north-west side of the enclosure (509) was aligned north-east to south-west and measured 44.6 m long. At both the north-east and south-west ends, the ditch turned to the south-east to form the enclosure's north-east (518) and south-west (539) sides respectively. The north-east enclosure ditch (518) measured 17.2 m long and extended up to the edge of palaeochannel 524. Ditch 539 was visible for a length of 10.9 m before becoming indistinct. It remained uncertain whether this represented a purposeful break in the enclosure's south-west side or whether it too originally extended to the edge of the palaeochannel. It is probable that the palaeochannel formed a natural boundary for the enclosure's south-west side. If so, the enclosure would have defined a total area of approximately 778 m². The enclosure ditches varied between 1.1 m and 1.8 m wide and between 0.42 m and 0.6 m deep. Pottery of mid to late first century AD date was recovered from ditch 509 (133 sherds, 551 g), ditch 539 (153 sherds, 1081 g), and ditch 518 (184 sherds, 1350 g). Two corroded copper alloy shaft fragments were also recovered from ditch 539 (FN 13). Features associated with activity within Enclosure G included a pit (579), a short linear feature (580) and two post-holes (563 and 564). A small quantity of early Romano-British pottery was recovered from pit 579 (three sherds, 9 g) and linear feature 580 (20 sherds, 115 g).

Enclosure H

Two parallel ditches (547 and 687/3232/3234), aligned north-west to south-east and spaced approximately 25 m apart, formed a second enclosure adjoining the north-west side of Enclosure G (Fig. 9). Both ditches terminated approximately 2 m short of Enclosure G indicating opposing access points along the enclosure's south-eastern edge, although the terminal of ditch 687 had been completely removed by later ditch 681. The north-western side of the enclosure appears to have been largely open: ditch 687 continued north-westward (as 3232 and 3234) before turning to the west some 21 m north-west of Enclosure G, indicating a roughly rectangular area of approximately 585 m². The enclosure ditches measured up to 1.5 m wide and between 0.42 m and 0.47 m deep. Pottery assemblages from

ditch 687 (97 sherds, 901 g) and ditch 547 (249 sherds, 2216 g) both suggested a mid to late first century AD date and indicate that Enclosure H was probably contemporary with Enclosure G.

Situated within Enclosure H was a possible square feature defined by gully 702, aligned perpendicular to and 2.8 m south-east of ditch 687. The full dimensions were not exposed during the 1993 excavation and its northern extent, probably destroyed by modern impacts, was not identified during 2007. The form of the gully, 0.85 m wide by 0.34 m deep, enclosing an area with an exposed length of 2.93 m and minimum width of 1.55 m, might be comparable to a square feature (3332) located 19 m to the north-east adjacent to the entrance of Enclosure E (below). A small assemblage (eight sherds, 37 g) of Late Iron Age to early Romano-British pottery was recovered from the gully fill, along with five sherds (42 g) of residual Late Bronze Age pottery, four worked flints, and daub fragments (260 g). Square feature 3332 was potentially associated with three mortuary features (2853, 2861 and 2874), and a comparable association might be suggested between gully 702 and features 115, 236 and 237 located 12 m to its south (below).

Other features contained within Enclosure H appear to have been concentrated along its south-west side. Three short linear features (569, 672 and 680), between 3.6 m and 4.1 m long by 0.77 m to 1.2 m wide and up to 0.47 m deep, represented an internal segmented ditch and were associated with six pits (504, 574, 662, 663, 668, 675) and four post-holes (565, 566, 664, and 673). The pits varied between 0.87 m and 1.8 m long by 0.66 m and 1.3 m wide and between 0.36 m and 0.5 m deep, and the post-holes varied between 0.32 m and 0.6 m in diameter by 0.22 m and 0.53 m deep. Pottery recovered from linear features 569 (nine sherds, 66 g) and 680 (26 sherds, 131 g), pits 574 (41 sherds, 195 g), 662 (17 sherds, 144 g), 663 (26 sherds, 155 g) and 668 (250 sherds, 838 g), and post-hole 565 (58 sherds, 365 g) were all mid- to late first century AD in date. Pottery from pit 504 (107 sherds, 538 g) and post-holes 566 (16 sherds, 90 g) and 664 (3 sherds, 12 g) were late first to early second century AD in date, while pottery from pit 675 (114 sherds, 1,353 g) was dated to the second century AD.

A second cluster of pits (682, 686 and 704) and a post-hole (703) were located approximately 5 m south-east of square feature 702. The pits measured between 0.8 m and 1.65 m long by 0.89 and 1.24 m wide and varied between 0.05 m and 0.71 m deep. Pit 686 cut the north-west

side of pit 682. Pit 682 (80 sherds, 482 g), pit 686 (78 sherds, 995 g), and post-hole 703 (4 sherds, 43 g) each contained pottery assemblages dated to the mid- to late first century AD.

Pit 683, situated 0.5 m east of the south-east terminal of ditch 687 might also be associated with Enclosure H. This pit measured 3.5 m long by 1.21 m wide and was 0.86 m deep. No finds were recovered from this feature, but it was cut by later ditch 681.

This short segment of ditch (681), 2.07 m wide by 0.89 m deep, cut the south-east terminal of ditch 687 (Enclosure H) as well as the southern edge of pit 683. The ditch segment extended north-east for 6.5 m, parallel to ditch 509 (Enclosure G), before turning at a right angle to the south-east to join ditch 518 (Enclosure G), effectively closing off the north-east access point into Enclosure H. The ditch contained pottery (336 sherds, 2828 g) of a mid- to late first century AD date, and included two substantially complete grog-tempered vessels (236 and 237), one a bead rimmed jar, decorated with shoulder groove and external diagonal scoring.

At some point ditch 681 was extended 14.7 m further to the south-west by ditch 508. This ditch, which measured 1.4 m wide by 0.48 m deep, cut the southern edge of pit 682 and ditch 510. Ditch 508 effectively partitioned off the south-east corner of Enclosure H, with access at its south-west end through a narrow, 0.6 m wide gap. Pottery from ditch 508 was of comparable date to that recovered from ditch 681 and included a third near complete grog-tempered vessel (115), comprising a necked jar with everted rim. All three vessels appeared to have been purposefully placed in the terminal of each ditch. While no cremated human bone was recovered during excavation, all three might be considered as funerary-related rites or cenotaph-type features, having been placed on the floor of their respective ditches prior to their infilling.

Enclosure E

Ditches 3334/525, 3335, 3364/519 and 509 formed a sub-rectangular or trapezoidal enclosure, extending from the north-west side of Enclosure G (Fig. 10). Ditch 519 extended northwards from the north-west corner of ditch 681 (Enclosure H), continuing as ditch 3364. Ditch 525 extended north-westwards from the north-west corner of ditch 509 (Enclosure G), continuing as ditch 3334. Both ditches measured at least 2 m wide by between 0.48 m and

0.58 m deep. Pottery of a mid- to late first century AD date was recovered from the fills. The enclosure encompassed the earlier Enclosure H within its interior.

An east-facing entrance at least 8 m wide was situated near its north-east corner, and a narrower north-facing entrance located at its north-west corner may have been modified over time; it could originally have been, for example, 6 m wide, between the terminal of ditch 3335 and the right-angled turn in ditch 3334, perhaps narrowed to 3.8 m by the north-eastward aligned extension of that ditch. Although partly obscured by a land drain, the terminal of that extension was cut by the terminal of ditch 3367 of the adjacent enclosure to the north (Enclosure F, below), narrowing the gap further to just 2.7 m and giving access only to the north.

The most prominent feature in Enclosure E, just south of its east-facing entrance, was a small near-square enclosure (3332) defined by a shallow gully 0.4–0.6 m wide and up to 0.15 m deep, very similar in size, orientation and morphology to the example within Enclosure H to the south-west. It measured 2.6 m (NNE–SSW) by 2.1–2.5 m internally and had no break in its circuit. There were no internal features, and the only finds from the gully were a single Late Iron Age to early Romano-British sherd and four pieces of residual worked flint. Possibly associated with this feature, however, was a group of three mortuary features: two cremation-related deposits (2853 and 2874) and an unurned cremation burial (2861), 12 m to its north-west, from one of which (2853) was recovered a single Late Iron Age to early Romano-British sherd.

A line of short irregular features lying roughly parallel to, and 4–6 m from, the enclosure ditches near the north-west corner were possibly associated with the entrance at that point. Only one (2727) was investigated and proved to be up to 0.9 m wide and 0.15 m deep, with a single fill containing 24 Late Iron Age to early Romano-British sherds, and one Romano-British sherd. The nature of these features is unclear, but they may be related in form and purpose to the line of short ditch segments on the south-western side of Enclosure H. There were other unexcavated possible features within the enclosure but they formed no obvious pattern.

Enclosure F

This sub-square enclosure lay immediately north of Enclosure E, sharing with it part of ditch 3335 (Fig. 11). The relationship, at its south-east corner, between ditch 3335 and the northern end of Enclosure E ditch 3364 was not clear enough to be certain as their relative phasing.

There were a number of actual and potential access points into this enclosure. One was at the south-west corner, from Enclosure E. Another was at the north-west corner. It appears that at some point ditch 3335 ended midway along the enclosure's northern side, at a slightly inturned terminal, leaving a 13 m wide gap between it and the northern end of ditch 3365, on the enclosure's western side. This gap appears to have been partly closed by ditch 3366, although the latter's stratigraphic relationship with ditch 3335 was not securely established. Ditch 3366 terminated less than 1 m from the north-east corner of Enclosure C (below), but there was a 2.7 m wide gap between Enclosure C and the northern end of ditch 3356, in the vicinity of which a number of unexcavated features were surveyed.

The west side of Enclosure F was defined by two lengths of ditch – 3367 to the south which curved inwards at its northern terminal, and 3365 to the north. Together they had a staggered line, the gap between them, over 3 m wide, being filled by a large irregular feature (3194), 5 m wide north–south and up to 0.9 m deep, with an irregular profile. Although the relationship between feature 3194 and the ditches was not established, it is possible that it was a later feature blocking the gap; it contained a large pottery assemblage comprising 284 sherds (1807 g) of early Romano-British sherds, from both its lower and upper fills.

The most prominent feature inside Enclosure F was a square enclosure (3333), 5 m wide internally, defined by a shallow gully, 0.3–0.7 m wide and up to 0.15 m deep. Like enclosures 3332 in Enclosure E and 702 in Enclosure H there was no break in the gully and no internal features. Unlike these two enclosures, however, it had the same general orientation as the large enclosure in which it lay (one axis lying NNW–SSE), and a much more central position, lying immediately inside the possible blocked entrance on the enclosure's western side. The gully contained 31 sherds of predominantly Late Iron Age to early Romano-British pottery, and four pieces of redeposited flint.

There was an arc of unexcavated features south of feature 3333, and a group of other features to its north-west. Among the latter was a small shallow possible hearth (2952) with a charcoal-rich fill containing 53 sherds of Middle to Late Iron Age pottery, a piece of fired clay with a wattle impression, and a flint tool; it was cut by a small undated pit. To its immediate south was an elongated pit (3091), 1.7 m by 3.6 m and 0.35 m deep with shallow sides and a deeper slot in the centre, with localised charcoal-rich patches in its fill. This contained a further 19 Middle to Late Iron Age sherds and six pieces of flint. A small pit (3044) to its west also had a charcoal-rich fill, containing fragments of Late Iron Age to early Romano-British pottery. At the north of this group was an irregular feature (2997), 1.2 m by 2 m and 0.3 m deep, containing two late prehistoric sherds and three of Late Iron Age to early Romano-British date. It is possible that all these features are associated, three of them containing significant quantities of charcoal, although their function is unclear.

Roundhouse 1

A roundhouse was located 9 m to the west of Enclosure E (Fig. 12). The roundhouse was defined by gullies 549 and 653, which formed an arc with a projected diameter of approximately 11.2 m, and fourteen post-holes (650, 651, 652, 656, 657, 550, 553, 554, 555, 556, 557, 558, 559, 688), clustered within its interior. Modern truncation had removed much of the south-west side. Both gully segments measured between 0.37 m and 0.6 m wide and were up to 0.22 m deep. The post-holes measured between 0.01 m and 0.59 m in diameter and between 0.07 m and 0.48 m deep. A later gully (654), 0.3 m to 0.59 m wide by 0.12 m deep, extended from the north-west edge of gully 653, and might represent a later modification or successor to this structure. Pottery recovered from gullies 653 (179 sherds, 1217 g), 549 (16 sherds, 74 g) and 654 (23 sherds, 367 g), and eight of the post-holes (64 sherds, 402 g) all reflected a general mid- to late first century AD date. Two further post-holes (575 and 655), 0.35 m and 0.87 m wide by 0.12 m and 0.2 m deep, located between 2.5 m and 7 m south-west of the roundhouse structure respectively, were potentially associated. A small assemblage (11 sherds, 539 g) of Romano-British pottery was recovered from post-hole 655.

Trackway 1

Trackway 1 (Fig. 13), defined on its eastern side by Enclosure G (ditch 539) and Enclosure E (ditch 525, continuing northward as ditch 3334) and on the west by opposing ditch 545

(continuing at ditch 3342), extended south from Enclosure D (above) towards palaeochannel 524. The trackway splayed outwards to form a funnel shape which measured 6 m wide at the entrance to Enclosure D, broadening to 18.5 m wide at its southernmost point. Where investigated, the western ditch (545) had a maximum width of 2 m and a surviving depth of 0.43 m. Pottery from ditch 545 (205 sherds, 1691 g) was dated to the late first to early/mid-second century AD, slightly later than the mid- to late first century AD assemblages recovered from ditch 539 and ditch 525 defining the trackway's eastern side.

Ditches 525 and 545 both had evidence of at least one episode of recutting. Ditch 525 was recut along its length by ditch 500, which measured up to 2.6 m wide by 0.64 m deep. The recut did not appear to extend south into ditch 539. Ditch 545 was recut by ditch 544, which measured 1.1 m wide by up to 0.23 m deep. Pottery from recut ditch 500 was dated to the late first to early second century AD, while pottery from recut ditch 544 (302 sherds, 1902 g) had a slightly later date range, in the second century AD.

Open Area

The ground to the west of Trackway 1 and south of Trackway 3 appeared to have been left as open ground (Fig. 6). The low incidence of recorded discrete features in this area contrasted sharply with the land use evident to the east and is not likely to be a product of differential preservation, although it was clear that the southern part of this area had been heavily impacted by agriculture and perhaps quarrying in the past. Much of the south-west area was reported to be covered with irregular, shallow-profiled scoops that sometimes contained small and heavily abraded pottery sherds. Following investigation these were dismissed as 'natural features', perhaps tree throws, and were not recorded further.

The special nature of this area is perhaps indicated by a pair of ring ditches and associated mortuary features; radiocarbon dated examples were Late Iron Age.

Ring ditch 2557 was 4.4 m in internal diameter, with no (surviving) internal features. The ditch, which was 0.4–0.7 m wide and less than 0.2 m deep, had a single fill from which were recovered 48 sherds (256 g) of Late Bronze Age pottery, all from one of the three excavated slots (2563), as well as five pieces of worked flint and one burnt flint. These provide the only

dating evidence for the feature, but are more likely to be redeposited, deriving from the Late Bronze Age settlement immediately to the north and west.

A Late Iron Age date for 2557 is more likely, as ring ditch 3331, just 4 m to the south, contained six sherds (14 g) of Late Iron Age to early Romano-British pottery from the lower of its two fills. This slightly larger ring ditch was 7.7 m in internal diameter and had at its centre (truncated by a modern land drain) a small feature (3262) 0.4 m wide and 0.08 m deep, with a charcoal-rich fill containing 1 g of burnt animal bone. The ditch was 0.5–0.9 m wide and 0.5–0.7 m deep, with steep sides and a concave base, and most commonly two fills, from which was also recovered 25 pieces of worked flint and 52 g of animal bone. It is noteworthy that two Romano-British ring ditches of comparable diameter (albeit with interrupted ditches) were recorded some 300 m to the south-south-west in Cheeseman's Green Area 11 (Gittins, Leivers and Powell, forthcoming).

Six features within 30 m of the ring ditches contained cremation-related deposits. Five were pits (2505, 2507, 2511, 2513 and 2527) while one (2509) appeared to be a natural undulation. The six features averaged 0.5 m wide and were all less than 0.1 m deep, with single charcoal-rich fills (2527 had two). They contained between 0.9 g (2511) and 198.8 g (2513) of cremated human bone, all of which was in poor condition due to the soil conditions. There were no other finds.

Radiocarbon dating placed this funerary activity in the Iron Age, probably the Late Iron Age. One of the results (SUERC-80703: 2048±20 BP, 161 cal. BC– cal. AD 5) was Late Iron Age, although another (SUERC-80702: 2165±24 BP, 360–120 cal. BC) was less precise Middle to Late Iron Age date, due to the nature of the calibration curve for that particular period.

The only other features (Fig. 13) within this area broadly contemporary with Trackway 1 were a pit (520) and a short segment of ditch (512). Pit 520 was located 7 m to the west of ditch 545, and measured 1.9 m in diameter by 0.23 m deep, and contained an assemblage of pottery (182 sherds, 1607 g) dated to the late first century AD. Ditch segment 512 extended south-west to north-east towards ditch 545, and measured at least 10 m long by 1 m wide and up to 0.25 m deep. It contained a pottery assemblage (196 sherds, 1041 g) dated to the late first to early or mid-second century AD. A second ditch segment (513) located adjacent to

ditch 512, although undated, extended at least 8 m north from the south-west terminal of ditch 512, measuring 0.6 m wide by 0.3 m deep, and was potentially contemporary.

Enclosure B

Enclosure A (which may have been the earliest on the site, perhaps dating to the Middle to Late Iron Age) was surrounded on three sides by a complex of other ditches, some appearing to form elements of larger enclosures (Fig. 14). These included, to the south, five ditches (3344, 3342, 3354, 3355 and 3356) which lay parallel as they extended west beyond the excavation, but which turned in different directions, splaying outwards, towards their eastern ends. Although the two northernmost of these ditches (3355 and 3356) merged immediately south of Enclosure A, there were no stratigraphic relationships recorded between any of these ditches and therefore it is hard to determine in what order they may have been dug. It seems likely that some of them represent a trackway running from the west, the outermost ditches being over 8 m apart at the edge of the excavation. Some appear to be spatially related, although not necessarily connected to other ditches to the east, which appear to define a complex of irregular enclosed spaces.

The ditch (3355) closest to Enclosure A appears to be closely related to it, turning at a right angle just outside its south-eastern corner, and running along its south-eastern side towards the north-east. A second ditch (3007) forks eastwards off ditch 3355 at the corner, then curves towards the north-east. Two short lengths of ditch (3361 and 3372), with a 6 m wide gap between them, run between these two ditches creating a small roughly triangular sub-enclosure (Enclosure B) with a north-east facing entrance.

The enclosure also appears to have had an entrance on its south-east side, ditch 3007 having a terminal within an area of flint gravel. No equivalent opposing terminal was noted to the south-west, the ditch here being recorded up to the edge of the gravel, but the gap could have been up to 5 m wide. A small pit or truncated post-hole (3046) within this gap, close to the ditch terminal, contained charcoal and four sherds of Late Iron Age to early Romano-British pottery.

Ditch 3355 contained 19 sherds of Late Iron Age to early Romano-British pottery, and a further three came from ditch 3361. Ditch 3007, however, produced 2143 sherds (22.5 kg) of

Late Iron Age to early Romano-British date. The bulk of this material came from near its intersection with ditch 3355, but there were also substantial quantities in the other excavated slots, including the ditch terminal (2424 g), and at the intersection with the small ditch at the north-east (slot 3064/3135, 5845 g).

It is unclear how the function of this sub-enclosure was related to the large quantities of pottery recovered from its ditch. Only five features were excavated inside it, three of them undated (a pit and two short, probably related linear features). Of the other two features, pit 2960, which was 0.7 m by 1.2 m and 0.4 m deep, also contained a large quantity of pottery (512 sherds, 3270 g), of which 108 were Romano-British and the rest Late Iron Age to early Romano-British, as well as fired clay, slag and animal bone. Further pottery of the same dates (30 sherds, 133 g) was recovered from an adjacent shallow sub-rectangular pit (2943), 0.8 m by 2.2 m, along with a piece of possibly perforated Greensand. A small pit (2995) in the area east of the sub-enclosure contained a further 89 sherds (522 g). None of these features give any indication of activities which would explain the quantity of pottery in ditch 3007.

Enclosure C

Ditch 3007 continued north-east beyond the Enclosure B but was again obscured by the extensive gravel spread. However, after a gap of 18 m a ditch (3357) on the same line turned towards the north-west, having the effect of enclosing both Enclosures A and B as well as a large open area to their north-east. In total the area enclosed measured 65 m north-east to south-west by at least 50 m north-west to south-east. This enclosure (Fig. 14: Enclosure C) had at least two breaks on its north-east side, one 5.5 m wide, the other, at its intersection with an east-west ditch (3362), at least 2 m wide. Ditch 3357 contained Late Iron Age to early Romano-British pottery (120 sherds, 1339 g), but not in the large quantities seen in ditch 3007.

There was a scatter of possible features inside the enclosure (north of Enclosures A and B), the only excavated ones being a small undated pit and a cremation-related deposit with redeposited pyre debris (2714), 0.6 m in diameter and less than 0.12 m deep, containing 31.6 g of cremated human bone.

Trackway 3

It is possible that ditch 3355 was paired with one of the parallel ditches to its south to form a trackway (Fig. 6). If paired with the southernmost ditch (3344), which curved slightly southwards, the resulting trackway would have been 8–11 m wide. Ditches 3007 and 3344 would have formed a wide funnel opening to the east; such funnel arrangements are often found within field systems and may have been laid out to aid in the herding and control of livestock. Ditch 3344 contained three sherds of Late Bronze Age to Early Iron Age pottery and eight identifiable only as late prehistoric, but all are likely to be redeposited, having been recovered either from within the footprint of roundhouse 3374, where the ditch cut Late Bronze Age to Early Iron Age pits 3110 and 3117, or from the slot to the immediate west.

If, alternatively, ditch 3355 was paired with ditch 3342 the trackway would have been significantly narrower (5.5–8.5 m); this ditch continued further to the south-east, again forming a funnel with ditch 3007, before turning south.

It is also possible also that ditch 3355 was replaced by ditch 3356 in defining the northern side of the trackway. Ditch 3356 diverged from the line of ditch 3355 and followed a more curving line, matching approximately that of ditch 3007. It was traced up to the edge of the gravel spread, but not through it. The only excavated slot (at its intersection with ditch 3355) produced two Late Iron Age to early Romano-British sherds.

To the immediate south of ditch 3356, ditch 3354 ran straight for 55 m towards the south-east before turning at a right angle to the north-east and terminating just short of the gravel spread; no opposing terminal was noted. If this ditch defined the trackway, it is likely to have been paired with ditch 3344, since towards the west it was only 1.2 m from ditch 3342 (as opposed to 4.5 m from ditch 3344).

Enclosure D

Together ditches 3334, 3342 and 3354 appear to form a small, possibly square space, 25 m by 25 m, on which Trackways 1 and 3 converge (Fig. 6). Although not strictly an enclosure it does nonetheless have the appearance of a formally defined space, and is therefore referred to as Enclosure D. No features were recorded in this area. Toward its northern end ditch 3334 appears to fork. One slightly narrower branch continued its line for 3 m where it was

recorded as being cut by the terminal of ditch 3367, although the relationship is not clear in section. The other branch, perhaps the main course of the ditch, turned at a right angle to the west and was traced for 5 m up to the edge of the gravel spread.

Late first to mid-second century AD

Drainage system and Trackway 2

It is probable that the infilling of the Trackway 1 ditches, necessitating their recutting, would have been exacerbated by the silting up of palaeochannel 524. To resolve this, a new drainage channel (637: Fig. 15) was cut, presumably following the line of the former palaeochannel, though its full extents were not sufficiently exposed to be certain, along with a contiguous arrangement of parallel feeder ditches (523, 571, 601 and 617) extending into the new drainage channel from the north-west and south-east. To the north-west the ditches (523 and 571: Fig. 15) appear to have been superimposed across the interior of former Enclosure G, but terminated short of the still extant ditches forming the southern (ditch 509) and western (ditch 519) boundaries of Enclosure E. To the south-east, the ditches (601 and 617) continued beyond the edge of excavation. Both drainage channel 637 and ditches 571 and 588 cut the upper fills of the former palaeochannel 524. Drainage channel 637 was investigated in a single machine-cut intervention, where it was seen to measure at least 3.4 m wide by 1.1 m deep. The feeder ditches, in contrast, measured between 1.14 m and 1.6 m wide and between 0.52 m and 0.72 m deep.

To the south of ditch 617 a narrow 1.6 m wide trackway (Trackway 2) was defined by ditches 588 and 616/619 (Fig. 6). Here, a 3.9 m wide gap between ditch 588 and ditch 616/619 represented an access point to the south. The access point was potentially gated, represented by two large post-pits (620 and 632), between 0.73 m and 0.91 m wide and 0.47 m to 0.51 m deep, forming the settings for gate posts, and a line of 119 stake-holes (groups 713–715) following the inner edge of ditch terminal 588 and extending into adjoining north-east to south-west ditch 618, represented the line of a possible wicker fence.

Ditch 588 forming the southern boundary of trackway 2 contained a further two examples (137 and 165) of near complete grog-tempered pottery vessels placed on the ditch bottoms prior to infilling. As in Enclosure H, no cremated human bone was recovered.

The pottery from the drainage channel and feeder ditches was all highly abraded and is likely to be largely redeposited. Pottery recovered from the fills of drainage channel 637 (40 sherds, 735 g) was only datable to the broad Romano-British period. Other than the near-complete vessels, ditch 588 contained an assemblage of pottery (259 sherds, 2601 g) dated to the mid- to late first century AD. Pottery from ditch 618 (84 sherds, 736 g) and ditch 601 (248 sherds, 1475 g) also indicated a mid- to late first century AD date, and comparable but smaller assemblages were recovered from ditches 616 (eight sherds, 39 g) and 617 (36 sherds, 238 g). Pottery from ditch 523 (404 sherds, 2673 g) was slightly later, dated between the late first to second century AD. A fragment of quern stone in coarse sandstone and three fragments from a Roman glass vessel were recovered from ditch 523, and a fragment from an iron agricultural tine was recovered from ditch 601. Other significant finds included a complete fired-clay triangular loom weight, pierced through two corners for suspension from drainage channel 637.

Rectangular structure 1

A rectangular post-built structure was located between ditch 617 to the south and ditch 601 to the north (Fig. 15). The structure as interpreted consisted of two roughly parallel rows of post-settings (598/599, 597, 596, 602, 600, 603/604 and 605; and 643, 644, 642, 591, 641, 640, 613 and 614) and a shallow gully representing a beam-slot (645), extending between the post-settings forming the structure's eastern side. Several post-holes potentially related to internal partitions (post-hole 648/649, 589, 590 and 640). No trace of a floor surface survived and there was some evidence that truncation had removed structural elements. The structure as observed measured approximately 12 m long by up to 5.4 m wide and was situated perpendicular to the field ditches and trackway, and in alignment with the controlled access point to the south. Pottery from the post-holes and ground beam of the rectangular structure (90 sherds, 600 g) suggested a mid- to late first century AD date. However, pottery from internal post-hole 648/649 (13 sherds, 93 g) also indicated a late first to mid-second century AD date. An incomplete fired clay triangular loom weight, and a fragment each of lower greensand and sandstone were recovered from post-hole 589.

A fence line (post-holes 631, 584, 585, 568, 587, 581 and 647), at least 8 m long, extended from the south-east corner of the structure towards the east. Three further post-holes (583, 567 and 607) followed the same fence alignment, 2.2 m to the south. Both fence lines ran

parallel to the field ditches and trackway. Pottery from these post-holes (81 sherds, 678 g) included a fragment from a southern Gaulish samian bowl of late first to early second century AD date.

Twenty-one additional post-holes (582/646, 608, 609, 610, 611, 615, 621, 622, 623, 624, 625, 626, 628, 629, 630, 633, 634, 635, 636, 638, 639) were investigated within the immediate vicinity of the rectangular structure; they did not form any clear alignments. Of these, a small combined assemblage of early Romano-British pottery (36 sherds, 431 g) was recovered from post-holes 609, 623, 624, 625, and 630, along with a single fragment of blue Roman glass from post-hole 624, and Romano-British pottery (35 sherds, 275g) from post-holes 600, 610, 621, 622, 633, 636 and 638.

Four-post structure 1

A rectangular four-post structure, characteristic of a raised granary, located between ditch 571 to the south and ditch 523 to the north, was potentially contemporary with rectangular structure 1 (Fig. 15). The four post-pits (501, 560, 561 and 562) measured between 0.72 m and 0.83 m in diameter and between 0.21 m and 0.42 m deep, and formed an area 2.3 m long by 1.5 m wide. Small assemblages of Late Iron Age or Romano-British pottery were recovered from post-pit 501 (12 sherds, 106 g), 560 (eight sherds, 32 g) and 562 (seven sherds, 31 g).

Romano-British

Enclosure I

Enclosure I (Fig. 15), represented by gully 586, was superimposed over the arrangement of drainage ditches and Trackway 2, cutting ditch 528, from where it continued north-east across the fence-lines extending from the south-east corner of rectangular structure 1, before turning south-east to continue beyond the excavation area. The gully measured 0.39 m by up to 0.24 m deep and contained an assemblage (43 sherds, 206 g) of pottery, dated to the early to mid-second century AD. The sub-rectangular enclosure had an observed maximum internal width of 13.8 m. While no internal features were identified, a number of features located outside the enclosure might have been contemporary. This included pit 592 which was situated on the outer edge of the enclosure and truncated earlier drainage ditch 617; pit 594,

located within the former footprint of rectangular structure 1; and a short segment of gully (606), potentially representing remnants of an associated enclosure.

Enclosure J

To the north-west, ditches 505 and 535 might represent sections of a large, 103 m (NE–SW) long by 67 m (NW–SE) wide, rectilinear enclosure (Enclosure J: Fig. 16). The enclosure's potential eastern boundary, formed by ditch 505/3358, extended from an area of modern disturbance in the south-west of Area A towards the north-east, cutting Enclosures G, H and E. The ditch had a maximum width of 2.5 m and a depth of 0.35 m. A large assemblage of pottery (355 sherds, 1633 g) recovered from this ditch was dated to the early to mid-second century AD.

The enclosure's southern boundary, and part of the western, was defined by ditch 535. Little of this original ditch survived, as it was later recut by ditch 528, which continued the enclosure boundary on the same alignment. The recut ditch had a maximum width of 1.7 m and depth of 0.66 m. Pottery (385 sherds, 2242 g) from the recut (528) was dated to the early to mid-second century AD but also included part of a fragmented Lower Rhineland colour-coated ware vessel of second to third century AD date. A quern stone, in three fragments, was also recovered.

The northern boundary of this very large enclosure (if such it is) may have been formed by 3362, a straight ditch which ran west from the north-east corner of Enclosure F, intersecting with Enclosure C ditch 3357, although their stratigraphic relationship was not established. There were two breaks in its line, both approximately 8 m wide, one immediately west of its intersection with ditch 3357, the other 7 m to the west. The only finds were 12 sherds of Late Iron Age to early Romano-British pottery from adjacent to the intersection with ditch 3357.

A number of features lay within the interior of the potential enclosure. These included pit 670, which cut the western edge of Trackway 1 (ditch 545), and measured 2.3 m long by 1.9 m wide and up to 0.22 m deep. The pit had five quern stone fragments and a hone stone placed on its base. A copper alloy Harlow type brooch, dated *c.* AD 50–85, was recovered from the upper pit fill. The quern stone fragments were all formed of Lower Greensand and included examples of both an oscillatory quern with two handle slots, as well as rotary

querns. Pottery (190 sherds, 1113 g) recovered from the pit was dated to the mid-second to early third century AD. Other investigated features included two further pits (514 and 679), three shallow linear features (516, 517, 536), three post-holes (515, 676, 677), and two parallel alignments of stake-holes (691 and 706), none of which were sufficiently well dated to be sure they were contemporary.

A probable cremation burial (537/541) was located within the south-east corner of Enclosure J. The cremation was poorly preserved, having been heavily truncated by modern agriculture. The burial pit, which measured 0.27 m in diameter by 0.09 m deep, contained a deposit of cremated human bone, originally contained within a bag or other organic container, accompanied by a burnt and heat-distorted grog-tempered pottery vessel, a shallow dish of first to second century AD date, placed over the top, and the burial pit backfilled with pyre debris.

A second heavily truncated cremation-related feature (542) was located 9 m to the south-west of Enclosure J (ditch 528). This feature comprised a circular cut, 0.5 m in diameter by 0.05 m deep, which contained fragments of cremated human bone intermixed with charcoal indicative of pyre debris. This feature was not dated and is not necessarily contemporary with cremation burial 537/541.

Two undated parallel ditches (2977 and 2979), running west–east then turning north and merging, were recorded north of Enclosure C.

Ditch 2934 ran north-east to south-west, cutting the terminal of possible trackway ditch 3344, before curving to the west. It contained 44 Late Iron Age to early Romano-British sherds and 19 Romano-British sherds, along with animal bone and slag.

Alluvial deposit

An alluvial deposit (002 and 156) accumulated above the former palaeochannel 524 and drainage channel 637 and extended over the surrounding low-lying area including the later field ditches and trackway, and the rectangular structure. The deposit appeared to represent seasonal flooding. It is unclear whether this flooding was a cause of or effect of the cessation of settlement activity. A large assemblage of pottery came from this alluvial deposit (1335

sherds, 11,374 g), with material dated mainly between the late first to mid-second century AD, but also including some pottery of mid-second to third century AD. Other finds included two copper alloy brooch fragments, one a Colchester form dated to the mid-first century AD, the other a trumpet brooch dated to the late first to second century AD. Two potential iron agricultural tines, four iron nails, two iron strip fragments, a lead rivet and two fragments of glass were also recovered.

Area B

Evidence for broadly Late Iron Age and Romano-British activity in Area B was limited to a number of small pits and post-holes, concentrated in the north central part of the area, and a large number of ditches, of varying size and orientation. A significant number of the ditches appear to be spatially related to others, suggesting parts of trackways and field systems. However, given the few clear stratigraphic relationships between those that intersected, and the small mixed pottery assemblages (often including both redeposited and intrusive material) recovered from them, their actual association can be hard to demonstrate and their relative phasing is far from secure.

An arrangement of ditches at the eastern edge of Area B are possibly of this date (Fig. 5). They appear to be spatially related, possibly forming trackways. Ditches 2003 and 2024, 6–7 m apart, ran from the south (outside the excavation area), then turned to the north-east just inside it. They ran parallel for 35 m before diverging at the junction with another possible trackway. Ditch 2003 was up to 2.5 m wide (but of undetermined depth) at the south-west and narrowed to less than 1 m wide at the other end where it curved towards the east-south-east; here it was 0.3 m deep. The only find from its single fill was one probably intrusive medieval sherd.

Ditch 2024 varied considerably along its length, being surveyed as just 1 m wide at the south, but up to 3 m wide further north. It was 0.3–0.7 m deep, with only single fills recorded. There was evidence that it had been recut, the two cuts at one point diverging for a short distance. At the north it curved towards the north-west then appeared to end at a shallow (0.25 m deep) terminal, although its line was continued for a further 25 m by a shallower linear feature 0.10–0.15 deep. It contained pottery with a range of dates (four Late Bronze Age, 37

prehistoric sherds, five Iron Age and two Romano-British), along with one piece of fired clay and three pieces of struck flint.

Where ditch 2003 curved towards the east-south-east, the terminal of a parallel ditch (2002), 4.5–5.5 m to its north, may mark the end of another trackway. It was 2.5 m wide and 0.6 m deep, with a single fill containing five late prehistoric sherds (18 g) and one Iron Age sherd (66 g), along with 21 pieces of animal bone and two pieces of struck flint.

Another, much wider ditch (1691), appeared to follow the lines of ditches 2002 and 2024, forming another possible trackway 4–5 m wide. It continued past the terminal of ditch 2024 (and its shallower continuation) before curving round to the north-east. At the single excavated slot it was 5.5 m wide and 0.5 m deep with moderately steep concave sides and a wide flat base; further south it was over 7 m wide. Its single fill contained two Late Iron Age to Romano-British sherds (25 g) and two small medieval sherds (6 g).

In two areas in Area B, one to the north, the other to the south-west, layers of colluvium masked some of the archaeological features. At the south-west this layer (1002) was 0.75 m thick, lying between the natural clay (1003) and the subsoil (1001). The area at the north, which was surveyed but not excavated, overlapped with two undated ditches (1720 and 1830), and two ditches (1722 and 2025) forming part of a medieval field system, although their relationship with this spread was not recorded.

Medieval, post-medieval and Modern

Area A

The only post-Roman feature identified in Area A was ditch 526 (Fig. 17), which cut alluvial deposit 002. This feature, aligned north-east to south-west, measured 2 m wide and 0.85 m deep. The feature traversed the south-east corner of Area A and followed the line of a post-medieval field boundary present on the 1838 tithe map.

Area B

In Area B, a group of ditches was recorded at the northern corner of the excavation area, clearly representing more than one phase of activity. Although no clear stratigraphic

relationships were established between them, some of them appear to form part of a rectilinear field system, or series of small plots, extending beyond the excavation (Fig. 17).

Possibly early among these was ditch 1720, 0.6 m wide and 0.1 m deep, which curved towards the north. It contained one prehistoric and two medieval sherds as well as fragments of fired clay, although it is possible, given that it intersected with two medieval ditches, that the medieval sherds are intrusive.

Two medieval ditches (1722 and 2025) were parallel and 12–13 m apart, aligned north-north-west to south-south-east. Ditch 1722 turned at a right angle to the east-north-east, where it was joined by ditch 2025, then curved slightly eastwards, being recorded to within 12 m of the eastern edge of the excavation; it is unclear whether it terminated within the excavation. Also apparently associated was ditch 1595, which curved from the south-south-east to the north where it joined ditch 1722. It is unclear whether this terminated towards the south, although it appeared to be aligned on the terminal of an east–west ditch (1818), 21 m to the south-east. Ditch 1722 varied in size, being 1 m wide and 0.15 m deep immediately north-west of its turn, but 1.8 m and 0.4 m deep to the immediate north-east. Ditch 2025 was 1.4 m wide and 0.3 m deep towards the north, widening to over 3 m where it joined ditch 1722. Ditch 1595 was 1.3 m wide and 0.4 m deep, while ditch 1818 was 1.4–2.7 m wide and at least 0.3 m deep. Together these ditches produced six prehistoric sherds, one Late Iron Age to Romano-British sherd and 81 medieval sherds, the majority of the latter recovered (67 sherds) from the southern recorded extent of ditch 1595. There were also small quantities of burnt flint and fired clay, as well as, from ditch 1595, a possible horseshoe fragment and a piece of medieval roof tile.

Also possibly associated with this group was a small ditch (1830), 0.9 m wide and 0.1 m deep, lying almost parallel to ditch 1722 to its immediate south. It intersected with the northern end of ditch 1595 and an irregular medieval pit (1826), but in neither case was their stratigraphic relationship established; it contained no finds. In addition, intersecting with the eastern extent of ditch 1722, a linear feature (surveyed but not further investigated) matched approximately the orientations of the medieval ditches, running from the north-north-west before turning to the east, and possibly splitting into two forks.

A number of ditches in the western corner of the eastern area appear to be spatially related. Ditch 2013 followed a curving line from the south to the north-east where it terminated. Towards the south it was 1.9 m wide and 0.4 m deep, but it narrowed to under 1 m at the north-east. It produced single prehistoric and Late Iron Age to Romano-British sherds, and two medieval sherds. Its southward line was continued by an unexcavated ditch in the western part of the area which matches a mapped post-medieval field boundary. Although there are no indications from historic mapping that the boundary continued north of its junction with a contemporary boundary represented by ditch 1006 (the junction itself lay in the unexcavated strip between the two parts of Area B), the archaeological evidence suggests that it did, and that it therefore is likely to be earlier than reliable mapping.

At the north-east ditch 2013 ran parallel to and 1.6–2.7 m south-east of ditch 2014, which turned sharply to the north-north-west close to the end of ditch 2013, continuing beyond the excavation. Where ditch 2014 ran parallel to ditch 2013 it was of a similar width, and 0.35 m deep, but after the turn it widened to up to 3.3 m and at its northern extent it was 0.5 m deep. It contained eight prehistoric sherds and one medieval sherd. Its line was continued to the west by ditch 2017 which ran in a straight line to the south-west and contained two prehistoric sherds.

A different phase of activity is indicated by ditch 2015, which ran north-east to south-west, intersecting with ditch 2014 (although their stratigraphic relationship was not established) and possibly continuing after a break as a narrow feature which joined ditch 2013. At the north-east it was recorded up to the edge of the surveyed geology, but not beyond it. Ditch 2015 contained 51 prehistoric sherds and four pieces of animal bone. It may be related to the other ditches, in which case it may have been either part of an early layout pre-dating ditch 2014, or a later modification after ditch 2014 had gone out of use.

A rectilinear grid of ditches, forming an apparent field system, overlapped with the trackway ditches in the south-eastern part of the area. Only one of the field system ditches (2020) had a recorded stratigraphic relationship with any of the trackway ditches, cutting ditch 2024, and as it was on a slightly different alignment to the rest of the grid it may not have been part of the field system. It intersected with ditch 2019 (but with no stratigraphic relationship visible in section) and contained five sherds of medieval pottery, while the remaining ditches in the

grid together contained only three medieval sherds, one from ditch 1190, and two from ditch 2022.

The field system, which appears to have undergone some modification over time, comprised one long ditch (1738) running south-west to north-east, with others lying perpendicular to it, some of which crossed it (eg, 2018, 2021 and 2023), and others, running from the south-east, stopping at or close to its line (eg, 1190, 2018 and 2022), these latter ditches dividing up the eastern-most large field into a number of thin parallel blocks. Some of these ditches appear to have been heavily truncated, with many being under 1 m wide and 0.1–0.3 m deep, although there is considerable variation between ditches.

Two other ditches (1068 and 1084), further to the south-west, appear to define further large rectangular fields on the same orientation which appear not to have been subdivided. These ditches, however, were noticeably larger, with ditch 1068 in one slot being 1.1 m wide and 0.5 m with a steep V-shaped profile (elsewhere over 2 m wide), and ditch 1084 being up to 3 m wide and 0.5 m deep.

Ditch 2016, in the western part of the area, contained 11 medieval sherds and an iron nail (2016), and its north-western terminal, which lay just 1 m from a mapped post-medieval field ditch, cut a pit (1185) containing six medieval sherds, and was cut in turn by a shallower pit (1182) containing a further three.

An undated north–south ditch (2007) intersected with a number of the field system ditches, but its stratigraphic relationship with them was not established. A short length of unexcavated ditch on a similar alignment, 16 m to the east, may be associated with it.

A very straight unexcavated ditch, 1 m wide and aligned north-east to south-west, passed through the centre of the area, its line matching that of a field boundary shown on the 1840 tithe map, and later Ordnance Survey maps. Another ditch (1721), 0.1–0.3 m deep, lay further to the north-west on a slightly different line, and although not matching any mapped field boundaries, its similarly straight line suggests a comparable date; its only finds were 12 prehistoric sherds, four pieces of flint and one medieval sherd, all from a single slot (1682) where it cut one of a group of prehistoric pits.

North-west to south-east ditch 1006, 1.2–2 m wide and 0.5 m deep, also matches a mapped field boundary, as does an unexcavated ditch of a similar size aligned north-north-east to south-south-west in the western part of the area. The apparently more substantial nature of these ditches may reflect the fact that they are shaded on the tithe map indicating that they also mark property boundaries, while ditch 1271 has the appearance of a relatively more recent boundary, possibly laid out to subdivide a larger field which it bisects. Ditch 1006 cut the spread of colluvium (1002) along the southern edge of the excavation, as did a 10 m length of parallel ditch (2011) 2.5 m to its north-east, although it is unclear whether it continued to the edge of the excavation. Ditch 2011 was 0.7–1 m wide and 0.4–0.5 m deep and contained two Late Iron Age to Romano-British sherds and two medieval sherds.

Late Iron Age ditch 1691 in the eastern corner of Area B was recut in the post-medieval period, the recut (1693) being 3 m wide and at least 0.50 m deep, with convex sides descending to a narrow stone-lined slot (1694) the base of which was not reached. Lying against the shallow upper sides of the recut was a spread of broken post-medieval tile and stone, some of which had eroded down into the slot. Because no other slots were dug through ditch 1691, it was not established whether this later recut ran along its entire length.

Ditch 1097, in the western part of the area, produced two Late Iron Age to Romano-British sherds and one post-medieval sherd.

Ditch 2009, which was stratigraphically late, ran in a straight line south-east to north-west for over 100 m. It contained no datable finds, and although it does not match any mapped field boundaries it is considered likely to be of post-medieval or modern date. Possibly associated with it were two lengths of ditch to its north-east, both unexcavated but with similar orientations. One of these was abutted by ditch 2012 which ran in a straight line for 75 m to the north-east, parallel to and 13 m south-east of the post-medieval ditch field boundary (above); ditch 2012 yielded no finds.

Two large linear features in the western part of the area appear to be related to the recent construction of Waterbrook Avenue.

Part Two: artefacts, ecofacts and human remains

Animal Bone

L. Higbee

Introduction

A small quantity (3.065 kg) of animal bone was recovered from the 2007 excavations. The majority (81%) came from Area A and the rest from Area B. The assemblage is poorly preserved and extremely fragmented, hence most fragments (64%) came from the sieved residues of bulk soil samples. Most of the animal bones came from deposits of Late Iron Age to early Romano-British date, with small amounts from Bronze Age to Early Iron Age and medieval to modern deposits (Table 1). An additional small quantity came from features of uncertain date, mostly pits and postholes.

Methods

The following information was recorded for each identifiable fragment: species, element, anatomical zone (after Serjeantson 1996, 195-200); anatomical position, fusion state (after O'Connor 1989; Silver 1969); tooth eruption/wear (after Grant 1982; Halstead 1985; Hambleton 1999; Payne 1973), butchery marks (after Lauwerier 1988); metrical data (after von den Driesch 1976); gnawing, burning, and surface condition. This information was directly recorded into a relational database (in MS Access) and cross-referenced with relevant contextual information.

Results

Preservation and fragmentation

As indicated above the assemblage is poorly preserved and highly fragmented, and this has inevitably reduced the number of identifiable fragments and detailed information available. Most (97%) fragments show signs of physical and chemical weathering resulting from burial in acid soil conditions. Poor bone preservation is a feature of the Ashford area (Charles 2008, 335; Knight 2012, 30; Ayton 2013, 341; Higbee forthcoming).

Much of the bone is burnt (78%; Table 2) and in general this material is in better condition than the unburnt fragments. Most (76%) of the burnt fragments are calcined having been

burnt at temperatures over 600°C (Shipman *et al.* 1984, 308); these fragments are bluish-white or grey in colour, and the larger fragments show signs of heat cracking and distortion. A small proportion (2%) are charred and these fragments are black in colour and have been heated at temperatures of between 400–550°C. Most (86%) of the burnt fragments came from Late Iron Age to early Romano-British contexts in Area A and most (72%) of the unburnt fragments came from Bronze Age to Early Iron Age contexts. The burning of bones and other calcified tissues removes the organic component (i.e. collagen) rendering skeletal elements chemically inert but also more brittle, and as a result burnt bones tend to be more fragmented than unburnt fragments (Lyman 1994, 384–92). Intensive fragmentation reduces the probability that a specimen can be identified; indeed, there are few complete bones and teeth in the entire assemblage. Complete, well-preserved bones were only recovered from recent contexts, such as the recut of ditch 1691 in Area B. The three cattle bones from the recut account for 35% of the overall weight of the assemblage and when excluded the average fragment weight is just 2 g.

Bronze Age to Early Iron Age

A total of 188 fragments of animal bone were recovered from Bronze Age to Early Iron Age contexts including ditches 1700 and 2015, 20 pits, a posthole (1278), and tree-throw holes (1119, 1845 and 1983). Most of the recovered fragments are unburnt and 10% are identifiable to species. The identified bones all belong to either cattle or sheep/goat. The cattle bone assemblage includes a number of loose teeth, fragments of maxilla, mandible, horn core, humerus, first phalanx and rib. The identified sheep/goat elements include loose teeth, and fragments of radius and tibia.

Late Iron Age to early Romano-British

A total of 753 fragments of animal bone were recovered from Late Iron Age to early Romano-British contexts. The majority (72%) of this material came from Enclosure B (3355 and 3007), in particular slots 3064 (ditch 3007) and 3326 (ditch 3355). Modest quantities were recovered from pits (18%), including one inside Enclosure B (3355) and one in the centre of ring ditch 3331, with smaller amounts from ring ditch 3331, Enclosure A (3345), roundhouse gully 3063 and gravel spread 2946.

As noted above the Late Iron Age to early Romano-British assemblage is largely composed of calcined bone fragments, the majority of which came from Enclosure B, with smaller amounts from pits 2565, 2866, 2932, 2960, 2969, 2975, 3091 and 3262, ring ditch 3331, roundhouse gully 3063 and the terminal of ditch 2537. While the vast majority of calcined bone fragments could not be identified to species it is worth noting that the majority of sheep/goat bones are calcined, while the majority of cattle bones are unburnt. This suggests that sheep/goat were treated differently from other livestock. Their burnt remains were included in ritual practices, for example the placed deposit from Enclosure B (slot 3064, ditch 3007) comprised a near complete but broken, grog-tempered cordoned jar and 236g of calcined bone, including several sheep/goat elements and unburnt fragments of cattle mandible. This contrasts with the unburnt remains of a cattle skull and mandibles recovered from a dump deposit in slot 3326, ditch 3355 of Enclosure B.

The assemblage is highly fragmented and as a result only 8% could be identified to species. Four domestic species have been identified (Table 1). Sheep/goat bones are common (65%), followed by cattle (29%), and then pig and horse. The assemblage of sheep/goat bones includes a range of skeletal elements, although there is a noticeable bias towards teeth and small robust bones (eg, phalanges, patella, carpals, tarsals and vertebrae centra) or parts of bones (eg, proximal ulna and metapodials, and distal humerus, radius and femur). These are elements that generally survive in a recognisable form following cremation and fragmentation.

Most of the identified cattle bones came from Enclosure B and are unburnt. The assemblage includes mostly teeth and a few fragments of scapula, radius and femur. A dump deposit in ditch 3355 of the enclosure contained the fragmented remains of a cattle skull and mandible together with large quantities of pottery. Two calcined fragments of pig bone, a carpal and metacarpal, were recovered from pit 2969. The maxillary teeth from an adult horse, approximately 5 to 9 years of age, came from ditch 2934.

Medieval to modern

A single cattle tooth came from medieval ditch 1243. Several sawn cattle long bones, a scapula and two femurs came from the post-medieval recut 1693 of Late Iron Age to early

Romano-British ditch 1691, and six small unidentifiable fragments came from the modern topsoil layer.

Undated

Bone also came from a small number of undated contexts including a few pits, ditch 1625, gully 3363, posthole 1089 and tree throw-hole 1414. Only three fragments can be identified, they include two loose cattle teeth and a fragment of cattle rib.

Discussion and conclusions

The animal bone assemblage from Waterbrook Park is extremely fragmented due to burning and poor preservation. This combination of factors has resulted in an assemblage that is dominated by calcined fragments and only the more robust unburnt skeletal elements. The general character of the assemblage is similar to others from the Ashford area and is a reflection of the acid soils that prevail locally.

Most of the identified bones came from enclosure ditches of Late Iron Age to early Romano-British date. The assemblage is dominated by bones from sheep/goat, the majority of which are calcined. A deposit of calcined sheep/goat bones and pottery was recorded from Enclosure B, ditch 3007. The cremated remains of lambs have previously been recorded from human cremation burials at Westhawk Farm (Charles 2008, 336) and at Brisley Farm a charcoal-rich deposit containing a significant quantity of calcined animal bone fragments and pottery was recorded in an early–middle Romano-British enclosure ditch (G434) associated with two square barrows. Although the cremated sheep/goat bones from Waterbrook are not directly associated with human remains, it is possible that they are linked in some way to the rituals and practises associated with this activity. The deposition of cattle and horse skulls in some of the ditches might also have ritual connotations.

Worked Flint

Erica Gittins (incorporating comments from Pippa Bradley and Phil Harding)

Introduction

1880 pieces of worked flint were recovered, as in Table 3.

The raw material varies in colour and quality, from good quality black through to chocolate brown flint, as well as very poor quality grey and brown cherty flint with a large number of inclusions. There are also instances of glauconitic (Bullhead) flint and a small number that may have come from pieces of marbled flint; both are native to Kent. The good quality black flint is known to have been available from the North Downs.

The cortex varies from very thin, to moderately thick on the better quality flint, and ranges in colour from pale buff to dark brown. The presence of nodules with heavily battered cortex confirms that gravel cobbles were used, as well as pieces probably deriving from the parent Chalk.

The condition of the pieces is very variable. Many pieces show signs of patina, staining and rolling, while a number of other pieces are in near mint or mint condition.

Elements of technology included use of both hard and soft hammers. Some use of platform abrasion was noted as were a small number of rejuvenation flakes and crested pieces, the latter undoubtedly deriving from blade production.

Only a single feature (Early Neolithic pit 701) was potentially contemporary with the lithics it contained. Of the remainder of the assemblage, over one third was unstratified, with the rest redeposited in later features.

The largest single collections were made from unstratified contexts 1082 and 1083, which accounted for 39% of the total. This element of the assemblage comprised both flakes and blades with cores from their production, suggesting that the total represents multi-period activity. The flakes all showed considerable edge damage, which confirmed that this material has undergone considerable reworking in the plough soil.

Mesolithic

The diagnostically Mesolithic forms were truncations, notches, microliths, a microburin and probably the burins. There were also bladelet cores (including pyramidal), a core rejuvenation flake, and a quantity of debitage (mostly blades and bladelets), and a probable tranchet axe sharpening flake from 1002 which could have been of Mesolithic date. All are likely to be redeposited.

Of the seven truncations, identifiable forms included four transverse or laterally truncated blades, while one was concave. Two truncations were unstratified (Plate 1.1, 1.2), two came from fill 141 of pit 592 (Plate 1.3), one from fill 145 of post hole 597 (Plate 1.4), and one from alluvium 156 (Plate 1.5). A possible truncated flake came from fill 2568 of ditch 2567.

The 10 notches were all on blades apart from two on flakes, one of which was on a thick removal from a blade core (unstratified) and the other (Plate 2.1) from a large tertiary flake with opposed notches on the back (fill 120 of ditch 573). The others were all single notches on blades or broken blades. Two of these were unstratified, one was from paleochannel 524, one (Plate 2.2) from fill 103 of ditch 571, one (Plate 2.3) from fill 212 of field drain 658/659/660, one from fill 230 of ditch 674, and one from fill 214 of enclosure ditch 505/543/661. A possibly related piece (Plate 2.4) was a pinkish-red (perhaps from heating) teardrop-shaped small primary flake with opposed notches on the neck and shaping on the surface of the bulb. This came from fill 30 of field drain 521 and has the appearance of a pendant.

Of the seven microliths, two were of Clarke's form B (retouched straight down one edge: Clark 1934). One was a B1 from fill 166 of ditch 617 (Plate 3.1) and the other an unstratified B2 (Plate 3.2). A third microlith with backed edges came from layer 1003 (Plate 3.3), a crescentic backed piece came from layer 1082, and another backed piece also listed as a microlith came from fill 1041 in ditch 1040 (Plate 3.6). A rather crude obliquely blunted point (Plate 3.4) came from fill 2678 in ditch 2677, and a second fragmentary microlith (Plate 3.5) from fill 2635 of wheel rut 2634. A distal microburin came from fill 1073 in ditch 1071.

Of the two definite burins one was from layer 1082 and the other from fill 215 of pit 662 (plate 4.1). Both were struck from the platform, the example from 1082 on the left margin, that from pit 662 on the right. There is also a possible burin made on a snapped blade, from layer 1083, although the scar of the spall appears to be less well stained than the rest and may be a later accidental removal.

One bladelet core was unstratified and the other (a pyramidal form) from fill 22 of drainage ditch 518/519. Both have cortical backs. The former utilised a recorticated pebble, and was

abandoned, probably due to the condition of the raw material. The latter is a single platform example with evidence of platform preparation, abandoned due to exhaustion. Two opposed platform blade cores were recovered from subsoil 2501.

There were a number of blades and bladelets, and also trimming and other flakes struck from blade and bladelet cores. Any number of these could be Mesolithic, but equally these could be from the Early Neolithic, as no technological, raw material or contextual distinctions could be made. Specific pieces that are worthy of note included the proximal end of a large patinated broken blade, produced using a soft hammer from a core with a faceted striking platform from layer 1083 and one other flake with a similarly faceted butt (Plate 4.2) from fill 1130 of pit 1129. Neither of these pieces is dated with certainty but both are worth noting as possible examples of early activity in the area. The only other distinctive piece amongst the debitage was a triangular platform rejuvenation flake (Plate 4.3) from a blade core of classic Mesolithic type (Clark 1932). This piece was unstratified.

Early Neolithic

Early Neolithic flint was recovered from pit 701. The six pieces are all made on the same good quality dark brown chalk flint. Four are flake fragments (three showing signs of having been heated); one is a thin narrow blade struck with a soft hammer; and one is an end scraper on a broken flake. The pieces are in mint condition, and clearly derive from the same knapping episode or group of episodes. Although none of the pieces are inarguably Early Neolithic, they would not be out of place in an assemblage of that date. The presence of 110 sherds from a single flint-tempered vessel in the same feature (considered during assessment to be either Early Neolithic or Late Bronze Age) suggests that the earlier date is the correct one.

Two leaf arrowheads were recovered from layer 1083 (Plate 5.1 and 5.2) and three from layer 1082 (Plate 5.3 – 5.5). Two unfinished leaf-shaped arrowheads were also recovered, both unstratified. One (Plate 5.6) appears to be of type 1 or 2 (Green 1984, 21 and fig. 4), but was broken during a relatively late stage of manufacture while thinning the back. The other (Plate 5.7) was abandoned at an earlier stage. There is some thinning of the left ventral margin and over the bulb. The bottom third of the dorsal surface had begun to be thinned, until a series of step fractures prevented further successful thinning.

A number of the better made end scrapers are also likely to be Neolithic, probably Early–Middle Neolithic.

Late Neolithic

Diagnostic Late Neolithic retouched pieces were limited to an arrowhead (unstratified), and a scraper with worn edge from fill 140 of ditch 139. A keeled core from fill 3061 of ditch 2537 and a partly prepared discoidal core from layer 3175 were also recovered. These latter tend to be more common in later Neolithic contexts (cf Healy 1985). A piercer with a long well-made point was unstratified (3097), but is probably of Late Neolithic date.

The arrowhead (Plate 6.1) is a British Oblique type of the Transverse series (Green 1984, fig. 6). The tip is missing, and there is some damage to the unblunted edge, suggesting that the piece may have been used, and possibly lost during a hunting episode.

The scraper (Plate 6.2) is made on a short thick blank with minimal retouch to the concave distal end. On the right shoulder, the blade is very worn, almost to the point of polish. This wear pattern is sometimes seen in southern English Late Neolithic assemblages (for instance Cramp and Leivers 2010). Neatly made scrapers on thin blanks may also be of later Neolithic date (eg, from subsoil 2501 (Plate 6.3) and ring ditch 2557).

A third unstratified piece (no. 245) may be an abandoned blank for a hollow-based arrowhead. The blank is very thick (over 5mm in places). The left margins of both faces have been thinned (very casually on the ventral surface) in a manner typical of Transverse arrowheads.

A scraper or knife fragment of probable Neolithic or Early Bronze Age date came from fill 2637 in ditch 2635 and an unfinished arrowhead or knife of similar date came from fill 2953 in hearth 2952.

Beaker

Two pits, 1126 and 1131, contained Beaker pottery. These features both contained small quantities of otherwise undiagnostic lithic material, collectively 26 pieces, most of which were flakes.

Other Beaker period activity is represented by an unstratified barbed & tanged arrowhead (plate 7.1), a barbed and tanged arrowhead from fill 1651 in pit 1650 (Plate 7.2); two thumbnail scrapers (Plate 7.3 and 7.4: unstratified), a third from subsoil 2501 (Plate 7.5) and others from layer 1082; and multi-platform cores (unstratified and ditch 034), one used as hammer (topsoil 083).

The arrowhead from pit 1650 is a barbed & tanged of Green's Green Low type (1984, 29 and fig. 8). The tip and one barb are missing, but even so the piece is very regular and finely worked with evident symmetry in both planes.

The scrapers are very similar, made on the distal ends of small sub-square secondary flakes (20 by 25mm approx.). They are typical thumbnail examples, quite expedient in manufacture.

The cores are irregular, with multiple platforms at 90 degrees. There is no indication of platform preparation or maintenance: reduction strategies appear to have involved the removal of flakes until the platform edge had regressed, at which point the core was simply rotated to another suitable surface where removals continued.

Other lithics

While the majority of the lithics appear to fall in the chronological span of later Mesolithic to earlier Bronze Age, there are some indications of later working.

A number of pieces of flint had been flaked with hard hammers with very limited core control. Flakes with denticulate retouch were also recorded. Material of this type has often been shown to be typical of Late Bronze Age industries. It is possible that some of these pieces can be linked to the network of ditches that are of this date.

A small number of unstratified flakes have been struck from previously worked and patinated pieces. A flake with miscellaneous retouch and many incipient cones of percussion was also unstratified. Both are typical of later prehistoric (later Bronze Age or Iron Age) flint working (Young and Humphrey 1999).

Discussion

The assemblage finds its best local parallel at the adjoining site of Cheeseman's Green (Gittins forthcoming). The Cheeseman's Green assemblage is dominated by a concentration of Mesolithic material relating to the manufacture and use of tranchet axes and microliths. Indications are of activity towards the end of the Mesolithic period. As at Waterbrook Park, the Cheeseman's Green assemblage also includes type fossils from the Early Neolithic and Early Bronze Age, as well as a smaller number of later prehistoric pieces. Much of this material is likely to result from small-scale knapping associated with transitory campsites on dry ground on the edges of or among the braided channels of the East Stour floodplain. The predominance of projectile points among the retouched tools suggests that the lithic toolkits were geared towards the creation and maintenance of hunting equipment, with the few scrapers perhaps indicating that some processing of carcasses took place.

Together with the material from Cheeseman's Green, the Waterbrook Park assemblage is most notable for the Mesolithic component. Material of this date is not well-represented locally (see Wessex Archaeology and Jacobi, 2014), and the combined Waterbrook-Cheeseman's groups indicate a very significant Late Mesolithic presence. The Waterbrook Park assemblage is also notable for the inclusion of Late Neolithic type fossils, as indications of activity at this time have so far been only rarely recovered from the sites.

Prehistoric and Roman Pottery

Grace Perpetua Jones

Introduction

The evaluation and excavation at Waterbrook Park produced 21,823 sherds of prehistoric and Romano-British pottery, weighing 164,229 g (Table 4). The material ranges in date from the Early Bronze Age to the Romano-British period, but the majority derives from activity during the Late Iron Age and Romano-British periods. The assemblage is in extremely poor condition, with surfaces highly abraded or completely eroded away and there is little edge definition. The average sherd weight is 7.5 g. The pottery was recorded to a basic level according to the Standard for Pottery Recording (PCRG *et al.* 2016). It was quantified by the number and weight of sherds per fabric type, in each context. Where possible, rim forms were recorded using the Thompson (1982) type series for grog-tempered wares of South-eastern

England, and other appropriate regional and national classifications (eg, Monaghan 1987, Dragendorff 1895). Rim forms not found in such classifications, principally the prehistoric types, were recorded using a uniquely numbered sequence (R1, R2 and so forth). The rim diameters of all vessels, and the percentage present, were recorded. Details of any surface treatments, decoration and evidence of use were noted, and a comment made on the firing conditions of the grog-tempered wares.

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Early Bronze Age

Pottery of Early Bronze Age date was recovered from two features: pit 1129 (120 sherds, 612 g) and the topsoil (1 sherd, 8 g). The group from pit 1129 comprises highly abraded body sherds with much surface damage, but decoration is visible on 25 sherds. The motifs comprise fingertip impressions, possible cordons and short, ovate impressions. They are in a grog-tempered fabric, most with oxidised external surfaces and unoxidised cores and internal surfaces. The material probably derives from at least one coarse Beaker. Two Roman whiteware sherds were also recovered from this feature (context 1131).

Middle to Late Bronze Age

Pottery of Middle to Late Bronze Age date (3696 sherds, 24,364 g) was identified from 133 features, the topsoil and as unstratified finds. Other material of this date is also likely to be present amongst the undiagnostic prehistoric material. Only 30 of these features contained 30 sherds or more, whilst 63 features produced 10 sherds or fewer. Well over half of the features (65%) produced less than 100 g of pottery.

Fabric

The Middle to Late Bronze Age fabrics comprise flint-tempered wares, grog-tempered wares, fabrics gritted with flint and grog inclusions, and sandy wares (Table 5). Most of the flint-tempered wares were recorded under a generic code, however 70 sherds were noticeably coarser than the rest (from tree-throw holes 1983 and 1948) and 73 were tempered with very fine flint. Some of these particularly coarse and fine sherds may indicate a Middle Bronze Age date (for example from ditch 3348), but without diagnostic rim forms could not be closely dated. On the whole, the flint-tempered wares accounted for 46.3% of the Bronze Age assemblage by count and 45.7% by weight. Fabrics tempered with inclusions of both grog and flint were also commonly encountered, representing 32.3% of the assemblage by count

and 33.5% by weight. Fabrics tempered solely with grog were less common - 21% by count and 20% by weight. Sandy wares and rock-tempered fabrics are relatively rare, accounting for <1% of the Bronze Age pottery. Glauconitic sands were locally available, from the nearby Hythe Formation deposits or the Gault. Flint was available in the local drift geology. The use of grog-temper represents recycling of vessels on site.

Form

A total of 31 rim forms were identified, however the profile of many could not be discerned due to their fragmentary nature (Appendix 1).

Open forms

The bowls included shouldered and hemispherical forms. A carinated bowl with long, concave neck and flat-topped rim was present in a grog-tempered fabric (R16, Fig. 19.10). A similar but smaller vessel in a fine flint-tempered fabric was probably used as a drinking vessel rather than a bowl (R25, Fig. 19.9). An upright, rounded rim from a thin-walled vessel in a flint and grog-tempered fabric may represent another example of a carinated cup (R18). A low-waisted vessel with long neck and squared, internally bevelled rim, was recorded in a flint-tempered fabric (Fig. 19.8. PRN 47, R5). Traces of burnt residue adhere to the interior, particularly at the waist level. A number of variations of carinated/shouldered bowls and cups have previously been identified at Highstead (Couldrey 2007, F24, F28, F38), Saltwood Tunnel (Jones 2006a, R8) and White Horse Stone (Morris 2006a, vessel numbers 9 and 11) during the Late Bronze Age and continued to be made and used into the Early Iron Age period (McNee 2012, bowl form BO3).

The hemispherical bowls include a flint-tempered example decorated with a row of comb-impressed dots around its flat rim top, and possible incised or comb-impressed diagonal lines on the exterior wall, although these were difficult to see due to surface abrasion (R9, Fig. 19.11). A similar, but undecorated vessel was recorded in a grog and flint-tempered fabric (R26, Fig. 19.12). Variations on this form include one with an internally expanded rim (R17, Fig. 19.13), one with a rim slightly pinched on the interior (R19) and a small vessel with tightly curved walls (R22). Hemispherical bowls are widely paralleled in the region (McNee form BO4) during the Late Bronze Age and Late Bronze Age/earliest Iron Age, with

examples from Saltwood Tunnel (Jones 2006a, R25) and Highstead (Couldrey 2007, F4-F7, F16).

Closed forms

The jar forms included shouldered vessels and those with convex profiles. One shouldered jar is tripartite in form, with pointed, flared rim, in a grog and flint-tempered fabric (R6, Fig. 19.6). Another has a very slightly in-turned rim with rounded shoulder, and had been made from a finely flint-tempered fabric (R23, Fig. 19.7). The profile of a vessel with internally-bevelled and externally expanded rim was uncertain, but may represent another shouldered jar (R24, Fig. 18.3). Shouldered jars, like the bowls, have quite a long currency in the region, from the Late Bronze Age through to the earliest Iron Age. Shouldered jars have been recorded from other sites in Kent including Saltwood Tunnel (Jones 2006a, R3 and R24). A jar with short, out-turned rim, pie-crust on the exterior, had at least four pre-firing holes around its neck (R21). The vessel had broken at the shoulder but may have been quite globular (cf Couldrey 2007, 108, F50; McNee 2012, Late Bronze Age form J7). Rows of pre-firing perforations have been recorded on Middle to Late Bronze Age bucket-shaped vessels from Tutt Hill (Morris 2006b, R1).

More commonly occurring were vessels with convex profiles and undifferentiated rims. The tops of the rims may be flat-topped (R13, Fig. 18.2), internally-bevelled (R8, Fig. 18.1; R27, Fig. 18.5) or more rounded/pointed (R10, Fig. 19.6). More curved, ovoid-profiled vessels were indicated by rim form R7. Two vessels had faint vertical channels on their exteriors from finger smoothing (Fig. 18.1 R8 and Fig. 18.4 R10). The R13 had been used to cook food and retains burnt residue deposits that adhere to the interior of the vessel, along most of the wall other than the uppermost and lowest parts. Three of the four convex-profiled jars were in a grog and flint-tempered fabric and one was grog-tempered. The convex-profiled vessels belong to a continuum of forms that range from the Middle to Late Bronze Age transitional jars recorded from a number of sites along the route of the Cross Channel Rail Link, such as Beechbrook Wood (Jones 2006b, R1 and R2), to the Late Bronze Age hooked rim jars. They are encompassed by McNee's Middle to Late Bronze Age and Late Bronze Age form J3-J4. Late Bronze Age examples have been recorded from nearly Park Farm East (Jones 2012) and Highstead (Couldrey 2007, F10 and F12).

Miscellaneous

A number of rims were too fragmentary to identify their form and profile. These included two flat-topped, undifferentiated rims, one with a slashed rim top and fingernail impressions on the upper exterior (R12), and one with traces of fingertip/fingernail impressions on the rim top (R14). Non-joining sherds from a fingertip-impressed applied cordon may have come from the R14. A slightly flared, concave rim was recorded on 17 occasions, always broken at the rim/neck join but possibly from fineware bowl forms (R1). This rim form was also encountered at Cheeseman's Green, where it was again too fragmentary to identify to form. A similar rim, but with a pinched top, was also present at Waterbrook Park (R3). The R2 and R4 rims displayed an internal bevel, but were very fragmentary. A flat-topped rim with convex neck (R15) may be classified as McNee form J8, from a Late Bronze Age shouldered jar, and widely paralleled in the region. A flat-topped, externally expanded rim had been decorated with fingernail impressions around the rim top, but the profile is unknown (R20). Seven rim fragments were represented by the tip only, but were plain and rounded (R11).

Key groups

Pits 1357 and 1359

The largest groups of Late Bronze Age pottery derived from two intercutting pits in Area B (1357 and 1359). The material was highly abraded and fragmentary, and some sherds had been burnt. The fabrics contained moderate to very common quantities of flint, up to 2 mm in size, in silty clay matrices. There were few featured sherds; vessel walls ranged from 3-8 mm in thickness. The group from pit 1357 (439 sherds, 1848 g, average sherd weight 4.2 g) includes six rim sherds that appear to derive from a single thin-walled vessel, probably a fineware bowl with out-turned rim, possibly of carinated profile, but now broken at the neck. A burnt and highly abraded sherd from a second vessel of this type was also recovered. Other rim fragments comprise a small piece with internal bevel; a plain, out-turned fragment, and a plain fragment with slightly pointed top. Their profiles could not be discerned. Evidence for decorated vessels comprises three body sherds with fingertip and fingernail impressions and one with a horizontal cordon. Only two base fragments were identified from this group, both expanded forms. A smaller group (234 sherds, 689 g, average sherd weight 2.9 g) came from pit 1359 but was similar in composition, dominated by body sherds, including a burnt component, and four small rim fragments (R4 x 1, R1 x 3).

Pit 3110

Much larger sherds were recovered from pit 3110 (Area A, 208 sherds, 3287 g, average sherd weight 15.8 g, cxt 3113). Just over half of this group are flint-tempered wares (53% by count, 60% by weight), including part of the profile of a large, low-waisted bowl with long neck and squared, internally bevelled rim (R5, Fig. 19.8). Traces of burnt residue on the interior indicate it had been used for cooking. Flint and grog-tempered mixtures accounted for 15% of the group (by count, 18% by weight), some in sandy clay matrices. Forms in these fabrics include a large, probably tripartite, jar with long, flared rim, pointed at the tip (R6, Fig. 19.6), a slack-sided jar with internally-bevelled, pointed rim (R8, Fig. 18.1) and small rim fragments from two ovoid jars with rounded rims. Glauconitic sandy wares and glauconitic sandy wares with grog-temper together account for 12% of the number of sherds from this pit (8% of the weight), but no rims were found in these fabrics.

Other groups

Fairly large groups of Late Bronze Age pottery came from pit 1607 (202 sherds, 11,325 g) and feature 1293 (168 sherds, 930 g), but the assemblages are dominated by abraded, featureless body sherds. The material from pit 1607 is predominantly fragmentary grog-tempered sherds with sparse inclusions of flint and including rim fragments from two jars, both flat-topped and slightly flaring, but broken at the neck/shoulder join. They appear to be very large vessels (400 mm) but relatively thin-walled (7-8 mm). The group from feature 1293 includes two rims, one from a long-necked shouldered jar with flattened rim (R23) in a fine, flint-tempered fabric; a plain, rounded fragment (R11) and a couple of lugged sherds, predominantly in grog-tempered fabrics. The assemblage also includes grog- and flint-tempered wares, flint-tempered fabrics, and a minor component of sandy wares.

The assemblage from pit 2954 (109 sherds, 774 g) includes flint-tempered, grog-tempered, and grog- and flint-tempered sherds, including a base that may have been deliberately shaped and a rounded rim from an ovoid jar, 200 mm in diameter, with soot deposits on the external surface. A group of 113 sherds (598 g) from pit 1315 consists almost entirely of abraded body sherds in flint-tempered, grog and flint-tempered and coarse and fine grog-tempered fabrics. Many, particularly the flint-tempered sherds, are surfaceless and may have been burnt. The fine grog-tempered sherds included rim fragments, all extremely small and broken at the neck: two are undifferentiated, one is flared with an internal bevel and two with concave necks.

Several features contained groups of 50-150 sherds, each dominated by a single vessel. Most of the pottery from tree-throw 1313 (90% by count, 86% by weight) derives from a long-necked, shouldered jar with flat-topped rim of 280 mm diameter. The vessel had lightly oxidised surfaces and an unoxidised grey core, but much of the surfaces are highly abraded and now missing with only the core surviving and appearing grey in colour; the walls are approximately 6 mm thick. Parts of the interior are more abraded than others but it is not possible to ascertain if this was through use or post depositional abrasion due to the site conditions. Also represented from this feature is a grog-tempered bowl with flat-topped rim, externally expanded and internally bevelled, 300 mm in diameter, and walls of 6 mm. Little remains of its surfaces, but it appears to have been burnished.

Most of the 93 sherds (381 g) of Late Bronze Age pottery from pit 1859 derive from a single vessel in a fine grog and flint-tempered fabric, a single rim sherd indicates it was a bowl with a flat-topped rim, a groove on the interior and tooled, diagonal impressions on the exterior. The rim diameter is 240 mm, and walls are 7 mm thick. Although now abraded, the vessel probably once had well-finished surfaces. The group from pit 1472 derives from a vessel in a grog and flint-tempered fabric, with walls 7-9 mm thick. The rim is undifferentiated and slightly flattened on top with traces of fingertip impressions; three body sherds have a fingertip-impressed applied cordon. Much of the base is present – it is slightly footed/shaped and is up to 14 mm thick in the central part. Burnt residue surviving on the interior of the vessel suggests it was used to cook food.

The assemblage from feature 1556 comprises grog-tempered sherds with a little fine flint in the fabric; all appear to derive from a single vessel. Almost all are body sherds with three small flared rim fragments (R1); the group probably derives from a single vessel of Late Bronze Age date. One vessel had been deposited in pit 1727, but only body sherds were recovered, in a flint- and grog-tempered fabric. Traces of burnt residue were noted on the internal surface; fuel ash was present in the deposit.

Middle to Late Iron Age

Pottery of Middle to Late Iron Age date (424 sherds, 2997 g) was recovered from 28 contexts in eight ditches, three gullies, two ring gullies, five pits, two postholes and a hearth. Only

four contained more than 20 sherds – pit 1889 (Area B), two features associated with Enclosure A (ring gully 3063 and enclosure ditch 3345), and hearth 2952, located 50 m to the east of Enclosure A, but the latter comprised only body sherds.

Fabric and form

Grog and flint continued to be used for temper during the Iron Age period, but sandy wares increased in popularity, including a fine, sandy fabric with inclusions of iron (Table 6). The forms became more rounded during the Middle to Late Iron Age and the assemblage includes a round-bodied bowl with out-turned rim (R32, Fig. 20.3), an S-profiled jar (R31, Fig. 20.2), a round-bodied jar with proto-bead rim (R33, Fig. 20.4), a barrel-shaped jar (R37, Fig. 20.8) and a possible bowl of ovoid profile (R35, Fig. 20.6). Vessels with a more slack-sided profile comprise a jar with flat-topped, slightly internally bevelled rim (R30, Fig. 20.1), a proto-bead rimmed jar, internally bevelled (R16), and a tub-shaped vessel of neutral profile which may represent a saucepan pot (R34, Fig. 20.5). Two examples of open, hemispherical bowls with flat-topped rims were also identified (R36, Fig. 20.7). These are all forms paralleled in the region, including the assemblage from Beechbrook Wood where the globular, S-profiled jars and bowls occur frequently (Jones 2006b, R23), and the ovoid vessels and proto-saucepan pots are also represented (*ibid.* R23 and R19). They were current in this area, and the wider region, from the 4th century to the first half of the 1st century BC.

Prehistoric

Many features contained pottery that could be only broadly dated to the prehistoric period. This pottery amounts to 358 sherds (2148 g), most of which are abraded and featureless (Table 7). They derive from 18 linear features, 26 pits, 16 postholes, two cremation burials, two tree throw holes and eight other features. Of these 72 features, 64 contained fewer than 10 sherds, and only one contained greater than 25 sherds. No rim forms are present. The largest group (73 sherds, 323g) came from pit 3185, but all are highly abraded and burnt. The fabrics are flint and grog-tempered, one base appeared to have been flint-gritted but the internal surface is missing and this could not be confirmed; no featured sherds were found.

Small quantities of pottery were found with cremated human bone in a number of contexts. Cremation burial 1824 contained eight sherds (24 g) in extremely poor condition, probably from a single, small vessel. All are highly abraded, without surfaces and appear to have been

burnt. They are in a grog and flint-tempered fabric and include a base sherd, perhaps from a cup. Cremation burial 1095 contained just two sherds – one in a flint and grog-tempered fabric, and one in a fine grog-tempered ware. A single grog-tempered sherd was found in posthole 1278; cremated human bone was also found in the same deposit, possibly redeposited pyre debris. Small quantities of possible cremated human bone were found with pottery in posthole 1972 (one flint-tempered sherd) and pit 2503 (six sherds in a fine flint-tempered fabric).

Late Iron Age to Romano-British

The bulk of the assemblage derives from activity during the Late Iron Age to Romano-British periods (17,224 sherds, weighing 134,100 g), with a focus on the 1st to 2nd centuries AD. It is dominated by coarseware, utilitarian vessels in grog-tempered fabrics with smaller quantities of sandy wares. There are few imported finewares and amphora represented, suggesting limited access to goods from the Continent (Table 8).

Imported finewares

The imported fineware fabrics account for just 1.1% of the total number of sherds for this phase (Table 8). This is comparable with other sites in the Ashford area such as Cheeseman's Green (0.8%, Jones and Seager Smith forthcoming), Park Farm East (0.8%, Jones 2012) and Beechbrook Wood (1.0%, Lyne 2006b), with slightly higher quantities from Leda Cottages (2.7%, Lyne 2006a). Samian was imported from centres in Southern and Central Gaul, although identification of source was hampered by the fact that very few sherds retained their surfaces. The group includes 11 cups or small bowls (forms 24/25, 27, 33, 35 or 36, 27 or 35), six bowls (forms 30, 32, 37 and Curle 11) 11 plates (forms 18, 18R and 18/31), and one dish (form 42). Part of a stamp was visible in the base of a South Gaulish vessel from enclosure ditch 588 (group G9) but is now too fragmentary to identify. Other Continental finewares comprise two sherds of Central Gaulish colour-coated ware, including a beaker with everted rim, of late 1st to early 2nd century date (from CAT ditch 500, G22) and 32 sherds from a cornice rimmed, roughcast (with clay particles) beaker, in a Lower Rhineland colour-coated ware, of 2nd to 3rd century date (from CAT ditch 538, G18).

Imported coarsewares

Very few amphorae sherds are present, they include 18 of Dressel 20 and two Pélichet 47. The Dressel 20 carried olive oil from the Roman Spanish province of Baetica (Peacock and Williams 1991, 136, class 25); the Pélichet 47 is a wine amphora from southern France (Peacock and Williams 1991, 142-3, class 27). Both forms have a wide date range, of mid to late 1st century AD to the 3rd century AD. Other wares comprise four sherds from a Gillam (1970) 238 mortaria, imported from the Oisel Somme area of northern France during the mid to late 1st century AD, and recovered from ditch 618 (Hartley 1998, 200-206). This vessel represents the only mortarium identified from the site.

Oxidised wares

Identifiable forms amongst the oxidised wares comprise locally or regionally-made tablewares. The whitewares include a ring-necked flagon, of mid to late 1st century AD date, from alluvial deposit 2. A ribbed strap handle from a flagon came from enclosure ditch 508/570 (G8). A single butt beaker was also identified in a whiteware fabric, but was unstratified. The orange-firing wares included a range of flagons – two ring-necked flagons, one ‘pulley-rim’ flagon (cf Pollard 1998, fig. 40, 104), a cup-mouthed, ring-necked flagon, two flagons with flanged rim, one with conical neck (cf Green 2007, fig. 135, 511) and one with ringed-flange rim. Most are of late 1st to mid-2nd century date, although the example with ringed-flange rim is probably of mid-2nd to early 3rd century date. A two-ribbed handle was also recovered. The orange-firing oxidised ware beakers include a butt-beaker, an everted-rim beaker and one with a cornice rim. Other forms in oxidised wares comprise a necked jar with everted rim (cf Green 2007, fig. 134, 480-483) and two examples with rippled shoulders, but it is possible that the jars were once reduced and have been re-fired to an oxidised colour, perhaps after they had gone out of use.

Grog-tempered wares

Most of the assemblage comprises coarseware fabrics, and these are overwhelmingly dominated by grog-tempered wares, accounting for 88.3% of the number of sherds from this phase and 92.8% of the weight. Jars are the most commonly occurring vessel form in this fabric type, particularly plain everted-rim necked jars, often broken at the neck/shoulder junction (Thompson 1982, B1-1). A total of 149 vessels were assigned to this type, with rim diameters ranging from 90 mm to 240 mm where measurable, but most (55 vessels) are 140-180 mm. Where sufficient of the profile and surface survives, it was possible to ascertain that

at least one has horizontal scoring on the external surface, and 25 have a horizontal cord or groove at the base of the neck. One vessel has a post-firing perforation through the neck. A complete profile of a tall, necked cordoned jar of elegant shape was also recorded (Thompson 1982, B1-2). The next most commonly occurring grog-tempered vessel is the round-shouldered, bead-rimmed jar (Thompson 1982, C1-2), of which 93 examples were recorded. A third of these have a shoulder groove with scoring below. The measurable rims are 100-280 mm, with 18 examples between 100 mm and 130 mm, and 26 between 140 mm and 170 mm, only three were larger. One with a rim diameter of 140 mm is 150 mm high. Thirty-three vessels are large jars with everted rims, probably used for storage, with rims of 230 mm to 500 mm in diameter (Thompson 1982, C6-1). Three have shoulder cordons, one of which is decorated with fingertip impressions, another is decorated with diagonal impressions and has deep combed horizontal lines below. Fourteen jars have rippled shoulders (B2-1, B2-2) and one has bulges between cordons (B3-1). Forms represented by only one or two examples include other necked jars (B1-3, B1-4, B1-5, B1-6, B3-2 and B3-8), a grooved, globular jar (B5-5), a round-shouldered jar (C4), bead-rimmed jars (C1-1 with double post-firing perforation through the wall; C1-4) and a plain-rimmed jar with internal thickening (C3). Many of the jars were too fragmentary to be assigned to a form, with 50 displaying everted rims and 51 with beaded rims.

Fewer bowls are present, they include six with offset neck (D1-1, D1-2), four necked bowls (D1-5, D2-1), a rounded bowl with rippled shoulder (D2-4) and a plain, round bowl (D3-1). Three plain, rounded rims may derive from dishes but were too incomplete to ascertain their form. A number of Gallo-Belgic copies were recorded, including 18 butt beakers (Thompson 1982, G5-6), three platters (G1-7, G1-9 and G1-12), two cups (E1-1, E3-4), a narrow-necked flask (E3-6) and a jug copy (G6). Part of a perforated base from a strainer was also identified (S1). Lids include three of conical form (L8), a bell-shaped lid (L1) and two plain forms. Base forms are predominantly plain and flat, but vessels with slightly footed bases, chamfered bases, footring bases and pedestal bases are also present.

Upchurch and North Kent greywares

The greyware component of the assemblage includes finer and coarser fabric variants, accounts for 5.4% of the pottery of this phase (by count). Most derive from the Upchurch and North Kent pottery industry, although there may be other centres represented amongst this

group. Almost all of the identified forms are represented by only one or two examples, with few measurable rim diameters. They range in date from the mid-1st century AD to the 3rd century and include copies of imported vessels in the local fabrics. The finer tablewares and drinking vessels comprise a funnel-necked beaker (Monaghan 1987, form 2C), an indented beaker (form 2D), cups imitating samian form 27 (form 6C, three examples), an S-profiled bowl (form 4A4), a high-waisted bowl (form 4C), a carinated bowl copying samian form 30 (form 4H1.3), a platter (form 7C) and a narrow-necked jar (3A). A plain-rimmed dish form was made in both coarse and fine fabrics (form 5E, four examples). More utilitarian kitchen wares in coarser fabrics include lid-seated jars (Monaghan 1987, 3L), a copy of a Black-burnished ware everted rim jar (form 3J) and other everted rim jars (form 3H), two reed-flanged neckless jars and three round-rimmed dishes (form 5C). Amongst the lid forms is one with internally thickened rim (form 12E), one with tightly rolled bead (cf Green 2007, fig. 132 nos. 438 to 444), one with triangular bead rim and two unclassified examples.

Other fabrics

Forms in other reduced sandy wares (1.1% of the assemblage by count) include a small, rounded jar (cf Green 2007, fig. 126, 347-350), a bowl with upright, beaded rim and neck cordon, a butt-beaker copy, two round-rimmed bowls and a lid. Flint-tempered wares are present but as a very minor component of the assemblage (0.8% by count), with a lid the only form identified. Highly abraded flakes in an organic-tempered ware may derive from briquetage containers, used in the production of salt. Most (13 pieces) came from the topsoil, with six fragments recovered from ditch 500.

Distribution

The Late Iron Age and Roman pottery assemblage derives from 374 contexts. Some 1747 sherds (10,526 g) were unstratified or came from topsoil/subsoil layers, accounting for 10% of the assemblage from this phase by count, or 7.8% by weight. Dating was problematic due to the longevity of the grog-tempered ceramic tradition in east Kent and conservatism in the range of forms produced through the 1st century BC and 1st century AD. However, the presence of small quantities of Romanised wares, including samian, greywares and oxidised wares, indicates that most of the below mentioned groups are post-conquest in date. Summaries of the larger (>100 sherds) pottery assemblages recovered from the various

features are available in the archive but some of the largest groups, or those containing vessels of note, are presented below.

Ditch 3007 (Enclosure B)

The largest assemblage of pottery (2074 sherds, 21,771 g) was recovered from eight interventions through ditch 3007, with the greatest concentration in slot 3312 (872 sherds, 11,408 g). The condition of the pottery was generally poor, with the sherds highly abraded and surfaces damaged or missing entirely. The average sherd weight of material from this ditch is 13.1 g, but there was variability across the larger groups with 16.5 g for context 3133 (slot 2135; 260 sherds), 13.1 g for context 3313 (slot 3312, 872 sherds) and 5.6 g for context 3058 (slot 305, 431 sherds); the condition was equally poor, regardless of size. The sherds exhibited variable firing but on the whole the cores and internal surfaces tended to be unoxidised, with more irregular firing of the external surfaces. Little evidence of use survives. Almost all were grog-tempered, with only small quantities of flint-tempered fabrics (five sherds), whiteware (20 sherds), oxidised ware (one sherd), greyware (one sherd) and other sandy sherds (three sherds).

Many of the grog-tempered sherds could be re-joined, revealing little variation in form. Necked, cordoned jars or bowls with everted rims dominate the group (forms B1-1, B1-2, B1-3, B1-4, D1-1: 39 vessels). Where sufficient profile survives, it is evident that most had a groove and/or cordon at the base of the neck. Many appear to have been fairly equal in height and maximum girth (Thompson 1982, B1-1/D1-1). There was little variation in their rim size, with diameters between 150 mm and 220 mm where measurable, and walls of 4-6 mm. A number of vessels were largely reconstructed, including a tall, necked cordoned jar from context 3100 of slot 3064 (B1-2, Fig. 24.26) and a necked bowl/jar (B1-1/D1-1) found across fills 3050, 3052, 3054 and 3056 of slot 3064 (Fig. 24.25). The joining sherds (20 sherds, 568 g) of the latter have an average sherd weight of 28 g, but surface preservation is poor with only small traces of burnish surviving around the external neck area; in some areas, particularly on the lower vessel, the surface was missing. The profile was reconstructed to a height of 160 mm but the base sherds found in these contexts could not be joined to the profile, although central base fragments with a post-firing perforation from context 3056 may have come from this vessel. Its upper part was much more abraded than the lower half, with much of the upper surfaces missing, creating a wall thickness of 2 mm in comparison to the

lower walls, with a thickness of 6 mm. The exterior was probably once burnished, the internal surface is missing. Much of the pottery from slot 3135 came from a necked, cordoned bowl/jar with slightly footed base, perforated post-firing. Almost nothing remains of its surfaces, only the grey core.

Other forms included seven jars with rounded shoulders and beaded rims (C1-2), three storage jars (C6-1), two jars with rippled or corrugated shoulders (B2-1), a barrel-shaped jar with beaded rim (B5-5), two imitation butt beakers (G5-1, G5-6) and a lid (L1). Also present was a plain, globular jar with short, out-turned rim, the complete profile of which was reconstructed (PRN 1, Thompson 1982, C2-1). The vessel is 200 mm diameter at the rim (80% is present) and 230 mm tall. One post-firing perforation (15 mm diameter) had been made through the base, just off-centre. Amongst the body sherds are three decorated with short, diagonal impressions in a horizontal band or on a cordon; this type of decoration is typical of small jars with a band of stabbed marks and rilled/combed bodies below (Thompson 1982, C8-1).

Layer 2 and relict river channel F524

A large group of pottery came from an alluvial layer, overlying a relict river channel (context 2, F524, G3). The group of 1335 sherds (11374 g) is dominated by grog-tempered wares (82% by count and 93% by weight), with smaller quantities of greyware, oxidised wares, white wares and samian. Some 29% of the sherds were fully oxidised. The most commonly occurring form is the grog-tempered necked jar (Thompson 1982, B1-1), with other grog-tempered jars and a bowl also present (storage jars, C6-1; bead-rimmed jars, C1-2; everted-rimmed jars, C2-3; a jar with rippled shoulder, B2-1; bowl form D3-1). The greywares include an indented beaker (Monaghan 1987, form 2D), a narrow-necked jar (form 3A), an S-profiled bowl (form 4A4), an imitation of a samian form 30 bowl (form 4H1), an imitation of a samian form 27 cup (form 6C), a carinated platter (form 7C) and a reed-flanged bowl. Oxidised wares include a ring-necked flagon. The samian vessels include two platters/dishes (Drag. form 18 and 18/31), a cup (form 27) and a dish (form 35). A small jar or beaker with everted rim, in a fine greyware fabric, had once been repaired with a glue, perhaps birch bark tar. The range of fabrics and forms suggests the deposit accumulated over a relatively long period of time from the 1st century AD through to the mid-2nd century. Much smaller quantities of pottery were recovered from the underlying fills of the river channel (feature

524, group G3, contexts 31, 34 and 35), totalling 50 sherds (505 g). This group is again dominated by grog-tempered sherds, with just four greyware sherds; the only identifiable form is a necked jar. Associated deposit context 6, produced 34 sherds (338 g) of grog-tempered pottery, all apparently from a single vessel - a necked jar with everted rim (B1-1).

Ditch 500

A large assemblage of late 1st to early 2nd century pottery came from ditch 500, comprising 810 sherds (5951 g). Most derived from contexts 3, 4 and 5, with four sherds from context 119 and one from context 118. Much of the assemblage (59% of count, 57% by weight) is fully oxidised in orange, pink and buff colours. There are no instances of bloating or vitrification that would clearly indicate that it had been burnt, but the possibility the group derives from vessels that failed during a pottery firing cannot be discounted. Whatever process caused the colouration of the pottery, the assemblage is consistent with re-worked material, dumped after the ditch had gone out of use. The group is dominated by grog-tempered wares (91% of the number of sherds), with 8% greywares and very small quantities of flint-tempered pottery, two small pieces of Dressel 20 amphora, one of which had been re-shaped into a rectangular tessera (22 x 12 mm and 10 mm thick), and one fragment from a beaker with sharply everted rim in a Central Gaulish colour-coated ware. There is a faint groove on the exterior of the rim (cf Green 1979, fig. 19, 6). Most of the surfaces are now missing but may once have been roughcast. This vessel was probably imported during the Flavian period. Six fragments of briquetage are also present. Few other forms were identified, they include five necked jars (B1-1 and B3-2), two storage jars (C6-1), a plain-rimmed dish - probably a Thameside product (Monaghan 1987, class 5E), and lids in both grog-tempered and sandy fabrics including four with triangular beaded rims, and one with a rounded bead rim and groove on the interior of the rim.

Pit 2960

A group of 513 sherds (3198 g) of pottery came from three fills of pit 2960. The assemblage is dominated by grog-tempered wares, including 14 round-bodied bead-rimmed jars (C1-2), at least two of which were decorated with a groove below the rim and at the shoulder, and scoring below; 12 necked jars with everted rims (B1-1) but all broken at the neck or rim, and a strap handle. The base from a grog-tempered vessel appears to have been deliberately shaped (ON 104) – it is 120 mm in diameter and has a central post-firing perforation. A second base from this pit may also have been shaped. Romanised wares include 12 highly

abraded and powdery fine greyware sherds, probably from a beaker, and 97 oxidised sherds, including a ribbed strap handle, that are likely to derive from a flagon.

Ditch 681

Ditch 681 contained 336 sherds (2828 g) of pottery, of mid to late 1st century AD date.

Almost all are grog-tempered with the exception of 12 very small greyware fragments and one sherd of Central Gaulish colour-coated ware. A single vessel was found across fills 234, 236 and 237. The complete profile was reconstructed revealing a round-bodied, bead-rimmed jar with flat base (Thompson 1982, C1-2). It is decorated with a shoulder groove and a scored external surface below this. The scoring was diagonally applied in both directions, creating a rough lattice pattern. The vessel is 220 mm in height, with a rim diameter of 170 mm. Two closely-spaced post-firing holes had been made through the wall of the vessel, just below the shoulder area, creating a keyhole-shape. This may have been done to facilitate a cord to suspend the vessel, secure a lid, or as part of a repair.

Other vessels recovered from this ditch include parts of two other bead-rimmed jars (C1-2); eight necked jars with everted rims, most with a horizontal groove or cordon at the base of the neck (B1-1); two plain jars with internally thickened rim (C3) and a storage jar rim fragment (C6-1). The other forms were probably drinking vessels and comprise a butt-beaker copy (G5-6), a small, plain necked bowl or cup with everted rim and a well-polished external surface (E3-4) and a carinated cup with beaded rim and a cordon restricting the upper body and groove above the carination (E1-1). As only the upper part of the latter was recovered, it is not possible to ascertain if it had a flat or pedestalled base. As a group the pottery is broadly of mid-1st century AD date, however a very small and abraded sherd of Central Gaulish colour-coated ware suggests a slightly later date, *c.* AD 80/90. The grog-tempered vessels are predominantly unoxidised, with no evidence of burning or over-firing.

Ditch 508/570

A group of 318 sherds (3581 g) of early Roman pottery was recovered from fills 15, 102 and 115 of enclosure ditch 508/570. The grog-tempered wares account for 95.6% of the number of sherds and 95.7% of the weight. Other pottery comprises greyware body sherds, a five-ribbed strap handle from a white ware flagon and a sherd of samian. Identifiable forms amongst the grog-tempered vessels include ten round-bodied jars with beaded rims - almost all have a shoulder groove and are combed below the shoulder (Thompson 1982, C1-2), nine

necked jars with everted rims (B1-1), one necked bowl with everted rim (D1-1), three everted rim jars (C2-3), and a butt-beaker (G5-6). Much of the upper part of a round-bodied, necked jar with everted rim (B1-1) from context 115 was reconstructed (74 sherds, 714 g), from the cordon to approximately half of the way down the vessel. Little remains of the rim but it appears to have been in the region of 140 mm diameter. The vessel is unoxidised and the surfaces are badly abraded, although the level of abrasion is variable around the body of the vessel. There is no evidence of use in terms of sooting, residues or limescale.

Ditch 669/544

Ditch 669/544 contained a group of 302 abraded sherds of 2nd century pottery (1902 g), with an average sherd weight of 6.3 g. The Romanised fabrics (greywares, oxidised wares and sandy wares) and imported wares dominate this group, with grog-tempered wares accounting for 47% of the sherds from this feature, reflective of the date of the material. The vessels include the handle from a Dressel 20 amphora and four fragments of samian, including the footring base from an 18/31 or 31 dish, and one from a form 33 cup. Interestingly, part of the exterior of the footring has closely spaced vertical indents (lines) that extend to the base of the wall. They appear to be below the slip, perhaps functioning as a key, but they are so abraded that identification of such potting techniques is tenuous. The coarsewares include much of a small, everted rim jar, in a sandy greyware fabric (Monaghan 1987, 3J), with a rim diameter of 120 mm. The lower walls are decorated with horizontal burnished lines, the base is slightly footed.

Ditch 588

Enclosure ditch 588 contained 259 sherds (2601 g) of highly abraded, powdery pottery, one quarter of which is fully oxidised. The group is dominated by grog-tempered wares with 32 greyware sherds (8 g), five whiteware fragments, six oxidised sherds and nine pieces of South Gaulish samian. The grog-tempered sherds include much of a small, round-bodied bowl/jar with short, everted rim and cordon at the base of the neck, in a grog-tempered fabric (Thompson 1982, D1-1; context 137). Its rim diameter is 110 mm (35% survives) and it is 110mm tall. Much of the base is present, with the exception of the centre, it is therefore not possible to ascertain if it had a single, central, post-firing perforation but this is a possibility. Also in this fabric are 34 sherds (484 g) from a round-bodied bead rimmed jar with groove and diagonal scoring/wiping below (C1-2). The rim measures 140 mm in diameter (47% present) and the vessel is 155 mm tall. The interior is unoxidised and has traces of burnt

residue around the middle and lower parts of the vessel, indicating it was used as a cooking pot. The upper exterior is unoxidised but the lower part of the vessel, below the shoulder, is irregular fired, possibly as result of being sat in a fire; the lower exterior is abraded.

There were few other identifiable forms amongst the group, they include two necked jars (B1-1), two round-bodied, bead rimmed jars (C1-2), a jar with rippled shoulder (B2-1), two storage jars (C6-1), a round-bodied bowl with out-turned rim (similar to Thompson's D1-5), and the knob from a lid. It appears to be solid, with a concave indent in the top. It measures 44 mm both in diameter and height. The walls of a grog-tempered vessel may have been deliberately chipped away from its footring base after breakage, creating a little dish of 110 mm diameter. The samian is abraded but includes part of a footring base from a cup with traces of a stamp, but the piece is too fragmentary and abraded to identify it. The assemblage is of mid to late 1st century AD date.

Pit 670

An assemblage of 190 sherds (1113 g) was recovered from pit 670, predominantly in grog-tempered wares with smaller quantities of greywares (12% of the number of sherds) and oxidised fabrics (4.2%). The Romanised fabrics include a ringed-flange-rim flagon in a Canterbury buff ware, of mid-2nd to early 3rd century date (Pollard 1988, cf fig. 28, 80) and three round-rimmed dishes in greyware fabrics, probably Thameside products (Monaghan 1987, 5C). The grog-tempered sherds are highly abraded, but include 43 scored body sherds, the rim from a storage jar (C6-1), and nine jar rim fragments, but all broken at the neck and not assignable to type.

Structures

Pottery was recovered from a number of features associated with structure G5. Fills 83, 84 and 206 of curvilinear gully 551/552 produced an assemblage of 179 sherds (1217 g) of pottery that is typical for this site, dominated by grog-tempered wares with only very small quantities of greywares (five sherds) and samian (two sherds). The few identifiable forms are in the grog-tempered fabrics and include two necked jars (B1-1), two bead-rimmed jars (C1-2), a storage jar (C6-1), a possible butt beaker (G5-6) and three lids. A samian dish (18/31 series) is also present. Postholes 651, 652 and 656 contained very small quantities of grog-tempered pottery, 16 sherds were also recovered from gully 549. Postholes and gullies associated with a number of other structures also produced fairly small quantities of pottery.

The largest groups from features associated with structure G13 came from postholes 595 (14 sherds), 596 (16 sherds, including a samian form 42 bowl) and 598 (17 sherds, including part of a grog-tempered storage jar and a small jar or beaker). Little pottery was recovered from the other structures, with 23 sherds (367 g) from a single grog-tempered necked jar in gully 654 (structure G6, Thompson 1982, B1-1). All groups are suggestive of a mid- to late 1st century AD date for these structures.

Possible funerary features

Three vessels were thought to relate to funerary activity on the site. Feature 541 (structure G16, context 71) contained 22 sherds (79g) from a single vessel that has been burnt. It is now grey in colour, powdery in texture and vesicular. The heat has distorted its shape but the fragments appear to have derived from a shallow dish with rounded walls and irregular, pinched groove on the interior of the rim edge, or a lid (cf Monaghan 1987, 5E4, 5E0 or 12E). The lower part of a vessel (21 sherds, 325g) was found in the bottom of a circular cut 710 (context 271). It is a glauconitic sandy ware, and its hardness suggests a probable Roman, rather than Iron Age, date. The upper part of a grog-tempered necked jar with everted rim, found in the base of enclosure ditch 508/570, was also interpreted as a possible funerary vessel.

Re-use and repair

Evidence for the reuse and repair of pottery vessels was found in the assemblage. A spindlewhorl made from a Romano-British pottery sherd was found unstratified. It is relatively flat and disc-shaped, 35 mm in diameter and 13 mm thick. The bases of a number of vessels appear to have had their walls deliberately removed. These include examples in grog-tempered fabrics from ditches 2551 and 3356, and pit 2960. Some bases had been perforated to facilitate re-use, perhaps as timing devices or for culinary applications. Several vessels had been drilled through the neck, perhaps to facilitate a repair or attach a cord or lid. Of interest amongst the regional Romanised wares is the evidence for repair, possibly with a birch bark tar, of a small jar or beaker in a fine greyware fabric from alluvial layer 2, and the rim of a small beaker in an oxidised fabric from ditch 522/601. This practice is now known to have been comparatively common (Marter Brown and Seager Smith 2012, 5–6), especially in this part of east Kent during the Late Iron Age and Romano-British period, but extends back

to at least the Late Bronze Age/Early Iron Age (Jones 2009 online archive report, 25; Seager Smith 2105).

Discussion

The pottery assemblage from Waterbrook Park is fairly large but its condition limits the amount of information that might otherwise have been extracted from it. The surfaces of almost all of the sherds are either highly abraded or now missing, a result of the post-depositional environment. Consequently, detailed fabric analysis beyond classification of the main ware types was not warranted. The levels of fragmentation are such that reconstruction of many of the profiles was not possible. Nonetheless, a number of observations and broad conclusions may be made.

The assemblage provides a chronological framework for activity on site. The earliest evidence comes from a group of grog-tempered sherds in pit 1129, indicating small scale activity during the Early Bronze Age. However, most of the prehistoric activity occurred during the later Bronze Age, predominantly during the Late Bronze Age. Whilst no definitive Middle Bronze Age forms were recovered, some of the particularly fine and coarse flint-tempered fabrics may derive from vessels in use during this period. Four jars of convex profile are of a type in use during the transitional phase between the Middle and Late Bronze Age, although most were here associated with forms of Late Bronze Age date, and their use is suggestive of activity during the 12th to 10th centuries BC. During the later Bronze Age at Waterbrook Park vessels were most commonly made using crushed flint as temper, but mixing crushed pottery (grog) with the flint, or using the grog on its own, were also popular methods of tempering the clay. These fabrics are typical of later Bronze Age potting techniques in Kent. A range of Late Bronze Age forms were produced, at least some of which were shown to have been used to cook food. They include shouldered jars and bowls, a carinated cup and hemispherical bowls. Vessels were sometimes decorated with fingernail and fingertip impressions, occasionally with cordons or comb impressions. One vessel had pre-firing perforations around its neck, perhaps to aid attachment of a cover. This technique has been recorded from other sites in Kent, but on bucket-shaped vessels of Middle to Late Bronze Age date (McNee 2012). Most of the larger groups of later Bronze Age pottery came from features associated with settlement in the western half of Area B (including pits 1357, 1359, 1472, 1607, 1735, 1859, feature 1559 and tree throw hole 1313) with smaller quantities

from Area A (including groups from pits 3110 within roundhouse 3347, ring gully 2557 and pit 2855). There was little evidence for the use of pottery vessels in burial rites, the only possible example came from cremation burial 1824 which contained a small quantity of burnt flint and grog-tempered sherds, perhaps from a cup.

There is no evidence amongst the ceramic assemblage of activity during the Early Iron Age, and there may have been a hiatus until the 4th or 3rd centuries BC, and then only small scale settlement. The range of fabrics and forms in use during the Middle Iron Age are echoed across the region, and the south-east more generally, with sandy fabrics and round-bodied bowls and jar forms, and a proto saucepan pot. Such forms may have been produced until the mid-1st century BC, a time when there was a shift in the ceramic repertoires of the south-east, and grog-tempered fabrics became dominant, a trend that continued until the early to mid-2nd century AD (Couldrey 2007, 179). During the 2nd century AD, the supply of ceramic containers to the site increased to include greyware jars and bowls, and oxidised flagons, from the Canterbury and Upchurch industries; and samian from Central Gaul.

Conservatism in the fabrics and forms during the Late Iron Age and into the 2nd century AD in east Kent has hampered close dating of contexts. Pollard has suggested a pre-conquest origin may be assigned to pottery groups without Romanised wares (Pollard 1988, 32), however few such groups were recorded, other than those represented by small assemblages of body sherds or undiagnostic, fragmentary rims. Perhaps the earliest feature is ditch 573 – the presence of a grog-tempered narrow-necked flask in the lower fill of the ditch is suggestive of an early to mid-1st century AD date, although a small chip from a Dressel 20 amphora was found in its upper fill. There may be other features of pre-conquest Late Iron Age date, but there was too little pottery from them to allow them to be closely phased. The focus of activity at Waterbrook Park during the Late Iron Age to Romano-British period appears to be in the mid- to late 1st century AD, with the latest features dated to the mid- to early 3rd century, by which point the site appears to have been abandoned.

The dominance of the grog-tempered ‘Belgic’ wares at Waterbrook Park is a feature repeated at other Late Iron Age and early Romano-British sites around Ashford (for example Park Farm East, Ashford; Cheesemans Green, Ashford; Westhawk Farm, Ashford; Leda Cottages, Westwell; Boys Hall Moat, Willesborough; Beechbrook Wood, Hothfield;), and more widely

across east Kent. The percentage of grog-tempered wares present at Waterbrook Park (87% by count and 92% by weight) is mirrored in the Park Farm East assemblage (89% by count and 94% by weight), and similar to Cheesemans Green (78% and 82%), Beechbrook Wood (75% and 90%, Lyne 2006b) and Westhawk Farm (80 and 90%, Lyne 2008). The grog-tempered forms that dominate the Waterbrook Park assemblage – the bead-rimmed jars and necked, everted rimmed jars, are common amongst other assemblages from the wider east Kent region. The combed surfaces seen on vessels in this assemblage are also common across this part of Kent during the pre-Flavian period. The settlement at Waterbrook Park therefore relied on local workshops and industries for its ceramic supply.

There is little evidence for the import of Romanised goods in amphorae, or the use of mortaria, with only small quantities of Dressel 20 and Pelichet 47 amphora, and a single mortaria – a type (Gillam 238), also recorded from Westhawk Farm, recovered (Lyne 2008, 257). The assemblage is therefore indicative of a settlement of relatively low status, with only limited access to imported and Romanised goods.

The firing conditions of the pottery was recorded for the assemblage recovered by Canterbury Archaeological Trust. It was evident that almost one third (30%) of the grog-tempered wares are fully oxidised. The reasons for this are unclear, but may be the result of firing in a fully oxidised atmosphere (which would be unusual for such wares), over-firing – perhaps during production – or being subject to heat post-use. However, few sherds showed any clear evidence of actually being burnt in terms of vitrification, distortion of shape, or bloating. The largest groups of fully oxidised sherds came from the topsoil, context 2 of relict river channel 524, mid to late 1st century pit 520 (56%) and ditch 539 (53%), context 3 of late 1st to early 2nd century ditch 500 (59% of the sherds from this feature) and early to mid-2nd century ditches 505/543 (52%) and 528/529/533 (48%). Features containing approximately one fifth to one third of fully oxidised sherds include mid- to late 1st century ditches 588, 522/601 and 618, gully 551/552 and pits 685, 686 and 592, late 1st to early/mid-2nd century ditches 523, 674/512 and 545/546 and pit 504, and mid-2nd to 3rd century ditch 669/544. This phenomenon therefore does not appear to be restricted to a particular area or period of activity. Of the features excavated by Wessex Archaeology, pit 2606 contained a large proportion of fully oxidised or burnt pottery, highly abraded with powdery surfaces, dumped into this pit. Other pottery assemblages from this area share a similar condition, such as that

from Park Farm East, with the surfaces of the vessels highly abraded or missing, and many sherds appearing to have been burnt or re-fired (Jones 2012, 8). The possibility of pottery production in the Ashford area has been mooted for a number of sites. Lyne has suggested that this may be the case for the Westhawk Farm settlement during the late 1st to early 2nd centuries AD (Lyne 2008, 257). Certainly the dump of a large group of pottery in ditch 3007, representing a limited range of forms, is suggestive of pottery production of necked, cordoned jars or bowls of medium to large size (150-220 mm rim diameter). There were no features at the site that were thought to relate to pottery production, such as puddling or settling tanks, or firing structures, yet the character of the pottery assemblage recovered is suggestive of production nearby. Further investigation in the Ashford area may provide such evidence.

Other Finds

Grace Perpetua Jones

Crucibles

Fragments from ceramic crucibles, made from a very fine, sandy clay, were recovered from Middle to Late Iron Age ring gully 3350 within Enclosure A, and from the upper, Late Iron Age, fills of enclosing ditch 3345. Possible crucible fragments also came from gully 3363 (within Enclosure A) and Middle to Late Iron Age ditch 2745. The material includes two rim fragments, but too little survives to ascertain form or volume. The crucibles are likely to derive from small-scale non-ferrous metalworking on the site, probably within Enclosure A, during the later Iron Age.

Ceramic Building Material

A small assemblage of ceramic building material (34 pieces, 1683 g) was recovered from the site, with only two fragments dateable to the Romano-British period – joining but abraded pieces from a *tegula* roof tile, from the subsoil. Fragments from medieval roof tiles came from ditches 1942, 1595, 1625, 1731 and 1925, field drain 1157, pit 1344, tree-throw hole 1747 and layer 1083. Two brick fragments, of medieval/post-medieval date, were recorded from ditch 1942, and three fragments of post-medieval field drain came from ditch 2886.

Fired clay

A total of 584 fragments (9.696 kg) of fired clay was recovered from 54 features of later Bronze Age to post-medieval date (Table 10). Most are abraded and amorphous, and are likely to have a structural origin, either from pit, oven or hearth linings, or from upstanding structures. Three fragments have impressions that suggest they formed part of a wattle supported structure (in Late Bronze Age pits 1347 and 3110; Iron Age hearth 2952 and Late Iron Age/Roman ditch 3345 and linear 3240). Several fragments have one flat face and may derive from rectangular blocks or slabs. These may have formed part of an oven structure or were utilised for another, uncertain function. One from Late Iron Age/Roman ditch 2024 is part of the corner of a block or oven plate and has pinched edges, other block corner fragments came from Late Bronze Age pit 1664 and Early Roman ditch 3007. Perforated fragments, probably from oven plates, were found in Late Bronze age pits 1359 and 1361. Other pieces with one flat surface, often slightly curved, were recorded from Late Bronze Age pits 1357, 1359, 1412 and 1460, early Roman pit 2960, Iron Age ring gully 3063 and early Roman ditch 3194.

There is evidence, however, for some industrial activity, in the form of more highly fired clay, sometimes burnt to vitrification, and this material also includes at least two tuyère fragments from the bellows of metalworking hearths. The presence of ceramic crucible fragments has already been mentioned (see above), and the material noted here includes several pieces of possible crucible. Almost all came from Middle to Late Iron Age Enclosure A, with the largest group of this material (17 pieces, 231 g), including one tuyère fragment, recovered from the fills of enclosure ditch 3345, and smaller groups from the features within - gully 3359 (five pieces, 77 g, including the second tuyère), pit 2932 (eight pieces, 30 g), ring gully 3063 (three pieces, 32 g) and pit 3019 (one piece, 3 g). A single fragment of vitrified fired clay (7 g) was also recovered from Late Iron Age/early Roman ditch 3342, located to the south of the enclosure, and subsoil layer 1082 (one piece, 24 g). Small quantities of ironworking slag were also associated (see below).

Slag

A total of approximately 2.225 kg of ironworking slag was recovered from 14 features, all of which probably derived from iron smithing. The majority comprises relatively small pieces, in some cases abraded, which are generally undiagnostic. However, approximately half of a small smithing hearth bottom (weighing 176 g) came from context 2798 (enclosure ditch

3345; 33 pieces, 438 g), and it is possible that some of the other pieces are also fragments of smithing hearth bottoms, including a large, dense fragment from undated ditch 2004 (Area B; one piece, 511 g). The only other feature to contain greater than 150 g of slag was early Roman ditch 2934, located 50 m to the south-east of Enclosure A (30 pieces, 628 g). Smaller groups (<114 g) came from Middle to Late Iron Age features within Enclosure A (ring gullies 3062 and 3350, gullies 3359 and 3363, and pit 2932) and those located up to 100 m to the south and east of the enclosure (Late Iron Age/Early Romano-British ditches 3007, 3334, 3364 and 3367, pit 2565, and undated pit 2960). The assemblage is indicative of small scale ironworking, probably carried out within Enclosure A, during the Middle to Late Iron Age period. Much more extensive ironworking was carried out during the Romano-British period (c. 2nd to 3rd centuries AD) at Westhawk Farm, located approximately 4 km to the west of Waterbrook Park, from which 1.65 tonnes of waste material was recovered, and two workshops discovered (Paynter 2008).

Stone

Few stone objects were recovered. A fragment from a Puddingstone rotary quern came from early to mid-1st century AD pit 2932, but too little survives to ascertain details of form and size (ON 101, 1164 g). It appears to be a quartz cemented, rather than ferruginous, type, suggesting an origin in the Hertfordshire area (Shaffrey 2011, 364). This lithology was the most commonly occurring amongst the querns from Springhead, Gravesend, although the majority from Springhead were of the ferruginous type (*ibid.*).

A piece of sandstone with one flat surface, from undated posthole 1276, may have derived from a rubstone or rubber but was too fragmentary to be positively identified. Two rounded pebbles from Late Bronze Age pit 1698 have some pitting but this may result from natural processes. An irregularly-shaped fragment of greensand, probably a Kentish Rag, was recovered from early Roman pit 2943. It is perforated, but with no obvious signs of working it is likely that this is a result of natural processes, although it is just possible it was utilised as a pivot stone. A whetstone fragment, in a fine micaceous sandstone, was recovered from the surface of medieval ditch 1595 but is otherwise unstratified.

Small quantities of burnt, unworked stone were recorded from prehistoric posthole 1430 (21 g), later prehistoric pit 1129 (26 g), Late Bronze Age pit 1357 (36 g) and medieval pit 1828 (40 g).

Worked bone

Four bone pins were found in grave 1570. All are calcined, white or mottled grey in colour. Two are similar in size and form, with flat, disc-shaped heads and shafts of circular cross-section (ON 8, Fig. 25.1; ON 9, Fig. 25.2). The pins had been finely worked and were once polished. They appear to be made from piece of cortical bone with a natural curve - most probably the anterior, lateral distal part of a cattle-sized radius shaft. Each is broken into four pieces with the tip missing; each weighs 1.8 g. Their tips may be present amongst four tip fragments recovered from the same context. The surviving lengths of pins ON 8 and 9 are 89.2 mm and 87.5 mm respectively. Their heads are damaged, one more so than the other, with ON 8 measuring 7.0 x 7.2 mm, but only one measurement of 6.9 mm possible for the second head (ON 9). The shanks of both are of similar thickness, varying from 3.05-3.5 mm, tapering very slightly towards the head, and again to the tip.

Also present in the grave were two smaller pins. One is of the same form as objects 8 and 9, with flat, disc-shaped head (ON 10; 0.1 g; Fig. 25.3). It has a shaft of circular cross-section, 2.1-2.2 mm thick; the head measures 2.95 x 3.4 mm. Two joining fragments survive to a length of 17.6 mm but the lower part of the pin is missing. Four shank fragments of circular section (0.1 g), 1.9-2.2 mm diameter, may have derived from pin ON 10 but none could be rejoined. The other pin is of a different type, with simple, slightly swollen head (ON 11; 0.3 g; Fig. 25.4). It is complete, albeit in three pieces, 52.9 mm in length, with a shank of circular cross-section, 1.7-2 mm in diameter, tapering to a slightly bent point.

The pins were pyre goods and accompanied the burial of a young to mature adult, possibly female, with a foetus or neonate. The pins may have fastened the garments the bodies were clothed or wrapped in, although it is possible the larger pins may have been used in the hair of the deceased. A radiocarbon date of 1190-1010 cal. BC (SUERC-80708) was obtained for the burial, indicating a Middle to Late Bronze Age origin for these pins.

Rod/shank fragments of worked bone, probably from pins or points, were also recovered from a further five features; none are dated. Probable grave 2708 contained six shank

fragments (0.9 g) of circular cross-section, 2.5 – 3.6 mm diameter, and one tip fragment. Two joining pieces of bone (1 g), broadly of oval cross-section (4.7 x 5.0 mm diameter), were found in grave 1539. Two pieces of worked bone from cremation-related deposit 1843 comprise a small rod/shank fragment (0.1 g) of oval cross-section, 1.8 x 2.4 mm diameter, and an unidentified fragment, possibly worked (0.1 g). Two joining rod/shank fragments of circular cross section, 1.7 mm diameter, came from cremation-related deposit 2914. A single fragment (0.2 g) of oval cross-section, 2.2 x 4.1 mm, was recovered from tree-throw hole 1845.

Pins were used in Britain from the Neolithic period onwards. Bone skewer pins, with a simple domed head, are datable to the Late Neolithic/Early Bronze Age and are typically associated with funerary contexts (Montague 1995, 409). During the later Bronze Age pins were more commonly made from copper alloy. The pins from the Waterbrook Park burials may be copies of metal examples in circulation at the time, and moulds for copper alloy disc-headed pins have been found at Highstead, Chislet, located approximately 35 km to the north-east of Waterbrook Park (Needham 2007). The Highstead group derived from a Period 2 pit, broadly dated to 900-600 BC at the site. However, the results of an extensive programme of radiocarbon dating at Cliffs End Farm, Ramsgate, suggests a tighter date range, in the 10th century BC, may be proposed for the Period 2 ceramic assemblage at Highstead (Leivers 2014, 161). Needham notes that the metalworking evidence from Highstead is very similar to material recovered from Fort-Harrouard, Eure, northern France (Mohen et Bailloud 1987, fig. 74), both sites producing disc-headed pins with head diameters of 7-8 mm and shank diameters of approximately 3.5 mm, although unusually the Highstead shanks were square in section, rather than round. The dimensions of the Waterbrook pins, rendered in bone, are comparable. Moulds for the manufacture of metal disc-headed pins have also been found at Rathgall, Co. Wicklow, Ireland. The settlements at Fort-Harrouard and Rathgall were both of Late Bronze Age date. Needham notes that over 50 metal disc-headed pins are known from Britain, although there are variations on the simple disc/nail head. Needham draws parallels for the Highstead types from Lakenheath, Suffolk (British Museum registration 1992 2-4 3), Staple Howe, North Yorkshire (Brewster 1963, 114, fig. 63.1) and Heathery Burn, Co. Durham (Britton 1968, GB 55, no. 101). A bone example has been recorded from Coneybury Henge, Wiltshire (Richards 1990, fig. 109, SF 125). Overall, the evidence is suggestive of a Late Bronze Age date for the type.

Metalwork

Copper alloy

All copper alloy objects recovered from the site came from subsoil layers 1082 and 1083, and are of post-medieval or modern date. They include two gun cartridge cases, two buttons, one tack, an L-shaped bar and a ring fitting.

Iron

Amongst the small number of iron objects are two joining rods, 12 mm diameter and 160 mm in length, recovered from Late Iron Age/early Roman ditch 3345 (fill 2759, ON 102). They may be the remains of a bucket handle, potentially of Roman date, although Manning (1985, 102) notes the type is almost indistinguishable from modern examples. Other iron objects include a horseshoe fragment from medieval ditch 1595, nails from feature 1921, Late Iron Age/Roman pit 2932 and subsoil layer 1083, and a tapering bar from medieval ditch 2016.

Lead

The lead objects from the site include a perforated, conical weight, 35 mm diameter at its base and 10 mm high, from undated ditch 1913. Subsoil layers 1082 and 1083 contained a shot of 10 mm diameter (7 g); an oval-shaped pot mend, 50 mm x 30mm x 10 mm (82 g); part of a disc-shaped, perforated fitting of unknown function, and waste sheet fragments. The shot is of post-medieval date, however the other objects could not be dated.

Glass

Five fragments of green vessel glass, of post-medieval date, were recovered from tree throw hole 1985 and subsoil layer 1002.

Human Bone

Jacqueline I. McKinley (November 2020)

Introduction

Cremated human bone was recovered from 56 contexts associated with 53 features distributed across both Areas of the site; 20 context/17 features from Area A (which includes the Canterbury Archaeological Trust investigations) and 36 contexts/features from Area B.

The excavated material includes the remains of a minimum seven unurned burials, with a possible/probable further nine (deposit types insecure; Table 11). Secondary deposits of pyre debris were recovered from the backfills of most graves, and fine particle fuel ash and charcoal was observed and/or recovered from the majority of the remaining features. At least 25 of the fills from the latter represent or probably represent deposits of pyre debris (deliberate or incidental), whilst the nature of the deposits in a substantial proportion of the features (15) remains inconclusive.

In the absence of artefactual dating evidence from the majority of the deposits, bone samples from eight features (two from Area A and six from Area B) were submitted for radiocarbon analysis. All the samples from Area B returned a Mid-Late Bronze Age date and those from Area A Mid-Late or Late Iron Age dates. Burnt pottery sherds (probably the remains of a pyre good) recovered from one feature in Area B and fragments of worked bone pins were identified as Late Bronze Age (see Jones), and on the basis of the dating and surrounding stratigraphic evidence it is probable that all the cremation-related deposits (including burial remains) in this area are Late Bronze Age in date. Ceramics recovered from three features – including one grave fill – in Area A indicated a Late Iron Age-Romano-British date for these deposits (see Jones). Here, the combined evidence is for a Late Iron Age date for all the cremation-related deposits with a Late Iron Age-Romano-British date for grave 541.

The Late Bronze Age deposits in Area B broadly fell into five groups of varying size and density (Fig. 26). The remains of two burials were recovered from the south-western portion of the site. Grave 1095 lay within a few metres of the south-western margins of the area of investigation and a second grave (1149) is believed to have been situated some 66 m to the NNE; unfortunately the latter, and one other feature containing redeposited pyre debris, were not mapped on site so their exact location is unknown. A pair of graves (1539 and 1570; 1.9 m apart) were recorded in the central northern part of the Area and the nearest other mortuary deposits, lying 47–67 m to the south-east, comprised redeposited pyre debris and a charcoal-rich deposit of indeterminate type.

Two dispersed groups of features were found in the north- and south-eastern portions of Area B. The former formed a relatively tight cluster (8 x 5 m) of eight relatively small features with a further four distributed up to 21 m to the south. The majority of these deposits appear

to have comprised redeposited pyre debris leaving the potential nature of three (from features 1755, 1911 and 1987) open to question (see Table 11). The south-eastern group of mortuary-related features consisted of several small clusters and singletons dispersed across a 63 x 29 m area. Only one deposit conclusively represents the remains of a burial, made in grave 1841, which formed one of a cluster of three features at the west end of the group. Again, much of the material from the remaining 11 features seems to represent redeposited pyre debris but the type of deposit made within seven other cuts is inconclusive (see below). The location of a further six mortuary-related features from Area B was not recorded on site, though it is clear they all derived from one of the two eastern groupings. Two of the features contained redeposited pyre debris (1899 and 1903) and two others charcoal-rich deposits of uncertain type (1879 and 1930). A very small quantity of bone appears to have been redeposited in feature 1972 with no accompanying pyre debris. Unfortunately, however, the remaining unlocated feature comprised a grave (1881) and it would undoubtedly have been useful to know at least which of the two groups it derived from.

The Late Iron Age–Romano-British mortuary-related features/deposits in Area A showed a similarly wide distribution to their earlier counterparts some 200 m to the north. Here, two broad groups were found towards the eastern and western margins of the site, with five singletons distributed to the north and south in the intervening area (Figures 6, 10, 14 and 17). Only one of the latter represented burial remains (grave 541; southern margins), with one deposit of pyre debris and two of uncertain type; a very small quantity of bone with no accompanying fuel ash was found in the north-western terminus of Enclosure ditch A which encompassed a pair of round houses. The smaller of the two groupings lay to the east, in the north-eastern corner of Enclosure E, the three closely spaced features (*c.* 1.4 m apart) including the remains of one probable burial. The features in the western group, lying to the south of Trackway 3, formed dispersed singletons set 2–17 m apart across an approximately 31 x 25 m area. Only one deposit appears to have represented the remains of a burial (grave 2513 at the north end of the group) with three others of uncertain type, two probable deposits of pyre debris and one small quantity of possibly unintentionally redeposited bone. The remains of a second probable unurned burial (grave 2708) are likely to have derived from this western grouping but unfortunately the feature was not mapped in excavation and its precise location is unknown.

The remains of urned and unurned burials of Late Iron Age–Early Romano-British date were recovered from several locations at Cheeseman’s Green to the immediate west of Waterbrook Park (McKinley 2017). The deposits general comprised dispersed singletons, mostly situated 200–600 m to the west and south-west of the similarly dated deposits in Area A, with two some 300 m to the west of Area B. Although this suggests comparable mortuary activity being undertaken by broadly contemporaneous small communities, the frequent deposits of small quantities of bone – redeposited pyre debris and/or fuel ash-rich deposits of uncertain type – so commonly seen at Waterbrook Park, were not observed at Cheeseman’s Green.

Very small quantities (maximum 1.3 g) of degraded and comminuted burnt bone was recovered from a further three deposits in Area B. The condition of this material precludes any confident statement as to whether it is animal or human, but the balance is in favour of the former (see Higbee).

Methods

Recording and analysis of the cremated bone followed the writer's customary procedures (McKinley 1994a, 5–21; 2004a). The age and sex of individuals was assessed using standard methods (Beek 1983; Buikstra and Ubelaker 1994; Gejvall 1981; Scheuer and Black 2000; Wahl 1982); levels of confidence include probable (‘?’; c. 95% confidence) and most likely (‘??’; c. 65–80% confidence). Interpretation of deposit type was undertaken with consideration of the various criteria of influence – contextual, taphonomic and osteological – outlined elsewhere by the writer (McKinley 1997a; 2013a). Animal bone species identifications were undertaken by Lorrain Higbee.

Most of the deposits were excavated by quadrant (and where of sufficient depth (>0.10m), spit) to enable the deposit formation processes to be analysed. A summary of the results, including the combined weight of bone for each context, is presented in Table 11; further details, including the individual spit/quadrant weight of bone, are held in the archive.

Results and Discussion

Taphonomy

The surviving depths of features containing cremation-related deposits of all forms ranged from 0.05 m to 0.34 m. The majority (49%) were between 0.10–0.20 m deep, with 28% at <0.10 m (similar proportions Areas A and B) and 19% >0.20 m (the proportion from Area B being almost twice that from Area A): NB some depths were not recorded. A substantial proportion of the deposits from Area B were apparently undisturbed or only minimally so (see Table 11); amongst the former the depths ranged from 0.12 m to 0.28 m, mean 0.23 m, and amongst the latter 0.10–0.30 m, mean 0.17 m. This suggests that loss of bone from most of the deposits due to horizontal truncation, if a problem at all, is likely to have been limited in most instances. Certainly the surviving depth of the feature seems to have been of restricted consequence with respect to the quantity of bone recovered; the greatest amount was retrieved from grave 1570 at 0.12 m depth, and one of the shallowest features – grave 1539 at 0.05 m – contained the second largest weight (though in this instance the common presence of bone at the stripped surface level indicates that an unknown quantity will have been lost due to truncation). Conversely, a substantial proportion (80%) of the deeper features (>0.20 m) contained <50 g of bone (half with <0.10 g). The features interpreted as graves, or probable graves, showed a comparable array of depths as seen within the overall assemblage, with a 0.05–0.28 m range and mean of 0.14 m for those confidently interpreted as such, and a similar range (0.05–0.24 m) and mean (0.13 m) for the probable graves.

The bone from most deposits is moderately–heavily eroded and chalky in appearance, with the survival of very little or no trabecular bone; the latter, which comprises the articular surfaces of the long bones and most of the axial skeleton, is generally subject to preferential destruction in adverse (eg, acidic) soil conditions (McKinley 1997b, 245; Nielsen-Marsh *et al* 2000). Marked exceptions are the two Mid-Late Bronze Age burial remains from the adjacent graves in the central northern section of Area B, where only very slight surface erosion was observed to some fragments and a relatively representative proportion of trabecular bone was recovered (see below). The remains from both these deposits were in parts slightly obscured by an adhering precipitate, a peculiarity observed in only two other cases from Waterbrook Park – features 1303 and 1987, a central singleton and the southerly feature in the north-east group within Area B – but which was also noted on the remains from a Late Iron Age Romano-British burial at Cheeseman’s Green (Area 7; McKinley 2017). It is unclear whether this reflects some unknown characteristic of the burial conditions (which did not appear to vary markedly from those seen elsewhere) or a pre-depositional occurrence affecting the

bone, possibly relating to something which happened at the pyre site before recover of the bone for burial. Very small quantities of trabecular bone did survive in around 17% of the deposits from Area B (22% if the above mentioned graves are included) and in some 41% of those from Area A; however, the data is insufficient to give any clear indication as to whether this might signal variations in the soil conditions between the two areas, a temporal variation in landuse or factors related to the mortuary rite (all deposit types included). Whilst it is probable that bone loss will have occurred via this taphonomic mechanism in some instances at Waterbrook Park given the nature of the surface geology (alluvial clays), the quantities are likely to have been relatively small and to have had a restricted impact on the size of the original deposit.

Demographic Data

The enigmatic nature of many of the deposits at Waterbrook Park rendered deduction of the minimum number of individuals (MNI) represented within the assemblage problematic. The intrinsic divisibility and portability of cremated remains readily accommodates the possibility of material from one cremation being deposited in several locations within an area functioning as a ‘mortuary zone’, as well as removal of material from that zone for curation or deposition – including burial – elsewhere. The presence of pyre debris within almost all the deposits from the site strongly suggests the cremations were undertaken in the immediate vicinity since, whilst cremated bone could be and at times clearly was subject to curation (McKinley 2013a; 2015) it is unlikely that pyre debris would be carried any substantial distance from the pyre site. Pyre sites commonly appear to have been cleared after use, either for ritual purposes or purely functional ‘clearing-up’ (though the two need not be mutually exclusive), and pyre debris – often inclusive of some of the cremated bone not collected for formal burial – has been recovered from a variety of locations (McKinley 1997a; 2013a). A substantial proportion of the features at Waterbrook Park seem likely to represent deposits of pyre debris, made either in deliberately excavated features (‘formal’ deposits) or having accumulated in pre-existing features within the vicinity of the pyre. Many of these deposit contained very small quantities of bone (<10g; 20 Late Bronze Age; five Late Iron Age) and a further 16 (11 Late Bronze Age, five Late Iron Age) contained less than 55 g – that is <4% of the average weight of bone from an adult cremation (McKinley 1993). Although bone was probably lost from some of these deposits due to taphonomic factors (see above), the quantities present within most were clearly very small at the time of deposition.

Whilst pyre debris from a cremation might have ended up in one or more feature on the site in addition to the grave (where it formed a secondary deposit to the burial), it is also possible that the bone collected for burial (which need not immediately have followed on cremation) was removed entirely from the area and that only the bone left amongst the pyre debris might be found. One such case is indicated within the Late Bronze Age assemblage by the mere 0.3g of infant bone from feature 1911 (north-east group), representing the only remains of an individual within this age category recovered from the site.

A careful consideration of various factors has to be made with assemblages such as that from Waterbrook Park when making an assessment of the MNI including the deposit type, feature location, duplication of skeletal elements and potential associations between deposits, and it is often difficult to make an unequivocal statement. Consequently, the following includes both a confident assessment of MNI, and some possible additional numbers.

The Late Bronze Age assemblage is estimated to have a MNI of eight; one from each of the two graves at the west end of Area B; four from the two dual burials in the central area of the site; one from the un-mapped burial from one of the two eastern groups; and the infant from the deposit of uncertain type in the north-east group (see above). A possible further four individuals might be represented; two from the north-east group (cuts 1755 and 1987) and two from the south-east group (cuts 1739 and 1841). In these cases the concentrated distribution of the small amounts of bone recovered are suggestive of burial deposits with secondary deposits of pyre debris. In some cases there was clear disturbance to the deposit and loss of bone via this mechanism together with the loss of trabecular bone due to the soil conditions, meaning the weight of bone deposited is likely to have been 10–20% greater than that recorded (see below); additionally, some distinctive skeletal elements from these deposits were duplicated amongst the remains of burial 1882, the potential nearest-neighbour made within the un-mapped eastern grave 1881. The small amounts of bone found amongst the fuel ash/charcoal in the remaining deposits could all have derived from one of the same cremations as that recovered from one or more of the burial remains already included in the MNI; no distinguishable duplicate skeletal elements were recorded in any of these deposits.

The *in situ* remains of Late Bronze Age burials are relatively rare and, despite increasing numbers of inhumation burials being recovered and recognised (often via radiocarbon dating) in recent years, it still appears that cremation probably formed the predominant mortuary rite though not quite as markedly as previously believed (Bradley 1990, 112; Brück 1995); NB. the curation and redeposition of disarticulated unburnt bone clearly formed another important facet within the Late Bronze Age mortuary repertoire (Bradley 1990, 11; Brück 1995, 249 and fig. 1; McKinley 2014). The current MNI recovered from Late Bronze Age burial remains in Kent stands at around 50, with at least twice the number of cremated compared with inhumed individuals (Mays and Anderson 1995; McKinley 2014; 2015; Moody 2008, 108). Generally, singletons or small grave groups – similar to those seen at Waterbrook Park – have been recovered, principally from sites close to the east coast (eg, O'Connor 1975; Cruse 1985; Mays and Anderson 1995; McKinley 2015). The remains include those of individuals across the age ranges from neonate to older adult (>45 yr.), and both sexes are represented amongst the adults. The limited nature of the comparative data illustrates the significance of this small assemblage from Waterbrook Park. The small size of the assemblage, which would clearly only reflect a small proportion of the community from which the individuals derived, precludes much specific demographic comment other than that the age and sex of an individual alone would not exclude them from the rite and from formal burial within the landscape.

The MNI within the Late Iron Age–Romano-British assemblage from Area A is six; one from the probable burial in the eastern group, two from the burials in the western group (including the un-mapped probable grave 2708), and three from the singleton on the central southern margins of the site (Table 11; Figures 6, 10, 14 and 17). A possible further three individuals might be represented; two from the western group (features 2505 and 2528) and one from the central singleton 2914. In two cases (2528 and 2914) there had been substantial modern disturbance to the features removing up to half of the deposits in each case, and both showed marked concentrations in the location of the bone. All three had probably also suffered horizontal truncation with loss of some bone (evident at surface level), with two of the features surviving to <0.10 m. As with the Late Bronze Age assemblage (see above), the small amounts of bone from the other deposits in this area could all relate the one or more of the burial remains already included in the MNI.

Of the MNI of six from the similarly dated deposits at Cheeseman's Green to the west, all were adult and over half were believed likely to have been females (McKinley 2017). Both of the tentatively sexed individuals within the extended MNI at Waterbrook Park were also female. The absence of recognised males within both assemblages should be viewed with caution given the number of unsexed individuals, the tentative nature of most of the sexing and the dispersed nature of these burial deposits. Such singletons and small groups distributed across the rural landscape, whilst relatively frequently encountered in archaeological investigations, comprise fortuitous discoveries not necessarily representative of the mortuary population from any one temporal phase when viewed in isolation. Although the adult age ranges at Waterbrook Park were similarly limited in detail, here at least – unlike at Cheeseman's Green – were several immature individuals demonstrating that all age groups could qualify for the mortuary rite and formal burial.

Most Late Iron Age/Late Iron Age–Romano-British burials from Kent are of cremated remains (eg, Booth *et al* 2008; Mays and Anderson 1995, 381; Hicks 1995; McKinley 2006a figure 4) with a few – some notable (Mill Hill, Deal: Parfitt 1995; 2003, 16) – exceptions. There are many examples of this date comprising singletons or small dispersed grave groups as at Waterbrook Park (eg, Booth 2011; Egging Dinwiddy and Schuster 2009; McKinley 2006a, figure 5; 2015). A common feature within the cremated bone assemblages seems to be a scarcity of immature individuals not mirrored in the inhumation burial assemblages; for example, within the various sites along the East Kent Access Route (EKA2), whilst only one of seven cremated individuals was immature, one third of the inhumed individuals fell in this category (McKinley 2015, tables 13.13 and 13.34). While this might suggest a level of localised variation in the burial rite adopted for immature individuals (inhumation in preference to cremation), the potential effects of taphonomic factors and others inherent within the cremation rite requires consideration, and greater numbers would be needed to test the possible validity of an age-related variation in mortuary treatment.

Pathology

Minor pathological lesions were observed in the remains of a minimum of four individuals (HuBTable 1). Several fragments of cranium from two Late Bronze Age deposits (MNI 1) have areas of increased porosity in the exocranial surface. The lesions are indicative of hypervascularity/increased blood supply to the area, probably due to persistent scratching of

the head to relieve the irritation of heavy lice infestation. Enthesophytes (bony growths which develop at tendon insertions) might develop in response to traumatic stress or various diseases (Rogers and Waldron 1995, 24–25) and it is not always possible to be conclusive with respect to the aetiology of particular lesions. They are commonly seen along the posterior shaft of the femur and the anterior surface of the patella – as in two Late Iron Age cases here – where they probably reflect activity-related stress. The latter is also indicated by the changes in the Late Bronze Age finger phalanx from grave 1881. Extra ossicles in the lambdoid suture (or wormian bones), recorded in one Late Iron Age individual, are a frequently observed asymptomatic morphological variation.

Pyre Technology and Cremation Ritual

Oxidation

The white colour of most of the cremated bone indicates a generally high level of oxidation (Holden *et al* 1995a and b). Deviations from this norm, comprising slightly grey or blue hues, indicative of slightly less extensive levels of oxidisation, were observed in a few bone fragments from four graves (two Bronze Age; two Iron Age) and two other cremation-related deposits (one each period). Fragments from only one or two skeletal elements were affected in the majority of cases, the exception being the two adjacent Late Bronze Age burials from the central part of Area B where parts of seven – eight skeletal elements (mostly upper and lower limb) were affected. The level and distribution of the variations seen at Waterbrook Park suggest occasional minor shortfalls in the time required to effect full oxidation of the bone, which might reflect a slight deficit in the quantity of wood used to construct the pyres – influencing both the time for cremation and the temperature sustained (see McKinley 1994a, 76–78; 2004b, 293–295; 2008a). The close similarity in condition of the remains from the adjacent graves 1539 and 1570 might reflect the cremations having been undertaken by the same operative(s) with their own ideas of how much fuel was required and how large the pyre needed to be. In the case of the bone from grave 2514, the peripheral position of the head on the pyre or the presence of an insulating material around the head (eg, a pillow or leather cap) in the early stages of cremation could be responsible for the singular inclusion of the cranial diploe in this category of less well oxidised bone.

Variations in oxidation of the bone have been observed in archaeological cremation burials across the temporal range of the rite in the British Isles and currently few consistent temporal or geographic variations are apparent. The remains from Waterbrook Park and neighbouring Cheeseman's Green do, overall, show less variations in oxidation than seen elsewhere in material from Kent. More intense, if not more extensive, variations were seen in some of the Late Iron Age remains from Brisley Farm (3.5 – 4 km to the west), for example, and this is also the cases for remains of all periods from the EKA2 sites (McKinley 2013b; 2015 table 13.36).

Bone weight

The small amounts of bone recovered from the non-grave features have been discussed above. The quantity of bone included in the burial deposits shows a marked difference between the temporal periods. A broad range of 33.8 – 1491.7 g was recorded for the Bronze Age burial remains, the minimum from the apparently undisturbed and tentatively interpreted unurned burial made in feature 1739 and the maximum from the undisturbed dual burial of the adult female and baby made in grave 1570. The mean weight from the deposits confidently identified as graves is 656.5 g (701.3 g for the undisturbed deposits), falling to 435.8 g where those less confidently interpreted as such are included (438.8 g for the undisturbed deposits). The range for the Iron Age deposits was markedly shorter at 16.5 – 262.0 g (mean 90.3 g), the former from the machine damaged feature 2914 and the latter from the undisturbed multiple burial remains from grave 541. Only two graves were confidently identified, with a close range of 198.8 – 262.9 g, and only two of the burial deposits were considered to be undisturbed (range 51.4 – 262.9 g).

Although the maximum weight of bone recovered derived from a dual burial, only just over 1% of the identified skeletal elements in the deposit comprised those of the neonate with the vast majority representing those of the adult female. The weight of bone represents around 93% of the average expected from an adult cremation (McKinley 1993), compared with the approximate 10% from the undisturbed burial deposit in grave 1095. Though at Waterbrook Park the two heaviest deposits both contained the remains of two individuals, such a consistent association is very rarely observed. Even here, despite the burial made in grave 1539 including the remains of an adult and a much older immature individual (a teenager) than was found in the adjacent grave 1570, the weight of bone recovered in the latter was

roughly twice that from the former. The deposits from these two graves do appear in contrast to the majority from the site however, reinforcing the observations made above regarding levels of oxidation and their close locational pairing.

Whilst the quantity of bone from grave 1570 places this deposit in the upper range of weights recovered from Bronze Age burials, the mean weights – particularly those of the undisturbed deposits – places the assemblage as a whole in the median range for the period, and well over half the deposits fall in what would comprise the lower range (McKinley 1997a, 142). Such consistently low weights of bone were observed in many of the Bronze Age deposits encountered at EKA2 (McKinley 2015, table 13.37) and, although there were potentially other factors of influence within the latter assemblage, it is possible that a geographic variation is being reflected in these figures.

As with the earlier assemblage, the greatest weight of bone in the Late Iron Age assemblage was recovered from the remains of a multiple burial but featured a substantially smaller quantity than in the earlier examples. The maximum and mean weights are considerably lower than seen in the similarly dated deposits from EKA2 (*ibid.*) and Cheeseman's Green (McKinley 2017), but are comparable with those from Brisley Farm (McKinley 2013b). The lack of consistency between these similarly dated deposits from the county argues against a general regional temporal variation in the mortuary rite, though it might reflect more localised idiosyncratic influences.

Fragmentation

A variety of intrinsic and extrinsic factors can affect the size of cremated bone fragments, many of which are exclusive of any deliberate human action other than that of cremation itself (McKinley 1994b; 2004b). A misleading impression of the condition of the bone at the time of burial can be formed without due consideration of these mechanisms, amongst which taphonomy represents a major influence, and the figures recovered in analysis can generally provide only a guide to the levels of fragmentation to the bone at the time of deposition.

The majority of the bone from burial remains of both periods at Waterbrook Park was recovered from the 5 mm sieve fraction (56% of the Bronze Age and 71% of the Iron Age deposits; 46–60% and 54–78% by weight of bone respectively). A greater proportion (44%) of the earlier burials found the majority in the 10 mm fraction than did the later ones where

most of the bone fell in the 10 mm fraction in one case and the 2 mm fraction in the other. The maximum fragment sizes for both periods had a similar range (23–47 mm and 17–41 mm respectively) with almost identical means (32 mm and 31 mm).

The Bronze Age data is again similar to that seen at EKA2 whilst the Late Iron Age material from Waterbrook Park appears slightly more heavily fragmented (McKinley 2015, table 13.38). The comparative data from both EKA2 and Cheeseman's Green demonstrates the protection offered by the presence of a ceramic container, both from the influence of the surrounding soil matrix and, to some extent, from physical pressure exerted from above on the brittle and thereby vulnerable cremated bone. The absence of such shielding material at Waterbrook Park – where all the burials were made unurned – will undoubtedly have been a major factor, after cremation, influencing the relatively high levels of fragmentation recorded. The extent of breakage to the bone is not, however, as great as that seen in the Iron Age deposits from Brisley Farm (McKinley 2013b), where it was suggested variations in the post-cremation mortuary rites might have resulted in greater fragmentation of the bone than is commonly observed. A consistent degree of fragmentation, suggestive of deliberate breakage of the bone with the intent of producing a 'uniform' fragment size, is not indicated at either Brisley Farm or amongst the Iron Age deposits at Waterbrook Park, rather it is postulated that there might have been greater incidental fragmentation as a potential artefact of greater handing/movement/manipulation of the remains between the pyre and the grave.

Skeletal elements

Variable proportions of the bone from each burial were identifiable to skeletal element (a named bone within one of the four skeletal areas), ranging from a meagre 15% (by weight) from the truncated Iron Age deposit in ?grave 2527 to the 58% from grave 2513. The remains from both periods show great variation extending from well below the median range (generally 30–50%, *pers. obs.*) to slightly above it in the case of grave 2513; Bronze Age 21–49% by weight identified to skeletal element, mean 31%; Iron Age 15–58%, mean 39%.

As is routinely observed, each grave contained an assortment of bone fragments from all skeletal areas, with the frequently encountered over-representation of the readily identifiable skull elements, generally – but not exclusively – at the expense of the fragile axial skeletal elements (see *Taphonomy*). In both the Bronze Age and the Iron Age deposits, the lower limb

was also identified in greater than 'normal' proportions (see McKinley 1994a, 6) in a couple of instances. Conversely both upper and lower limb elements were recorded in much lower than anticipated proportions, particularly in the Iron Age deposits; the potential significance of this latter observation is tempered by the fact that many of these deposits contained relatively low weights of bone and that most of the unidentifiable skeletal elements will comprise parts of one or more limb bone. A paucity in the readily identifiable skull elements might, however, be of greater significance; two graves, one Bronze Age (1841) and one Late Iron Age (2914), each contained much lower proportions of skull elements than is commonly observed. In both cases less than 100 g of bone was recovered from relatively shallow graves (80 mm) and, it is possible, that were the bone to have been deposited with a degree of anatomical order, that more skull elements lay in the upper levels of the deposit and were thereby subject to greater displacement than other parts of the skeleton. Alternatively, rather than being deliberately excluded from the burial, it might be that these elements were being preferentially retained for disposal/distribution elsewhere, perhaps as *memento mori* (McKinley 2013a). Such ordered deposition of remains and potential selection of skull elements for 'curation' has been observed in Romano-British burial remains from other sites in Kent (McKinley 2015, 422–423).

The small bones of the hands and feet are routinely recovered from cremation burials. It has been suggested that the frequent recovery of these elements might indicate that the bone was collected after cremation by raking the remains off the pyre site with subsequent winnowing to clear away any fuel ash (easing the recovery of the smaller skeletal elements) as opposed to individual hand-recovery of fragments (McKinley 2004b, 299–301). Some of these small elements were recovered from most of the graves at Waterbrook Park (78% Bronze Age, 58% Late Iron Age) but with markedly different frequencies. In general, greater numbers were recovered from the earlier graves; the two adjacent dual burials from the central part of Area B again demonstrating a distinction from others on the site with each containing 46–48 of these small elements. One other Bronze Age burial included 22 hand/foot bones, with 10–15 from one Bronze Age and two Iron Age deposits, and the remaining examples featuring only one–five. Although most of the deposits with more than 10 such elements comprised <100 g of bone, there is no consistent link between the amount of bone recovered and the frequency of these small elements. Similarly, with the exception of the two dual burials mentioned above, there is no apparent connection with the location of the

graves. The data suggest that different modes of recovery were employed for different individuals, but on what basis is unclear. As with other aspects of the rite, idiosyncratic local influences – such as the preference of those undertaking the task at any one time – are likely to have played their part.

Pyre goods

Small quantities (<15 g, mostly <1 g) of cremated animal bone were recovered from amongst the remains of six burials – four Bronze Age (44%) and two Late Iron Age/Romano-British (28%) – and within one other Late Iron Age cremation-related deposit (Table 11). The fragments are commonly too small/eroded to enable species identification, but sheep was identified within two of the earlier deposits, in one instance coupled with bird, and a pig tooth was recorded in one Late Iron Age/Romano-British deposit. The recovery of cremated animal bone amongst the burial remains is characteristic of the rite across the temporal range with variations in both the species encountered (and their nature/significance) and the frequency with which they occur. The species identified at Waterbrook Park are amongst those most commonly seen in burials of Bronze Age – Romano-British date (eg, McKinley 1997a; 2006b, table 5.1; 2015, 424–426). and are probably representative of food offerings, though a less prosaic significance might also be attached to some. The popularity of pig in the Romano-British period, for example, might also reflect the ritual status of the animal, which included a legal requirement for their sacrifice at the graveside prior to burial (Cicero *De Legibus* II 22, from Toynbee 1971, 50; Witkin and Boston 2006).

Slight blue/green ‘spot’ staining was observed on bone fragments from one Bronze Age and one Late Iron Age/Romano-British grave, indicative of the presence of some form of copper-alloy object(s) on the pyre. In both cases elements of the skull – mandible or cranium – were affected, suggesting the presence of items of personal adornment worn around the neck or on elsewhere on the head. This type of staining, in similar skeletal locations, whilst not common is well documented (eg, McKinley 2008b; 2015, 426) and is often seen where no remnants of copper-alloy pyre goods are found; melted fragments of copper-alloy were recovered amongst the later burial remains at Waterbrook Park but not amongst the earlier remains.

Fragments of worked bone objects were found in three of the Bronze Age graves and one of the later graves. These items, as with the other forms of pyre good recorded here – including

the ceramic material mentioned in the introduction – should be viewed a minimum of the materials which probably accompanied the deceased on the pyre. Since it appears to have been a characteristic of the rite across the temporal range not to collect all the human remains for burial, it is probable that the remains of all forms of pyre goods were also overlooked (accidentally or deliberately) in this secondary part of the mortuary rite. There is, however, evidence from some Romano-British cemeteries, for example, for deliberate selection of certain types of pyre good for burial, others being left with the pyre debris (Cool 2004, 437–60; Polfer 2000).

Formation Processes

Analysis of the location (by quadrant and, where appropriate, horizontal spit) of the various osseous components within the burial deposits showed the multiple individuals, pyre goods (animal and artefactual) and different skeletal elements to be mixed throughout. The only potential exception are the neonatal remains from grave 1570, 90% of which (by weight) was recovered from the south-west quadrant suggesting it might have been contained in its own little package within the overall deposit. This opens the possibility of these remains not having been cremated together with those of the adult female, but rather with the baby having pre-deceased the adult and its remains having been curated before final deposition – perhaps a ‘token’ or form of *memento mori/mortuis* (McKinley 2013a).

The confined distribution of the remains in several graves is indicative of deposition within some form of flexible bag. For example, 93% (by weight) of the bone in grave 1540 lay in the southern half of the grave, whilst 73% of that in grave 1740 lay in the east half; 68% of the bone in grave 1571 came from the southwest quadrant and 74% of that from grave 2414 sat in the northern quadrant. The current evidence does not support any specific placing of the burial deposit in one or other part of the grave.

Although a failure to maintain the contextual integrity of parts of the deposits from feature 541 render the interpretation open to debate, there is evidence to suggest the burial deposit was made in a box or lined grave, with subsequent deposits of pyre debris made above and to the side of it. A ceramic vessel, which appears to have been on the pyre, was inserted into the upper fills as an accompanying grave good.

The grouping of features in the two areas of the site, each with their few burial remains and frequent small deposits of pyre debris, suggest independent foci of mortuary activity. Irrespective of the absence of any pyre sites *per se* – ephemeral and readily eradicated structure in the absence of associated negative features or protective overlying earthworks (McKinley 1997a; 2013a) – these areas are likely to be the locations in which cremations were undertaken, with pyre debris dispersed around the vicinity by accident or design and graves occasionally cut in close proximity. The two areas on the east side of Area B may well have provided the venue for numerous cremations, the burials associated with which were made in other parts of the site – there is certainly evidence for one such occurrence and others are likely. The same might have been the case in the less dense groupings seen on the east and west sides of Area A. The many small features rich in fuel ash but sparse in cremated bone supplying the evidence for spatial segregation of different parts of the rite and the activities associated with them.

Environmental evidence

Lucy Allot, John Giorgi and Inés López-Dóriga

Introduction

Environmental bulk sediment samples were collected for the recovery of charred plant remains for potential information on the agrarian economy and human activities at the site from the early prehistoric through to the post-medieval period.

A total of 582 bulk sediment samples taken from a range of features across the site were processed for the recovery and assessment of environmental evidence (

Table 11 Human bone - summary of results

context	cut	date	deposit type	bone weight (g)	age/sex	pathology & pyre goods
Area B						
1096**	1095	M/LBA ^s	un. burial + rpd	155.7	adult >25 yr ??male	?animal (0.4g), sp. u/id
1150*	1149	M/LBA ^s	un. burial + rpd	456.5	adult >18 yr ??female	animal (0.8g), inc. sheep & ?bird; lower & S
1175	1174		?rpd	1.0	>infant (>4 yr)	
1279	1278		?rpd	0.5g	>infant (>4 yr)	
1304	1303		crd inc. rpd	67.7	subadult/adult 13–40 yr	
1540	1539		un. burial + rpd	716.7	1) subadult 14–17 yr 2) adult >23 yr	exocranial porosity – head lice?; 1.1g worked bone; animal? u/id sp. 0.9g
1571*	1570	M/LBA ^s	un.burial + rpd	1491.7	1) adult 23–40 yr ?female 2) foetus/neonate	fragments 4 worked bone pins (1.8g); blue/green spot staining right mandible; animal (5g) inc. sheep
1677*	1676		rpd	40.2	subadult/adult >15 yr	
1697*	1696		rpd	36.6	subadult/adult >15 yr	
1740*	1739		crd - ?un. burial + rpd	33.8	subadult/adult >14 yr	
1750	1749		?rpd	1.6	subadult/adult >13 yr	
1752	1751		?R inc. fuel ash	1.6	>infant (>4 yr)	
1754	1753		?rpd	<0.1	?human/?animal	
1756**	1755		crd - ?un. burial + rpd	56.1	subadult/adult 15-30 yr ??female	
1758**	1757		?rpd	16.3	>infant (>4 yr)	
1760**	1759	M/LBA ^s	rpd	16.3	subadult/adult >12 yr	
1762	1761		?rpd	0.2	>neonate	
1770**	1769		?rpd	1.3	?human/?animal	
1772*	1771		?rpd	0.6	?human/?animal (>neonate)	
1774*	1773		rpd	14.9	subadult/adult >12 yr	
1781	1780		crd – ?rpd	0.3	?human, ?immature	
1793**	1972		crd – ?rpd	50.5	subadult/adult >15 yr	
1801	1800		?rpd	0.2	?human (>infant)	
1805**	1804		?rpd	<0.1	?human	
1825**	1824	LBA	?rpd	3.1	>infant (>4 yr)	burnt sherds –?pyre good
1835	1834		crd inc. rpd	28.6	subadult/adult >12 yr	endocranial porosity – head lice?
1842	1841	M/LBA ^s	?un.burial +	93.4	subadult/adult >15 yr	

			rpdp/?rpd			
1844	1843		crd inc. rpd	11.4	subadult/adult >12 yr	2 (0.2g) fragments worked bone pin
1851	1850		crd inc. rpd	35.1	adult >18 yr	
1880	1879		crd – ?rpd	4.2	subadult/adult >15 yr	
1882	1881	M/LBA ^s	un.burial + rpd	361.1	adult >18 yr ??female	enthesophytes – finger phalanx
1892**	1891		crd inc. rpd	8.2	human >10 yr	
1896*	1895		?rpd	0.1	?human	
1900	1899		fuel ash/?rpd	<0.1	?human	
1904	1903		fuel ash/?rpd	0.1	?human	
1912**	1911		crd inc. rpd	0.3	infant 0.5–5 yr	
1931	1930		crd inc. rpd	5.4	subadult/adult >12 yr	
1973	1972		R	0.2	?human (>12 yr)	
1988	1987		crd - ?un. burial + rpd	41.3	subadult/adult >15 yr	
Area A						
2504	2503		R	1.6	?human	
2506*	2505		crd - ?un. burial + rpd	51.4	subadult/adult >15 yr ??female	
2508	2507		crd – ?rpd	19.6	subadult/adult >15 yr	
2510	2509		rpdp	4.5	subadult/adult >18 yr	
2512	2511		R – inc. fuel ash	0.9	subadult/adult >15 yr	
2514	2513	MIA ^s	un. burial + rpd	198.8	subadult/adult 15–30 yr ??female	enthesophytes – left patella; morphological variation – wormian (?Inca) bone
2528	2527		crd - ?un. burial + rpd	16.5	human >8 yr	
2709	2708		?un. burial + rpd	117.9	adult >18 yr	7 fragments (0.8g) worked bone pin
2715	2714		crd inc. rpd	31.6	subadult/adult >12 yr	
2730	2729	LIA/RB	R (ditch)	0.4	?human (>12 yr)	
2854	2853	?LIA/ RB	crd inc. fuel ash (?rpd)	64.6	adult/subadult >15 yr	0.8g medium-sized mammal
2862	2861	MIA ^s	?un. burial + rpd	121.1	subadult/adult >12 yr	14.9 g ?animal bone (species u/id)
2875	2874		?crd inc. rpd	36.6	adult >18 yr	enthesophytes – femur
2915	2914		crd - ?un. burial + rpd	30	adult >20 yr	
2893	2892		?rpd	0.7	human >infant (>5 yr)	

WBF A93 (south Area A)						
69 inc. 62 & 70	541 (?537)	LIA/RB	un. burial + rpd	262.0	1. juvenile 9–10 yr 2. subadult/adult >15 yr 3. neonate/young infant <2 yr	0.1g juvenile pig tooth; melted scarps copper-alloy; b/g spot staining vault frag
71			?R	9.7	infant/?juvenile	ceramic vessel
72	542		rpdp	31.4	adult >30 yr	

KEY: * – largely undisturbed; ** – undisturbed; un. – unurned; rpd – redeposited pyre debris; crd – cremation-related deposit; \$ – C14 dated; M/LBA – Middle/Late Bronze Age; M/LIA – Middle/Late Iron Age; RB – Romano-British

Table 2). The samples were collected from a range of features across the site in both Areas A and B; the majority of the samples were from pits (many containing cremated remains) and urned cremation burials with smaller numbers from the fills of ditches, post-holes, hearths and tree-throws. Most of the sampled features that could be dated were from the Middle Bronze Age through to the Romano-British period, largely from Late Bronze Age Phase 3 (70 samples) and Late Iron Age/Romano-British phases (69 samples) with a small number of samples from medieval and post-medieval contexts. The majority (63%) of the samples, however, are from undated features while 8% of the samples could only be broadly dated to the prehistoric period.

As a result of the assessment, a selection of 36 samples was selected for further analysis based on the abundance, preservation and diversity of charred plant remains and charcoal fragments. Of these, nine samples were selected for the analysis of charred plant remains, and the charcoal in 28 other samples was identified and quantified. This report incorporates the results of the assessment, which have been revised and completed, and the analysis.

Materials and Methods

Sample processing was carried out by an initial wet-sieving on a 0.5 mm mesh and a subsequent bucket flotation; with the flots retained on a 0.5 mm mesh. Dried residues were fractionated into 5.6/4 mm, 2 mm and 1 mm fractions. The coarse fractions (>5.6/4 mm) were sorted by the naked eye, weighed and discarded. For the assessment, the flots were scanned using stereo incident light microscopy at magnifications of up to 40x and assessed differently according to the different nature of the sampled features: about 30% the samples from cremation related features were only rapidly assessed for the abundance of wood charcoal, as

charred plant remains in them were found to be likely residual or intrusive after an initial full assessment of about 70% of the cremation related samples; the samples from other types of features were fully assessed. Full assessment was carried out taking into account the presence of the different bioturbation indicators (roots, modern seeds, mycorrhizal fungi sclerotia, earthworm eggs and insects), and the preservation and nature of the charred plant and wood charcoal remains, and other environmental remains such as molluscs and animal bone. A riffle box was used to split large flots into smaller flot subsamples when appropriate. Identifications of plant taxa are noted below, following the nomenclature of Stace (1997) for wild plants, and traditional nomenclature (Zohary and Hopf 2000) for cereals. Abundance of remains is qualitatively quantified (A*** = exceptional, A** = 100+, A* = 30-99, A = >10, B = 9-5, C = <5) as an estimation of the minimum number of individuals and not the number of remains per taxa. Based on the results of the assessment and the abundance and diversity of the charred evidence, a selection of samples was chosen for further carpological or anthracological analysis.

Results

Assessment

The assessment showed the presence of identifiable charred plant remains in 172 of the 582 samples (

Table 1) although the great majority of the productive samples contained only traces of poorly preserved charred material; moreover 93 of the productive samples were from undated or only broadly dated prehistoric contexts.

Although many of the samples were rich in wood charcoal, many displayed poor preservation with sediment encrusting and common percolation. Samples were characterised by abundant small charcoal fragments, often with fewer of the larger fragments that are more suitable for analysis.

Charred plant remains

John Giorgi

Only nine samples, all from features in Site B, contained significant amounts of charred plant remains to merit further analysis; two from a fill (1375) of a late Bronze Age pit (1374) and three from medieval features, two from a fill (1187) of an oven (1185) and one from a fill (1977) of a pit (1976). The other four samples were from Pit 1895 from which the range of charred plant remains suggests a post-Roman, probably medieval date.

The charred plant remains from the selected samples were sorted from the flots and identified using a binocular microscope (with a magnification of up to x40) together with modern and charred reference material and reference manuals (Cappers *et al.* 2006; Jacomet 2006). All the remains were quantified with the exception of charcoal fragments, small unquantifiable cereal grain fragments (<1mm) and unidentifiable fragments, estimates of which were made using the following scale: + =1-10; ++ = 11-50; +++ = 51-150; ++++ = 151-250; +++++ = >250 items.

The charred plant remains from the analysed samples are shown in Table 1. Taxonomic order for the wild plants follows Stace (1997), which was also used for ecological data together with Hanf (1983) and Wilson *et al.* (2003).

Just over 2,000 identifiable charred items were counted from the eight analysed samples, charred cereal grains making up the bulk (71%) of the quantified remains although preservation was poor and just over 60% of the grains could not be identified. Cereal chaff

fragments accounted for 9% of the quantified items while other plants, largely wild plant/weed seeds, made up the other 20%.

There follows a discussion of the plant remains in the analysed samples by period with reference when appropriate to the botanical assessment data from the site.

Late Bronze Age

Two samples from a fill (1375) of a Late Bronze Age pit (1374) contained moderately good amounts but fairly low concentrations (item densities of 9 and 11 per litre of processed soil) of remains with similar charred plant assemblages consisting virtually entirely (97% and 98%) of cereal remains, mainly chaff fragments (54% and 67%) together with smaller amounts of poorly preserved and mainly unidentifiable grains (44% and 30%). The other charred remains in the samples consisted of just a few wild plant/weed seeds. These two charred assemblages mainly represent burnt debris from the final stages of crop-cleaning including the de-husking of hulled wheat, and food preparation/cooking activities.

The cereal remains showed the presence of mainly hulled wheat (*Triticum dicoccum/spelta*) including emmer (*Triticum dicoccum*) identified on the basis of the chaff fragments, and barley (*Hordeum vulgare*). Botanical assessment data from another 30 Late Bronze Age features (mainly pits with occasional ditches, post-holes and tree-throws) from the site also showed the presence of these cereals with traces of wheat grains in 27 samples including hulled wheat (glume bases) in three, and barley grains in five samples.

Emmer along with spelt (*Triticum spelta*) another hulled wheat, and barley were the main cereals cultivated and used during this period in southern England (Greig 1991, 302).

Archaeobotanical evidence from ten sites excavated as part of the CTRL Project (Giorgi and Stafford 2006) also shows the importance of emmer during the Bronze Age in Kent, this cereal for example being the best represented grain in Middle Bronze Age contexts at Beechbrook Wood and Saltwood Tunnel. While botanical evidence from other sites in southern England suggest that spelt became increasingly important replacing emmer as the main hulled wheat during the later Bronze Age and Iron Age (Greig 1991, 305), this does not appear to be the case in Kent where emmer continues to be an important crop into the Iron

Age, for example being the dominant grain in Early to Middle Iron Age deposits at Whitehorse Stone (Giorgi and Stafford 2006).

Free-threshing wheat (*Triticum aestivum/turgidum*) was also represented in one of the Late Bronze Age samples by a single rachis fragment. There is little evidence for free-threshing wheat from Bronze Age sites in Kent; for example a possible free-threshing wheat grain in a Bronze Age ditch at Beechbrook Wood (Giorgi and Stafford 2006). It is possible that the rachis fragment in the Late Bronze Age pit represents intrusive material from later medieval activity on the site.

One of the samples from the Late Bronze Age pit contained a possible broad bean (cf *Vicia faba*), the botanical assessment results also showing the presence of this species in another Bronze Age sample along with traces of indeterminate legume in three other samples from this period. There is limited evidence for legumes from Bronze Age sites in southern Britain (Greig 1991, 303) although large numbers of beans were found in several late Bronze Age/early Iron Age contexts at Saltwood Tunnel in Kent (Giorgi and Stafford 2006).

The only other charred remains in the two Late Bronze Age pit fill samples consisted of just two weed seeds, *Persicaria* (knotweed) and *Bromus* (brome), probably arable weeds imported incidentally onto the site with the cereals, and a few *Avena* (oat) awn fragments, oat at this time probably being a cereal weed rather than a cultivar. A few charred weed seeds were also noted in several other assessed Late Bronze Age samples from the site including *Persicaria* and also *Galium aparine* (cleaver) and Cyperaceae (sedges). *Galium aparine* may indicate the cultivation of the loamy and clayey soils around the site as well as the autumn sowing of cereals while the sedges may suggest the use of damp areas of ground around the site for growing crops and/or possibly their collection for various uses, for example flooring/roofing materials, from the river floodplain.

Medieval

Three samples from a medieval oven (1185) and pit (1976) produced rich charred plant assemblages; four samples from an undated pit (1895) contained very similar assemblages suggesting a medieval date and therefore will also be discussed here.

The charred plant remains in the three sampled features were broadly similar consisting mainly of cereal grains with smaller amounts of chaff and other seeds mainly of wild plants/weeds. The dominant cereal was free-threshing wheat with rachis fragments in Pit 1895 and Oven 1185 showing the presence of hexaploid bread wheat (*Triticum aestivum*). There were only very small amounts of (hulled) barley and oats and very occasional rye (*Secale cereale*) grains in the three features along with traces of rye and barley rachis fragments and oat awn fragments. Almost 60% of the grains, however, were very poorly preserved and could not be identified further. Grains of possible free-threshing wheat and barley were also noted during the assessment of two medieval samples.

All four cereals are the main grains found in the medieval period in southern Britain (Greig 1991, 321; Moffett 2006, 45) including medieval deposits from eight sites excavated as part of the CTRL Project where free-threshing (including hexaploid) wheat was the dominant grain in many of the samples (Giorgi and Stafford 2006).

Wheat and rye were the main bread making grains in the medieval period although all the different cereals and mixtures (except for oats on their own) may have been used for making bread (Campbell *et al.* 1993, 25). Wheat was the most valued cereal (Hammond 1995, 2) with bread wheat being the most common and preferred bread making grain (Moffett 2006, 49). Wheat flour was also used for pies and pastries while the cereals may have also been used for biscuits and cakes or added to pottage (Campbell *et al.* 1993, 25). Barley and oats were also used for animal feed and also for brewing (as was occasionally wheat) although there were no sprouted grains in the assemblages suggest such a use.

Other crops in the medieval samples included a small number of broad beans in Oven 1185 while some of the larger *Vicia/Lathyrus/Pisum* (vetch/tare/vetchling/pea) and legume fragments in all three medieval features may also belong to cultivated pulses. Beans, along with other legumes, have all been found on medieval sites although usually only in small quantities (Moffett 2006, 53). Beans have been recorded in several medieval sites in Kent including Northumberland Bottom, Parsonage Farm, Westernhanger Castle and Saltwood Tunnel (Giorgi and Stafford 2006).

Beans and other legumes were mainly grown as fodder but could have been used together with cereals for bread especially following poor cereal harvests while all had a traditional use in pottage (Wilson 1991, 201-2). Pulses were grown in the medieval period as a means of restoring nitrogen to the soil as part of crop rotation (Campbell *et al.* 1993, 134).

Wild plant/weed seeds were mainly present in Pit 1895 and Oven 1185 and were probably largely from arable weeds incidentally harvested along with the cereals. *Anthemis cotula* (stinking chamomile) was very well represented in both, including seed heads in the latter feature and suggests the cultivation of the loams and clay soils around the site. Single seeds of *Agrostemma githago* (corn cockle) and *Raphanus raphanistrum* (wild radish) may also point to the use of sandy loams for growing crops while *Raphanus raphanistrum* may tentatively point to the spring-sowing of some of the cereals. Other wild plant remains in Pit 1895 and Oven 1185 included occasional remains of *Crateagus monogyna* (hawtorn) and *Prunus spinosa* (sloe/blackthorn) which may be indicative of a hedgerow/shrub habitat in the vicinity of these two features during this period.

The charred plant assemblages in the three medieval features mainly represent the burnt residues of almost fully processed free-threshing wheat, with grains being the dominant component in all the samples, a fill of Pit 1976 containing the cleanest grain assemblage (Table 1 and

Table 1).

The grains in the oven may have been accidentally burnt while being dried before storage and/or milling, the two pits possibly containing the charred plant residues of such activities or other accidents during the final stages of cereal cleaning and/or food preparation/cooking. The small amounts of chaff, largely from free-threshing wheat, may represent remaining persistent contaminants of the grains yet to be successfully separated along with the large weed seeds well represented and including good numbers of large-seeded wild grasses particularly *Bromus* (brome) and also *Lolium temulentum* (darnel) along with occasional large seeds of *Agrostemma githago* and *Raphanus raphanistrum* as well as the *Anthemis cotula* seed heads. Being of a similar size to the grains, these seeds are difficult to separate from the grain other than by hand-sorting and are often found in almost fully processed crops. It is possible however, that the weed seeds and chaff could also represent crop processing by-products used as fuel.

Discussion

The paucity of charred plant remains in the Late Bronze Age samples at Waterbrook Park, with the exception of moderate amounts in Pit 1374, provide only a limited insight into crop husbandry during this period although the evidence does show the presence of emmer wheat and barley and possibly broad beans, common crops for this period, the few weed seeds suggesting the cultivation of the loamy and clayey soils around the site and including the autumn sowing of cereals. The dearth of charred remains may suggest that the sampled features were away from areas of agricultural activities, the few remains indicative of debris from low-level domestic activities including the final stages of crop-cleaning (including de-husking of hulled wheat) and food preparation/cooking. Previous archaeobotanical evidence from prehistoric deposits in the area around Ashford has shown similar results, for example only low amounts of cereal remains being recovered from Late Iron Age deposits south-east of Park Farm (Stevens 2012), and in Middle/Late Iron Age contexts at Cheeseman's Green (Giorgi 2017).

Assessment data from Late Iron Age and Romano-British contexts at the site also shows only traces or small amounts of charred plant remains, with a little cereal debris in 20 samples

consisting of barley and wheat remains including traces of emmer and spelt wheat in several samples. Both emmer and spelt and hulled barley were also found in sites of a similar date close-by; in Late Iron Age/early Romano-British deposits at Cheeseman's Green (Giorgi 2017) and in Romano-British contexts in excavations south-east of Park Farm (Stevens 2012).

The few charred weed seeds in a small number of assessed samples from the Late Iron Age and Romano-British contexts from the site included several of the weed seeds found in the Bronze Age samples notably *Galium aparine* which along with *Persicaria lapathifolia* (pale persicaria) may tentatively suggest the continued cultivation of the (damp) loamy soils around the site, while *Fallopia convolvulus* (black bindweed) may point to some spring-sowing of cereals. The presence of *Crateagus monogyna* (hawthorn) and *Alnus glutinosa* (alder) in an assessed Late Iron Age/early Romano-British context may be indicative of hedgerow/scrub vegetation close-by during this period.

A large number of the Waterbrook Park samples were from features that could only been broadly dated to the prehistoric period, the assessment showing the presence of occasional or very small amounts of charred plant remains in 26 of these samples, virtually all of which were from pits and included cereal grains and fragments in 16, mainly of wheat (including emmer in one sample) and barley. Occasional fragments of charred hazel nut (*Corylus avellana*) shell were present in eight prehistoric samples, hazelnuts appearing to have been an important wild food resource during the prehistoric period (Greig 1991, 301; Moffet *et al.* 1989).

Tubers of *Arrhenerathium elatius* var *bulbosus* (onion couch) were found in six prehistoric pits containing cremated remains; charred tubers of this wild grass are often found in prehistoric cremations and may have been gathered and used as fuel as well as being indicative of relatively ungrazed grasslands close-by (Robinson 1988). Onion couch tubers were also found in 17 of the undated samples (mainly urned cremation burials) along with hazelnut shell in five undated samples including cremations.

The charred plant remains from the medieval samples at Waterbrook Park show the presence of mainly free-threshing (bread) wheat which was probably being cultivated on the loamy

clay soils around the site, with hulled barley, rye, oats and beans also being grown but perhaps only playing a minor role in the agricultural economy at the time. The good amounts and high densities of charred cereal grains in these features suggest large-scale activities associated with the latter stages of crop-processing including the use of the oven, perhaps to dry the grains before milling and/or storage.

Wood charcoal

Lucy Allot

After an initial assessment, 28 samples from eight features were selected for analysis based on a combination of their priority, feature information and preservation quality data. Analysis aimed to establish the range of fuel types selected and used for funerary activities and whether there was any evidence that this changed through the different occupations with a further aim of characterising the local vegetation from which the fuel was procured.

Multiple samples were extracted from different quadrants within the individual contexts. Charcoal identifications were recorded by sample and the raw data was subsequently combined.

Table 1 provides an overview of the features analysed while

Table 1 summarises the data by period.

Full analysis (up to 100 fragments per context as recommended by Keepax 1988) was undertaken for samples from features 1759, 2513, 2853 and 2874 (Table 17). Due to poorer preservation analysis of the remaining four selected features was restricted to 30-80 fragments from 1570 and 1727 and up to 30 fragments only from 1841 and 1881.

Preparation and examination of fragments followed standard procedures for the analysis of wood charcoal as described in Hather (2000). The fragments were fractured along three planes to reveal transverse, tangential longitudinal and radial longitudinal surfaces and viewed under a stereozoom microscope for initial sorting and a metallurgical incident light microscope (at x50, x100, x200 and x500) for identification. Only fragments greater than 2 mm, and primarily those greater than 4 mm, were examined in this analysis. Fragments <2 mm tend to lack sufficient anatomical detail and are often not conclusively identifiable, if at all. Specimens were identified to the highest taxonomic level possible through comparison with reference texts (Schweingruber 1990, Hather 2000, Schoch *et al.* 2004). Habitat information and nomenclature follows Stace (1997). Weight and fragment counts of each taxon identified were recorded to aid interpretation of taxon abundance in each feature, context and period.

Charcoal from this site demonstrated poor to moderate preservation with many of the fragments displaying evidence of sediment infiltration and concretion that is characteristic of charcoal assemblages from this region of Kent (see for example Allott 2013, Gale 2013).

Such post depositional deposits are often common where features become intermittently saturated due to fluctuations in ground water for example. Vitrification was also observed in several samples although such fragments were not common in the assemblage over all. The exact causes of this type of preservation are unknown and although several hypotheses relating to temperatures during charring and prolonged exposure to heat (Prior and Alvin 1983) have been provided, further studies have demonstrated that the relationship between charring temperature and vitrification is less clear (McParland *et al.* 2010). The majority of the assemblage derives from wood with very little ring curvature visible suggesting that many of the fragments are from large, mature stem and branch wood. Smaller roundwood and twigwood fragments were uncommon in all of the samples analysed (

Table 1). This pattern appears consistent across the different periods of occupation and confirms observations made during assessment.

The samples derive from features assigned to three phases of landuse; Middle/Late Bronze Age (five samples), Late Bronze Age/Early Iron Age (one sample) and Late Iron Age/Early Romano British (two samples). A total of 636 fragments were examined during the analysis.

Analysis identified five different taxonomic groups all of which are hardwoods. Anatomical structures observed in the charcoal fragments are consistent with the following taxa:

- Fagaceae: *Quercus* sp., oak; *Castanea sativa*, sweet chestnut (where large >10 seriate rays are not visible the identification is recorded as *Quercus/Castanea* sp. see above for discussion regarding the identification)
- Rosaceae: Maloideae subfamily, including hawthorn (*Crataegus monogyna*), rowan, service and whitebeam (*Sorbus* sp.), apple (*Malus* sp.) and pear (*Pyrus* sp.); Prunoideae subfamily: *Prunus* sp., cherry/blackthorn
- Betulaceae: *Alnus* sp., alder; *Corylus avellana*, hazel
- Aceraceae: *Acer campestre*, field maple

With the exception of the possible sweet chestnut twig wood all of the taxa are indigenous to southern England (see below for further consideration of this taxon). Due to inherent similarities in wood structure, taxa within the Maloideae subfamily cannot be separated. Distinguishing between hazel and alder can also be problematic when wood anatomical features are poorly preserved or obscured by sediment as was often the case within this assemblage. Identifications have been given to species where possible, however, where similarities are too great to allow for separation or where differences are not apparent due to preservation, taxa are grouped. With the exception of the Maloideae subfamily group, common English names are used in the following text.

By both fragment count and weight oak is the most commonly recorded taxon (537 fragments, 68.47 g) and contributes 84% of the analysed assemblage. Cherry/blackthorn is the next most abundant taxon (41 fragments) followed by those classed as indeterminate/unidentifiable (26 fragments). By weight, indeterminate wood was slightly more abundant (5.65 g) than cherry/blackthorn (4.33 g) and this is most likely due to

significant sediment encrustations on some of the fragments which augment the recorded weight. Field maple (14 fragments, 1.32 g); Maloideae group taxa (11 fragments, 1.33 g) and hazel/alder (seven fragments, 0.70 g) were relatively equally represented although, as with the Cherry/blackthorn, these taxa were only recorded in Middle/Late Bronze Age features.

When examined by period the differences in taxon diversity are striking (

Table 1), with the greatest diversity recorded in Middle/Late Bronze Age features while oak was the only taxon identified in samples dating to the Middle Iron Age and Late Iron Age/Romano-British period. This may be due in part to the greater number of samples and therefore charcoal fragments analysed from Middle/Late Bronze Age deposits when compared with the later occupations, although the pattern is consistent across four of the five Middle/Late Bronze Age samples (

Table 1).

Middle/Late Bronze Age

Fragments of oak dominate the four unurned cremation burial features, (1570, 1759, 1841 and 1881) in Area B. No other taxa were identified in 1881. The majority of oak fragments in these samples display little growth ring curvature suggesting they derive from large original pieces. Feature 1759 contained some oak roundwood fragments although the majority are from larger specimens. Cherry/blackthorn, hazel/alder and Maloideae group taxa were present in varying amounts in 1570, 1759 and 1841 and field maple was also recorded in 1570. Cherry/blackthorn and oak are prominent in the urned cremation burial feature 1727 (Area B), with smaller quantities of field maple, Maloideae group taxa, hazel/alder and a single fragment of vitrified bark. It is perhaps noteworthy that this feature provides the only example in which a taxon (in this case cherry/blackthorn) is more abundant than oak. Indeed the occurrence of cherry/blackthorn in the urned cremation accounts for the majority of fragments of this taxon across all the analysis samples.

Late Bronze Age/Early Iron Age

Cremation related feature 2513, located close to the Late Bronze Age settlement, consisted almost exclusively of oak with several fragments recorded as unidentifiable due to various states of preservation including vitrification and sediment encrusting and percolation. Sample <217> also produced a fragment of twig wood with five-pointed star-shaped pith wood characteristic of oak/sweet chestnut (Schweingruber 1990). It was not possible to refine the identification further as large rays (>10 seriate) were not visible to confirm the presence of oak rather than sweet chestnut. Oak is however the more likely identification in this Late Bronze Age/Early Iron Age feature as sweet chestnut has long been considered a Roman introduction (Godwin 1976) and may not even have been locally cultivated until significantly later (Jarman *et al.* 2015). The prominence of oak both in the feature and the site in general (

Table 1) supports the likely identification of this taxon.

Late Iron Age/early Romano British

Features 2852 and 2874, located in Enclosure E, contained unurned cremated bone and produced large assemblages of wood charcoal. Analysis has revealed the prominence of oak with no other taxa identified although a fragment of unidentifiable distorted wood was recorded in feature 2853 and it remains possible that other taxa are present in the large assemblage. Much of the oak derives from mature, slow grown wood with little ring curvature evident.

Discussion

All of the features included in this analysis relate to funerary activities at the site. Although they do not represent the primary pyre locations, it can be assumed that the vast majority of the charcoal present in the deposits was selected for fuel used within cremation pyres and subsequently became redeposited either urned or unurned together with some of the cremated bone and fuel ash. It is feasible that other wood, such as from artefacts, also became incorporated in the fuel debris although recognising this from the charcoal assemblage alone is more problematic. It could be suggested for example that taxa not typically considered fuel woods may indicate the presence of grave goods or other objects or they may have been selected for another culturally embedded reason. Of the taxa identified at Waterbrook Park, cherry/blackthorn and possible alder are perhaps the least suitable as fuels although Taylor (1981) notes that once lit the wood of *Prunus* species burn well and the burning quality of alder depends very much on the treatment of it. If seasoned for example it burns well (Taylor 1981) and it is well suited to charcoal production. The prominence of cherry/blackthorn in urned cremation burial 1727 is particularly notable and it is tempting to speculate that it was specifically selected, perhaps because the wood burns with an aromatic smell. This may also be true for other less prominent taxa although many of these could equally derive from bundles of kindling inserted into the pyre structure.

Oak wood appears to have been consistently available in the local vegetation from the Middle/Late Bronze Age to the Late Iron Age/early Romano-British period. Much of this oak derived from large or moderately large stem or branch wood from mature specimens and there is no evidence in these assemblages for the deliberate selection and use of smaller quick grown roundwood. This may reflect bias within the analysed samples as they all derive from

funerary related fuel deposits and large branches would have been well suited to construction of the pyre platform. There is however a notable absence of charcoal from other large trees such as ash or lime. While ash is a moderately frequent component of Bronze Age cremations in the south-east (such as Gale 2009, Alldritt 2006a, 2006b, 2006c, Challinor 2006, Mooney 2015), lime is poorly represented in charcoal assemblages from any context, perhaps due to its poor quality as a fuel, and its absence here is not unexpected. The prominence of oak is almost certainly a result of the high degree of selection employed, but also likely to reflect the composition of the local woodland. Records from Brisley Farm support the assertion with oak forming the main woody components of both the charcoal (Gale 2013) and pollen (Scaife 2013) sequences. At that site the more sporadic identifications of lime and ash pollen are interpreted as either distant but extensive stands or occasional local occurrences (Scaife 2013).

Oak is likely to have dominated the deciduous woodland, which could also have supported hazel with cherry/blackthorn at the woodland margins. Field maple indicates open vegetation while several of the Maloideae group taxa, such as hawthorn and whitebeam, could also thrive on open ground forming patches of scrub. The possible alder identifications may be indicative of riverine or wetland habitats. The absence taxa other than oak beyond the Middle/Late Bronze Age samples precludes any discussion of changes in local vegetation associated with the later occupations. Instead, it appears to highlight the high degree of fuel selection employed with the consistent preference of oak. However, based on the small number of samples analysed it is not possible to attribute this as evidence for distinct changes in fuel procurement strategies at the site and it remains probable that assemblages from other Late Bronze Age/Early Iron Age and Late Iron Age/early Romano-British features, especially those not associated with funerary practices, may hold evidence for a broader range of taxa.

Radiocarbon dating

Inés López-Dóriga

Introduction

A series of samples were radiocarbon dated with the purpose of obtaining a chronology for the funerary activity on the site, and particularly for the otherwise undated cremation deposits.

Methods

A total of nine radiocarbon samples from cremated human remains were submitted to the laboratory at the Scottish Universities Environmental Research Centre (SUERC), University of Glasgow. Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar *et al.* (2016). The calibrated age ranges were calculated with OxCal 4.2.3 (Bronk-Ramsey and Lee 2013) using the IntCal13 curve (Reimer *et al.* 2013). All radiocarbon dates are quoted as uncalibrated years before present (BP), followed by the lab code and the calibrated date-range (cal. BC) at the 2σ (95.4%) confidence, with the end points rounded out to the nearest 10 years.

Results

Eight of the nine radiocarbon dating samples were successfully measured, providing results (Table 19) largely falling in the Middle to Late Bronze Age (SUERC-80707 to SUERC-80711 and SUERC-81618), with two in the Middle or Middle to Late Iron Age (SUERC-80702 and SUERC-80703).

Discussion

It is important to note that all measured samples have been obtained on cremated human bone, and that oak was the dominant wood taxon found across all periods and site areas (see Allott, this vol.): this involves a potential old wood effect in all of the results (eg, Olsen *et al.* 2013; Snoeck *et al.* 2014), presuming oak was the main source of fuel used in the cremation process. The associated uncertainty of this old wood is difficult to estimate in absolute numbers and could range from decades to centuries, in the absence of direct radiocarbon dates on roundwood or short-lived charcoal from the same deposits where the cremated human measurements were obtained. Nevertheless, the results provide useful data for understanding the approximate chronology of the funerary activity on the different site areas.

f

The sequence of results concentrates naturally into two phases (Fig. 28), corresponding to the two site areas: Area B is largely Middle to Late Bronze Age, whilst Area A is broadly Late Iron Age and contemporaneous (*contiguous phases*, in the language of OxCal) to the burial activity in neighbouring site Cheeseman's Green (Gittins, Leivers and Powell forthcoming, marked in blue in Fig. 28).

The funerary activity in Area B belongs to the Middle to Late Bronze Age (SUERC-80707: 2963 ± 24 BP, 1260-1090 cal. BC; SUERC-80708: 2899 ± 24 BP, 1190-1010 cal. BC; SUERC-80709: 2954 ± 24 BP, 1260-1060 cal. BC; SUERC-80710: 2911 ± 21 BP, 1200-1020 cal. BC; SUERC-80711: 2941 ± 24 BP, 1220-1050 cal. BC; and SUERC-81618: 2913 ± 28 BP, 1210-1020 cal. BC), with all dates roughly concentrating in the second half of the second millennium BC.

The Area A funerary activity is dated to the Iron Age, with most of the activity probably concentrated in the Late Iron Age, as given by one of the results (SUERC-80703: 2048 ± 20 BP, 161 cal. BC- cal. AD 5), although one of the results (SUERC-80702: 2165 ± 24 BP, 360-120 cal. BC) is a more imprecise Middle or Middle to Late Iron Age result, due to the nature of the calibration curve for that particular period.

Part Three: Discussion

The archaeological investigations at Waterbrook Park revealed a settled landscape with occupation and from the Late Bronze Age to the Romano-British period. This evidence complements the growing body of material from sites of these periods in the environs of Ashford, such as at Brisley Farm (Johnson 2002; Archaeology South East 2006; Stevenson 2013), Cheeseman's Green (Gittins *et al.* forthcoming), Foster Road (Powell 2010; Powell and Birbeck 2010), Boys Hall Moat (Booth and Everson 1994; Booth *et al.* 2011), South-East of Park Farm (Powell 2012), Westhawk Farm (Booth *et al.* 2008), Orbital Park (Philp 1991) and West of Blind Lane, Sevington (Oxford Archaeology 1999), as well as more widely in Kent (Champion 2007; Booth *et al.* 2011).

Evidence pre-dating the Late Bronze Age was generally limited, as was evidence for activity in the Middle Iron Age. Although the lithic assemblage contains Mesolithic and Early Neolithic material, the types and quantities are much lower than at the adjoining site of Cheeseman's Green (Gittins forthcoming). The Cheeseman's Green assemblage is dominated by a concentration of Mesolithic material relating to the manufacture and use of tranche axes and microliths, whereas the Waterbrook Park assemblage is likely to result from small-scale knapping associated with transitory campsites on dry ground on the edges of or among the braided channels of the East Stour floodplain. The predominance of projectile points among the retouched tools suggests that the lithic toolkits were geared towards the creation and maintenance of hunting equipment, while the main areas of activity lay to the south-west, south of the East Stour. The Waterbrook Park lithic assemblage is however notable for the inclusion of Late Neolithic type fossils, as indications of activity at this time have so far been only rarely recovered from the sites.

Later Bronze Age and Iron Age

The first traces of any substantial use of the area date to the Late Bronze Age. Although formal division of the landscape is not yet evident, it is possible to envisage small unenclosed settlements associated areas of agricultural and mortuary activity (not necessarily exclusive). Scattered evidence of preceding Middle Bronze Age evidence was limited, but mostly comprised pottery of Deverel-Rimbury type redeposited in later features, in a pattern similar to that at the adjoining Cheeseman's Green. The two ring ditches in Area A, at 4.4 m and 7.7

m in internal diameter, compare with the 5.2 m diameter ring ditch 850 m to the west in Cheeseman's Green Area 10W (Gittins *et al.* forthcoming).

Late Iron Age and Romano-British

Apart from those fields which can reasonably be dated to the post-medieval and modern periods, largely due to their correspondence to mapped field boundaries, the majority of the field systems encountered during the excavations are either Iron Age or Romano-British date, with the beginnings of widespread landscape division in the Late Iron Age. This consisted of enclosures of various sizes, linked by trackways, probably for the movement and management of livestock both between fields and between different parts of the landscape.

The layout of the field systems appears to have been largely unaffected by the local topography, extending with little evident variation in form across both the valley floor and the adjacent areas of higher ground. There are suggestions that the elements of the field system were modified over time, but the relatively small number of locations where this is evident may indicate that the field system was relatively short lived. While much of the Romano-British reorganisation of the landscape was clearly undertaken within the context of the late prehistoric field system, many of the later ditches cut across and slight the earlier features.

Although predominantly given over to agriculture, evidence of other activities was recovered among the fields. Urned and unurned cremations were recovered, while square structures within some of the enclosures, although devoid of material and of unknown function, may be in some way related to these mortuary activities.

Medieval, post-medieval and modern

Evidence for medieval and post-medieval activity is almost entirely agricultural in nature. Only very small quantities of material were recovered from the excavations, and the reconstruction of the landscape depends mostly on documentary sources.

Palaeoenvironmental

The palaeoenvironmental evidence retrieved from the site has allowed the characterisation of the diversity and general dynamics of plant exploitation activities for domestic use and funerary activities over time, from the Bronze Age to the medieval period.

For the Bronze Age, the presence of by-products from cereals such as emmer wheat and barley and possibly broad beans is representative of the last stages of crop-processing such as de-husking and food preparation/cooking. The few weed seeds present suggest the cultivation of the loamy and clayey soils around the site and including the autumn sowing of cereals. The sparsity of the charred plant remains for this period suggest that the sampled features were away from areas of agricultural and domestic activities. This is consistent with the use of the area for funerary purposes. Oak dominates the charcoal assemblages from the analysed cremation-related deposits. It is assumed that the majority of the charcoal was selected for fuel used within cremation pyres and subsequently became redeposited together with the cremated bone. The prominence of oak is probably a result of fuel selection practices, as well as being a reflection of the composition of the local woodland. Oak is likely to have dominated the deciduous woodland, which could also have supported hazel with cherry/blackthorn at the woodland margins, and in the open or scrub areas field maple and the Maloideae, with taxa such as hawthorn and whitebeam. The riverine or wetland habitats encountered during excavation as palaeochannels in the near environment are indicated in the palaeoenvironmental remains by the presence of alder. Occasional hazelnuts, which may have been an important wild food resource, were present in some of the cremation deposits, together with tubers of onion couch grass, which are often found in prehistoric cremations and may have been gathered for use as fuel.

Data from the Late Iron Age and Romano-British contexts at the site also show only traces or small amounts of charred plant remains, with crops consisting of barley, emmer and spelt wheat. The few charred weed seeds included several of the weed seeds found in the Bronze Age samples, which may suggest the continued cultivation of the (damp) loamy soils around the site, with some spring-sowing of cereals. The presence of hawthorn and alder may be indicative of hedgerow/scrub vegetation close by during this period, although fuel selection for funerary activity was restricted consistently to oak.

The medieval samples indicate that bread or common wheat was probably the main crop, being cultivated on the loamy clay soils around the site, with hulled barley, rye, oats and beans also being grown. The good amounts and high densities of charred cereal grains in these features suggest a change of use of the area from mainly funerary to domestic, where large-scale activities associated with the latter stages of crop-processing were carried out.

Bibliography

- Alldritt, D. (2006a) Wood charcoal from White Horse Stone, Aylesford, Kent. CTRL Specialist Report Series
- Alldritt, D. (2006b) The wood charcoal from Beechbrook Wood, Hothfield, Kent. CTRL Specialist Report Series
- Alldritt, D. (2006c) The wood charcoal from Saltwood Tunnel, Kent. CTRL Specialist Report Series
- Allott, L. (2013) Charcoal from the Brisley Farm School Site. In, Stevenson, J., *Living by the Sword. The Archaeology of Brisley farm, Ashford, Kent. Spoilheap Monograph 6*, 353-354
- Ayton, G., 2013. The animal bones from Brisley Farm, in J. Stevenson, *Living by the Sword: the archaeology of Brisley Farm, Ashford, Kent*. Portslade, East Sussex, SpoilHeap Publications, 341-6
- Ayton, G., 2013. The animal bones from Brisley Farm, in J. Stevenson, *Living by the Sword: the archaeology of Brisley Farm, Ashford, Kent*. Portslade, East Sussex, SpoilHeap Publications, 341-6
- Booth, P, Bingham, AM and Lawrence, S 2008 The Roman Roadside Settlement at Westhawk Farm, Ashford, Kent: excavations 1998–9. Oxford, Oxford Archaeology Monogr 2
- Booth, P and Everson, P 1994 Earthwork survey and excavation at Boys Hall Moat, Sevington, Ashford, *Archaeol Cantiana* 114, 411–34
- Brewster, T C M 1963 *The Excavation of Staple Howe* Malton, Yorkshire: The East Riding Archaeological Research Committee
- British Geological Survey *Geology of Britain Viewer*
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (accessed December 2015)
- Britton, D 1968 *Late Bronze Age Finds in the Heathery Burn Cave, Co. Durham, Inventaria Archaeologica*, GB 55, London
- Campbell BMS, Galloway A, Keene D, & Murphy M 1993, *A Medieval Capital and its Grain Supply. Agrarian Production and Distribution in the London region c 1300*. Historical Geography Research Series No 30
- Cappers R T J, Bekker R M, and Jans J E A, 2006, *Digitale Zadenatlas Van Nederland. Digital Seed Atlas of the Netherlands*, Groningen
- Charles, R., 2008. Animal bones, in P. Booth, A-M, Bingham and S. Lawrence, *The Roman Roadside settlement at Westhawk*

- Farm, Ashford, Kent: excavations 1998–9. Oxford, Oxford Archaeological Unit Ltd, 335–7
- Challinor, D. (2006) *The wood charcoal from Pepper Hill, Northfleet, Kent*. CTRL Specialist Report Series
- Charles, R., 2008. Animal bones, in P. Booth, A-M, Bingham and S. Lawrence, *The Roman Roadside settlement at Westhawk Farm, Ashford, Kent: excavations 1998–9*. Oxford, Oxford Archaeological Unit Ltd, 335–7
- Clark, J. G. D., 1932 *The Mesolithic Age in Britain*. Cambridge: University Press.
- Clark, J. G. D., 1934 ‘The Classification of a Microlithic Culture: the Tardenoisian of Horsham’. *Archaeol. J.* 90, 52-77.
- Couldrey, P., 2007. Flint-tempered pottery from Period 4. In: Bennett, P., Couldrey, P., and Macpherson-Grant, N., 2007. *Highstead near Chislet, Kent*. Canterbury: Canterbury Archaeological Trust, 176-189.
- Cramp, K. and Leivers, M., 2010 ‘The Flint’ in J. Lewis, M. Leivers, L. Brown, A. Smith, K. Cramp, L. Mephram and C. Phillpotts *Landscape Evolution in the Middle Thames Valley*, cd-rom appendix 4. Salisbury: Framework Archaeology.
- Cross, R P 1990 *Waterbrook, Sevington, Archaeological Assessment: initial desk study*. Canterbury Archaeological Trust unpubl rep
- Dragendorff, H., 1895. Terra Sigillata, *Bonner Jahrbücher* xcvi (1895), 18-55 and xcvi (1896), 54-163.
- Gale, R. (2009) ‘Charcoal’. In Hutcheson, A. & Andrews, P. (Eds) ‘A Late Bronze Age, Anglo-Saxon and Medieval Settlement Site at Manston Road, Ramsgate’. In Andrews, P., Dinwiddy, K.E., Ellis, C., Hutcheson, A., Phillpotts, C., Powell, A.B. & Schuster, J. (Eds.) *Kentish Sites and Sites of Kent: A miscellany of four archaeological excavations*. Salisbury: Wessex Archaeology. Pp. 236-237
- Gale, R. (2013) Charcoal from Brisley Farm. In Stevenson, J., *Living by the Sword. The Archaeology of Brisley farm, Ashford, Kent*. Spoilheap Monograph 6, 347-353
- Gillam, J P, 1970. *Types of Roman Coarse Pottery Vessels in Northern Britain*, (3rd ed.), Newcastle upon-Tyne.
- Giorgi J, and Stafford L, 2006, *The Channel Tunnel Rail Link: Palaeoenvironmental Scheme-wide Overview* (Archive Report)
- Giorgi J, 2017, *The Charred and Waterlogged Plant Remains from 77711 Cheeseman’s Green, Ashford* (Wessex Archaeology Archive Report)

- Gittins, E. K., in. prep. 'Worked flint' in E Gittins, M Leivers and A B Powell, *Excavations at Cheeseman's Green: The Development of Prehistoric, Romano-British and Medieval Landscapes*
- Gittins, E, Leivers, M and Powell, A B forthcoming *Excavations at Cheeseman's Green: the development of prehistoric, Romano-British and medieval landscapes*
- Godwin, H. (1975) *The History of the British Flora*. Cambridge University Press,
- CambridgeGreen, K., 1979. *The Pre-Flavian Fine Wares*, Cardiff: University of Wales Press.
- Grant, A 1982 The use of tooth wear as a guide to the age of domestic animals, in B Wilson, C Grigson and S Payne (eds.) *Ageing and Sexing Animal Bones from Archaeological Sites*. Oxford, BAR 109, 91–108
- Green, K., 1979. *The Pre-Flavian Fine Wares*, Cardiff: University of Wales Press.
- Green, M., 2007. The Roman pottery. In: Bennett, P., Couldrey, P., and Macpherson-Grant, N., 2007. *Highstead near Chislet, Kent*. Canterbury: Canterbury Archaeological Trust, 214-250.
- Green, S., 1984 'Flint Arrowheads: typology and interpretation'. *Lithics* 5, 19-39.
- Greig J, 1991, The British Isles, *Progress in Old World Palaeoethnobotany* (eds W van Zeist, K Wasylikowa and K-E. Behre), Rotterdam, 229-334
- Halstead, P 1985 A study of mandibular teeth from Romano-British contexts at Maxey, in F Pryor and C. French, *Archaeology and Environment in the Lower Welland Valley Volume 1*. East Anglian Archaeol Rep 27, 219–24
- Hambleton, E 1999 *Animal Husbandry Regimes in Iron Age Britain: a comparative study of faunal assemblages from British archaeological sites*. BAR 282
- Hammond PW, 1995, *Food and Feast in Medieval England*
- Hanf M, 1983, *The Arable Weeds of Europe*. Ludwigshafen
- Hartley, K, 1998. The incidence of stamped mortaria in the Roman Empire with special reference to imports to Britain, in J Bird (ed.), *Form and Fabric: studies in Rome's material past in honour of B R Hartley*, Oxbow Monograph 80, 199-217. Oxford: Oxbow Books.
- Hather, J. G. (2000) *The Identification of the Northern European Woods: A Guide for archaeologists and conservators*. London: Archetype Publications Ltd.
- Healy, F., 1985, The struck flint, in S J Shennan, F Healy and I F Smith, The excavation of a ring-ditch at Tye Field, Lawford, Essex, *Archaeol J* **142**, 177-207

- Higbee, L., forthcoming Animal bone, in Wessex Archaeology, *Excavations at Cheeseman's Green: the development of prehistoric, Romano-British and medieval landscapes*. Wessex Archaeology Monogr.
- Jacomet S, 2006, *Identification of cereal remains from archaeological sites* 2nd edition. Archaeobotany Lab IPAS, Basel University
- Jarman, R., Chambers, F.M., Webb, J. and Russell, K. (2015) Sweet Chestnut in Britain: when and whence did it arrive? Searching for ancient 'chestnut-scapes'. AEA conference Nottingham 2015 poster presentation
- Jones, G. P., 2009. Later prehistoric and Roman pottery from the route of the Weatherlees–Margate–Broadstairs wastewater pipeline, on-line specialist report associated with P Andrews, K Egging Dinwiddy, C Ellis, A. Hutcheson, C Philpotts, A B Powell and J Schuster, *Kentish Sites and Sites of Kent: a miscellany of four archaeological excavations*. Salisbury, Wessex Archaeology Rep 24:
<http://www.wessexarch.co.uk/projects/kent/margate>
- Jones. G. P., 2012, Pottery, in A. Powell, *Excavations South-East of Park Farm, Ashford, Kent*, <http://www.kentarchaeology.org.uk/10/006.pdf>
- [Jones, G. P., and Seager Smith, R. H., forthcoming, Pottery, in Wessex Archaeology, Excavations at Cheesemans Green, Kent.](#)
- Keepax, C. A. (1988) *Charcoal analysis with particular reference to archaeological sites in Britain*. Ph.D. Dissertation, University of London
- Knight, S., 2012. Animal bone, in A.B. Powell, *Excavations South-East of Park Farm, Ashford, Kent, Part 2: finds and environmental reports*. Kent Archaeol. Soc. eArchaeol. Rep. <http://www.kentarchaeology.ac/archrep/Ashford03.pdf>
- Lauwerier, R C G M 1988 *Animals in Roman Times in the Dutch Eastern River Area*. Nederlandse Oudheden 12/Project Oostelijk Rivierengebied 1, Amersfoort
- Lyman, R.L., 1994. *Vertebrate Taphonomy*. Cambridge Manuals in Archaeology. Cambridge, Cambridge University Press
- Lyne, M 2006a *The late Iron Age and Roman pottery from Leda Cottages, Westwell, Kent (ARC 430/83+200)* CTRL Specialist Report Series, in ADS 2006
- Lyne, M., 2006b. *The Late Iron Age and Roman pottery from Beechbrook Wood, Hothfield, Kent*. CTRL Specialist Report Series, in ADS 2006

- Lyne, M., 2008. Roman and medieval pottery. In: Booth, P., Bingham, A. M., and Lawrence, S., *The Roman roadside settlement at Westhawk Farm, Ashford, Kent, excavations 1998-9*, Oxford: Oxford Archaeology, 207-259.
- Manning, W H *Catalogue of the Romano-British Iron Tools, Fittings and Weapons in the British Museum*, London: British Museum Publications
- Marter Brown, K and Seager Smith, R 2012. What did the apocrypha know? Glued pottery vessels from Springhead and other Romano-British sites in south and eastern England, in B Jervis and A Kyle, *Make-do and Mend: archaeologies of compromise, repair and reuse*, 5–11. Oxford, BAR Int Ser 2408
- McParland, L.C., Collinson, M.E., Scott, A.C., Campbell, G and Veal, R. (2010) Is vitrification in charcoal a result of high temperature burning of wood? *Journal of Archaeological Science* 37, 10: 2679-2687
- Moffet L, Robinson M, Straker V, 1989, Cereals, fruit and nuts: Charred plant remains from Neolithic sites in England and Wales and the Neolithic Economy, in A Milles, D. Williams and N Gardner (eds) *The Beginnings of Agriculture*. British Archaeological Reports, International Series 496, 243-61
- Moffet L, 2006, The Archaeology of Medieval Plant Foods, in CM Woolgar, D Serjeanston & T Waldron, *Food in Medieval England. Diet and Nutrition*, 41-55
- Mooney, D. (2015) Charcoal, in, D. Hart, Around the Ancient Track: Archaeological Excavations for the Brighton and Hove Waste Water Treatment Works and adjacent housing at Peacehaven, East Sussex. Spoilheap Monograph 10, 262-271
- Mohen, J-P et Bailloud, G 1987 *La Vie Quotidienne, Les Fouilles du Fort-Harrouard*, Paris: Picard
- Monaghan, J., 1987. *Upchurch and North Kent pottery. A ceramic typology for northern Kent, first to third centuries A.D.*, Oxford: British Archaeological Reports 173.
- Montague, R Bone and antler small objects, 407-414. In R M J Cleal, K E Walker and R Montague, 1995 *Stonehenge in its Landscape. Twentieth century excavations*. London: English Heritage
- Morris, E. L., 1994. *The analysis of pottery*, unpublished Wessex Archaeology Guidelines 4
- Needham, S 2007 Evidence for Metalworking. In P Bennett, P Couldrey and N Macpherson-Grant, N *Highstead near Chislet, Kent*. Canterbury: Canterbury Archaeological Trust, 258-265
- O'Connor, T P 1989 Bones from Anglo-Scandinavian Levels at 16-22 Coppergate. *The Archaeology of York* 15 (3), 137–207. London, CBA

- Oxford Archaeology 1999 *West of Blind Lane, Sevington, Kent (ARC BLN 98): detailed archaeological works interim report*. Oxford, unpubl rep
- Payne, S 1973 Kill-off patterns in sheep and goats: the mandibles from Asvan Kale, *Anatolian Studies* 23, 281–303
- Paynter, S 2008 Metalworking remains. In P Booth, A-M Bingham and S Lawrence *The Roman Roadside Settlement at Westhawk Farm, Ashford, Kent, Excavations 1998-9*, Oxford, Oxford Archaeological Unit, 267-301
- PCRG, SGRP and MPRG 2016 *A Standard for Pottery Studies in Archaeology*,
- Peacock, D. P. S. and Williams, D. F., 1991 *Amphorae and the Roman economy: an introductory guide*. London: Longman.
- Philp, B 1991 Excavations on the Orbital Park Site – Ashford, *Kent Archaeol Rev* 104, 74–7
- Pollard, R. J., 1988. *The Roman pottery of Kent*. Maidstone: The Kent Archaeological Society.
- Powell, A B 2010 Foster Road, Ashford, *Archaeol Cantiana* 130, 376–9
- Powell, A B and Birbeck, V 2010 *Excavation of a multi-period site at Foster Road, Ashford, 2006*. Kent Archaeol Soc eArchaeol rep
<http://www.kentarchaeology.ac/archrep/archrep.html>
- Powell, A B 2012 *Excavations South-East of Park Farm, Ashford, Kent Part 1: main report*, Kent Archaeol Soc eArchaeol rep www.kentarchaeology.ac/archrep/Ashford03.pdf
- Pre-Construct Geophysics 2003 Fluxgate Gradiometer Survey, Land at Waterbrook Park, Ashford, Kent. Unpubl rep
- Prior, J., Alvin, K.L. (1983) Structural changes on charring woods of *Dichrostachys* and *Salix* from southern Africa. *International Association of Wood Anatomists Bulletin* 4, 197-206
- Rady, J 1999 Waterbrook Farm, Ashford: report on evaluation trenching in 1992; report and assessment of excavations in 1993. Canterbury Archaeological Trust unpubl rep
- Richards, J 1990 *The Stonehenge Environs Project*, London: Historic Buildings and Monuments Commission for England, English Heritage Arch Rep 16
- Robinson, M. 1988, The significance of the tubers of *Arrhenatherum elatius* (L.) Beauv., in G. Lambrick (et al) *The Rollright Stones, megaliths, monuments and settlements in the prehistoric landscape. English Heritage Archaeological Report 6*. London: HBMC (E), England Oxfordshire

- Scaife, R., (2013) Pollen Analysis. In Stevenson, J., *Living by the Sword. The Archaeology of Brisley farm, Ashford, Kent. Spoilheap Monograph 6*, 363-370
- Schoch, W., Heller, I., Schweingruber, F. H., & Kienast, F. (2004) *Wood anatomy of central European Species*. Online version: www.woodanatomy.ch. Accessed 20.10.12
- Schweingruber, F.H. (1990) *Anatomy of European Woods*, Bern
- Seager Smith, R., 2015. Later prehistoric and Romano-British pottery, in P Andrews, P Booth, A P Fitzpatrick and K Welsh K *Digging at the Gateway. Archaeological landscapes of south Thanet: the archaeology of the East Kent Access (Phase II), Volume 2, Finds, Environmental and Dating Reports*, 193–246. Oxford/Salisbury, Oxford Wessex Archaeology Monogr 8
- Serjeantson, D 1996 The animal bone, in S. Needham and T. Spence (eds.) *Refuse and disposal at Area 16 East Runnymede: Runnymede Bridge Research Excavations, Volume 2*. London, British Museum Press, 194–224
- Shaffrey, R 2011 Worked stone. In E Biddulph, R Seager Smith and J Schuster *Settling the Ebbsfleet Valley. High Speed 1 Excavations at Springhead and Northfleet, Kent. The Late Iron Age, Roman, Saxon and Medieval Landscape. Volume 2: Late Iron Age to Roman Finds Reports*, Salisbury and Oxford: Oxford Wessex Archaeology, 363-377
- Shipman, P., Foster, G. and Schoeninger, M., 1984. Burnt bones and teeth: an experimental study of color, morphology, crystal structure and shrinkage. *J. Archaeol. Sci.* 11, 307–35
- Silver, I A 1969 The ageing of domestic animals, in D R Brothwell and E S Higgs (eds.) *Science in Archaeology: a survey of progress and research*. London, Thames and Hudson 283–301
- Stace, C. (1997) *New Flora of the British Isles*. Cambridge University Press, Cambridge
- Stevens C, 2012, Charred Plant Remains, in A B Powell, *Excavations South-East of Park Farm, Ashford, Kent*. Part 2: Finds and Environmental Reports KAS eArchaeological rep. www.kentarchaeology.ac/archrep/Ashford03.pdf, 31-37
- Stevenson, J 2013 *Living by the Sword: the archaeology of Brisley Farm, Ashford, Kent*. Portslade, East Sussex, SpoilHeap Publications
- Taylor, M. (1981) *Wood in Archaeology*. Shire Archaeology 17. Aylesbury: Shire Publications Ltd
- Thompson, I., 1982. *Grog-tempered 'Belgic' pottery of south-eastern England*. Oxford: British Archaeological Reports 108.

- Von den Driesch, A 1976 *A Guide to the Measurement of Animal Bones from Archaeological Sites*. Peabody Museum Bulletin 1. Cambridge Massachusetts, Harvard University
- Wessex Archaeology 2007 *Waterbrook Park, Ashford: interim report for Phase 1 archaeological excavation (Site B)*. Salisbury, unpubl rep
- Wessex Archaeology 2008 *Area A, Waterbrook Park, Ashford, Kent: post-excavation assessment*. Salisbury, unpubl rep ref: 65742.01
- Wessex Archaeology and Jacobi, R., 2014 *Palaeolithic and Mesolithic Lithic Artefact (PaMELA) database*. http://archaeologydataservice.ac.uk/archives/view/pamela_2014/ [accessed 23 April 2018].
- Wilson P, and King M, 2003, *Arable Plants – a field guide*
- Wilson CA, 1991, *Food and Drink in Britain. From the Stone Age to Recent Times* Harmondsworth
- Young, R. and Humphrey, J., 1999 'Flint use in England after the Bronze Age: time for a re-evaluation?' *Proc. Prehist. Soc.* 65, 231-42.
- Zohary, D; Hopf, M, Weiss, E 2012 *Domestication of Plants in the Old World. The origin and spread of cultivated plants in West Asia, Europe and the Nile Valley*. Oxford University Press

Appendix 1: Tables

Table 1 Number of identified animal bones present (or NISP) by period

Species	Bronze Age- Early Iron Age	Late Iron Age- early Romano- British	medieval- modern	undated	Total
cattle	10	16	4	3	33
sheep/goat	8	33			41
pig		2			2
horse		1			1
Total identified	18	52	4	3	77
large mammal	4	122		1	127
medium mammal	4	17			21
mammal	156	506	6	86	754
Total unidentified	164	645	6	87	902
Overall total	182	697	10	90	979

Table 2 Condition of animal bone fragments by period

Condition	Bronze Age- Early Iron Age	Late Iron Age- early Romano- British	medieval- modern	undated	Total	%
calcined	24	633		80	737	75.5
charred	1	22			23	2.5
unburnt	157	42	10	10	219	22
Total	182	697	10	90	979	100

Table 3 Composition of the flint assemblage

Flint Type	Number	% of assemblage
<i>Retouched tools</i>		
scrapers	64	3.39
piercers	12	0.65
burins	3	0.21
microliths	7	0.37
projectile points	14	0.79
truncations	7	0.42
knives	11	0.58
notched pieces	10	0.90
knife/truncation	1	0.05
denticulates	5	0.26
misc. retouched pieces	89	4.72
<i>Retouched tools sub-total</i>	225	12.34
<i>Unretouched tools</i>		
hammers	2	0.11
<i>Debitage</i>		
flakes (incl. broken)	1274	67.48
blades (incl. broken)	143	7.57
bladelets	18	0.95
irregulardebitage	50	2.65
chips	14	0.74
platform rejuvenation flakes	19	1.01
Crested flakes	3	0.16
<i>Tooldebitage</i>		
axe thinning flakes	2	0.11
microburins	1	0.05
<i>Debitage sub-total</i>	1524	80.72
<i>Cores</i>		
flake core	65	3.44
blade core	17	0.90
bladelet core	4	0.21
core fragments	43	2.28
<i>Cores sub-total</i>	129	6.83
Total	1880	100%

Table 4 Quantification of prehistoric and Romano-British pottery by phase

Phase	Number	Weight (g)
Early Bronze Age	121	620
Middle to Late Bronze Age	3696	24,364
Iron Age	424	2997
Prehistoric unspecified	358	2148
Late Iron Age to Romano-British	17,224	134,100
Total	21,823	164,229

Table 5 Quantification of Middle to Late Bronze Age fabrics

Fabric	Number	Weight (g)
<i>Flint-tempered</i>		
Coarse flint-tempered	70	545
Fine flint-tempered	73	339
Flint-tempered wares	1540	10073
Glauconitic sand and flint-tempered	27	175
<i>Grog-tempered</i>		
Grog-tempered	695	4428
Fine grog-tempered	63	265
Glauconitic sand and grog-tempered	16	178
<i>Grog and flint-tempered</i>		
Flint and grog-tempered (flint dominant)	475	3698
Fine flint and grog-tempered	91	464
Grog and flint-tempered (grog dominant)	523	3489
Fine grog and flint-tempered ware	103	516
<i>Sandy ware</i>		
Sandy ware	9	70
Glauconitic sandy wares	9	98
<i>Rock-tempered</i>		
Rock-tempered	2	26
Total	3696	24364

Table 6 Quantification of Middle to Late Iron Age pottery, by fabric type

Ware	No.	Wg (g)
Flint-tempered	31	221
Flint and grog-tempered	55	286
Grog-tempered	240	1583
Iron-gritted	13	190
Sand and iron gritted	24	379
Sandy	55	314
Glauconitic sandy	5	15
Vesicular	1	9
Total	424	2997

**Table 7 Quantification of prehistoric pottery, phase unspecified, by fabric
(number/weight of sherds)**

Fabric	Number	Weight (g)
<i>Flint-tempered</i>		
Fine flint-tempered	3	12
Flint-tempered	48	337
<i>Flint and grog-tempered</i>		
Flint and grog-tempered (flint dominant)	6	26
Fine flint and grog-tempered	3	51
Grog and flint-tempered ware (grog dominant)	116	692
<i>Grog-tempered</i>		
Grog-tempered wares	169	968
<i>Sandy wares</i>		
Sandy wares	8	48
Glauconitic sand and flint-tempered	2	7
Glauconitic sandy wares	1	2
Sand and iron gritted	2	5
Total	358	2148

Table 8 Quantification of Late Iron Age and Roman pottery fabrics

Fabric	No.	% of no.	Weight (g)	% of weight
<i>Imported finewares</i>	196	1.14	1159	0.86
South Gaulish samian	67	0.39	433	0.32
Central Gaulish samian	17	0.10	125	0.09
Samian, unassigned	76	0.44	517	0.39
?samian	2	0.01	8	0.01
Central Gaulish colour-coated ware	2	0.01	14	0.01
Lower Rhineland colour-coated ware	32	0.19	62	0.05
<i>Imported coarsewares</i>	25	0.15	968	0.72
Dressel 20 amphora	18	0.10	534	0.40
Pelichet 47 amphora	2	0.01	22	0.02
Amphora, unsourced	1	0.01	40	0.03
NOG WH 4	4	0.02	372	0.28
<i>Oxidised wares</i>	464	2.69	1842	1.37
Whiteware	70	0.41	362	0.27
Oxidised ware	368	2.14	1315	0.98
Fine oxidised ware	23	0.13	65	0.05
Canterbury sandy orange ware	1	0.01	47	0.04
Canterbury buff ware	2	0.01	53	0.04
<i>Coarsewares</i>	16539	96.02	130131	97.04
Grog-tempered	15213	88.32	124491	92.83
Greyware	491	2.85	2242	1.67
Fine greyware	450	2.61	1212	0.90
Sandy ware	108	0.63	575	0.43
Fine sandy ware	60	0.35	298	0.22
Glauconitic sandy ware	24	0.14	345	0.26
Flint-tempered	123	0.71	689	0.51
Flint and grog-tempered	20	0.12	116	0.09
Iron-gritted	6	0.03	17	0.01
Organic-tempered	19	0.11	37	0.03
Other vesicular	6	0.03	19	0.01
Unspecified	19	0.11	90	0.07
Total	17224		134,100	

Table 9 Quantification of finds by material type

Material	Number	Weight (g)
Pottery	21,823	164,229
Ceramic building material	34	1683
Fired clay	583	9676
Stone	10	2387
Worked flint	1880	-
Burnt flint	111	2239
Slag	102	2225
Metalwork		
<i>Copper alloy</i>	<i>11</i>	<i>113</i>
<i>Iron</i>	<i>12</i>	<i>263</i>
<i>Lead</i>	<i>11</i>	<i>232</i>
Glass	5	14
Worked bone	35	13
Human bone		
Animal bone	979	3065

Table 10 Quantification of fired clay, by phase

Phase	Number	Weight (g)
Later Bronze Age to Early Iron Age	207	5353
Middle to Late Iron Age	12	162
Late Iron Age and Roman	174	2243
Late Prehistoric	92	928
Medieval	19	219
Post Medieval	1	24
Uncertain	78	747
Total	583	9676

Table 11 Human bone - summary of results

context	cut	date	deposit type	bone weight (g)	age/sex	pathology & pyre goods
Area B						
1096**	1095	M/LBA ^s	un. burial + rpd	155.7	adult >25 yr ??male	?animal (0.4g), sp. u/id
1150*	1149	M/LBA ^s	un. burial + rpd	456.5	adult >18 yr ??female	animal (0.8g), inc. sheep & ?bird; lower & S
1175	1174		?rpd	1.0	>infant (>4 yr)	
1279	1278		?rpd	0.5g	>infant (>4 yr)	
1304	1303		crd inc. rpd	67.7	subadult/adult 13–40 yr	
1540	1539		un. burial + rpd	716.7	1) subadult 14–17 yr 2) adult >23 yr	exocranial porosity – head lice?; 1.1g worked bone; animal? u/id sp. 0.9g
1571*	1570	M/LBA ^s	un.burial + rpd	1491.7	1) adult 23–40 yr ?female 2) foetus/neonate	fragments 4 worked bone pins (1.8g); blue/green spot staining right mandible; animal (5g) inc. sheep
1677*	1676		rpd	40.2	subadult/adult >15 yr	
1697*	1696		rpd	36.6	subadult/adult >15 yr	
1740*	1739		crd - ?un. burial + rpd	33.8	subadult/adult >14 yr	
1750	1749		?rpd	1.6	subadult/adult >13 yr	
1752	1751		?R inc. fuel ash	1.6	>infant (>4 yr)	
1754	1753		?rpd	<0.1	?human/?animal	
1756**	1755		crd - ?un. burial + rpd	56.1	subadult/adult 15-30 yr ??female	
1758**	1757		?rpd	16.3	>infant (>4 yr)	
1760**	1759	M/LBA ^s	rpd	16.3	subadult/adult >12 yr	
1762	1761		?rpd	0.2	>neonate	
1770**	1769		?rpd	1.3	?human/?animal	
1772*	1771		?rpd	0.6	?human/?animal (>neonate)	
1774*	1773		rpd	14.9	subadult/adult >12 yr	
1781	1780		crd – ?rpd	0.3	?human, ?immature	
1793**	1972		crd – ?rpd	50.5	subadult/adult >15 yr	
1801	1800		?rpd	0.2	?human (>infant)	
1805**	1804		?rpd	<0.1	?human	
1825**	1824	LBA	?rpd	3.1	>infant (>4 yr)	burnt sherds –?pyre good
1835	1834		crd inc. rpd	28.6	subadult/adult >12 yr	endocranial porosity – head lice?
1842	1841	M/LBA ^s	?un.burial +	93.4	subadult/adult >15 yr	

			rpdp/?rpd			
1844	1843		crd inc. rpd	11.4	subadult/adult >12 yr	2 (0.2g) fragments worked bone pin
1851	1850		crd inc. rpd	35.1	adult >18 yr	
1880	1879		crd – ?rpd	4.2	subadult/adult >15 yr	
1882	1881	M/LBA ^s	un.burial + rpd	361.1	adult >18 yr ??female	enthesophytes – finger phalanx
1892**	1891		crd inc. rpd	8.2	human >10 yr	
1896*	1895		?rpd	0.1	?human	
1900	1899		fuel ash/?rpd	<0.1	?human	
1904	1903		fuel ash/?rpd	0.1	?human	
1912**	1911		crd inc. rpd	0.3	infant 0.5–5 yr	
1931	1930		crd inc. rpd	5.4	subadult/adult >12 yr	
1973	1972		R	0.2	?human (>12 yr)	
1988	1987		crd - ?un. burial + rpd	41.3	subadult/adult >15 yr	
Area A						
2504	2503		R	1.6	?human	
2506*	2505		crd - ?un. burial + rpd	51.4	subadult/adult >15 yr ??female	
2508	2507		crd – ?rpd	19.6	subadult/adult >15 yr	
2510	2509		rpdp	4.5	subadult/adult >18 yr	
2512	2511		R – inc. fuel ash	0.9	subadult/adult >15 yr	
2514	2513	MIA ^s	un. burial + rpd	198.8	subadult/adult 15–30 yr ??female	enthesophytes – left patella; morphological variation – wormian (?Inca) bone
2528	2527		crd - ?un. burial + rpd	16.5	human >8 yr	
2709	2708		?un. burial + rpd	117.9	adult >18 yr	7 fragments (0.8g) worked bone pin
2715	2714		crd inc. rpd	31.6	subadult/adult >12 yr	
2730	2729	LIA/RB	R (ditch)	0.4	?human (>12 yr)	
2854	2853	?LIA/ RB	crd inc. fuel ash (?rpd)	64.6	adult/subadult >15 yr	0.8g medium-sized mammal
2862	2861	MIA ^s	?un. burial + rpd	121.1	subadult/adult >12 yr	14.9 g ?animal bone (species u/id)
2875	2874		?crd inc. rpd	36.6	adult >18 yr	enthesophytes – femur
2915	2914		crd - ?un. burial + rpd	30	adult >20 yr	
2893	2892		?rpd	0.7	human >infant (>5 yr)	

WBF A93 (south Area A)						
69 inc. 62 & 70	541 (?537)	LIA/RB	un. burial + rpd	262.0	1. juvenile 9–10 yr 2. subadult/adult >15 yr 3. neonate/young infant <2 yr	0.1g juvenile pig tooth; melted scarps copper-alloy; b/g spot staining vault frag
71			?R	9.7	infant/?juvenile	ceramic vessel
72	542		rpd	31.4	adult >30 yr	

KEY: * – largely undisturbed; ** – undisturbed; un. – unurned; rpd – redeposited pyre debris; crd – cremation-related deposit; \$ – C14 dated; M/LBA – Middle/Late Bronze Age; M/LIA – Middle/Late Iron Age; RB – Romano-British

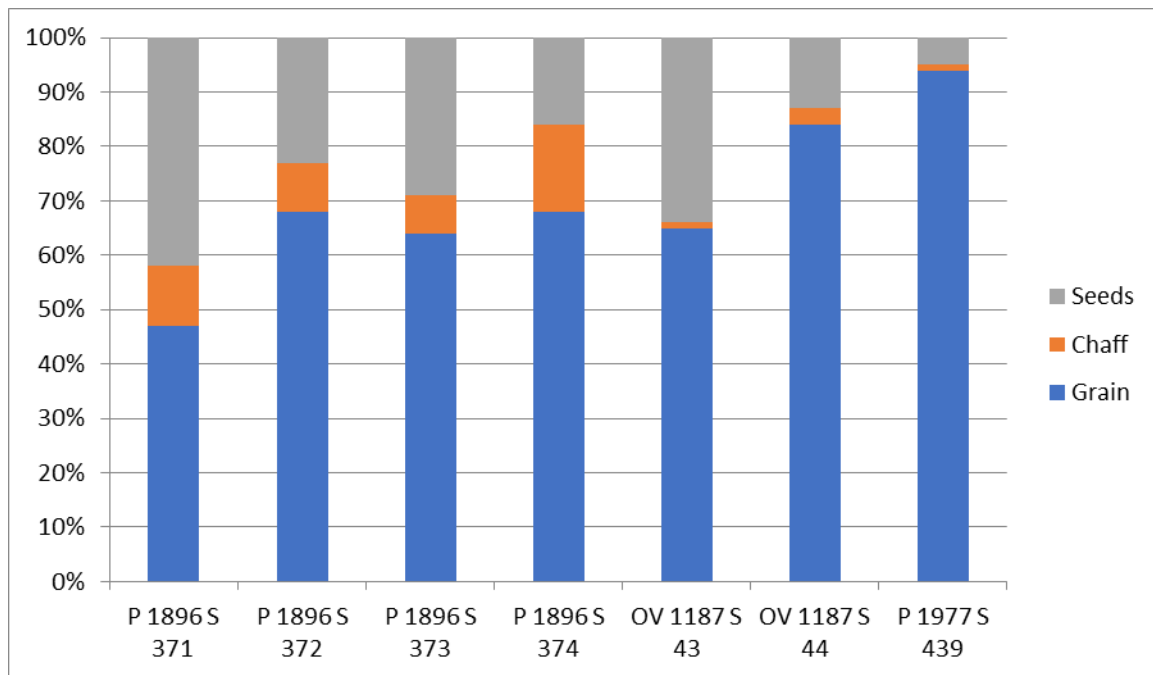
Table 12 Sample summary

	Rapidly assessed	Fully assessed	Analysed	Total
Bulk samples	-	358	9	358
Bulk cremation samples	58	163	28	221
Monolith samples	-	-	-	3
		508	37	582

Table 13 Frequencies and percentages of grain, chaff and weed seeds in the medieval samples (with >100 quantified items)

Context type	Pit fill	Pit fill	Pit fill	Pit fill	Oven fill	Oven fill	Pit fill
Context number	1896	1896	1896	1896	1187	1187	1977
Sample	371	372	373	374	43	44	439
Grains	47 (47%)	180 (68%)	167 (64%)	100 (68%)	200 (65%)	525 (84%)	160 (94%)
Cereal chaff	11 (11%)	24 (9%)	18 (7%)	24 (16%)	1 (<1%)	16 (3%)	1 (1%)
Weed seeds	42 (42%)	60 (23%)	74 (29%)	23 (16%)	106 (35%)	82 (13%)	9 (5%)
Total nos. items	100	264	259	147	307	623	170
Item density	25	44	32.4	73.5	30.7	62.3	7.7

Table 14 Proportions of grain, chaff, and weed seeds in the medieval samples (with >100 quantified items)



OV=oven fill; P=pit fill

Table 15 Assessment of bulk sediment samples

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
Prehistoric ditches														
1034	1035	1085	65741_2	9	10		90%, B	-	-	-		<1/<1ml	-	heterogenous, iron coating
1045	1047	1085	65741_4	10	10		70%, A*	-	-	-		0/<1	-	iron coating
Prehistoric hearth														
1802	1803		65741_267	10	750		1%, B, I	-	-	-		250/300ml	-	iron coating
Prehistoric pits														
1092	1093		65741_5	19	340 0	25%	B <1%, C, F	-	-	-		500/250ml	-	iron coating
1105	1106		65741_14	5	30		5%, A**	-	-	C	Poaceae	2/4ml	-	Poor (grain fragments only), iron coating
1125	1126		65741_17	10	300		15%, C	C	-	A	Triticeae, <i>Corylus avellana</i>	100/50ml	-	Poor (grain fragments only),
1129	1130		65741_21	9	90		30%, B, E, F	-	-	C	Poaceae (<i>Poa/Phleum</i>)	60/20ml		iron coating
1129	1131		65741_22	20	500		10%, A, E	-	-	-		200/150		iron coating
1257	1258		65741_51	6	4.5		20%, A*, E, I	C	-	-	<i>Hordeum vulgare</i>	1/<1ml	-	Heterogeneous, iron coating
1361	1362		65741_72	20	30		20%, A, E	-	-	-		8/4ml	-	iron coating
1381	1382		65741_78	8	125		<1%, A, E, I	-	-	C	cf. <i>Prunus</i> sp. endocarp	25/30ml	-	Poor, iron coating
1460	1461		65741_90	8	5		80%, C	C	-	-	Triticeae	-	-	Poor (just fragments), -

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1466	1467		65741_91	10	10		30%, A, E, I	C	-	-	Triticeae	0/<1ml	-	Poor,
1492	1493		65741_95	3	15		20%	-	-	-		<1/<1ml	-	iron coating
1629	1631		65741_142	10	35		1%, A	-	-	-		5/3ml	-	iron coating
1646	1647		65741_145	4	1		90%, C	-	-	-		Trace	-	
1814	1815		65741_305	5	3.5		70%, A, I	-	-	-		1/<1ml	-	iron coating
1824	1825		65741_284	7	50		<1%, B, E	-	-	C	<i>Corylus avellana</i>	25/15ml		Fair,
1824	1825		65741_285	6	80		2%, A	-	-	C	<i>Corylus avellana</i>	30/30ml		Fair,
1824	1825		65741_286	10	250		<1%, B, E	-	-	C	<i>Corylus avellana</i>	65/70ml		Fair,
1824	1825		65741_287	10	230		<1%, C, E			C	<i>Corylus avellana</i>	50/70ml		Fair,
1824	1825		65741_288	3	25		<1%, B, E, I	-	-	-		4/8ml		
1824	1825		65741_289	4	50		2%, B, E	-	-	C	<i>Corylus avellana</i>	15/15ml		Fair,
1824	1825		65741_290	7	125		<1%, C, I	-	-	C	<i>Corylus avellana</i>	30/40ml		Fair,
1824	1825		65741_291	8	175		<1%, B, E	-	-	C	<i>Corylus avellana</i>	40/60ml		Fair,
1932	1933		65741_424	5	15		10%, C, I	-	-	-		10/1ml	-	iron coating
1956	1957		65741_433	7	10		1%, A*, E, I	C	-	-	cf. <i>Hordeum vulgare</i>	3/1ml	-	Poor, iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1997	1998		65741_450	5	175		<1%, B, E, I, F	C	C	C	<i>Triticum</i> sp. (inc. <i>dicoccum</i>) glume bases, spikelet forks and grains, <i>Hordeum</i> <i>vulgare</i> grains, Poaceae	80/45ml	-	Poor, iron coating
Prehistoric pit with cremation related deposits														
1095	1096		65741_6	8	80		40%, C	C	-	-	Triticeae	10/3ml	Moll-f (C)	Poor (grain fragments only), iron coating
1095	1096		65741_7	4	80		35%, C	C	-	-	<i>Triticeae</i>	5/2ml	-	Poor (grain fragments only), iron coating
1095	1096		65741_8	3	50		50%	C	-	B	<i>cf. Triticum</i> sp., <i>Arrhenatherum</i> <i>elatius</i>	3/2ml	-	Poor (grain fragments only), iron coating
1095	1096		65741_9	4	50		35%, C	-	-	C	<i>Arrhenatherum</i> <i>elatius</i>	4/2ml	-	Poor (grain fragments only), iron coating
1095	1096		65741_10	5	50		35%	C	-	C	<i>cf. Triticum</i> sp., <i>Vicia/Lathyrus</i> , <i>Arrhenatherum</i> <i>elatius</i>	3/2ml	-	Poor (grain fragments only), iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1095	1096		65741_11	4	40		40%, C	B	-	B	<i>cf. Triticum sp., Arrhenatherum elatius</i>	3/2ml	-	Poor (grain fragments only), iron coating
1095	1096		65741_12	3	10		30%, C	C	-	C	<i>Triticeae, Arrhenatherum elatius</i>	1/1ml	-	Poor (grain fragments only), iron coating
1095	1096		65741_13	3	30		10%, C	C	-	C	<i>cf. Triticum sp., Arrhenatherum elatius</i>	3/2ml	-	Poor (grain fragments only), iron coating
1873	1874		65741_345	30	20							3ml		
1873	1874		65741_347	6	5							-		
2505	2506		65743_204	3	150		3%	-	-	-		50/30ml	-	iron coating
2505	2506		65743_205	2	175		5%	-	-	-		30/50ml	-	
2505	2506		65743_206	4	60		1%	-	-	-		40/10ml	-	
2505	2506		65743_207	2	150		5%	-	-	-		50/30ml	-	
2507	2508		65743_208	2	60		7%	-	-	-		12/5ml	-	iron coating
2507	2508		65743_209	3	35		2%	-	-	-		3/3ml	-	iron coating
2507	2508		65743_210	2	400		0%	-	-	-		60/80ml	-	
2507	2508		65743_211	2	45		7%	-	-	-		5/4ml	-	iron coating
2509	2510		65743_212	0.5	10		10%	-	-	-		2/1ml	-	
2509	2510		65743_213	0.5	5		15%, C	-	-	-		0/1ml	-	
2509	2510		65743_214	0.5	2		25%, C	-	-	-		0/<1ml	-	
2509	2510		65743_215	2	30		10%	-	-	-		5/3ml	-	iron coating
2511	2512		65743_220	1.5	40		5%	-	-	-		10/10ml	-	iron coating
2511	2512		65743_221	2	50		10%	-	-	-		12/5ml	-	iron coating
2511	2512		65743_222	2	60		5%	-	-	-		10/7ml	-	iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
2511	2512		65743_223	2	60		5%, C	-	-	-		30/15ml	-	iron coating
2527	2528		65743_225	1	20		7%	-	-	-		3/2ml	-	iron coating
2527	2528		65743_226	2	35		7%	-	-	C	Polygonaceae	5/2ml	-	iron coating
Prehistoric postholes														
1127	1128		65741_19	8	5		80%, A, F	-	-	-		<1/<1ml	-	iron coating
1278	1279		65741_54	7	15		40%, B, I	-	-	-		5/1ml	-	iron coating
1430	1431		65741_85	8	20		70%, C	C	-	-	Triticeae	2/1ml	-	Poor (just fragments),
1554	1555		65741_113	10	4		60%, A, I	-	-	-		<1ml/<1ml	-	
1958	1959		65741_431	5	10		70%, A*, I	C	-	-	Triticeae	0/<1ml	-	
1972	1973		65741_437	5	8		5%, A, E, I	-	-	-		1/<1ml	-	
1974	1975		65741_438	8	15		20%, A*, E, I	-	-	-		5/<1ml	-	iron coating
Middle Bronze Age pit with cremation related deposit														
1472	1473		65741_92	4	15		30%, C	-	-	-		2/1ml	-	
Middle/Late Bronze Age cremation burials														
1355	1356		65741_70	10	50		<1%, A	-	-	-		8/10ml	-	
1434	1435		65741_86	10	3		70%, A, E, F	-	-	-		Trace in <1mm	-	
1570	1571		65741_123	5	40		20%, C	C	-	-	Triticeae	5/3ml	-	Poor (just fragments),
1570	1571		65741_124	5	3		50%, C	-	-	-		2/<1ml	-	
1570	1571		65741_125	5	5		20%, C	-	-	-		2/<1ml	-	iron coating
1570	1571		65741_126	5	30		5%, C	-	-	-		3/1ml	-	
1759	1760		65741_258	4	50		10%, C	-	-	-		8/5ml	-	
1759	1760		65741_245	2	40		10%	-	-	-		5/3ml	-	iron coating
1759	1760		65741_246	2	30		10%, C	-	-	-		7/2ml	-	iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1759	1760		65741_247	3	75		7%	-	-	-		40/5ml	-	iron coating
1759	1760		65741_248	3	30		60%	-	-	-		5/3ml	-	iron coating
1759	1760		65741_251	2	30		25%	-	-	-		7/5ml	-	iron coating
1759	1760		65741_252	2	15		10%	C	-	-	Triticeae	2/1ml	-	Poor (just fragments), iron coating
1759	1760		65741_253	5	80		8%, C	-	-	-		25/8ml	-	iron coating
1759	1760		65741_254	7	90		10%, C	-	-	-		25/10ml	-	iron coating
1759	1760		65741_255	7	120		8%	C	-	-	Triticeae	20/15ml	-	Poor (just fragments), iron coating
1759	1760		65741_256	10	150		5%, C	-	-	-		35/25ml	-	iron coating
1759	1760		65741_257	10	250		8%	-	-	-		30/50ml	-	iron coating
1841	1842		65741_293	6	60							45ml		
1841	1842		65741_294	4	35							15ml		
1841	1842		65741_295	5	35							20ml		
1841	1842		65741_296	5	35							20ml		
1881	1882		65741_354	2	20							15ml		
1881	1882		65741_355	2	20							5ml		
1881	1882		65741_356	5	25							15ml		
1881	1882		65741_357	6	20							5ml		
Late Bronze Age ditches														
1702	1703	2015	65741_172	10	25		10%, A*	-	C	-	<i>Triticum</i> sp. glume base	Trace/1ml	-	Poor,
1743	1744	2015	65741_307	10	10		15%, A, I, F	C	-	-	Triticeae	4/1ml	-	Poor,
3030	3031	3348	65743_310	20	30		50%	-	-	-		3/1ml	-	

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
Late Bronze Age pits														
1079	1080		65741_40	35	100		60%, C	B	-	-	<i>Triticum</i> sp., <i>Hordeum</i> <i>vulgare</i>	4/3ml	-	Poor (grain fragments only),
1315	1316		65741_65	20	60		20%, A, E	C	-	-	Triticeae	20/10ml	-	Poor,
1321	1322		65741_63	8	10		75%, C	-	-	-		20/<1ml	-	
1321	1322		65741_64	5	5		70%, C	-	-	-		15/<1ml	-	
1323	1325		65741_67	8	50		5%, A, E	C	-	-	Triticeae	20/15ml	-	Poor,
1344	1346		65741_71	20	5		60%, C	-	-	-		<1/<1ml	-	
1357	1358		65741_69	6	30		10%, A*, E	-	-	-		20/2ml	-	iron coating
1359	1360		65741_74	7	60		<1%, A	-	-	C	Vicieae	30/15ml	-	Poor,
1387	1388		65741_81	5	15		<1%, A*	-	-	-		2/2ml	-	iron coating
1411	1410		65741_88	5	10		5%, A, E, I	C	-	-	<i>Triticum</i> sp.	1/<1ml	-	Poor,
1412	1413		65741_82	10	60		80%, A*, E	-	-	-		10/4ml	-	iron coating
1490	1491		65741_94	5	5		80%, C	-	-	-		0/<1ml	-	iron coating
1510	1507		65741_97	6	3		40%, C	C	-	-	Triticeae	0/<1ml	-	Poor (just fragments)
1510	1511		65741_98	8	30		15%, C	C	-	-	Triticeae	1/<1ml	-	Poor (just fragments), iron coating
1537	1538		65741_104	8	5		60%, C	-	-	-		<1/<1ml	-	
1543	1544		65741_114	6	2		90%, B	-	-	-		Trace	-	
1561	1562		65741_116	6	25		20%, C	-	-	-		3/2ml	-	
1565	1566		65741_117	2	5		<1%, C	-	-	-		2/<1ml	-	iron coating
1576	1577		65741_130	35			10%, A	-	-	-		30/1ml	-	iron coating
1586	1587		65741_131	5	45		2%, A	C	-	-	<i>Triticum</i> sp., Triticeae	35/4ml	-	Poor, iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1605	1606		65741_134	4	15		10%, A	A	C	-	<i>Triticum</i> sp. grains and glume base, <i>Hordeum</i> <i>vulgare</i> var. <i>vulgare</i> grain	5/1ml	-	Heterogeneous (barley well, wheat poor), iron coating
1607	1608		65741_136	40	175		15%, A*, E, I	C	-	-	<i>Triticum</i> sp., Triticeae	100/15ml		Poor, iron coating
1613	1614		65741_137	4	30		2%, A*, E, I	B		C	<i>Triticum</i> sp., <i>Hordeum</i> <i>vulgare</i> , Triticeae, cf. <i>Prunus</i> sp. endocarp	10/8ml		Poor, iron coating
1615	1616		65741_138	4	20		40%, A*, E, I	-		-		10/2ml		iron coating
1621	1622		65741_139	10	3		80%, A	-	-	-		Trace	-	
1656	1657		65741_149	5	10		1%, A	-	-	-		1/1ml	-	
1662	1663		65741_148	5	35		<1%, A, E	-	-	-		4/5ml	-	iron coating
1664	1665		65741_204	10	15		1%, A*, E, I	-	-	-		4/1ml	-	iron coating
1668	1669		65741_150	10	4.5		80%, A	-	-	-		0/1ml	-	
1674	1675		65741_151	10	25		40%, A*, E	-	-	-		4/4ml	-	iron coating
1687	1688		65741_205	10	40		15%, A*, E, I	C	-	-	Triticeae	30/4ml	-	Poor, iron coating
1689	1690		65741_156	5	7		30%, C	-	-	-		0/3ml		
1698	1699		65741_171	4	40		10%, A*, E	-	-	-		10/3ml	-	iron coating
1706	1707		65741_169	8	10		30%, A*	-	-	-		2/2ml	-	iron coating
1725	1726		65741_173	8	7		1%, A*, I, F	C	-	-	Triticeae	1/0.5ml	-	Poor,

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1763	1764		65741_298	4	100		2%, A*, E	-	-	C	<i>Corylus avellana</i>	45/20ml		Poor, iron coating
1763	1764		65741_299	4	35		1%, A	-	-	-		10/8ml		iron coating
1763	1764		65741_300	2	20		<1%, A	-	-	C	Indet burnt material	5/3ml		Poor, iron coating
1763	1764		65741_452	5	30		<1%, C	-	-	-		8/8ml	-	iron coating
1788	1789		65741_202	10	-						,	2ml		
1855	1856		65741_318	10	10		40%, A*	-	-	-		<1/<1ml	-	
1875	1876		65741_349	5	35		1%, A*, E	-	C	B	<i>Triticum</i> sp. glume base, Vicieae (inc. large seeded), Cyperaceae, <i>Galium</i> sp.	20/5ml	-	Poor,
1901	1902		65741_382	2	4		40%, A, E, I	C	-	-	<i>Triticum</i> sp.	1/<1ml	-	Poor,
1978	1979		65741_440	5	6		5%, A, E, I	-	-	-		Trace	Moll-t	
3032	3031		65743_305	7	25		25%	C	-	-	Triticeae	5/2ml	-	Poor (just fragments),
3032	3031		65743_306	7	15		20%	-	-	-		4/2ml	-	
3032	3031		65743_307	7	50		15%, C	-	-	C	Indet. bud	20/3ml	-	iron coating
3032	3031		65743_308	5	40		8%	C	-	-	Triticeae	4/1ml	-	Poor (just fragments), iron coating
Late Bronze Age postholes														
1288	1289		65741_55	3	1		80%, C	-	-	-		Trace	-	

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1533	1534		65741_101	10	3		15%, A*, E	C	-	C	<i>Triticum sp.</i> , <i>cf. Hordeum vulgare</i> , <i>Galium sp.</i>	<1/<1ml	-	Poor,
1541	1542		65741_112	5	15		50%, A, E, I	-	-	-		<1ml/<1ml	-	iron coating
1546	1547		65741_115	5	5		50%, C	-	-	-		<1/<1ml	-	iron coating
1648	1649		65741_146	2	3.5		<1%, C	-	-	-		<1/<1ml	-	
1648	1649		65741_147	10	20		1%, A, E	-	-	-		2/2ml	-	
1666	1667		65741_203	5	10		2%, B	C	-	-	<i>cf. Hordeum vulgare</i>	1/3ml	-	
Late Bronze Age treethrows														
1293	1294		65741_49	20	30		50%, A**, E	-	-	C	Poaceae	10/<1ml	-	Poor, iron coating
1313	1314		65741_73	18	35		40%, A*, E	C	-	-	Triticeae	5/3ml	-	Poor, iron coating
1377	1376		65741_87	8	10		20%, A*, E, I	-	-	-		0/<1ml	-	
1401	1402		65741_79	10	5		80%, C	-	-	-		-	-	
1948	1949		65741_429	10	25		30%, A*, E, I	C	-	C	Triticeae, Vicieae	15/3ml	-	Poor, iron coating
1970	1971		65741_436	10	10		20%, A*, E, I	C	-	-	<i>cf. Hordeum vulgare</i>	<1/<1ml	-	Poor,
1983	1984		65741_441	10	30		5%, C, E	C	-	C	Triticeae, <i>Vicia faba</i>	4/5ml	-	Poor, iron coating
1986	1985		65741_442	7	25		15%, A*, E	C	-	-	Triticeae	10/5ml	-	Poor, iron coating
Late Bronze Age cremation burials														
1319	1320		65741_61	10	25		35%, C	-	-	-		5/1ml	-	
1556	1558		65741_121	6	5		15%, C	C	-	-	Triticeae	<1/<1ml	-	Poor (just fragments),

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1727	1730		65741_174	25	100		10%, C	-	-	-		35/20ml	-	
Late Bronze Age/Early Iron Age pits														
1735	1737		65741_306	10	35		<1%, C, E	-	-	A	<i>Galium</i> sp., <i>Persicaria</i> sp., Cyperaceae	3/7ml	-	Good,
1859	1860		65741_317	10	3		50%, A	-	-	-		<1/<1ml	-	
2503	2504		65743_200	1.5	40		7%	C	-	-	<i>Triticum</i> sp.	5/3ml	-	iron coating
2503	2504		65743_201	1.5	50		7%	-	-	-		5/2ml	-	iron coating
2503	2504		65743_202	4	30		10%, C	-	-	-		3/1ml	-	iron coating
2503	2504		65743_203	10	225		5%, C	-	-	-		50/40ml	-	iron coating
2855	2856		65743_243	20	100		25%	C	-	-	Triticeae	20/15ml	-	Poor (just fragments),
2855	3336		65743_257	10	60		10%	-	-	-		10/5ml	-	iron coating
Iron Age hearth														
2952	2953		65743_272	16	60		40%, C	-	-	-		10/5ml	-	
Middle/Late Iron age cremation burials														
2513	2514		65743_216	5	60		7%, C	-	-	-		25/5ml	-	
2513	2514		65743_217	5	50		10%, C	-	-	-		12/5ml	-	iron coating
2513	2514		65743_218	5	30		10%	-	-	-		10/2ml	-	iron coating
2513	2514		65743_219	5	50		15%	-	-	-		15/5ml	-	iron coating
Late Iron Age ditches														
2729	2730	3345	65743_320	20	30		50%	-	-	-		10/5ml	-	
2729	2731	3345	65743_321	20	250		5%	-	-	-		80/80ml	-	
2863	2864	3345	65743_255	10	12		30%	-	-	-		4/3ml	-	
2863	2865	3345	65743_256	10	80		1%	-	-	-	cf. Triticeae internodes	20/10ml	-	

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
2975	2981	3345	65743_281	4	120		3%	-	-	-	<i>Hordeum vulgare</i>	15/15ml	-	
2975	2989	3345	65743_279	3	80		5%	-	-	C	<i>Crataegus monogyna, Alnus glutinosa cone</i>	15/8ml	-	
2975	2990	3345	65743_280	4	120		10%	-	-	-		30/12ml	-	
2870	2871	3363	65743_285	5	50		3%	-	-	-		4/4ml	-	
2906	2907	3363	65743_286	10	250		3%	C			<i>Hordeum vulgare</i>	50/40ml	-	
Late Iron Age pits														
3091	3092		65743_294	30	150 0		3%	-	-	-		300/300ml	-	
1889	1890		65741_381	4	3.5		1%, A, E	C	-	-	Triticeae	<1/<1ml	-	Poor,
Late Iron Age / Early Romano-British ditches														
1213	1214	2024	65741_45	30	4		50%, A, E, I	-	-	-		<1/1ml	-	iron coating
2887	2888	2537	65743_262	20	22		5%	-	-	-		2/1ml	-	
2971	2972	2537	65743_313	40	40		30%	-	-	-		5/4ml	-	
3060	3061	2537	65743_309	40	40		30%	C	-	-	<i>Hordeum vulgare</i>	0/0.5ml	-	
3057	3058	3007	65743_287	10	40		60%, C	C	-	-	Triticeae	3/1ml	-	Poor (just fragments), iron coating
3121	3122	3007	65743_298	8	60		5%	-	-	-		40/5ml	-	
3221	3222	3007	65743_311	10	40		5%	-	-	-		2/2ml	-	
3223	3225	3007	65743_312	10	150		5%	-	-	C	<i>Galium aparine</i>	40/30ml	-	

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
3312	3313	3007	65743_322	17	45		15%	C	-	C	cf. <i>Triticum</i> sp., <i>Avena/Bromus</i>	3/5ml	-	Poor (just fragments),
3329	3330	3007	65743_325	8	30		40%	-	-	-		0/1ml	-	
3123	3174	3331	65743_303	40	60		70%	-	-	-		2/1ml	-	
3262	3263	3331	65743_314	7	30		20%	-	-	-		10/3ml	-	
2671	2672	3342	65743_229	10	60		5%	-	-	-		10/10ml	-	
3326	3327	3357	65743_324	20	60		30%	-	-	C	<i>Fallopia convolvulus</i>	30/20ml	-	
Late Iron Age/early Romano-British pits														
1952	1953		65741_434	10	160		<1%, B	-	-	-		70/65ml	-	iron coating
2565	2582		65743_227	22	125		60%, C	C	-	-	cf. <i>Triticum</i> sp.	50/15ml	-	Poor (just fragments),
2661	2662		65743_228	10	20		80%	C	-	-	<i>Hordeum vulgare</i>	4/2ml	-	
2866	2867		65743_249	35	100		15%, C	-	-	-		40/10ml	-	
2866	2867		65743_250	58	120		10%, C	A	-	B	<i>Hordeum vulgare</i> and <i>Triticum</i> sp. fragments, <i>Avena/Bromus</i>	25/20ml	-	
2932	2933		65743_275	10	10		65%	-	-	-		<1/<1ml	-	
2941	2942		65743_271	20	110		5%	-	-	C	<i>Persicaria lapathifolia</i>	25/15	-	

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
2969	2970		65743_277	40	200		15%, C	C	-	B	<i>Hordeum</i> <i>vulgare</i> and cf. <i>Triticum</i> sp. fragments, <i>Avena/Bromus</i> , Poaceae, Polygonaceae	60/35ml	-	
2995	2996		65743_282	9	60		5%	C	B	B	<i>Triticum spelta</i> grains and chaff, <i>Avena/Bromus</i> , <i>Vicia/Lathyrus</i> , <i>Rumex</i> sp.	3/3ml	-	
3044	3045		65743_283	10	60		20%	C	-	-	<i>Triticum</i> sp.	4/3ml	-	
3046	3047		65743_284	9	20		80%	-	-	-		3/1ml	-	
3082	3083		65743_288	8	20		25%, C	C	-	-	Triticeae	1/<1ml	-	Poor (just fragments),
Late Iron Age/early Romano-British pits with cremation related deposits														
2853	2854		65743_244	8	375		3%	-	-	-		80/80ml	-	iron coating
2853	2854		65743_245	8	100		15%	-	-	-		20/20ml	-	iron coating
2853	2854		65743_246	8	200		3%, C	-	-	-		50/40ml	-	iron coating
2853	2854		65743_247	9	150		7%	-	-	-		25/45ml	-	iron coating
2861	2862		65743_251	1.5	10		50%	-	-	-		<1/<1ml	-	
2861	2862		65743_252	1	5		30%	-	-	-		0/<1ml	-	
2861	2862		65743_253	1	5		15%	-	-	-		0/<1ml	-	
2861	2862		65743_254	2	5		20%	-	-	-		<1/<1ml	-	iron coating
2866	2867		65743_248	35	200		5%, C	-	-	-		100/40ml	-	iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
2874	2875		65743_258	2	110		10%	-	-	-		10/20ml	-	iron coating
2874	2875		65743_259	10	60		20%	-	-	-		8/12ml	-	iron coating
2874	2875		65743_260	2	110		7%	-	-	-		20/40ml	-	iron coating
2874	2875		65743_261	5	110		15%	-	-	-		25/20ml	-	iron coating
2932	2933		65743_276	10	5		40%	-	-	-		1/<1ml	-	
2932	2933		65743_278	10	15		40%, C	-	-	-		2/1ml	-	
3064	3101		65743_296	3	8		20%	-	-	C	<i>Avena/Bromus</i>	3/1ml	-	
3221	3222		65743_327	1	5		75%	C	C	C	Triticeae, <i>Triticum</i> sp. glume base, <i>Vicia/Lathyrus</i>	<1/<1ml	-	Poor (just fragments),
3312	3313		65743_333	5	40		25%	C	-	-	cf. <i>Triticum</i> sp.	7/5ml	-	Poor (just fragments),
3095	3097	2537	65743_323	38	50		50%	C	-	-	<i>Avena/Hordeum</i>	1ml/1ml	-	
3064	3049		65743_289	14	30		60%	-	-	C	<i>Vicia/Lathyrus</i>	3/1ml	-	
3064	3051		65743_290	5	30		25%	C	-	-	Triticeae	2/1ml	-	Poor (just fragments),
3064	3053		65743_291	2	60		30%	-	-	-		5/4ml	-	
3064	3054		65743_329	1	2		75%	-	-	-		0/<1ml	-	
3064	3054		65743_330	1	5		20%	-	-	-		1/<1ml	-	
3064	3054		65743_331	1	10		60%	-	-	-		2/1ml	-	
3064	3054		65743_332	1	5		75%	-	-	-		<1/<1ml	-	
3064	3055		65743_292	2	5		50%	-	-	-		<1ml/<1ml	-	
3064	3065		65743_297	10	60		50%, C	C	-	-	Triticeae	4/3ml	-	
3064	3084		65743_293	2	25		30%, C	-	-	-		3/2ml	-	
3064	3094		65743_295	10	15		30%	-	-	-		1/1ml	-	

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
Romano-British ditch, pits and cremation burial														
3194	3196		65743_326	20	10		95%	-	-	-		1/1ml	-	
2606	2609		65743_231	10	160		8%	-	-	-		35/15ml	-	
2960	2963		65743_273	20	120		20%	-	-	-		-	-	
2606	2609		65743_328	1	10		65%	C	C	-	Triticeae, <i>Triticum</i> sp. glume base	<1/<1ml	-	Poor (just fragments),
Medieval ditches														
1194	1195	2020	65741_41	8	10		60%, A, F, I, E	C	-	C	<i>Triticum</i> cf. <i>aestivum/turgidu</i> <i>m</i> , <i>Avena</i> sp. (large seeded), Asteraceae	<1/1ml	-	Heterogenous,
1200	1201	2020	65741_42	8	10		80%, A*, F, I, E	-	-	C	Indet bud	<1/<1ml	-	
1861	1862		65741_358	10	50		5%, C, E, I	C	-	C	<i>Hordeum</i> <i>vulgare</i> , Viciaeae	7/15ml	-	Poor, iron coating
Post-medieval ditch														
1954	1955	1721	65741_435	10	3		5%, A, E	-	-	-		Trace	-	
Features of uncertain date														
1198	1199		65741_46	8	3		40%, A, E	-	-	-		0/<1ml	-	
1198	1215		65741_47	10	2		5%, B, E	-	-	-		0/<1ml	-	
1782	1783		65741_185	10	30		2%, A*, E, F	-	-	-		5/5ml	-	iron coating
1107	1108		65741_15	2	25		5%, -	-	-	-		5/3ml	-	iron coating
1113	1114		65741_16	10	25		70%, A, E, I	-	-	-		<1/3	-	iron coating
1188	1189		65741_35	0.3	1		10%	-	-	-		0/<1ml	-	

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1188	1189		65741_36	0.3	2		15%	-	-	-		<1/<1ml	-	
1188	1189		65741_37	0.1	1		10%	-	-	-		<1/<1ml	-	
1188	1189		65741_38	0.3	1		20%	-	-	-		<1/<1ml	-	
1276	1277		65741_52	2	30		5%, A	-	-	-		15/2ml	-	iron coating
1280	1281		65741_58	10	20		70%, A, E	-	-	-		<1/1ml	-	iron coating
1290	1291		65741_53	3	3		30%, B	C	-	-	<i>Triticum aestivum/turgidu m</i>	0/1ml	-	Poor,
1327	1328		65741_66	10	100		<1%, A, E, I	-	-	-		35/40ml	-	iron coating
1337	1338		65741_68	8	500		<1%, C, E	-	-	-		180/140ml	-	iron coating
1369	1371		65741_77	6	500		<1%		-	-		170/230		iron coating
1478	1479		65741_96	1	10		10%, C	-	-	-		0/2ml	-	
1512	1513		65741_103	2	20		<1%, B	-	-	-		<1/1ml	-	
1520	1522		65741_99	10	10		1%, A*	C	-	-	<i>Triticum</i> sp.	1/1ml	-	Poor, iron coating
1531	1532		65741_100	6	50		1%, A, E	-	-	-		20/10ml	-	iron coating
1559	1560		65741_122	4	3		<1%, A	-	-	-		<1/<1ml	-	
1582	1583		65741_128	2	15		2%, A, I	-	-	-		4/3ml	-	iron coating
1597	1598		65741_133	10	150 0		<1%, C, I, E	-	-	-		600/550ml	-	iron coating
1619	1620		65741_140	20	110		5%, A, E	C	-	-	<i>Triticum</i> sp., Triticeae	40/20ml	-	Poor,
1627	1628		65741_141	10	160		<1%, A, I	-	-	C	cf. <i>Prunus</i> sp. endocarp, indet. bud	60/50ml		Poor, iron coating
1640	1641		65741_144	8	10		1%, A, E	-	-	-		3/1ml	-	iron coating
1708	1709		65741_170	10	15		70%, C	-	-	-		2/1ml	-	

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1723	1724		65741_210	10	60		1%	-	-	-		20/15ml	-	iron coating
1753	1754		65741_211	5	100		10%, C	C	-	-	<i>Triticum sp.</i>	35/10ml	-	Poor (just fragments), iron coating
1753	1754		65741_212	3	50		7%	-	-	-		8/5ml	-	iron coating
1753	1754		65741_213	4	80		5%	-	-	-		20/10ml	-	iron coating
1753	1754		65741_215	4	120		5%	C	-	-	Triticeae	50/15ml	-	Poor (just fragments), iron coating
1753	1754		65741_216	2	10		10%	-	-	-		2/1ml	-	iron coating
1761	1762		65741_272	2	10		25%	-	-	-		1/1ml	-	
1761	1762		65741_273	4	100		2%, A, E, I	-	-	-		30/30ml	-	iron coating
1761	1762		65741_274	7	250		1%, A, I	-	-	-		100/75ml	-	iron coating
1761	1762		65741_275	1	20		1%, A, I	-	-	-		3/5ml	-	iron coating
1765	1766		65741_327	10	170 0		<1%, A	-	-	-		1100/375ml	-	iron coating
1767	1768		65741_313	2	20		<1%, C	-	-	-		10ml		iron coating
1767	1768		65741_316	2	35		<1%, C	-	-	-		15/10ml	-	iron coating
1775	1776		65741_359	5	25		10%, C, E, I, F	-	-	-		8/5ml	-	iron coating
1775	1776		65741_360	5	35		5%, C, I	-	-	-		10/5ml	-	iron coating
1775	1776		65741_361	5	250		<1%, C	-	-	-		100/50ml	-	iron coating
1775	1776		65741_362	3	30		10%, B, E, I	-	-	-		8/5ml	-	iron coating
1777	1778		65741_363	4	250		<1%, A, E	-	-	-		45/65ml	-	iron coating
1777	1778		65741_364	3	60		<1%, B, E	C	-	C	<i>cf. Hordeum vulgare, Rumex</i>	30/20ml	-	Poor, iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
											sp.			
1777	1778		65741_365	1	15		<1%, A, I	-	-	-		1ml/1ml	-	iron coating
1777	1778		65741_366	2	60		<1%, C	-	-	-		20/20ml		iron coating
1780	1781		65741_194	2	10		20%, C	-	-	-		3/1ml	-	
1780	1781		65741_195	4	25		25%, C	C	-	-	<i>Triticeae</i>	5/1ml	-	Poor (just fragments),
1780	1781		65741_196	4	5		40%	-	-	-		2/<1ml	-	
1780	1781		65741_197	6	20		35%	-	-	-		5/1ml	-	iron coating
1786	1787		65741_198	2	50		5%	-	-	C	<i>Arrhenatherum elatus</i>	3/3ml	-	
1786	1787		65741_199	4	40		5%	-	-	-		4/4ml	-	
1786	1787		65741_200	10	50		7%	-	-	-		3/4ml	-	
1786	1787		65741_201	5	60		8%	-	-	C	<i>Arrhenatherum elatus</i>	3/4ml	-	
1790	1791		65741_206	5	50		5%, C	-	-	-		3/3ml	-	
1790	1791		65741_207	5	20		10%, C	-	-	-		3/2ml	-	
1790	1791		65741_208	3	50		7%	-	-	-		4/5ml	-	iron coating
1790	1791		65741_209	4	80		5%	C	-	C	Triticeae, cf. <i>Conopodium majus</i> tuber, <i>Arrhenatherum elatus</i> stems	3/10ml	-	
1800	1801		65741_225	3	35		5%	C	-	-	Triticeae	7/5ml	-	Poor (just fragments), iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1800	1801		65741_226	2	60		5%	C	-	-	<i>cf. Hordeum vulgare</i>	5/5ml	-	Poor (just fragments), iron coating
1800	1801		65741_227	2	5		15%	-	-	-		1/<1ml	-	-
1800	1801		65741_228	2	50		8%	C	-	-	Triticeae	5/5ml	-	Poor (just fragments),
1804	1805		65741_229	5	250		3%	-	-	-		40/50ml	-	
1804	1805		65741_230	5	225		3%	C	-	-	Triticeae	30/450ml	-	Poor (just fragments),
1804	1805		65741_231	3	300		3%	-	-	-		50/50ml	-	
1804	1805		65741_232	5	250		2%	-	-	-		50/80ml	-	
1804	1805		65741_233	5	175		2%	-	-	-		40/35ml	-	
1804	1805		65741_234	5	250		2%, C	C	-	-	<i>cf. Triticum</i> sp.	50/60ml	-	Poor (just fragments),
1804	1805		65741_235	5	100		3%	-	-	-		40/30ml	-	
1804	1805		65741_236	4	120		2%	-	-	-		50/30ml	-	
1808	1809		65741_259	5	8		20%, C	-	-	-		1/<1ml	-	
1808	1809		65741_260	2	5		20%	C	-	-	Triticeae	<1/<1ml	-	Poor (just fragments),
1808	1809		65741_261	2	10		10%	C	-	-	Triticeae	1/1ml	-	Poor (just fragments),
1808	1809		65741_262	3	10		10%	-	-	-		2/1ml	-	
1810	1811		65741_263	1	2		25%	C	-	-	Triticeae	<1/0ml	-	Poor (just fragments), -
1810	1811		65741_264	1	10		5%	C	-	-	Triticeae	0/<1ml	-	Poor (just fragments), -

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1810	1811		65741_265	1	2		25%	-	-	-		0/<1ml	-	-
1810	1811		65741_266	1	3		25%	-	-	-		0/1ml	-	-
1816	1817		65741_268	1	12		3%	-	-	-		2/2ml	-	
1816	1817		65741_269	3	100		7%	-	-	-		10/25ml	-	
1816	1817		65741_270	3	60		5%	-	-	-		3/5ml	-	
1816	1817		65741_271	3	50		5%	-	-	-		3/5ml	-	
1834	1835		65741_276	5	40		1%, A, I	-	-	-	-	25ml		iron coating
1834	1835		65741_277	3	60		<1%, B, I	-	-	C	<i>Arrhenatherum elatus</i> subsp. <i>bulbosum</i>	50ml		iron coating
1834	1835		65741_278	4	125		<1%, A, E, I	-	-	C	Poaceae, stems/roots	100ml		iron coating
1834	1835		65741_279	5	60		1%, A*, E, I	-	-	C	<i>Arrhenatherum elatus</i> subsp. <i>bulbosum</i>	45ml		iron coating
1834	1835		65741_280	2	3		<1%, C, I	-	-	-	-	1.5ml		iron coating
1834	1835		65741_281	1	15		1%, B, E, I	-	-	-	-	8ml		iron coating
1834	1835		65741_282	4	15		<1%, A*, E, I	-	-	-		10ml		iron coating
1834	1835		65741_283	3	30		20%, A*, E, I	-	Tritice ae	C	Poaceae	20ml		iron coating
1877	1878		65741_340	8	15							2ml		,
1887	1888		65741_367	2	4		30%, C	-	-	-		<1/1ml	-	
1887	1888		65741_368	2	12		2%, B, I	-	-	-		1/3ml	-	
1887	1888		65741_369	2	20		5%, B, I	-	-	-		3/5ml	-	
1887	1888		65741_370	5	50		15%, A, E	-	-	-		10/20ml	-	
1893	1894		65741_375	5	20		<1%, B, F	-	-	-		1/<1ml		iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1893	1894		65741_376	3	15		5%, A, I	-	-	-		<1/<1ml	-	iron coating
1897	1898		65741_377	4	30		10%, A, E, I	-	-	-		10/10ml	-	
1897	1898		65741_378	7	35		40%, A, E, I	-	-	-		5/10ml	-	
1897	1898		65741_379	3	5		1%, A, E	-	-	-		1/<1ml	-	
1899	1900		65741_383	0.5	7		<1%, B, I	-	-	-		1/<1ml	-	iron coating
1899	1900		65741_384	1	35		<1%, A, I	-	-	-		1/2ml	-	iron coating
1899	1900		65741_385	0.5	7		5%, C	-	-	-		1/1ml	-	iron coating
1899	1900		65741_386	1	3		20%, A, E	-	-	-		<1/<1ml	-	
1903	1904		65741_387	3	25		<1%, A	-	-	-		5/5ml	-	
1903	1904		65741_389	2	20		15%, A*, E, I	-	-	-		3/4ml	-	
1903	1904		65741_390	4	45		<1%, A*, E	-	-	-		12/15ml	-	
1905	1906		65741_395	2	10		<1%, A	-	-	-		2/2ml	-	
1905	1906		65741_396	1.5	10		<1%, C	-	-	B	<i>Galium</i> sp., <i>Poaceae</i> stems and roots	2/2ml		Poor, iron coating
1905	1906		65741_397	1	35		2%, B, I	-	-	-		3/3ml	-	
1905	1906		65741_398	1	10		<1%, C	-	-	B	<i>Galium</i> sp., <i>Poaceae</i> stems and roots	2/2ml	Moll-t	Poor, iron coating
1907	1908		65741_403	3	250		<1%, B, E	-	-	-		150/65ml	-	iron coating
1907	1908		65741_404	4	250		1%, C, I	-	-	-		170/55ml	-	iron coating
1907	1908		65741_405	3	150		<1%, B	-	-	-		80/40ml	-	iron coating
1907	1908		65741_406	5	400		<1%, C, E	-	-	-		250/100	-	iron coating
1909	1910		65741_399	1	10		<1%, C, I	-	-	-		3/2ml	-	iron coating
1909	1910		65741_400	2	12		<1%, C	-	-	C	<i>Rumex</i> sp.	3/3ml	-	Fair,
1909	1910		65741_401	1	35		<1%, C	-	-	-		2/3ml	-	

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1909	1910		65741_402	1	50		<1%, C	C	-	C	<i>Triticum</i> sp., Asteraceae	10/10ml	-	Poor, iron coating
1911	1912		65741_411	2	35		10%, C	-	-	-		8/9ml	-	iron coating
1911	1912		65741_412	5	60		5%, C	-	-	-		35/15ml	-	iron coating
1911	1912		65741_413	7	100		15%, C	-	-	-		15/20ml	-	iron coating
1911	1912		65741_414	3	15		20%, C	-	-	-		1/2ml	-	iron coating
1917	1918		65741_407	1.5	5		<1%	-	-	-		1/2ml	-	
1917	1918		65741_409	2	7		<1%, C	-	-	-		1/1ml	-	
1917	1918		65741_410	2	15		<1%, C, E	-	-	-		1/4ml	-	Fair,
											Vicieae/Brassica ceae			
1919	1920		65741_415	2	60		<1%, C, I	-	-	-		15/5ml	Moll-t	iron coating
1919	1920		65741_416	4	45		<1%, C	-	-	-		30/8ml	-	iron coating
1919	1920		65741_417	3	35		1%, C	-	-	-		10/5ml	-	iron coating
1919	1920		65741_418	6	160		10%, C, I	-	-	-		50/40ml		iron coating
1928	1929		65741_423	5	20		2%, A	-	-	-		7/6ml	-	iron coating
1938	1939		65741_425	10	400		1%, A, E	-	-	-		200/130ml	-	iron coating
1938	1939		65741_426	10	750		<1%, A	-	-	-		450/220ml	-	iron coating
1938	1939		65741_428	5	650		<1%, C	-	-	-		400/170ml	-	iron coating
1950	1951		65741_430	5	350		<1%, B	-	-	-		200/80ml	-	iron coating
1962	1963		65741_432	5	60		<1%, C, I, E	-	-	-		30/20ml	-	iron coating
1987	1988		65741_443	2	10		1%, C	-	-	-		<12/<1ml	-	iron coating
1987	1988		65741_444	2	45		<1%, B, E	-	-	-		30/8ml	-	iron coating
1987	1988		65741_445	3	15		15%, A	-	-	-		<1/1ml	-	iron coating
1987	1988		65741_446	3	35		1%, B	-	-	-		8/10ml	-	iron coating
1989	1990		65741_447	3	250		1%, C	-	-	-		100/55ml	-	iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1991	1992		65741_448	5	125		<1%, A	C	-	-	<i>Triticum</i> sp.	50/40ml	Moll-t	Poor, iron coating
1995	1996		65741_449	5	60		<1%, C, E	-	-	C	<i>Corylus avellana</i>	50/15ml	-	Fair, iron coating
2519	2520		65743_224	18	200 0		1%	-	-	-		675/525ml	-	
2708	2709		65743_232	10	200		10%, C	-	-	-		45/40ml	-	iron coating
2708	2709		65743_233	10	175		10%, C	C	-	-	Triticeae	30/35ml	-	Poor (just fragments), iron coating
2708	2709		65743_234	5	25		15%	-	-	-		8/3ml	-	iron coating
2708	2709		65743_235	5	45		30%, C	-	-	-		5/4ml	-	
2708	2709		65743_236	10	250		5%, C	-	-	-		70/50ml	-	
2708	2709		65743_237	3	50		20%, C	-	-	-		8/5ml	-	
2849	2850		65743_242	5	50		5%	-	C	-	<i>Triticum diccocus</i> glume base	5/5ml	-	
2892	2893		65743_264	2	2		60%, C	-	-	-		<1/<1ml	-	
2924	2925		65743_267	1	1		70%, C	-	-	-		-	-	
2924	2925		65743_268	1	2		50%	-	-	-		0/<1ml	-	
2924	2925		65743_269	2	10		35%	-	-	-		<1/<1ml	-	
2924	2925		65743_270	2	8		25%	-	-	-		<1/<1ml	-	
2967	2968		65743_274	7	40		50%	C	-	-	cf. <i>Hordeum vulgare</i>	3/2ml	-	
3160	3161		65743_299	3	12		20%, C	-	-	-		3/2ml	-	
3160	3161		65743_300	5	25		20%	-	-	C	<i>Galium</i> sp.	1/3ml	-	
3160	3161		65743_301	5	40		15%	-	-	C	<i>Galium</i> sp.	10/5ml	-	

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
3160	3161		65743_302	2	30		10%, C	-	-	-		3/2ml	-	
3215	3216		65743_315	10	40		50%	-	-	-		10/3ml	-	
3277	3278		65743_316	10	40		80%	-	-	-		0.1/0.2ml	-	
1539	1540		65741_105	3	5		40%, C	-	-	-		<1/<1ml	-	
1539	1540		65741_106	3	5		50%, C	-	-	-		<1/<1ml	-	
1539	1540		65741_107	8	15		35%, C	-	-	-		2/1ml	-	
1539	1540		65741_108	6	40		5%, C	-	-	-		5/3ml	-	
2714	2715		65743_238	10	150		10%, C	-	-	-		10/60ml	-	
2714	2715		65743_239	10	175		3%, C	-	-	-		15/60ml	-	iron coating
2714	2715		65743_240	10	175		5%	-	-	-		10/60ml	-	iron coating
2714	2715		65743_241	10	140		30%	C	-	-	Triticeae	15/40ml	-	Poor (just fragments),
2914	2915		65743_265	7	30		15%, C	-	-	-		3/3ml	-	
2914	2915		65743_266	10	30		50%	-	-	-		10/5ml	-	
1111	1112		65741_18	32	50		70%, A**, F, E, I	C	-	-	<i>cf. Hordeum vulgare</i>	<1/5ml	-	Poor, iron coating
1147	1148		65741_27	10	10		40%, A*, E, I	C	-	C	<i>Triticum</i> sp., Cyperaceae	<1/<1ml	-	Good ,
1255	1256		65741_50	3	2		80%, A*, E, I	-	-	-		0/<1ml	-	
1271	1273		65741_48	3	48		<1%, A, E	C	-	C	<i>Triticum</i> sp., Poaceae	15/15ml	-	Poor,
1405	1406		65741_80	5	15		5%, A	-	-	-		1/1ml	-	iron coating
1452	1453		65741_89	5	35		5%, A, I	-	-	-		10/10ml	-	iron coating
1488	1489		65741_93	4	15		2%, C	C	-	-	Triticeae	2/3ml	-	Poor , iron coating
1514	1515		65741_109	2	20		<1%, A	-	-	C	<i>Prunus spinosa</i> endocarp,	5/4ml	Moll-t	Fair, iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
											<i>Galium</i> sp.			
1516	1517		65741_110	5	20		1%, A, E	-	-	-		<1ml/1ml	-	
1518	1519		65741_111	2	2.5		<1%, C	-	-	-		0/<1ml	Moll-t	
1535	1536		65741_102	1	10		<1%	-	-	C	Vicieae, <i>Galium</i> sp.	<1/1ml	Moll-t	Fair, iron coating
1548	1549		65741_118		30		1%, C, E	-	-	-		10/4ml	-	iron coating
1550	1551		65741_119	5	35		1%, A, E	-	-	-		10/8ml	-	iron coating
1552	1553		65741_120	1	120		1%, C	-	-	-		30/30ml	-	
1578	1579		65741_127	10	900		<1%, B	-	-	C	<i>Arrhenatherum elatius</i> ssp. <i>bulbosum</i>	300/300ml	-	Fair, iron coating
1588	1589		65741_132	9	125 0		1%, A	-	-	-		550/440ml		iron coating
1609	1610		65741_135	2	2.5		80%, B	-	-	-		<1/<1ml		
1132	1134		65741_20	10	200		15%, A*, E	-	-	C	<i>Corylus avellana</i>	100/60ml		Heterogenous, iron coating
1176	1177		65741_39	8	200 0	25%	A	-	-	-		300/50ml	-	
1414	1415		65741_83	7	20		60%, C	-	-	-		2/1ml	-	
1149	1150		65741_23	4	70		10%, C	C	-	B	Triticeae, <i>Arrhenatherum elatius</i> , <i>Crataegus</i> sp.	10/5ml	-	Poor (grain fragments only), iron coating
1149	1150		65741_24	5	200		10%, C	-	-	A	<i>Arrhenatherum elatius</i> , <i>Corylus</i>	15/10ml	-	iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
											<i>avellana</i>			
1149	1150		65741_25	7	35		30%, C	-	-	A	<i>Arrhenatherum elatius, Corylus avellana</i>	2/1ml	-	iron coating
1149	1150		65741_26	7	40		20%	-	-	A	<i>Arrhenatherum elatius, Corylus avellana, Euphorbia sp.</i>	3/3ml	-	iron coating
1174	1175		65741_28	10	100		7%	-	-	-		15/15ml	-	
1174	1175		65741_29	10	90		5%	-	-	C	<i>Arrhenatherum elatius</i>	15/20ml	-	
1174	1175		65741_30	10	200		15%	-	-	-		15/20ml	-	
1174	1175		65741_31	10	230		5%	-	-	-		15/15ml	-	
1174	1175		65741_32	10	175		7%	-	-	-		10/15ml	-	
1174	1175		65741_33	5	50		10%	-	-	-		5/3ml	-	
1174	1175		65741_34	10	100		5%	-	-	-		15/10ml	-	
1303	1304		65741_56	15	40		50%, C	C	-	-	Triticeae	2/2ml	-	
1303	1304		65741_57	20	30		60%, C	-	-	C	<i>Vicia/Lathyrus</i>	4/2ml	-	
1303	1304		65741_59	20	60		25%, C	C	-	C	<i>cf. Hordeum vulgare, Vicia/Lathyrus</i>	10/5ml	-	
1303	1304		65741_60	20	30		60%, C	C	-	-	Triticeae	3/1ml	-	Poor (just fragments),
1676	1677		65741_152	8	150		7%	-	-	C	<i>Arrhenatherum elatius</i>	15/15ml	-	iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1676	1677		65741_153	7	80		20%	-	-	B	<i>Arrhenatherum elatus</i>	8/10ml	-	iron coating
1676	1677		65741_154	10	200		5%	-	-	B	<i>Arrhenatherum elatus</i>	10/50ml	-	
1696	1697		65741_157	3	30		8%, C	-	-	C	<i>Arrhenatherum elatus</i>	1/2ml	-	bubbly
1696	1697		65741_158	5	90		8%	-	-	-		5/15ml	-	
1696	1697		65741_159	11	250		5%, C	-	-	-		10/15ml	-	bubbly
1696	1697		65741_160	4	60		7%, C	-	-	-		10/10ml	-	
1696	1697		65741_161	3	125		5%, C	-	-	-		5/15ml	-	
1696	1697		65741_162	6	150		3%	-	-	-		10/40ml	-	
1696	1697		65741_163	5	175		3%, C	-	-	-		15/40ml	-	
1696	1697		65741_164	7	120		3%, C	-	-	-		10/30ml	-	
1696	1697		65741_165	3	150		3%, C	-	-	-		5/15ml	-	
1696	1697		65741_166	7	120		3%, C	-	-	-		10/20ml	-	
1696	1697		65741_167	5	175		3%, C	-	-	-		10/50ml	-	bubbly
1696	1697		65741_168	5	80		5%, C	-	-	-		10/30ml	-	bubbly
1739	1740		65741_186	5	60		10%	-	-	C	<i>Arrhenatherum elatus</i>	5/5ml	-	
1739	1740		65741_187	3	60		8%, C	C	-	-	Triticeae	5/10ml	-	Poor (just fragments), iron coating
1739	1740		65741_188	5	80		8%, C	-	-	C	<i>Arrhenatherum elatus</i>	10/10ml	-	
1739	1740		65741_189	7	250		3%, C	-	-	C	<i>Arrhenatherum elatus</i>	15/15ml	-	iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1739	1740		65741_190	5	250		2%, C	-	-	C	<i>Arrhenatherum elatius</i>	40/40ml	-	
1739	1740		65741_191	1	50		5%	-	-	-		5/5ml	-	
1739	1740		65741_192	6	400		2%	-	-	-		60/50ml	-	iron coating
1739	1740		65741_193	11	350		3%	-	-	-		60/50ml	-	iron coating
1749	1750		65741_183	2	45		10%, C	-	-	-		10/5ml	-	iron coating
1749	1750		65741_184	3	35		5%, C	-	-	-		10/5ml	-	iron coating
1749	1750		65741_249	2	120		2%	-	-	-		30/35ml	-	iron coating
1749	1750		65741_250	3	20		10%	-	-	-		4/3ml	-	iron coating
1751	1752		65741_175	4	50		8%	-	-	-		15/10ml	-	iron coating
1751	1752		65741_176	3	100		8%, C	-	-	-		40/10ml	-	iron coating
1751	1752		65741_177	3	200		3%, C	-	-	-		80/30ml	-	iron coating
1751	1752		65741_178	7	230		3%, C	-	-	-		60/40ml	-	iron coating
1751	1752		65741_179	2	5		15%	-	-	-		0/<1ml	-	iron coating
1751	1752		65741_180	4	5		10%	-	-	-		<1/<1ml	-	iron coating
1751	1752		65741_181	5	15		25%	-	-	-		2/1ml	-	iron coating
1751	1752		65741_182	2	40		10%, C	-	-	-		8/3ml	-	iron coating
1755	1756		65741_332	10	300						,	250ml		
1755	1756		65741_333	8	300						,	250ml		
1755	1756		65741_334	2	40						,	30ml		
1755	1756		65741_335	3	100						,	90ml		
1755	1756		65741_336	5	300						,	250ml		
1755	1756		65741_337	3	110						,	90ml		
1755	1756		65741_338	2	110						,	90ml		
1755	1756		65741_339	10	500						,	400ml		
1757	1758		65741_237	3	100		5%, C	-	-	-		20/5ml	-	iron coating

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1757	1758		65741_238	4	70		20%, C	C	-	-	<i>Triticum</i> sp., cf. <i>Hordeum</i> <i>vulgare</i>	10/5ml	-	Poor (just fragments), iron coating
1757	1758		65741_239	6	450		5%	C	-	-	<i>Triticum</i> sp.	120/70ml	-	Poor (just fragments), iron coating
1757	1758		65741_240	3	140		15%	-	-	-		40/30ml	-	iron coating
1757	1758		65741_241	3	80		10%	-	-	-		35/10ml	-	iron coating
1757	1758		65741_242	3	350		3%	-	-	-		90/100ml	-	iron coating
1757	1758		65741_243	3	175		5%	-	-	-		30/40ml	-	
1757	1758		65741_244	3	450		3%	-	-	-		100/120ml	-	iron coating
1769	1770		65741_319	6	160						,	150ml		
1769	1770		65741_320	5	200						,	150ml		
1769	1770		65741_321	5	300						,	250ml		
1769	1770		65741_322	5	250						,	200ml		
1769	1770		65741_323	2	175						,	150ml		
1769	1770		65741_324	2	175						,	150ml		
1769	1770		65741_325	4	400						,	350ml		
1769	1770		65741_326	4	230						,	200ml		
1771	1772		65741_328	6	250						,	200ml		
1771	1772		65741_329	4	35						,	20ml		
1771	1772		65741_330	5	60						,	40ml		
1773	1774		65741_341	4	115						,	150ml		
1773	1774		65741_342	3	125						,	100ml		
1773	1774		65741_343	3	175						,	150ml		
1773	1774		65741_344	5	160						,	125ml		

Feature	Context	Group	Sample	Vol (L)	Flot (ml)	Sub- sample	Bioturbation proxies	Grain	Chaff	Charred Other	Notes	Charcoal > 4/2mm (ml)	Other	Preservation
1930	1931		65741_422	10	35							30ml		

Table 16 Analysis of the charred plant remains

		LATE BRONZE							
	Period	AGE		MEDIEVAL			MEDIEVAL		
	feature	PIT		PIT			OVEN		PIT
	feature number	1374		1895			1185		1976
	context type	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL
	context number	1375	1375	1896	1896	1896	1896	1187	1187
	sample number	75	76	371	372	373	374	43	44
	vol (l) processed soil	6	8	4	6	8	2	10	10
	vol flot (ml)	60	56	10	20	20	10	82	63
LATIN_NAME	ENGLISH								
Cereal grains									
<i>Triticum dicoccum/spelta</i>	emmer/spelt wheat		1						
<i>T. cf. dicoccum/spelta</i>	?emmer/spelt wheat		1						
<i>T. aestivum/turgidum</i> type	free-threshing wheat			2	9	3	2	12	64
<i>T. cf. aestivum/turgidum</i> type	?free-threshing wheat			13	20	12	8	18	66
<i>Triticum</i> spp.	wheat		2	4	8	12	8	3	3
cf. <i>Triticum</i> spp.	?wheat			4	21	23	8	18	70
<i>Triticum/Secale cereale</i>	wheat/rye								1
<i>Secale cereale</i> L.	rye						1		
cf. <i>S.cereale</i> L.	?rye				2		2		3
<i>Hordeum vulgare</i> L.	barley, hulled indet.								4
<i>H. vulgare</i> L.	barley, indet.		2			3	1	5	17
cf <i>H. vulgare</i> L.	?barley, indet.	1	1		2	1		2	3
<i>Avena</i> sp(p).	oat				1		1	3	1

		LATE BRONZE								
Period		AGE			MEDIEVAL			MEDIEVAL		
feature		PIT			PIT			OVEN		
feature number		1374			1895			1185		
context type		FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL
context number		1375	1375	1896	1896	1896	1896	1187	1187	1977
sample number		75	76	371	372	373	374	43	44	439
vol (l) processed soil		6	8	4	6	8	2	10	10	22
vol flot (ml)		60	56	10	20	20	10	82	63	228
LATIN_NAME	ENGLISH									
cf. <i>Avena</i> spp.	?oat			2	2		2	13	2	2
Cerealia	indet. cereal (estimate)	19	25	22	115	113	67	126	292	87
Cerealia	indet cereal fragments <1mm		+	+	+	++	++	+++	+++	++
Cereal chaff										
<i>Triticum dicoccum</i> Schubl.	emmer wheat glume base	7	2							
<i>T. dicoccum</i> Schubl.	emmer wheat spikelet fork	3								
<i>T. cf dicoccum</i>	?emmer wheat spikelet fork		1							
<i>Triticum</i> spp.	wheat glume bases	23	14							
<i>Triticum</i> sp.	wheat spikelet forks	1								
<i>Triticum</i> spp.	wheat spikelet bases	11	13							
<i>T. aestivum</i> type	free-threshing hexaploid wheat rachis			4	5	4	4		1	
<i>T. aestivum/turgidum</i> type	free-threshing wheat rachis		1	3	8	5	7		10	1
<i>Triticum</i> sp(p).	wheat rachis fragments		5	3	10	9	13	1	4	
<i>Secale cereale</i> L.	rye rachis			1						
<i>Hordeum vulgare</i> L.	barley rachis				1				1	

		LATE BRONZE								
	Period	AGE			MEDIEVAL			MEDIEVAL		
	feature	PIT			PIT			OVEN		PIT
	feature number	1374			1895			1185		1976
	context type	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL
	context number	1375	1375	1896	1896	1896	1896	1187	1187	1977
	sample number	75	76	371	372	373	374	43	44	439
	vol (l) processed soil	6	8	4	6	8	2	10	10	22
	vol flot (ml)	60	56	10	20	20	10	82	63	228
LATIN_NAME	ENGLISH									
<i>Avena</i> spp.	oat awn fragments	3						3		
Other plant/weed seeds										
<i>Chenopodium</i> sp.	goosefoot etc				1			1		
<i>Agrostemma githago</i> L.	corncockle	1								
<i>Persicaria</i> sp.	knotweed	1								
<i>Rumex acetosella</i>	sheep's sorrel				1		1			
<i>Rumex</i> sp(p).	dock	1			1		1		6	
<i>Raphanus raphanistrum</i> L.	wild radish							1		
<i>Prunus spinosa</i> L.	blackthorn							1		
<i>Crateagus monogyna</i> Jacq.	hawthorn							1		1
<i>Vicia faba</i> L.	broad bean							4		1
cf <i>V. faba</i> L.	?broad bean	1						4		3
<i>Vicia/Lathyrus</i> sp(p).	vetch/tare/vetchling (seeds>2mm)	1			1		1		7	
<i>Vicia/Lathyrus</i> spp.	vetch/tare/vetchling cotyledons(seeds<2mm)	5			5		21		3 11 2	
<i>Vicia/Lathyrus/Pisum</i> sp.	vetch/tare/vetchling/pea (seeds>2mm)							1		

		LATE BRONZE								
Period		AGE			MEDIEVAL			MEDIEVAL		
feature		PIT			PIT			OVEN		PIT
feature number		1374			1895			1185		1976
context type		FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL
context number		1375	1375	1896	1896	1896	1896	1187	1187	1977
sample number		75	76	371	372	373	374	43	44	439
vol (l) processed soil		6	8	4	6	8	2	10	10	22
vol flot (ml)		60	56	10	20	20	10	82	63	228
LATIN_NAME	ENGLISH									
<i>Vicia/Lathyrus/Pisum</i> sp.	vetch/tare/vetchling/pea (seeds<2mm)						1	1		1
<i>Medicago/Trifolium</i> sp.	medicks/clovers (seeds<1mm)								1	
Fabaceae indet.	pea family (large fragments >4mm)					4	2		4	2
Fabaceae indet.	pea family (small round cotyledons)					2		4	4	
<i>Rhinanthus minor</i> L.	yellow rattle						1			
<i>Lapsana communis</i> L.	nipplewort			1						
<i>Leontodon</i> sp.	hawkbit							1		
<i>Anthemis cotula</i> L.	stinking chamomile seed heads (part)							14		
<i>A. cotula</i> L.	stinking chamomile			21	33	19	6	56	24	
Asteraceae indet						1				
<i>Carex</i> sp.	sedge								1	
<i>Lolium temulentum</i> L.	darnel			2	2	1		2		
<i>Bromus</i> sp(p).	brome	1		1		5	3		12	1
cf. <i>Bromus</i> sp(p).	?brome			5	3	10	2	1		
Poaceae indet.	wild grasses (large seeds)			1	13	8	4	8	8	3

		LATE BRONZE								
Period		AGE			MEDIEVAL			MEDIEVAL		
feature		PIT			PIT			OVEN		
feature number		1374			1895			1185		
context type		FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL
context number		1375	1375	1896	1896	1896	1896	1187	1187	1977
sample number		75	76	371	372	373	374	43	44	439
vol (l) processed soil		6	8	4	6	8	2	10	10	22
vol flot (ml)		60	56	10	20	20	10	82	63	228
LATIN_NAME	ENGLISH									
Poaceae indet.	wild grasses (small seeds)	1								
Poaceae indet.	cereal/wild grass culm node fragments	3			1			1		
indeterminate	wood charcoal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
indeterminate				+	+		+		+	+
total		67	72	100	264	259	147	307	623	170
<i>item density (per litre of processed soil)</i>		<i>11.2</i>	<i>9</i>	<i>25</i>	<i>44</i>	<i>32.4</i>	<i>73.5</i>	<i>30.7</i>	<i>62.3</i>	<i>7.7</i>

key: item frequency: + =1-10; ++ = 11-50; +++ = 51-150; ++++ = 151-250; +++++ = >250 items.

Table 17 Results of the charcoal analysis by feature

			Middle/Late Bronze Age		Middle/Late Bronze Age		Middle/Late Bronze Age		Middle/Late Bronze Age		Middle/Late Bronze Age		Middle Iron Age		Late Iron Age/Roman		Late Iron Age/Roman					
Period			1570		1759		1841		1881		1727		2513		2853		2874					
Context			1571		1760		1842		1882		1730		2514		2854		2875					
Site Number			65741		65741		65741		65741		65741		65743		65743		65743					
Samples			123, 124,		245, 246,				354, 355, 356,				216, 217,		244, 245, 246,		258, 259, 260,					
			125, 126		247, 248		293, 294, 295		357		174		218, 219		247		261					
Feature Type			Unurned Crem.		Unurned Crem.		Unurned Crem.		Unurned Crem.		Urned Crem.		Cremation		Unurned Crem.		Unurned Crem.					
Family	Taxonomic Identification	Common Name	count	weight	count	weight	count	weight	count	weight	count	weight	count	weight	count	weight	count	weight	Total count	Total weight	Total count	Total weight
Fagaceae	Quercus sp.	oak	59			1																
			(some	5.		5.						3.										
			V)	72	85	4	25	7	27	2.74	22	9	96	73	96	8.71	95 (D,	7.18	505	8	65.1	
						0.			0.9			1		20.								
						1		1		0.1	3 (PDS,			0.1			5 (some					
	cf Quercus sp.				1	9	2	3	V)	0.26			1	7	13	1.34	PDS)	0.42	25	2.51		
	Quercus sp.																					
	RW				6	5														6	0.75	
	Quercus /Castanea twig wood (5 star pith)	oak/sweet chestnut												0.0								
													1	3							1	0.03

Period			Middle/Late Bronze Age	Middle/Late Bronze Age	Middle/Late Bronze Age	Middle/Late Bronze Age	Middle/Late Bronze Age	Middle Iron Age	Late Iron Age/Roman	Late Iron Age/Roman
Feature			1570	1759	1841	1881	1727	2513	2853	2874
Context			1571	1760	1842	1882	1730	2514	2854	2875
Site Number			65741	65741	65741	65741	65741	65743	65743	65743
Samples			123, 124, 125, 126	245, 246, 247, 248	293, 294, 295	354, 355, 356, 357	174	216, 217, 218, 219	244, 245, 246, 247	258, 259, 260, 261
Feature Type			Unurned Crem.	Unurned Crem.	Unurned Crem.	Unurned Crem.	Unurned Crem.	Cremation	Unurned Crem.	Unurned Crem.
Rosaceae		eg.								
-		apple/hawthorn								
Maloidea		/						1.		
e sub		whitebeam/row						0		
family	Maloideae	an					8	6		8 1.06
				0.				0.		
				0.	0			0		
	cf Maloideae		1	14 1	5		1 RW	8		3 0.27
Rosaceae										
-										
Prunoide				0.				4.		
ae sub		cherry/blacktho		2				0		
family	Prunus sp.	rn		2	2		37	6		39 4.28
						0.0				
	cf. Prunus sp.				2	5				2 0.05
				0.				0.		
Betulacea	Corylus/Alnus			3			2 (incl	2		
e	sp.	hazel/alder		2	2		V)	7		4 0.59
	cf.		1	0.		2 RW	0.0			3 0.11

Period			Middle/Late Bronze Age	Middle/Late Bronze Age	Middle/Late Bronze Age	Middle/Late Bronze Age	Middle/Late Bronze Age	Middle Iron Age	Late Iron Age/Roman	Late Iron Age/Roman		
Feature			1570	1759	1841	1881	1727	2513	2853	2874		
Context			1571	1760	1842	1882	1730	2514	2854	2875		
Site Number			65741	65741	65741	65741	65741	65743	65743	65743		
Samples			123, 124, 125, 126	245, 246, 247, 248	293, 294, 295	354, 355, 356, 357	174	216, 217, 218, 219	244, 245, 246, 247	258, 259, 260, 261		
Feature Type			Unurned Crem.	Unurned Crem.	Unurned Crem.	Unurned Crem.	Urned Crem.	Cremation	Unurned Crem.	Unurned Crem.		
e	Corylus/Alnus sp.			06		5						
	Aceracea			0.				0. 8				
	Acer campestre	field maple	3	34			9	6			12	1.20
	cf. Acer campestre		2	0. 12							2	0.12
Indet twig wood (pith shape and wood anat not clear									0.1 1	2	1	0.12
Indet Bark frag					0. 0			0. 1				
				1	9		1 (V)	2			2	0.21
Indet (various preservation)					0. 0			7 PDS (incl 1 part V)				
			9 (D, PDS)	1. 23	6 2 PDS	0.1 3 V	2 1 PDS	0.08	3.0 1	1 D 0.28	23	5.32

Period	Middle/Late Bronze Age	Middle/Late Bronze Age	Middle/Late Bronze Age	Middle/Late Bronze Age	Middle/Late Bronze Age	Middle Iron Age	Late Iron Age/Roman	Late Iron Age/Roman		
Feature	1570	1759	1841	1881	1727	2513	2853	2874		
Context	1571	1760	1842	1882	1730	2514	2854	2875		
Site Number	65741	65741	65741	65741	65741	65743	65743	65743		
Samples	123, 124,	245, 246,		354, 355, 356,		216, 217,	244, 245, 246,	258, 259, 260,		
	125, 126	247, 248	293, 294, 295	357	174	218, 219	247	261		
Feature Type	Unurned	Unurned	Unurned	Unurned	Uned		Unurned			
	Crem.	Crem.	Crem.	Crem.	Crem.	Cremation	Crem.	Unurned Crem.		
Total Fragments/Wei ght (by feature)	1									
	8.								9.	
	7.	1	1.3	6			24.	10.3	81.8	
	75	61 100	6 34	2 31	3.08 80	4 106	06 110	3 100	7.60 636	0

Key: weights are given in grams, cf. = compares with, RW = roundwood, V = vitrified, D = distorted, PDS = post depositional sediment, Indet = indeterminate/unidentifiable.

Table 18 Results of the charcoal analysis by period (weight in grams)

			Middle/Late Bronze		Middle Iron		Late Iron			
Period			Age		Age		Age/Romano-British			
Family	Taxonomic Identification	Common Name	count	weight	count	weight	count	weight	Total count	Total weight
Fagaceae	Quercus sp. (incl. cf. & rw)	oak	230	29.89	97	20.90	209	17.65	536	68.44
	Quercus /Castanea twig									
	wood (five star pith)	oak/sweet chestnut			1	0.03			1	0.03
Rosaceae - Maloideae sub		eg. apple/hawthorn/								
family	Maloideae (incl cf.)	whitebeam/rowan	11	1.33					11	1.33
Rosaceae - Prunoideae sub										
family	Prunus sp. (incl cf.)	cherry/blackthorn	41	4.33					41	4.33
Betulaceae	Corylus/Alnus sp. (incl cf.)	hazel/alder	7	0.70					7	0.70
Aceraceae	Acer campestre (incl cf.)	field maple	14	1.32					14	1.32
	Indeterminate combined		17	2.24	8	3.13	1	0.28	26	5.65
Total Fragments/weight			320	39.81	106	24.06	210	17.93	636	81.80

Table 19 Radiocarbon dates from cremation deposits

Lab. Ref	Sample reference	Material	Date BP	δC13‰	calibration (2 sig. 95.4%)
SUERC-80702 (GU48266)	Area A [2513] (2514)	Cremated human bone: femur? (2.2g)	2165±24	-21.2‰	360-120 cal. BC
SUERC-80703 (GU48267)	Area A [2861] (2862)	Cremated human bone: Long bone shaft (2.3g)	2048±20	-22.9‰	161 cal. BC- cal. AD 5
SUERC-80707 (GU48268)	Area B [1841] (1842)	Cremated human bone: Long bone shaft (2.4g)	2963±24	-25‰	1260-1090 cal. BC
SUERC-80708 (GU48269)	Area B [1570] (1571)	Cremated human bone: Femur (2.4g)	2899±24	-22.4‰	1190-1010 cal. BC
SUERC-80709 (GU48270)	Area B [1881] (1882)	Cremated human bone: femur? Shaft (2g)	2954±24	-22.2‰	1260-1060 cal. BC
SUERC-80710 (GU48271)	Area B [1759] (1760)	Cremated human bone: various long bones (2.1g)	2911±21	-22.9‰	1200-1020 cal. BC
GU48272	Area B [1149] (1150) I	Cremated human bone: 2.5 g	Failed		
SUERC-80711 (GU48273)	Area B [1095] (1096)	Cremated human bone: long bone (2.5g)	2941±24	-21.3‰	1220-1050 cal. BC
SUERC-81618 (GU48717)	Area B [1149] (1150) II	Cremated human bone: 2.6 g	2913±28	-22.2‰	1210-1020 cal. BC

Appendix 2: Catalogue of illustrated flint

1.1 Truncation; unstratified

1.2 Truncation; unstratified

1.3 Truncation; fill 141, pit 592

1.4 Truncation; fill 145, post hole 597

1.5 Truncation; alluvium 156

2.1 Notch; fill 120, ditch 573

2.2 Notch; fill 103, ditch 571

2.3 Notch; fill 212, field drain 658/659/660

2.4 Notch?; fill 30, field drain 521

3.1 Microlith - form B1; fill 166, ditch 167

3.2 Microlith - form B2; unstratified

3.3 Microlith - backed; layer 1003

3.4 Microlith - obliquely-blunted; fill 2678, ditch 2677

3.5 Microlith - fragmentary; fill 2635, wheel rut 2634

3.6 Microlith - backed; fill 1041, ditch 1040

4.1 Burin; fill 215, pit 662

4.2 Broken blade; fill 1130, pit 1129

4.3 Rejuvenation platform; unstratified

5.1 Leaf-shaped arrowhead; layer 1083

5.2 Leaf-shaped arrowhead; layer 1083

5.3 leaf-shaped arrowhead; layer 1082

5.4 leaf-shaped arrowhead; layer 1082

5.5 leaf-shaped arrowhead; layer 1082

5.6 leaf-shaped arrowhead - unfinished; unstratified

5.7 leaf-shaped arrowhead - unfinished; unstratified

6.1 Transverse arrowhead; unstratified

6.2 Scraper; fill 140, ditch 139

6.3 Scraper; subsoil 2501

7.1 Barbed & tanged arrowhead; unstratified

7.2 Barbed & tanged arrowhead; fill 1651, pit 1650

7.3 Thumbnail scraper; unstratified

7.4 Thumbnail scraper; unstratified

7.5 Thumbnail scraper; subsoil 2501

Appendix 3: Prehistoric pottery forms

The forms listed below are each represented by a single example, unless otherwise stated.

Bronze Age

R1 (CAT R17-R18): Slightly flared, concave rim. Broken at neck but probably from a fineware bowl, perhaps of tripartite profile. Equivalent to Cheesemans Green R10. Nineteen examples recorded, including one with pie-crust rim.

R2: Rim with internal bevel, slightly expanded externally, orientation uncertain. Equivalent to Cheesemans Green R11. Two examples recorded.

R3: Plain rim with slightly pinched top, orientation uncertain. Three examples recorded.

R4 (CAT R14): Rim with slightly out-turned tip, and internal bevel. Variant of R2. Four examples recorded.

R5: Low-waisted, long-necked bowl with squared, internally-bevelled rim. The illustrated example had traces of burnt residue on the interior, particularly at the waist line.

R6: A large, tripartite jar with pointed, flared rim.

R7: Plain, rounded rim from ovoid jar. Three examples recorded.

R8: Slack-sided jar with internally-bevelled, pointed rim.

R9: Hemispherical bowl with flat-topped rim.

R10: Pointed/hooked rim from convex profile jar, orientation uncertain.

R11: Plain, rounded rim, orientation uncertain.

R12: Flat-topped, undifferentiated rim, probably from a bucket-style vessel. Decorated with slashes on rim top and fingernail impressions on upper exterior.

R13: Undifferentiated, flat-topped rim from convex profile jar, but orientation uncertain.

R14: Flat-topped rim with traces of fingertip/fingernail impressions on rim top. A fingertip-impressed cordon may have come from this vessel.

R15: Flat-topped rim from vessel with convex neck and flaring wall. Similar to R1 but with convex rather than concave neck. Two examples recorded.

R16: Carinated bowl with long, concave neck and flat-topped rim.

- R17: Flat-topped rim, internally expanded, probably from a hemispherical bowl.
- R18: Thin-walled vessel with upright, rounded rim, probably from a carinated cup.
- R19: Hemispherical bowl with flat-topped rim, internally pinched lip. Two examples recorded.
- R20: Flat-topped, externally expanded rim, irregularly folded on the exterior, probably from a shouldered jar. Decorated with fingernail or similar impressions on the rim top.
- R21: Jar with short, out-turned rim, pie-crust exterior, and at least four pre-firing perforations around the neck.
- R22: Rounded, undifferentiated rim, from a hemispherical bowl with tightly curved wall.
- R23: Long-necked, shouldered jar with flattened rim.
- R24: Straight-walled vessel with internally expanded and internally bevelled rim.
- R25: Thin-walled cup, rounded and slightly out-turned rim, long neck and carinated body.
- R26: Convex bowl with flat-topped rim.
- R27: Convex-profile jar with internally bevelled rim.
- R28: Flared rim with internal bevel, profile unknown. Two examples recorded.
- CAT R9: Flat-topped, upright rim, with rolled over top. Equivalent to Cheesemans Green form R13 (Jones and Seager Smith forthcoming).
- CAT R15: Rounded fragment, possibly part of a flange or handle but too incomplete to ascertain form type.
- CAT R19: Flat-topped rim with slight pinching under rim exterior.

Middle to Late Iron Age

- R30: Jar with flat-topped rim, slight internal bevel, gently-shaped neck, convex profile. Sandy ware
- R31: Round-bodied jar with everted rim.
- R32: Round-bodied bowl with everted, rounded rim. Smoothed surfaces, two tooled, horizontal lines at the neck, part of a curved line below.
- R33: Vessel with rounded body and proto-bead rim a sandy, grog-tempered fabric.

R34: Small vessel of neutral profile with rounded, undifferentiated rim and smoothed surfaces, possible saucepan pot.

R35: Vessel of ovoid profile with undifferentiated rim, possible bowl.

R36: Hemispherical bowl with flat-topped rim.

R37: Barrel-shaped jar with flat-topped rim and slightly shaped neck.

CAT R16: Proto-bead rimmed jar, internally bevelled.

CAT R20: Squared rim with slight channel on rim top. Traces of shaping around the rim. Probably from a jar with convex profile.

Appendix 4: Catalogue of illustrated vessels

Bronze Age

Convex jars

1. PRN 49, R8, flint and grog -tempered, finger-smoothed exterior, context 3113, pit 3110
2. BA 6, R13, flint and grog-tempered, burnt residue on interior, context 1547, posthole 1546
3. BA 11. R24, grog-tempered, context 1314, tree-throw hole 1313
4. BA 5. R10, grog-tempered, finger-smoothed exterior, context 2856, pit 2855
5. BA 14, R27, grog and flint-tempered, context 1984, tree-throw hole 1983

Shouldered jars

6. PRN 48, R6, flint and grog-tempered, context 3113, pit 3110
7. BA 10, R23, flint-tempered, context 1314, tree-throw hole 1313

Carinated bowls and cups

8. BA ?, PRN 47, R5, flint-tempered, burnt residue on interior, context 3113, pit 3110
9. BA 12, R25, fine flint-tempered, context 1949, tree-throw hole 1948
10. BA 7, R16, grog-tempered, context 1606, pit 1605

Hemispherical bowls

11. BA 4, R9, ON 257, flint-tempered, context 2856, pit 2855
12. BA 13, R26, grog and flint-tempered, context 1984, tree-throw hole 1983
13. BA 8, R17, grog and flint-tempered, context 1665, pit 1664

Iron Age

1. IA 1. R30, jar with flat-topped rim, slight internal bevel, gently shaped neck, convex profile, sandy ware, context 3004, intervention 3003, ring gully 3063
2. IA 2. R31, round-bodied jar with everted rim, grog-tempered, context 2830, intervention 2829, ring gully 3063
3. IA 3. R32, round-bodied bowl with everted, rounded rim, smoothed surfaces, two tooled, horizontal lines at the neck and part of a curved line below, grog-tempered, context 2830, intervention 2829, ring gully 3063
4. IA 4. R33, vessel with rounded body and proto-bead rim, grog-tempered (sandy texture), context 2830, intervention 2829, ring gully 3063
5. IA 5. R34, small, neutral profile vessel with rounded, undifferentiated rim, smoothed surfaces, grog-tempered, context 2832, ring gully 3063

6. IA 6, R35, vessel of ovoid profile, undifferentiated rim, flint-tempered, context 2858, intervention 2857, gully 3363
7. IA 7, R36, hemispherical bowl with flat-topped rim, grog-tempered, context 2919, intervention 2918, gully 3349, roundhouse 3360
8. IA 8, R37, barrel-shaped jar with flat-topped rim and slightly shaped neck, sand and iron-gritted fabric, context 1214, intervention 1213, ditch 2024

Late Iron Age to Romano-British

Context 3313, intervention 3312, ditch 3007

1. PRN 1, C2-1, post-firing perforation through base, grog-tempered
2. PRN 2, B1-1/D1-1, grog-tempered
3. PRN 3, B1-1/D1-1, grog-tempered
4. PRN 4, B1-1/D1-1, grog-tempered
5. PRN 5, B1-1/D1-1, grog-tempered
6. PRN 6, B1-1/D1-1, grog-tempered
7. PRN 7, B1-1, grog-tempered
8. PRN 8, B1-1/D1-1, grog-tempered
9. PRN 9, B1-1/D1-1, grog-tempered
10. PRN 10, B1-1/D1-1, grog-tempered
11. PRN 11, B1-1/D1-1, grog-tempered
12. PRN 12, G5-1, grog-tempered
13. PRN 13, G5-6, grog-tempered
14. PRN 14, B1-3, grog-tempered
15. PRN 15, B1-1/D1-1, grog-tempered
16. PRN 17, plain base with single post-firing perforation, grog-tempered
17. PRN 18, plain base with one post-firing perforation, grog-tempered
18. PRN 19, slightly footed base, grog-tempered
19. PRN 20, plain base, grog-tempered
20. PRN 21, slightly footed base with at least four post-firing perforations, grog-tempered
21. PRN 22, plain base, grog-tempered, context 3313, intervention 3312, ditch 3007
22. PRN 23, plain base, grog-tempered, context 3313, intervention 3312, ditch 3007
23. PRN 24, plain base with one post-firing perforation, grog-tempered
24. PRN 25, plain base with one post-firing perforation, grog-tempered

Other contexts within ditch 3007

- 25. PRN 45, B1-1/D1-1, grog-tempered, context 3050, intervention 3064, ditch 3007
- 26. PRN 46, B1-2, grog-tempered, context 3100, intervention 3064, ditch 3007
- 27. C1-2, grog-tempered, context 3222, intervention 3221, ditch 3007
- 28. D1-1, one central post-firing perforation, grog-tempered, context 3133, intervention 3135, ditch 3007

Figures

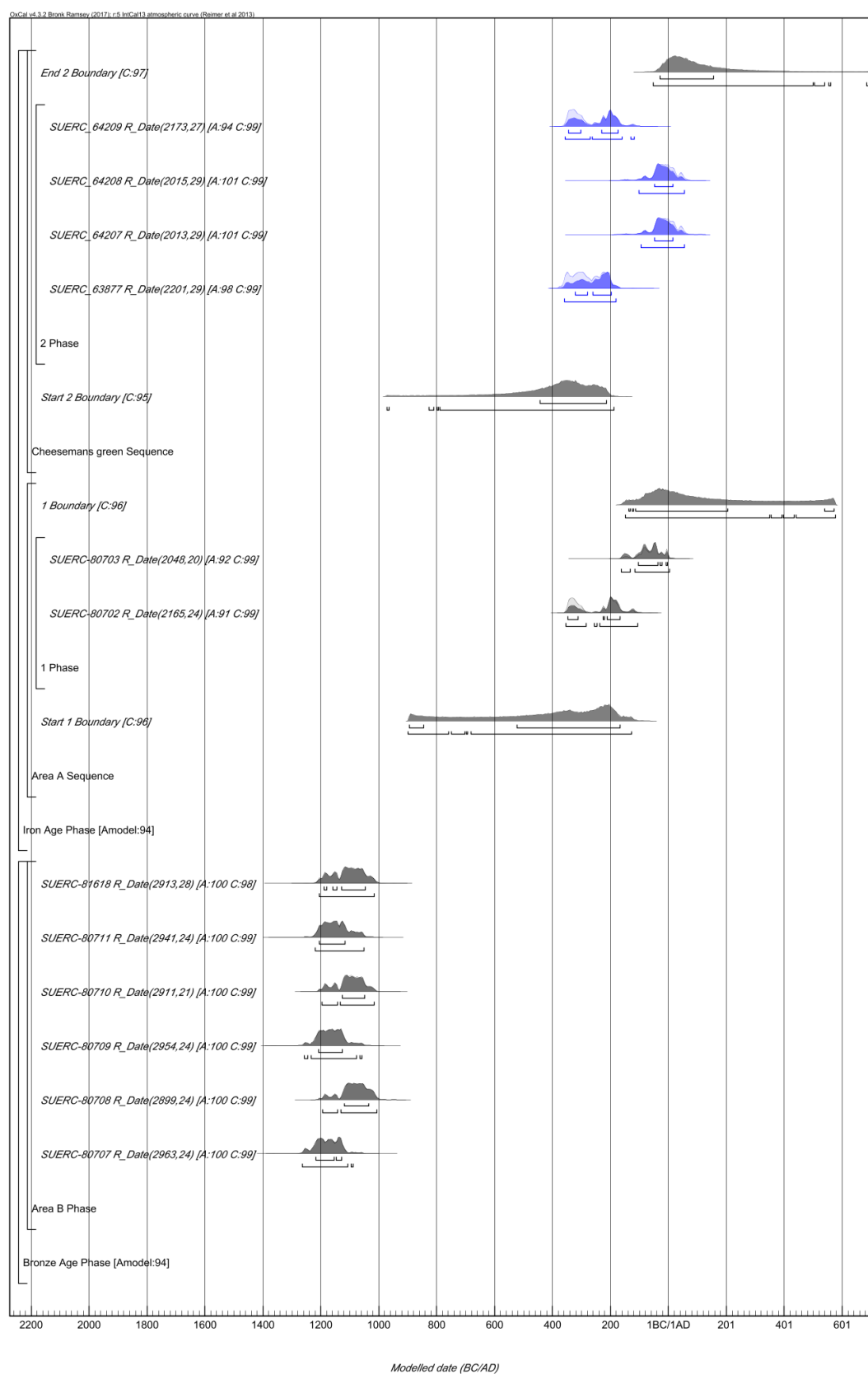


Figure 22 radiocarbon dating

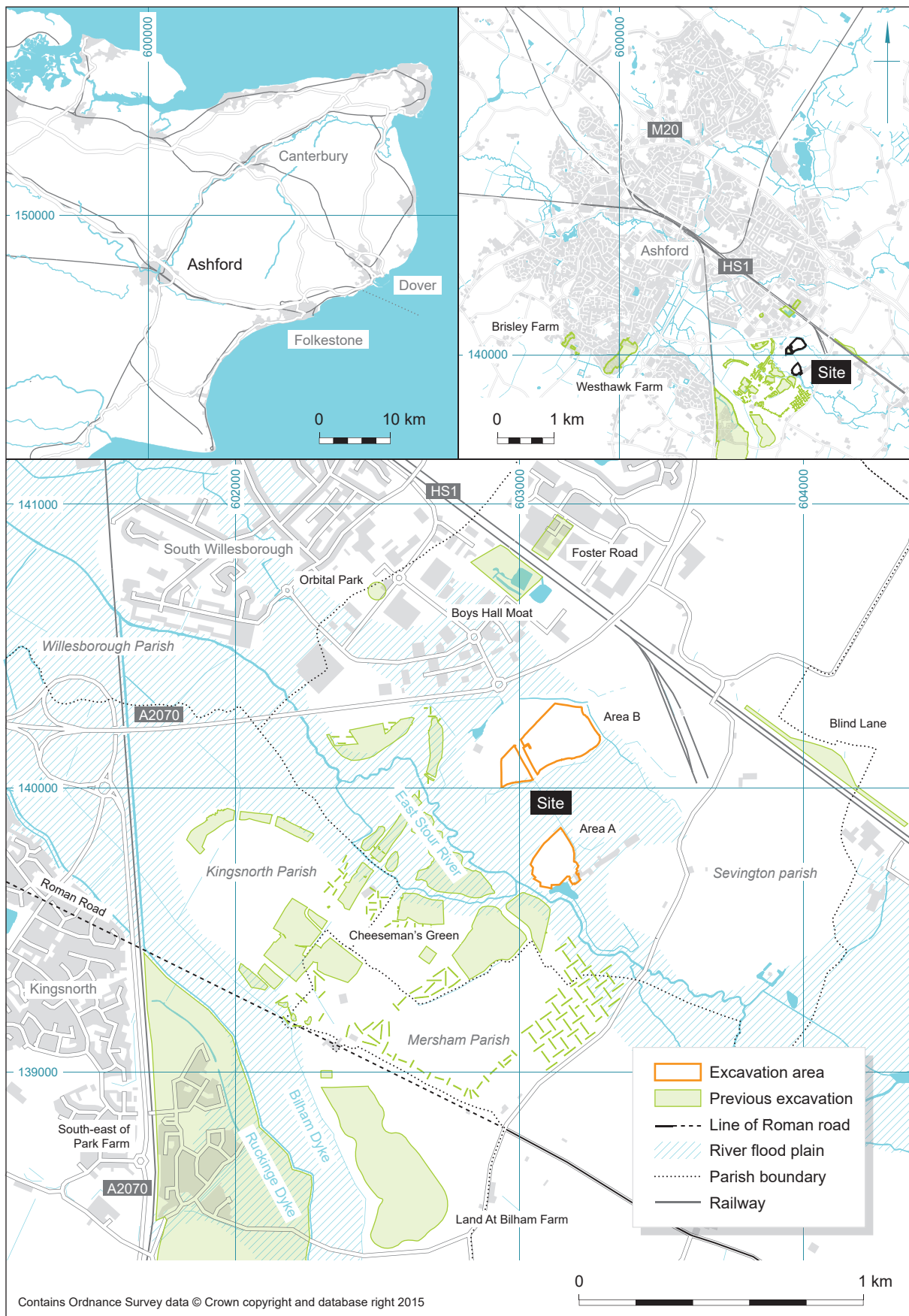


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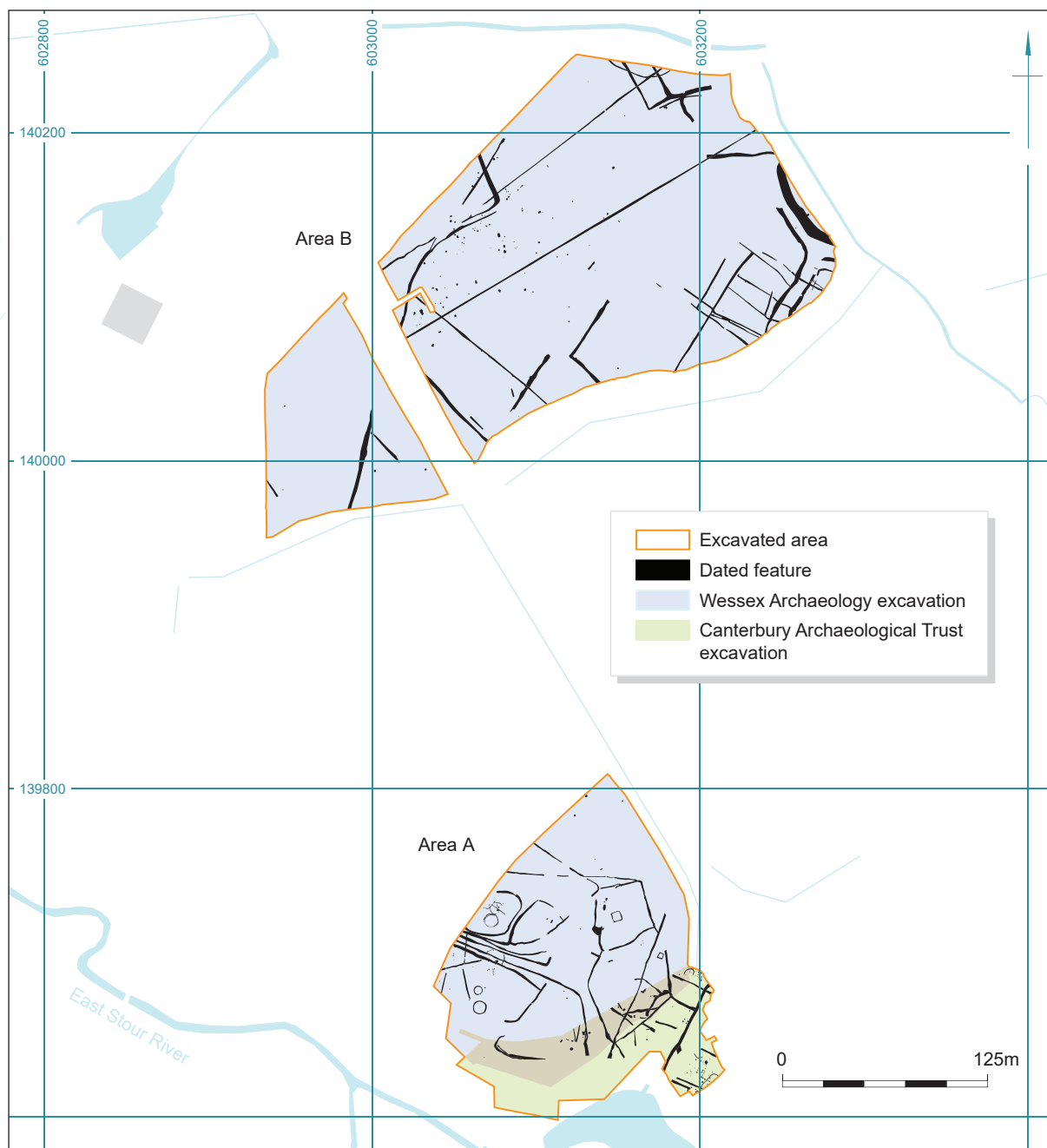


Figure 2



Figure 3

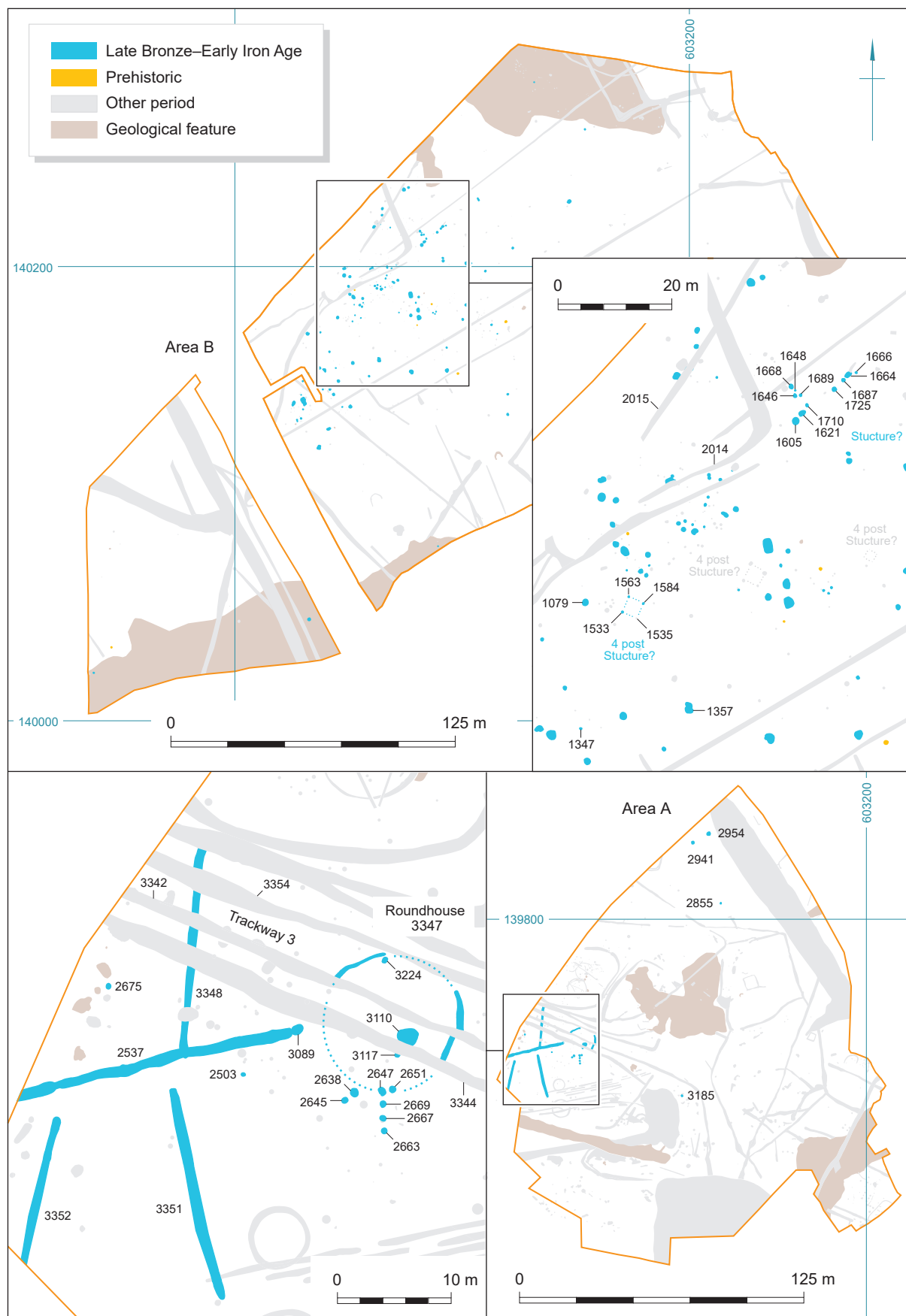


Figure 4



Figure 5

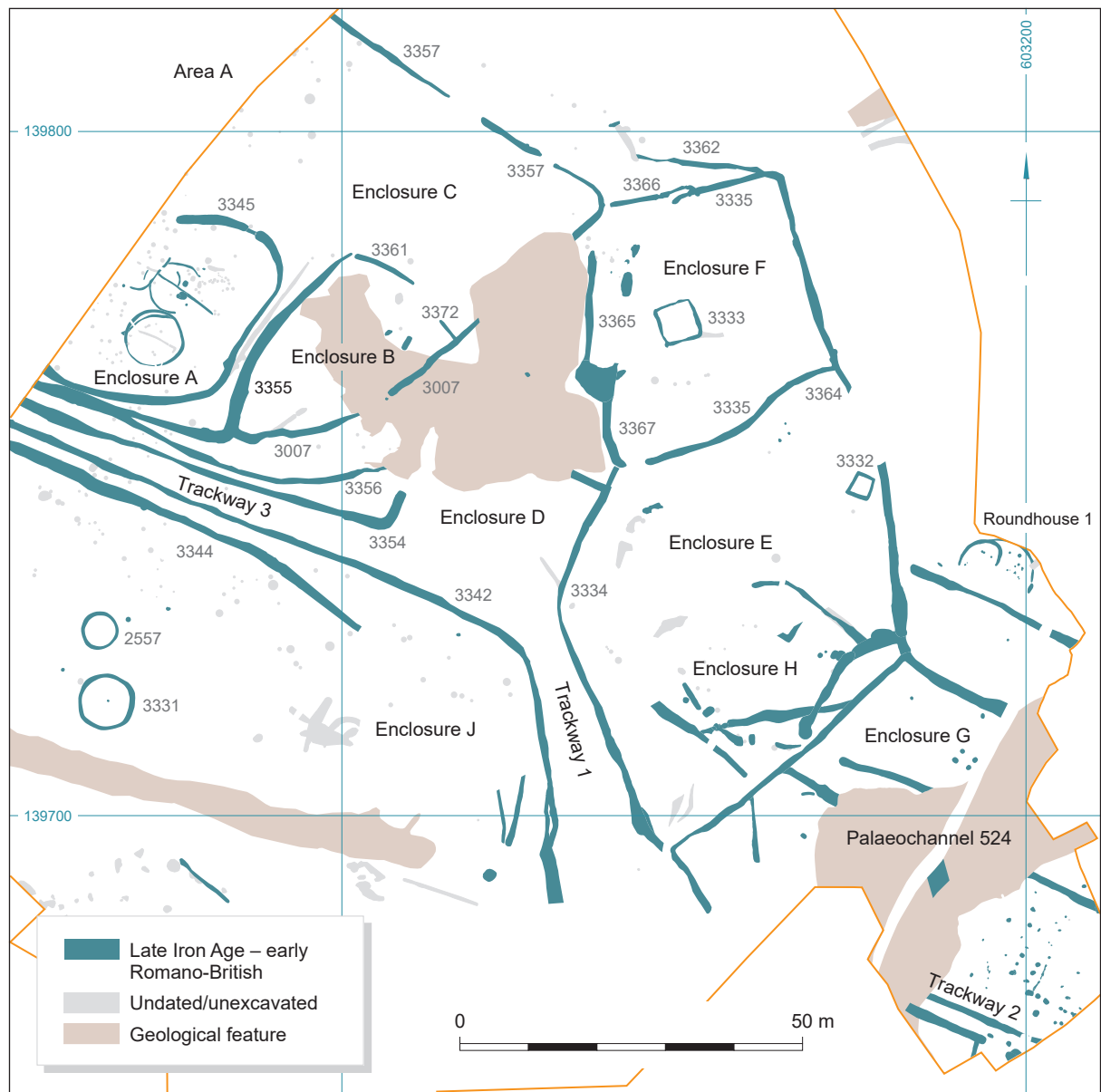


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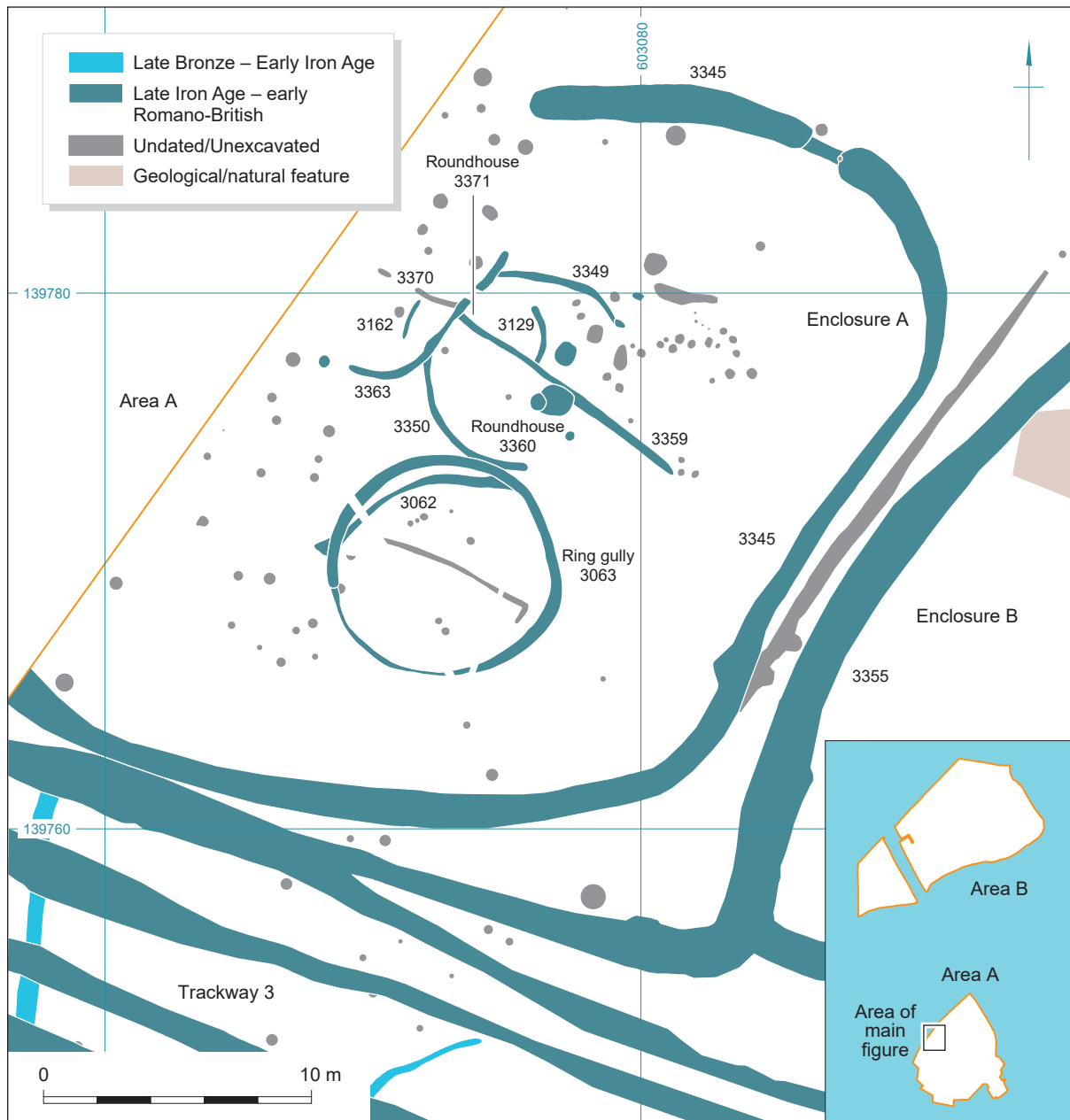


Figure 7



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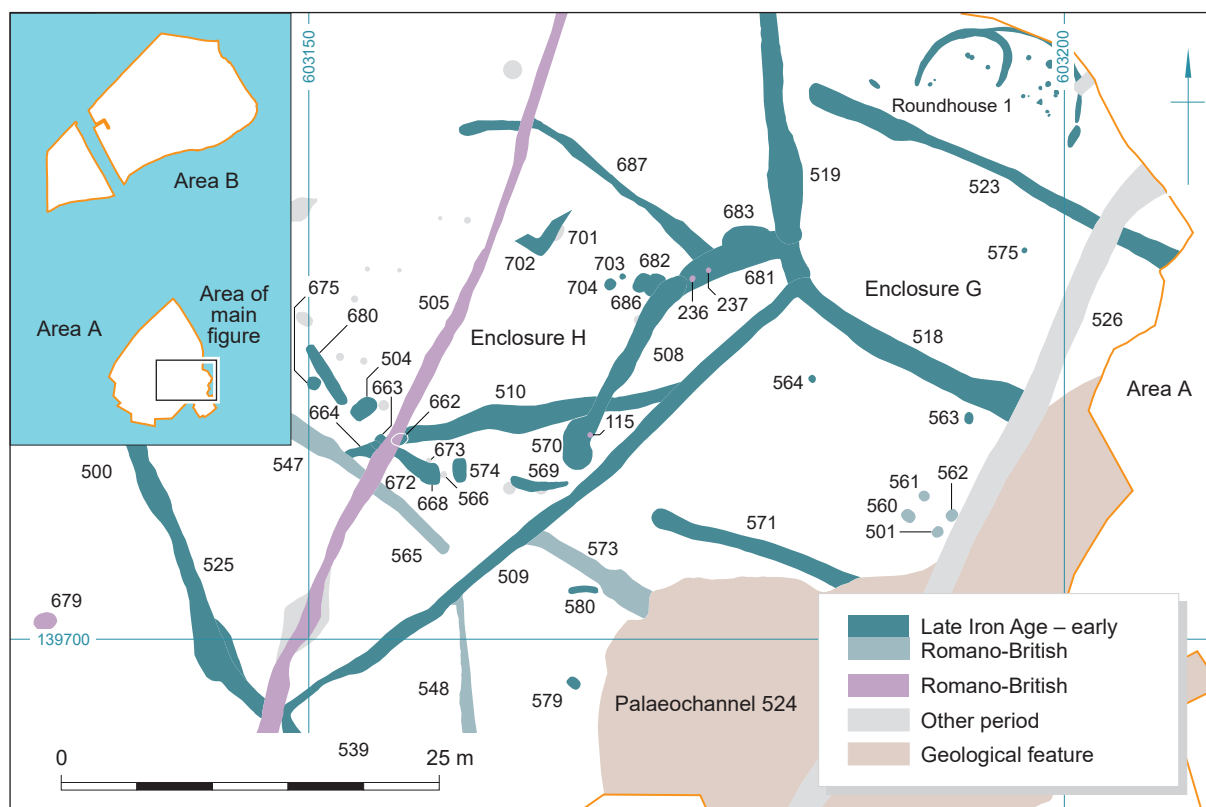


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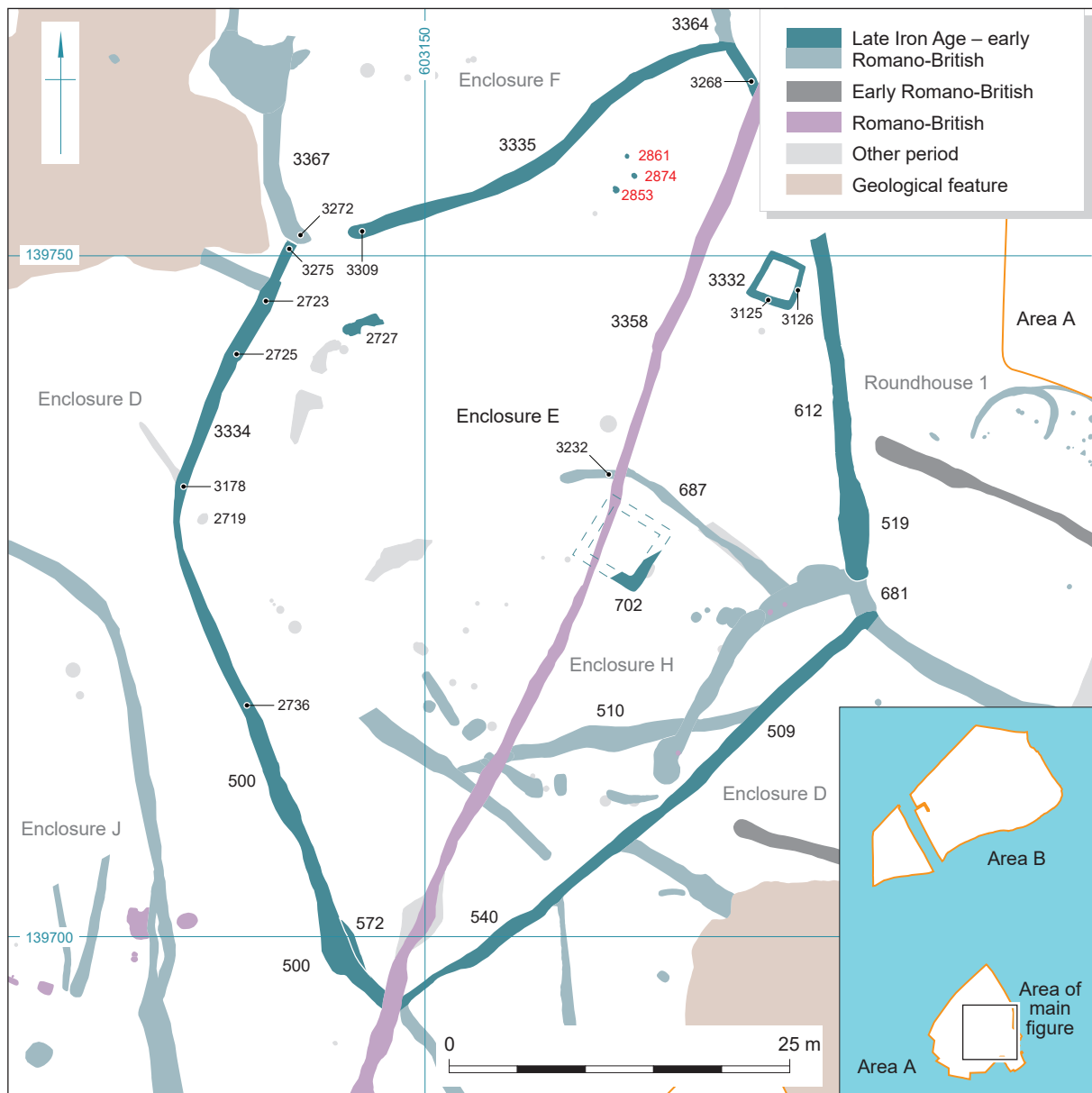


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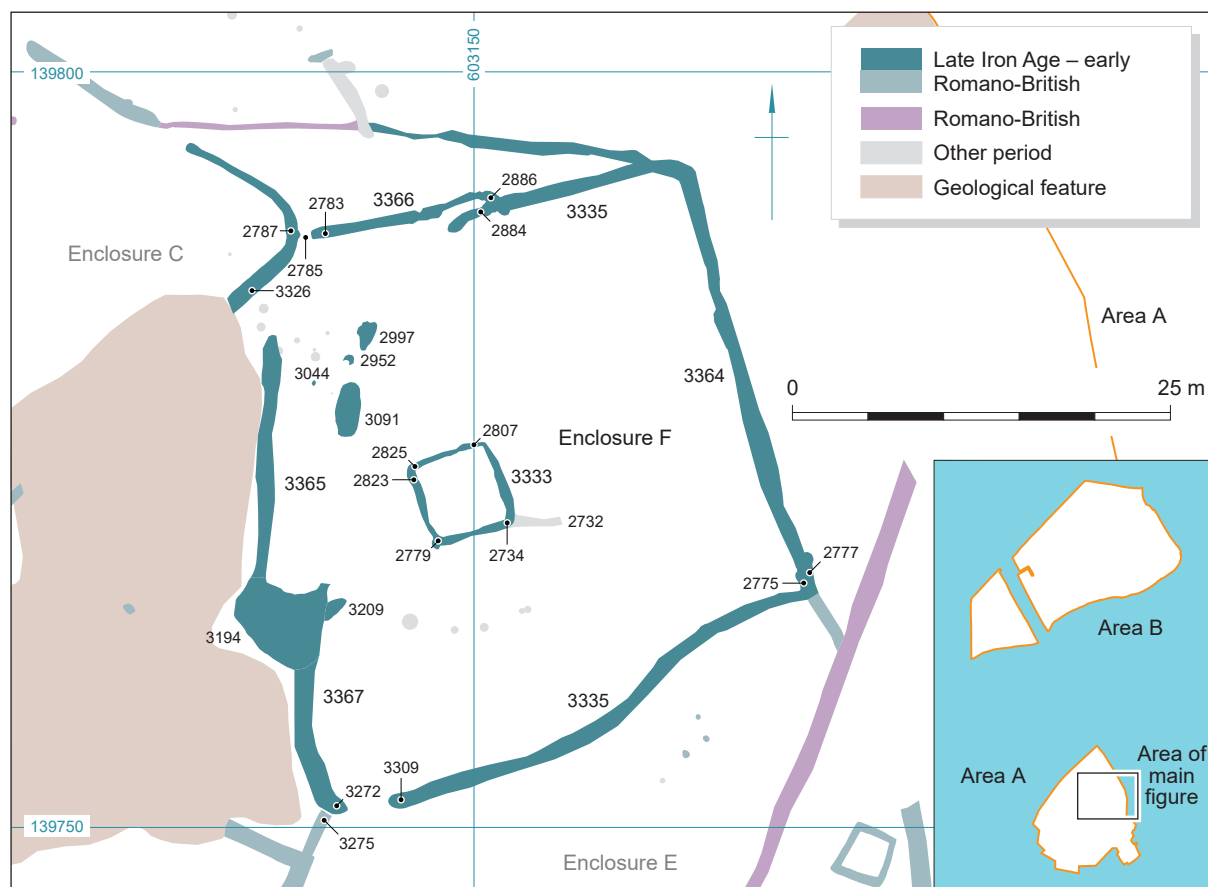


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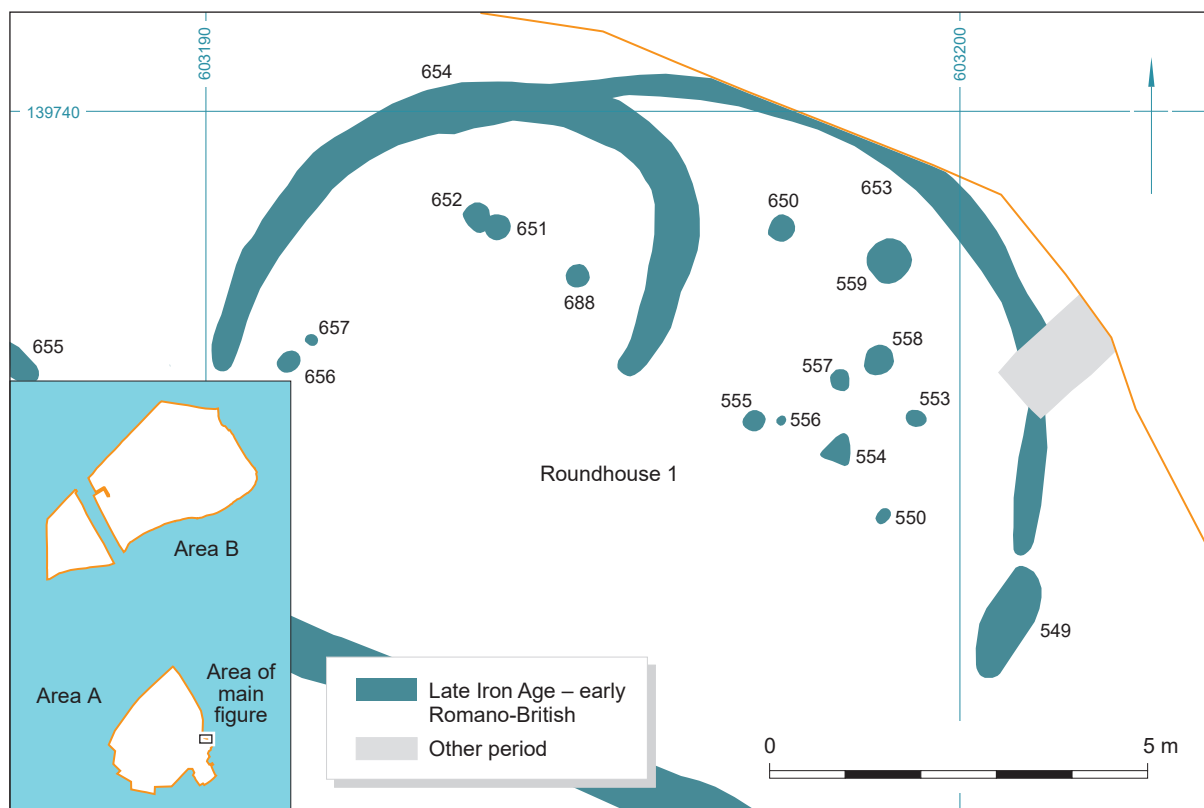


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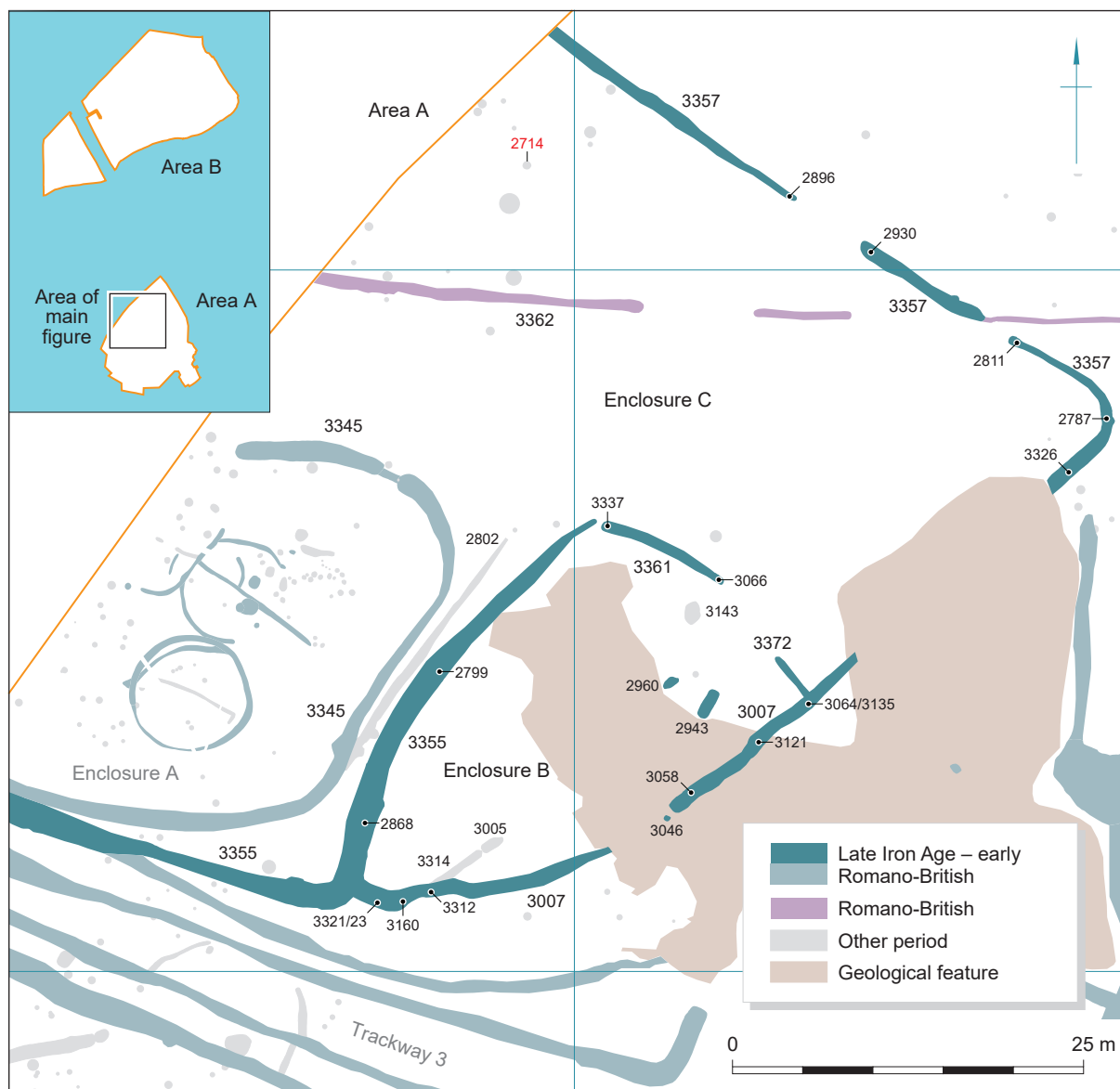


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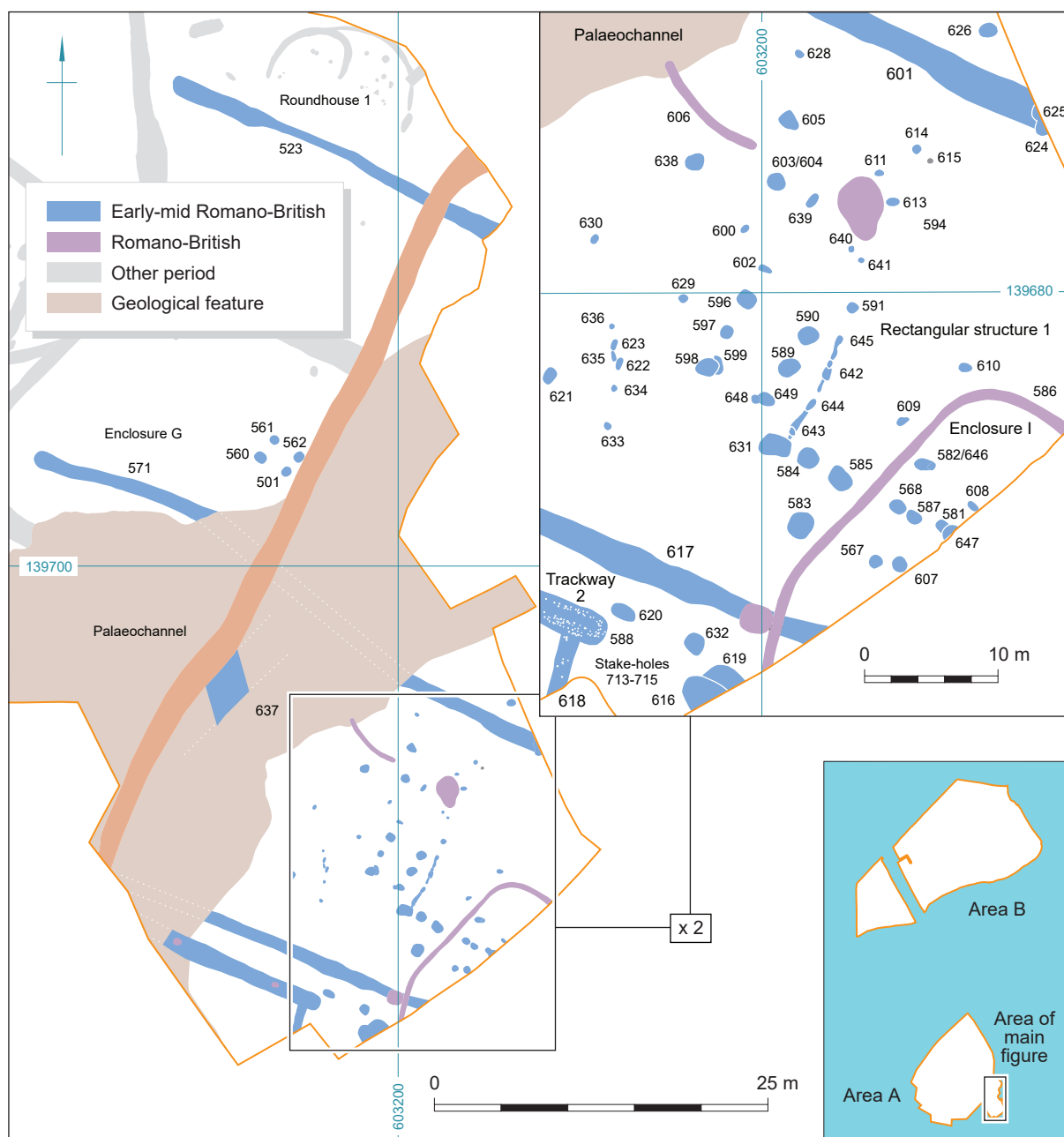


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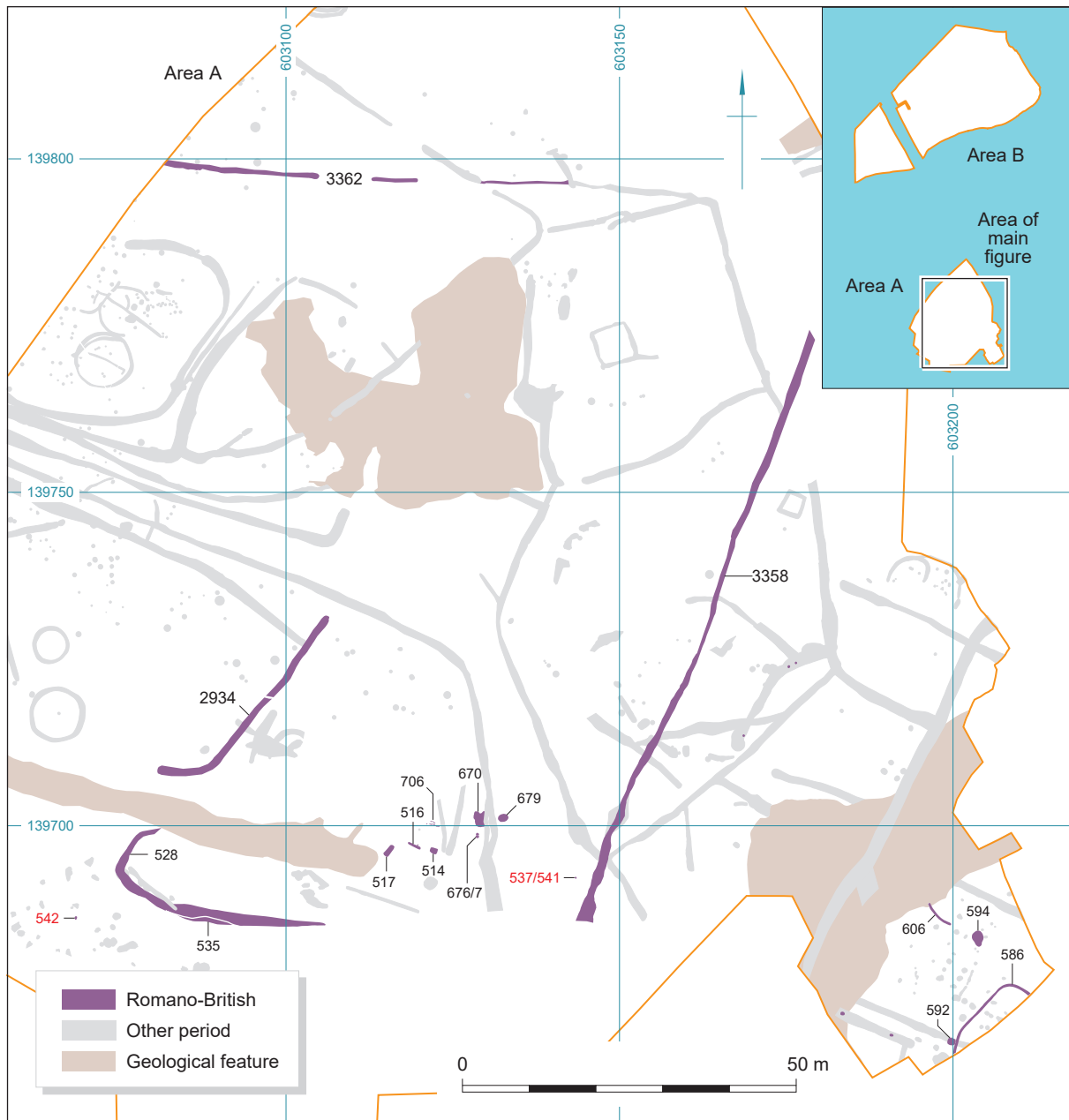


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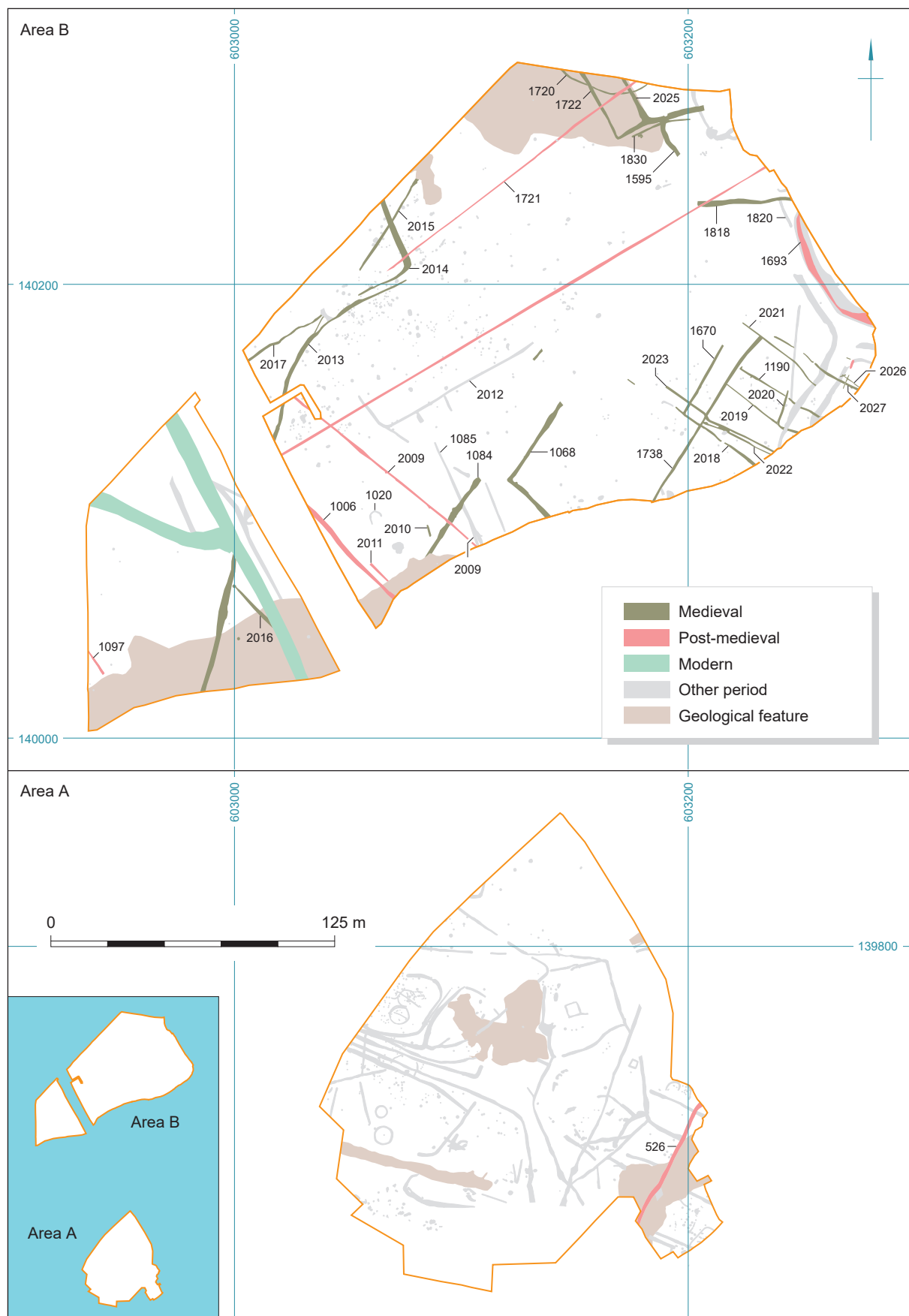


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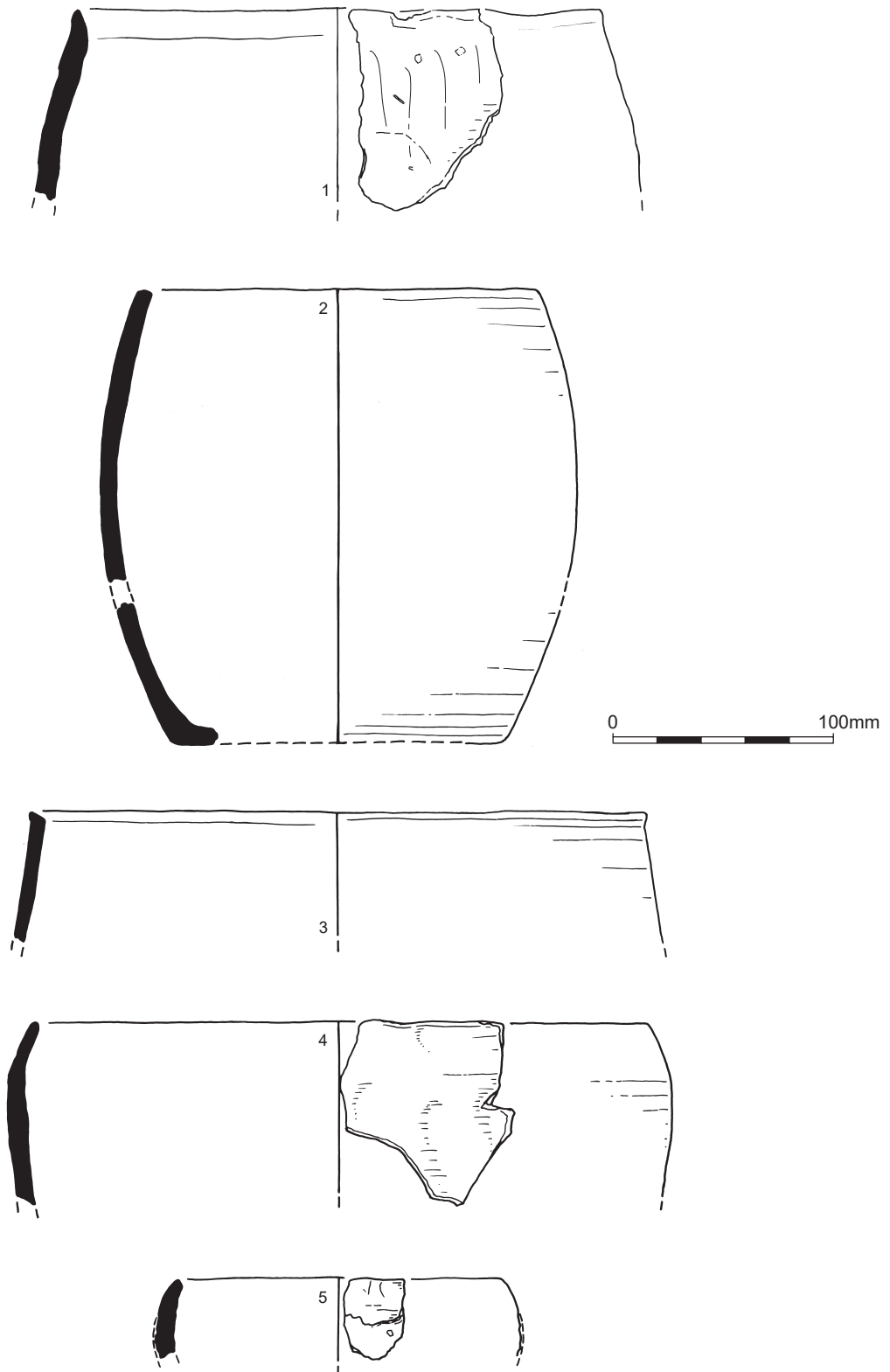


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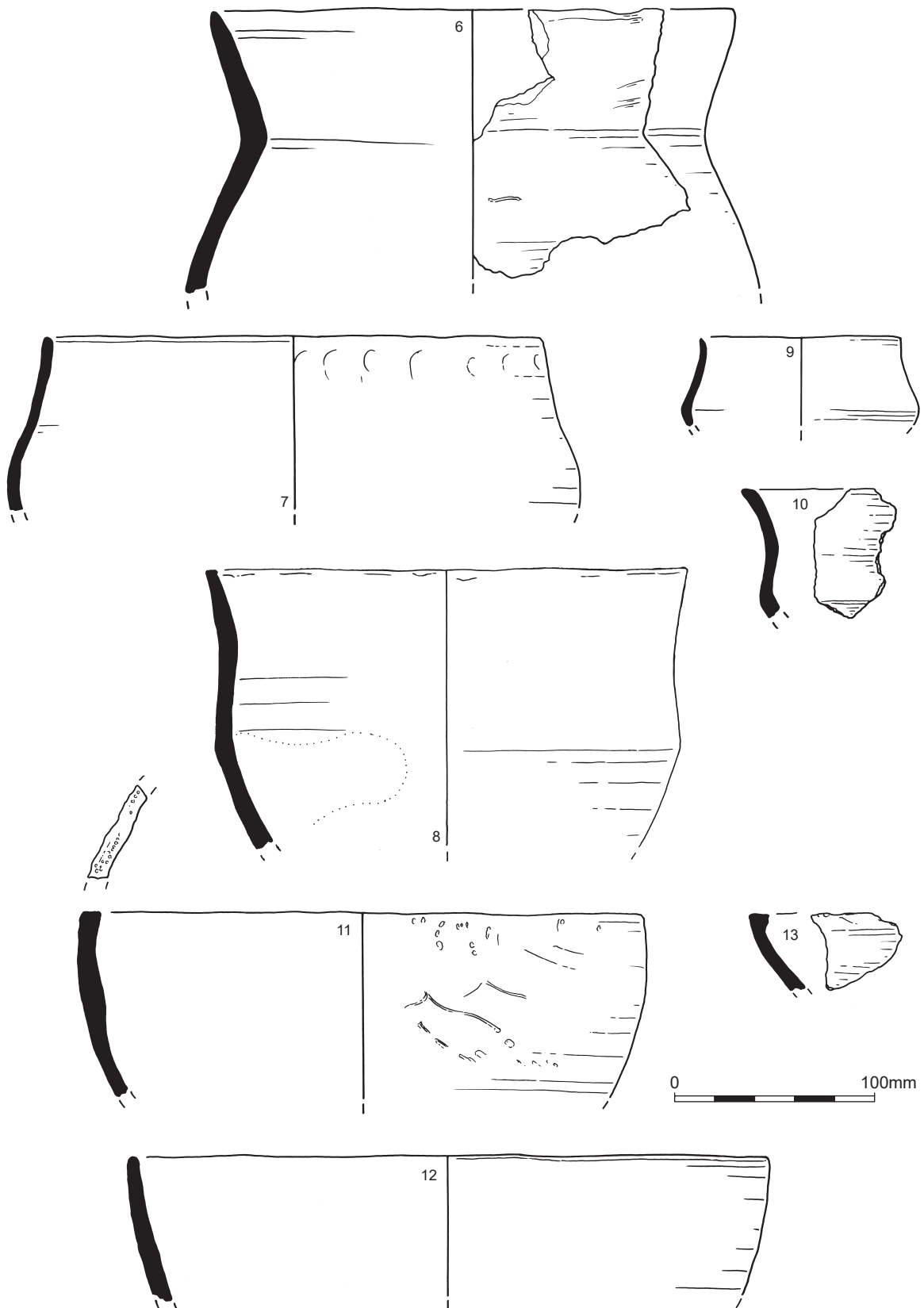


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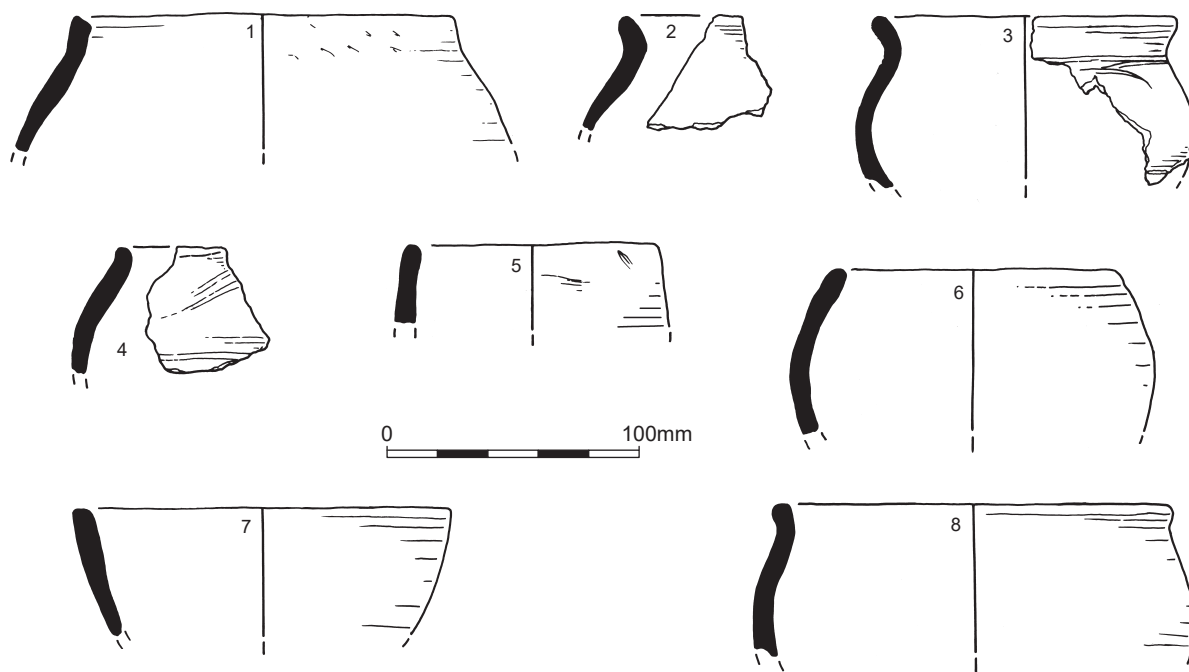


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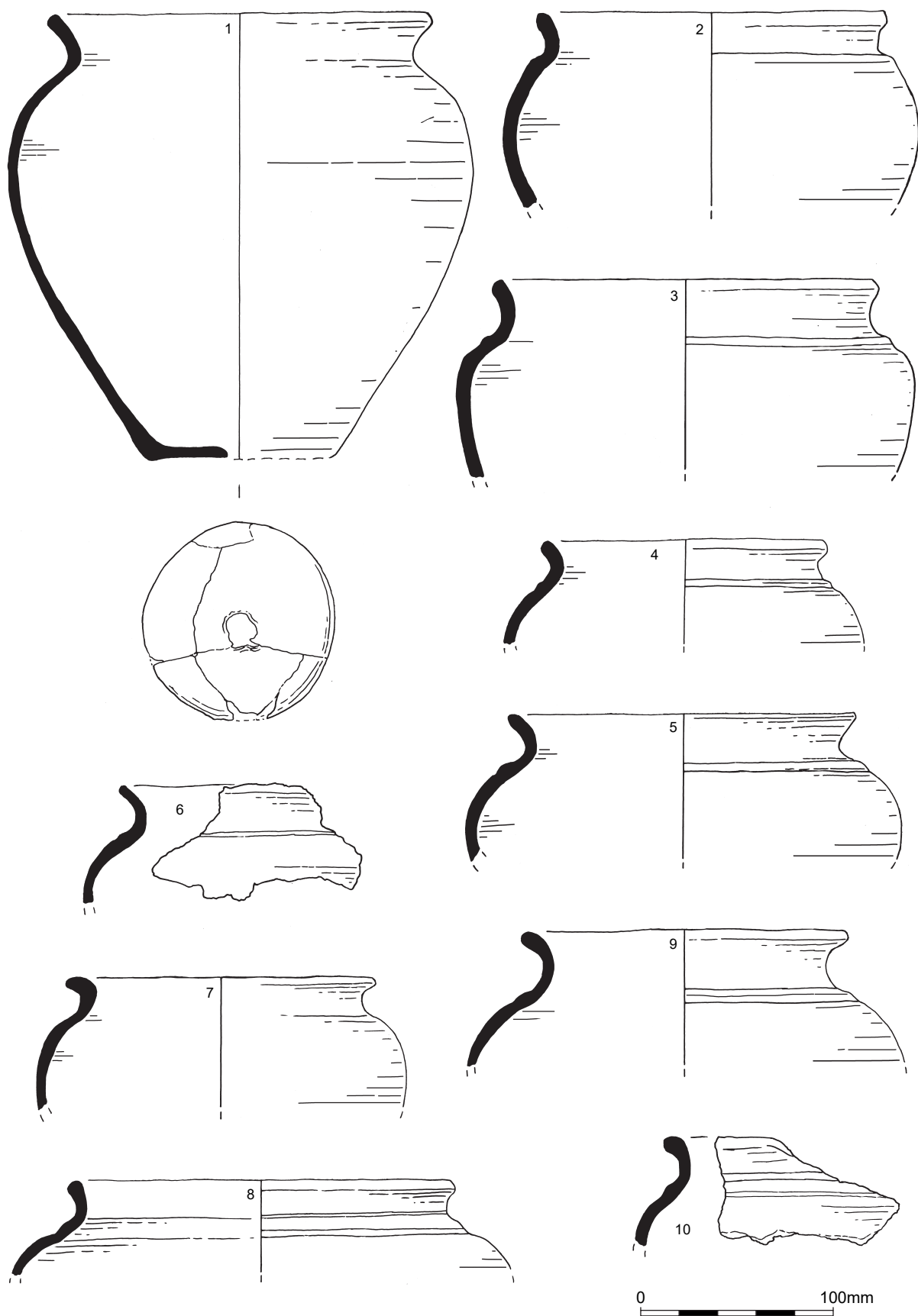


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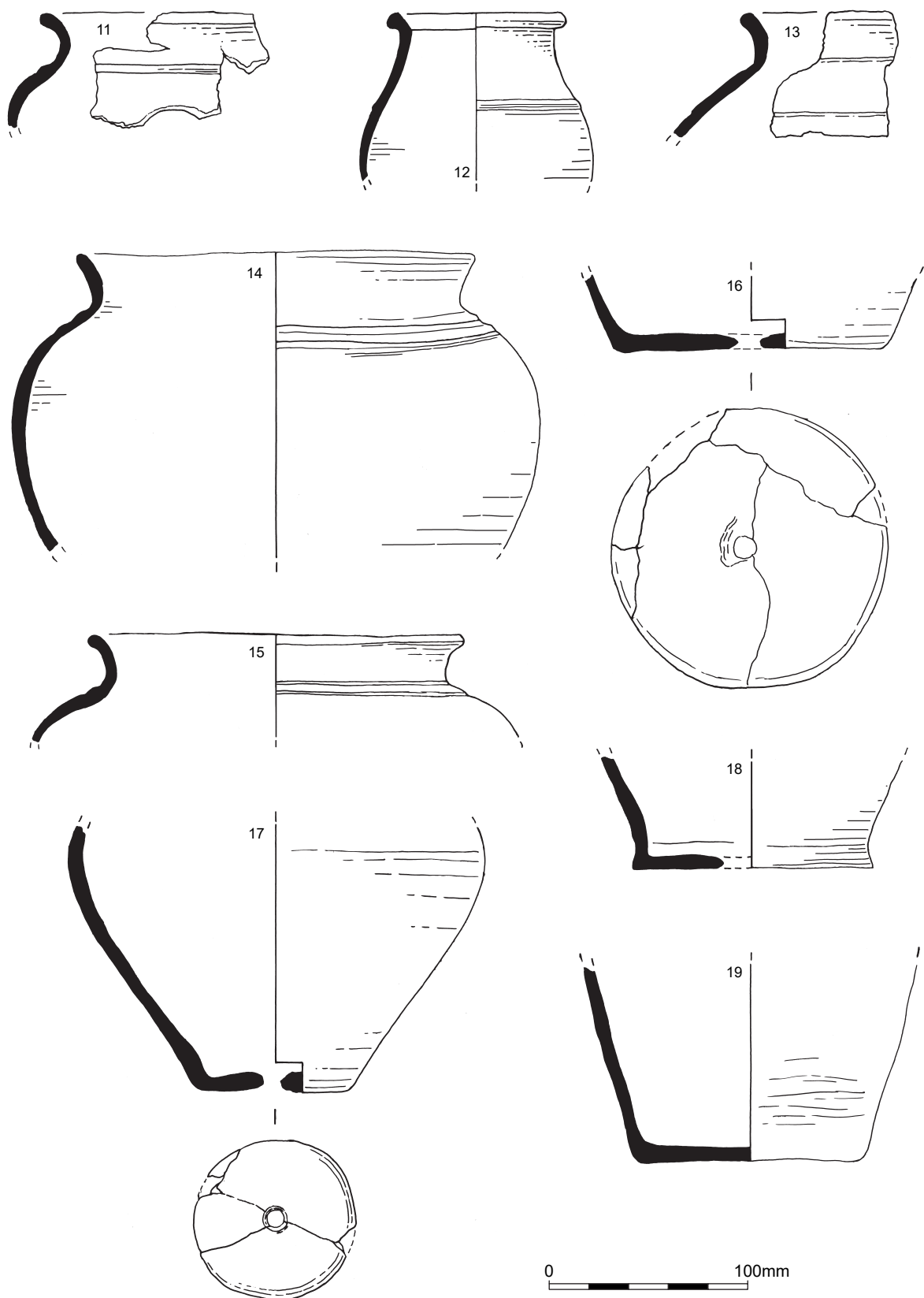


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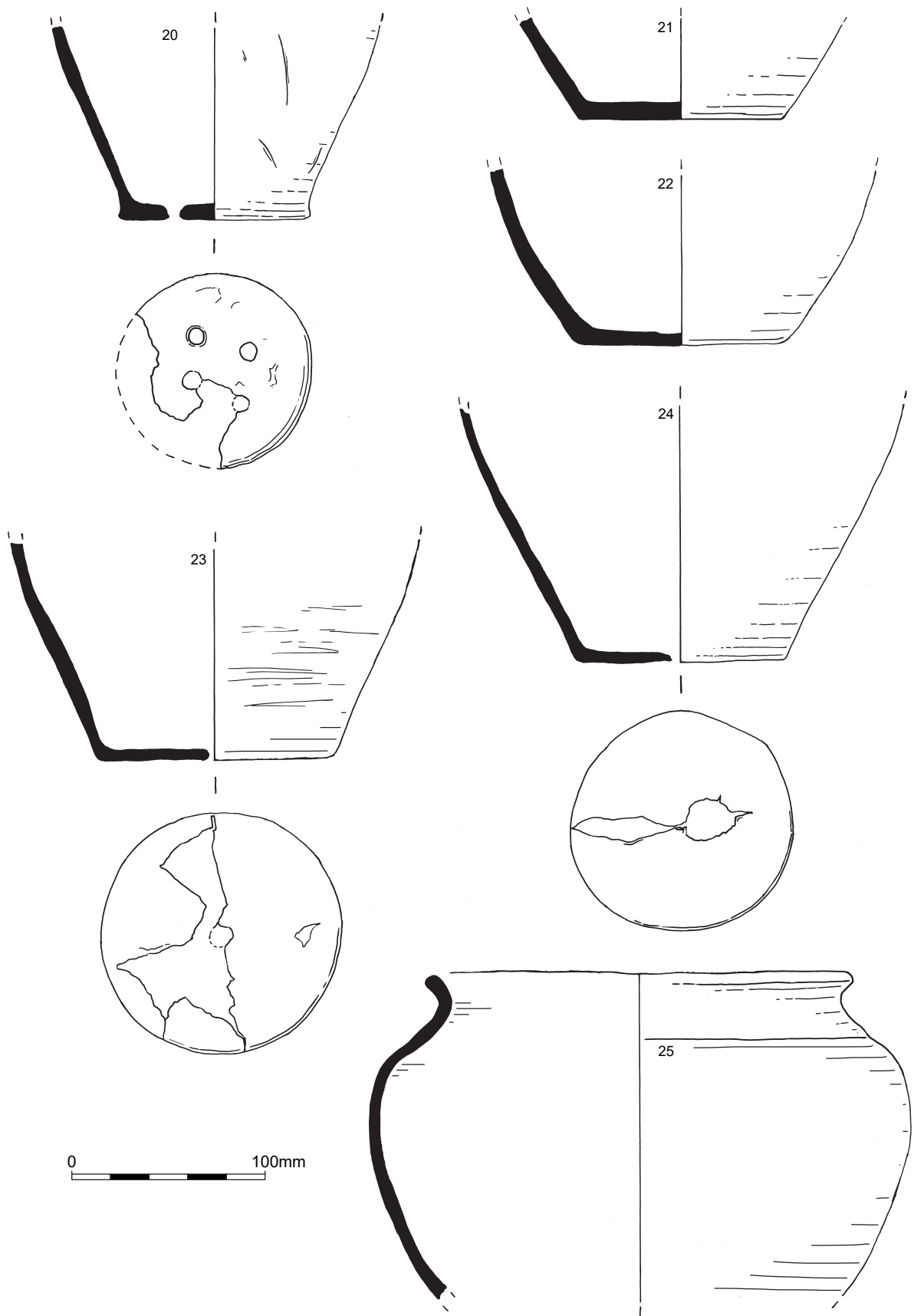


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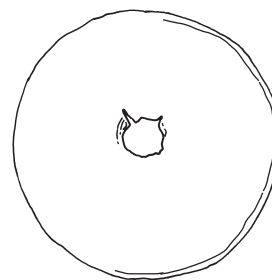
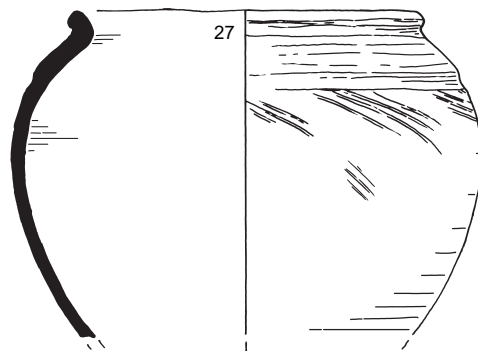
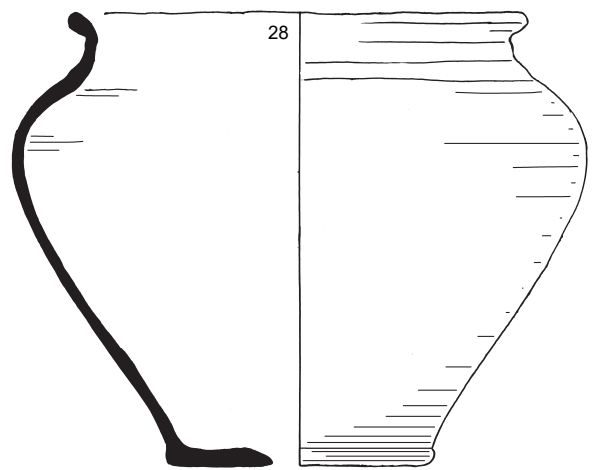
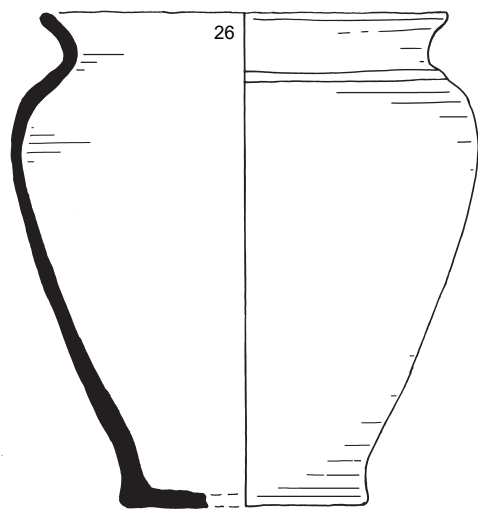


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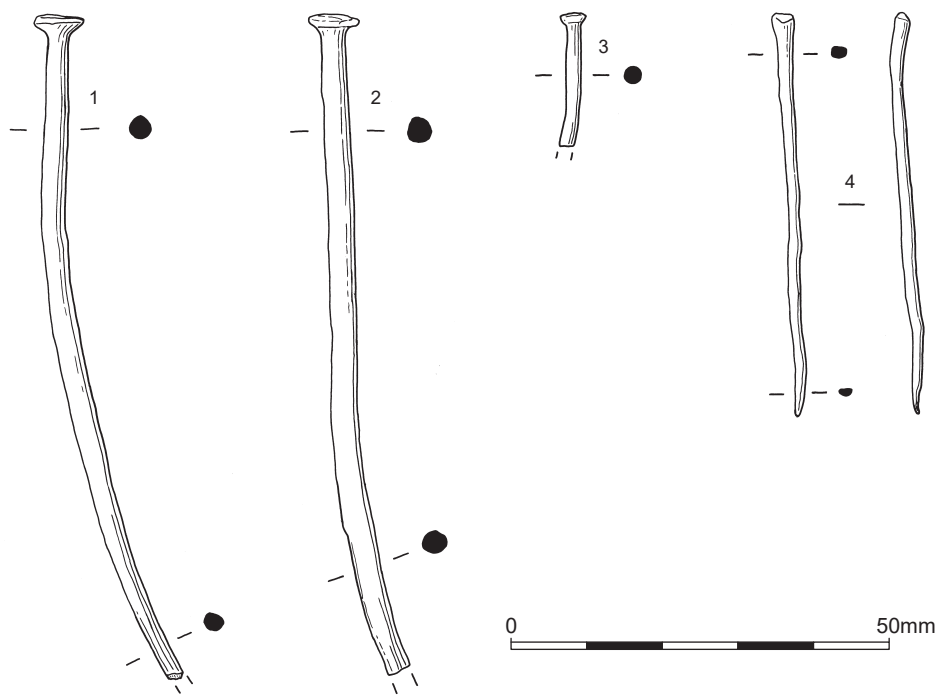


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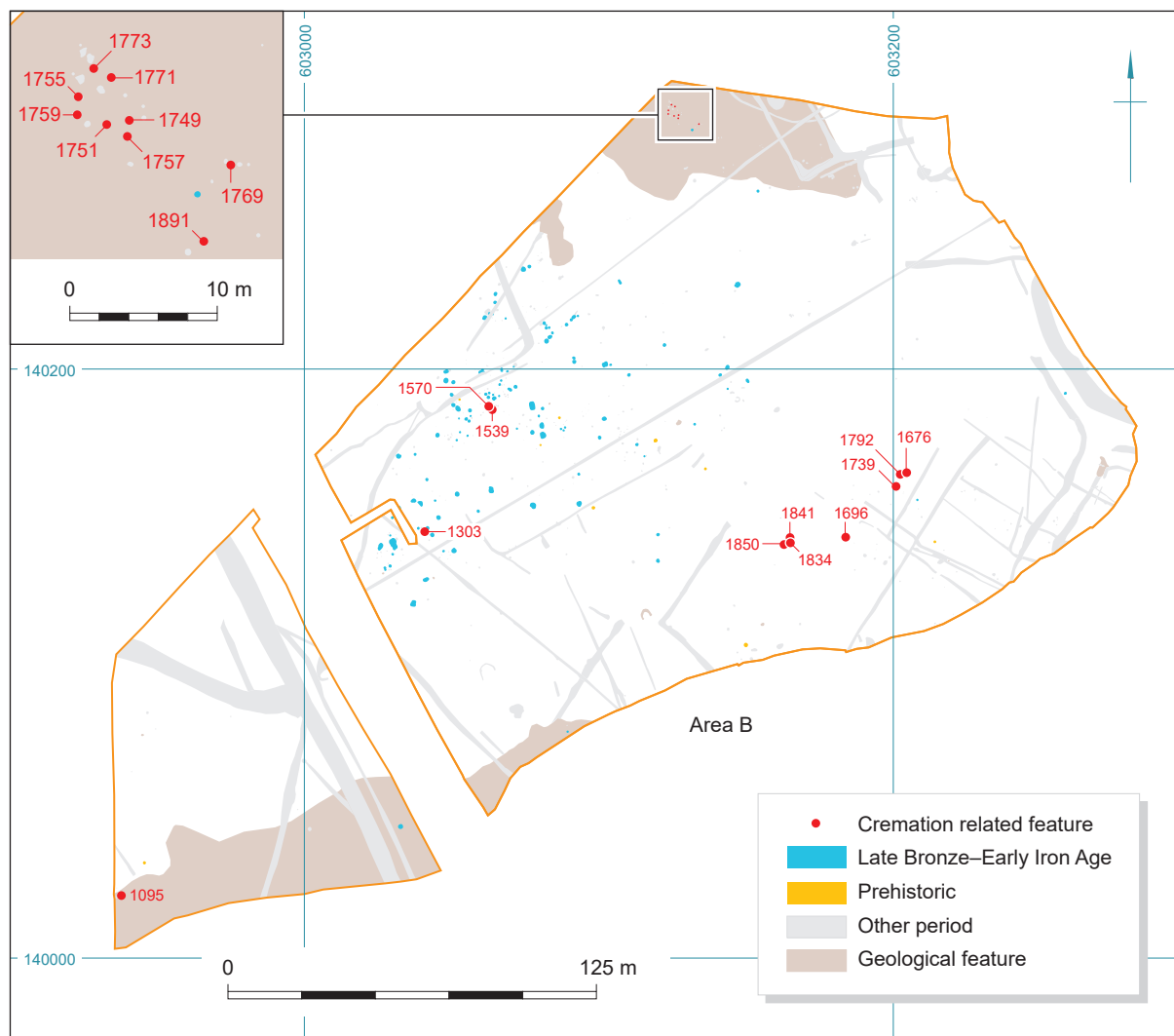


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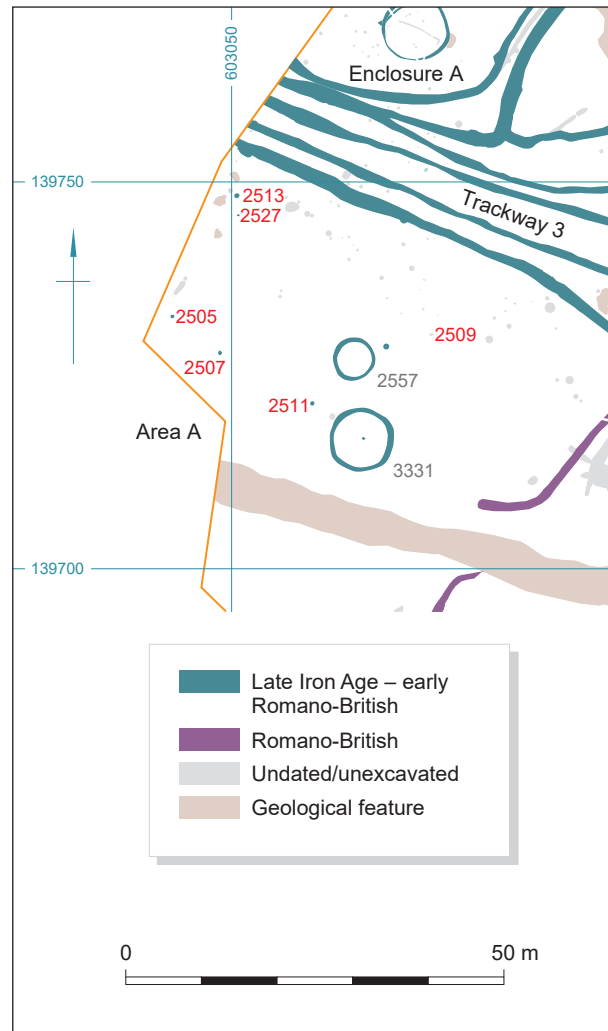


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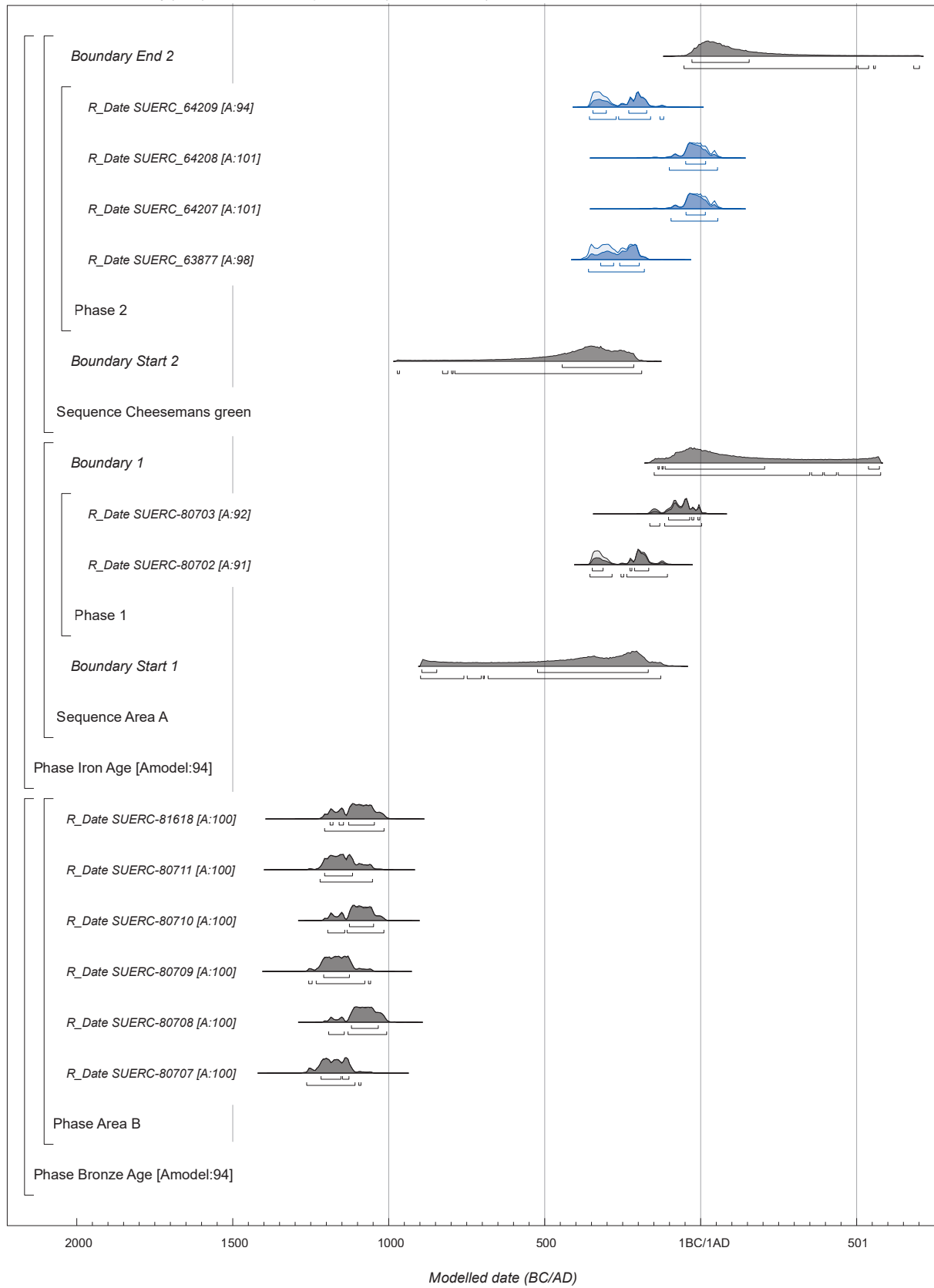


Figure 28



Plate 1



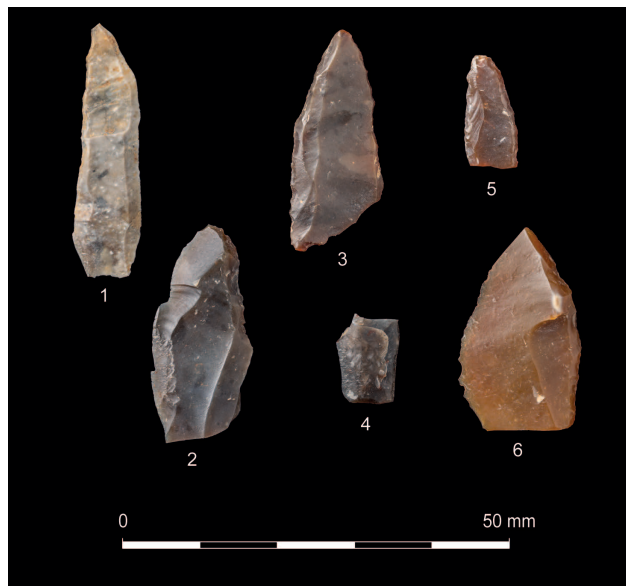




Plate 4



Plate 5



Plate 6

