

# Animal bones and broken objects: symbolic deposition at an Iron Age to early Romano-British settlement at Queen Mary's Hospital, Carshalton

Andrew B. Powell, with contributions by Alistair Barclay, Lorrain Higbee, Andrew Fitzpatrick and Rachel Seager Smith

## Introduction

In 2008 and 2010 part of an Iron Age to early Romano-British agricultural settlement was excavated on land formerly occupied by Queen Mary's Hospital (latterly known as Orchard Hill), Carshalton, in the London Borough of Sutton (Fig 1) with the site code OHH08.<sup>1</sup> The excavation by Wessex Archaeology revealed a multi-phase arrangement of enclosure ditches and dense clusters of pits, some containing complex and elaborate deposits of animal bone and other materials. The site, covering 0.6 ha centred on NGR 527820 162480, lies on the north-facing dip slope of the North Downs overlooking the valley of the River Wandle.

The excavation lay 50m north-west of one of the largest known Late Bronze Age ringworks in south-east England. The ringwork (Scheduled Monument LO 163) was first investigated in 1903–04,<sup>2</sup> then again in 1937 and 1939 under the auspices of the Surrey Archaeological Society.<sup>3</sup> These excavations produced a large assemblage of predominantly Late Bronze Age finds (re-assessed by Adkins and Needham in 1985)<sup>4</sup> mainly from the ditch, but no Romano-British finds. However, Iron Age and Romano-British features were recorded during earlier stages of fieldwork related to the redevelopment of the hospital site.<sup>5</sup>

Despite its proximity to the ringwork, the recent excavations found no evidence for Late Bronze Age activity. However, by the Early/Middle Iron Age an open settlement had been established on the site, represented by a single roundhouse with an adjacent square post-built granary-type structure, and a number of relatively shallow pits, the deepest possibly for storage but

others of uncertain function. There was also a neonate burial dating to this period. By the end of the Middle Iron Age, part of the settlement area had

been bounded by small enclosure ditches, with a larger D-shaped enclosure, with a west-facing entrance to the west, and a smaller subsquare

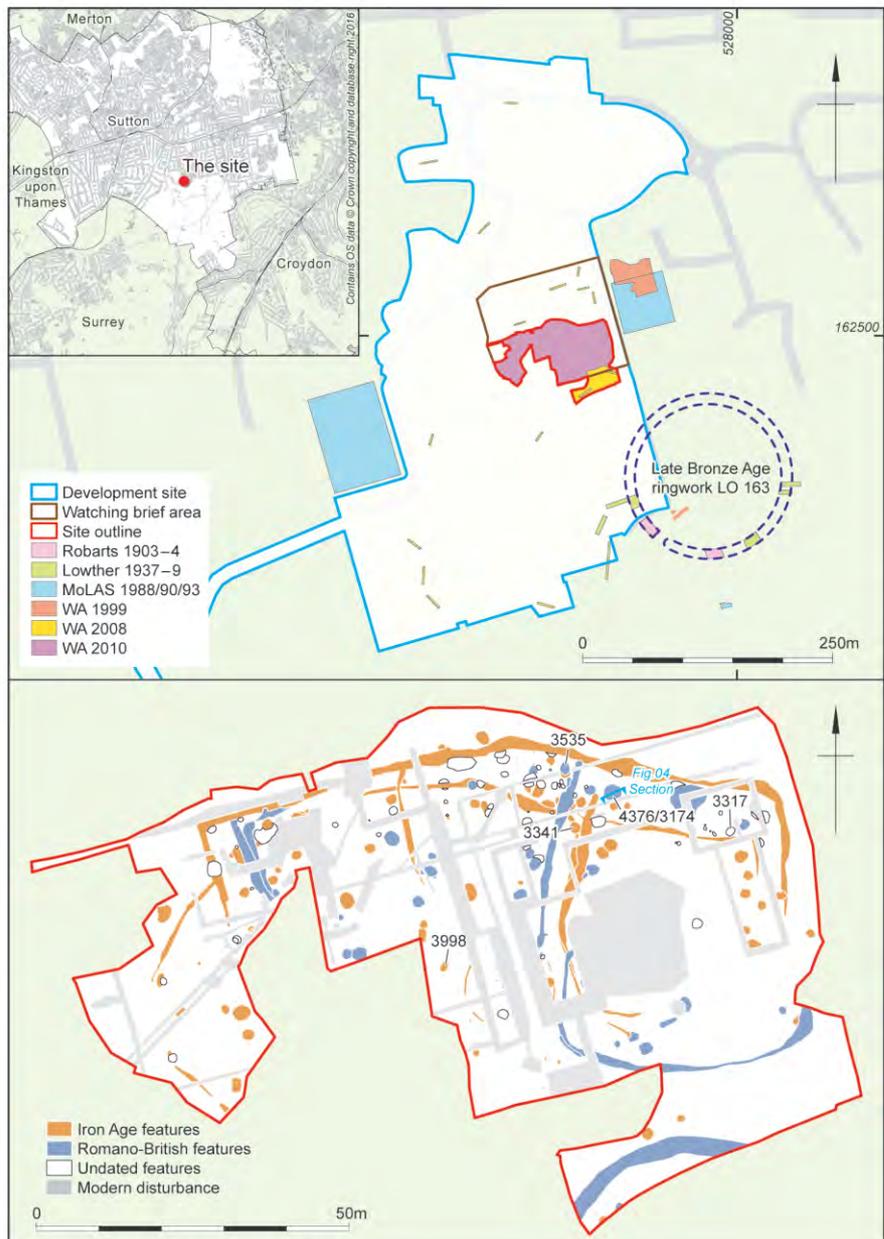


Fig 1: site location and phased site plan



Fig 2: *pars pro toto* deposit in Late Iron Age pit [3998]

enclosure to the east. A possible trackway ran along their northern side. There was no evidence for any significant break in the site's occupation, and although the eastern enclosure was subsequently enlarged twice, during the Late Iron Age and early Romano-British period, and the western enclosure also modified, their overall arrangement remained largely unchanged.

### Economy

There was evidence, from all phases, for a mixed agricultural economy typical for the region, and in many respects a continuation from the Late Bronze Age.<sup>6</sup> This involved the cultivation of hulled wheat and barley, with many of the arable weeds recovered being typical of the dry calcareous soils which are found locally.<sup>7</sup> There were, however, some developments over time in the manner of the harvesting, storage and processing of these crops. The Early/Middle Iron Age granary structure indicates above-ground storage at a time when there were few pits of a suitable form and depth. As time progressed, the size and number of storage pits increased, this enlargement

fodder supplies. Other farm animals included cattle, pig, goat and horse, and domestic fowl were also kept. In addition to meat, the animals would have contributed many other secondary products and resources (for example, milk, leather, hides, wool, bone, manure, traction and transport). Some vessels with perforations were possibly used for making cheese.

Dogs were also important within the settlement, having a variety of uses – protecting and controlling livestock, as guard dogs, as lapdogs and companion animals, and even, according to classical writers, possibly as food.<sup>9</sup> Dogs would also have been used for hunting, although there was little evidence for this, apart from a few bones of red deer and hare. There was also little evidence for the exploitation of wild plant foods except for a few fragments of hazelnut shell found among the charred plant remains.

There was also limited evidence for identifiable craft activities, although the recovery of chalk spindle whorls in Late Iron Age and early Romano-British pits indicates the production of yarns and textiles – not surprising given the importance of sheep. Weaving may also be indicated by the presence of

of the settlement's storage capacity probably reflecting greater productivity of its arable cultivation, or possibly the extension of arable land. Fragments of Greensand and lava quern stones were found in Iron Age and Romano-British contexts, respectively.

The animal bone assemblage indicates that a significant part of the landscape must have been devoted to pastoral agriculture, dominated by sheep,<sup>8</sup> although it appears that excess lambs and older unproductive sheep were slaughtered before winter to ease pressure on grazing land and winter

perforated triangular fired-clay objects of a form frequently interpreted as loom-weights, although these objects have also been interpreted as some form of oven furniture. Such objects were found, for example, along with burnt flint, in a possible oven [3317] with evidence of burning on the base and stakeholes possibly supporting some superstructure, but there were no other identifiable hearths, ovens or kilns. Relatively large quantities of burnt flint were recovered from a number of Early Iron Age pits, some of which also contained the fired-clay objects, but it is unknown what purpose these features fulfilled. Limited ironworking was also undertaken, with half of the slag (and all the smithing slag) being recovered from a single early Romano-British pit [3174], below.

Although no evidence was found for pottery production, the tempers used in the Iron Age pottery (shell, quartz sand and grog) were locally available and it is likely that much of it was made on a small-scale, probably household basis, fired in bonfires or clamp kilns within or close to settlements.<sup>10</sup> Lumps of birch tar with impressions of twisted vegetable fibres recovered from Late Iron Age pit [3998], see below, could have had a wide range of possible uses, such as for making composite tools or undertaking repairs, as evidenced by pieces of repaired pottery of both Iron Age and Romano-British date; the fibres themselves may have been used as some form of binding, or for making basketry containers. The full extent of the associated settlement, however, is not known and no other contemporary structures were identified. Moreover, there is little to indicate the settlement's status, although one Late Iron Age feature [3998] contained a set of objects suggesting activities and concerns far beyond the merely domestic and agricultural.

### Pit [3998]

This subrectangular, almost 'grave-shaped' pit contained a small hoard of placed but incomplete, possibly broken items dated to the 2nd–1st centuries BC (Fig 2). They included the head of an iron set hammer, used to work hot metals, an iron nave hoop (from a wheel axle), and large pieces from a Middle/Late Iron Age jar. There was

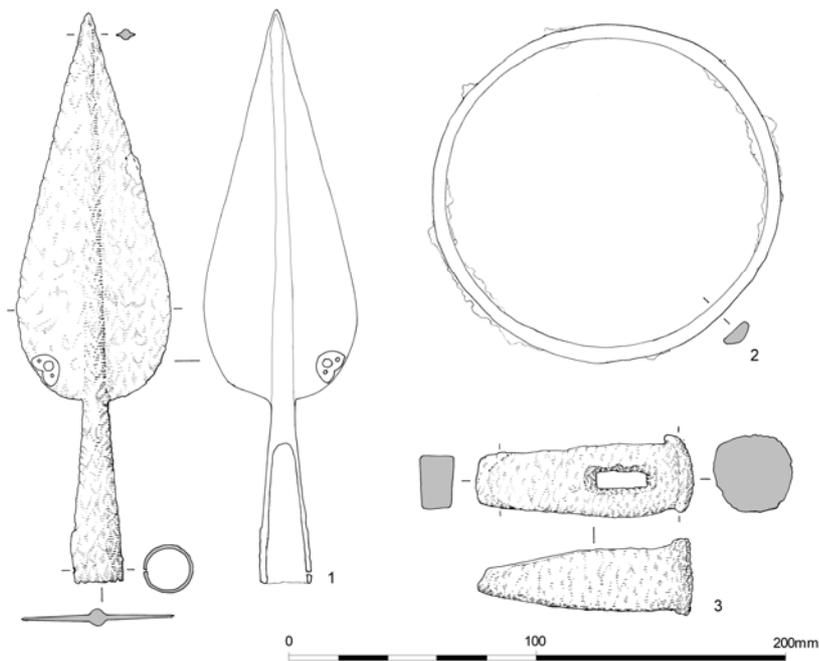


Fig 3: appliqué-decorated iron spearhead/ensign/standard from pit [3988]

also an iron socketed spearhead decorated with bronze appliqué (Fig 3); this is one of only a very few decorated spearheads from Iron Age Britain and may be better viewed as a standard or ensign. As well as further sherds of pottery, worked flint, burnt flint, animal bone and charcoal, this pit also contained the lumps of birch tar mentioned above.

The objects are interpreted as a *pars pro toto* deposit, in which objects were deliberately broken and only parts of them deposited (to represent the whole).<sup>11</sup> Set hammers were struck with iron sledge hammers, but only the set hammer was put in the pit. Nave hoops bound together the ends of the wheel naves into which the ends of the axle fitted, so each nave had two hoops, but only one is present. If the hoop was attached to the wheel when it was deposited, only part of the wheel was present (although the complete wheel, which is likely to have been in the range of 0.7–0.9m in diameter could have fitted into the pit). If the whole spear was deposited, the location of the metal head near the middle of the pit indicates that its shaft, which would have been at least 2m long,<sup>12</sup> must have been broken.

*Animal bone deposits*

Apart from the ditches and a small number of further neonate burials,

almost all the Late Iron Age and Romano-British features were pits. These were of varying size and shape, but many of them were cylindrical or bell-shaped forms probably dug for storage purposes. They contained very variable deposits, although a relatively

common feature was the presence of groups of articulated animal bones, comprising partial or complete animals, sometimes in large numbers.

**Pit [4376/3174]**

This bell-shaped pit, 2.8m deep, contained a series of fills, the character and dating evidence from which suggest the pit has a complex history (Fig 4). A series of irregular dumps of material filling the bottom 0.6m of the pit contained domestic waste, with a partial lamb skeleton from layer 4183 producing a modelled radiocarbon<sup>13</sup> date of 100 cal BC– cal AD 60 (SUERC-38161, 1990±35 BP at 95% probability); this is consistent with the 1st century BC–1st century AD date range of the associated Late Iron Age/early Romano-British pottery and also with the estimated date for the digging of the pit (50 cal BC–20 cal AD at 68% probability).

These lower fills were overlain by a 0.4–0.6m thick deposit [3711] containing the butchered partial carcasses of between 25 and 30 animals (Fig 5), predominantly sheep/goat, but including also cattle, a perinatal horse, two domestic fowl

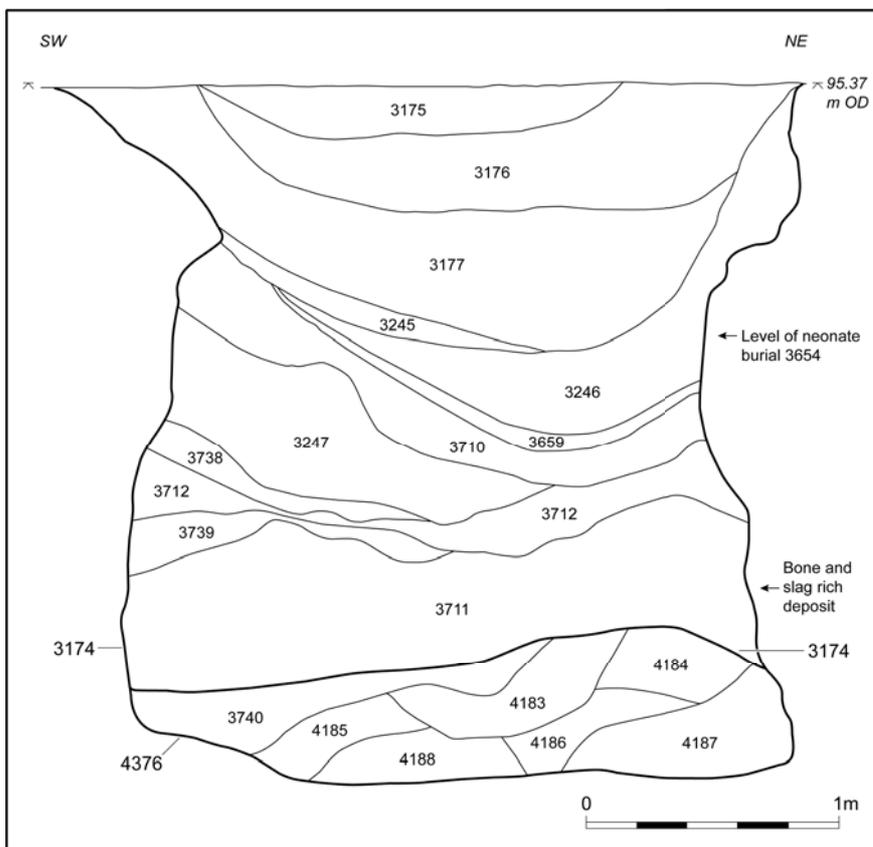


Fig 4: section of pit [4376/3174]



**Fig 5: animal bone deposit in pit [4376/3174]**

and a raven; there were also two dogs (one a large type, the other of a smaller, lapdog type – a Roman introduction). A radiocarbon date of cal AD 10–110 (SUERC-38158, 1900±35 BP at 95% probability) was obtained for one of the small dog's bones, consistent with the 1st–2nd-century AD date range of the pottery.

Lapdogs were first bred in Italy during the early Roman period and exported to other areas of the Empire including Britain.<sup>14</sup> Two main forms have been identified: chondrodystrophic dwarf hounds and toy or midget dogs – the example from Orchard Hill is similar to the latter type. Both types are rare in early Roman Britain although become more common later.<sup>15</sup> Depictions of lapdogs are known from the Mediterranean on statues, grave stones and mosaics. Whilst a few examples are known from Roman Britain little research has been carried out.<sup>16</sup>

The difference in the pottery and radiocarbon dates between the basal layers and those above, is consistent with there having been a significant interval between the two main phases of deposition. The clear interface between the basal deposits, which appear to have undergone some degree of levelling, and the bone-rich layer [3711] above suggests the pit, emptied of its stored goods, had been initially filled with waste, then almost

completely emptied again, before the animal carcasses were deposited. The carcasses were sealed by a sequence of three sterile layers, above which were further deposits of domestic waste, as well as two human neonate burials. Cattle bone (ABG 202) from an upper fill [3177] was radiocarbon dated to cal AD 50–170 (SUERC-38141, 1880±35 BP at 95% probability).

#### **Pit [3341]**

While the deposition of such large quantities of animal carcasses must alone have been significant, a number of more specific meanings

may have been expressed in different patterns of deposition, as well as a number of unique and individual deposition events. Pit [3341] contained 17 fills representing a sequence of repeated but relatively limited deposition events. It is notable that five of the lower fills contained one or more animal bone groups, all of which (apart from a raven skeleton) were of foetuses or neonates, including dog, pig and sheep. These deposition events may have largely filled the pit, with the subsequent decomposition and compaction leaving a concave hollow in the upper one third. Resting on the base of this hollow were the skeletons of two adult dogs arranged with their hind legs interlocking so as to appear to be mating (Fig 6). Such an arrangement was clearly powerfully symbolic, and one for which there are few other parallels – and those are from rare artistic representations on portable Roman objects. At Silchester, for example, the burial of two dogs and a puppy was

accompanied by a knife with an ivory handle depicting two dogs mating.<sup>17</sup>

Three radiocarbon dates were obtained on animal bone in pit [3341]: of 130–10 cal BC (SUERC-38159, 2085±35 BP at 95% probability) on a raven skeleton from a layer near the base, and 100 cal BC–cal AD 10 (SUERC-38342, 2055±30 BP at 95% probability) on an equid bone (identified as possibly from a donkey) from a deposit of disarticulated bone near the pit's midpoint, both of which are consistent with the Middle–Late Iron Age pottery. One of the dog burials produced a slightly later date of 60 cal BC–cal AD 60 (SUERC-38144, 2030±35 BP at 95% probability), which would be consistent with there having been some delay, as the lower fills compacted, before this event.

#### **Pit [3535]**

Another dog burial also displayed particular care in its arrangement (Fig 7). On the base of pit [3535], against the eastern side, was the skeleton of a small dog, approximately one-year old, that had been laid with its head to the north facing into the pit. Behind its back and hind legs were sherds from an early Romano-British jar dated c. AD 70–90. Further large pieces, including most of its rim, lay in front of its head. It seems that the vessel had been deliberately broken, and its ashy contents [3889], including the burnt remains of at least two lambs (and a



**Fig 6: 'mating' dogs buried in pit [3341]**

fragment of an iron saw blade), spread out (perhaps 'served up') in front of the dog, partly covering its head.

### Conclusion

While the pits also contained varied dumps of domestic waste and soil, it is likely that many of these below-ground contexts, used initially for the storage of grain, and therefore central to the community's survival and prosperity, had powerful symbolic associations, relating to ideas of life and death, decay, regeneration and fertility. As such, some may have involved elements of ritualised and religious sacrifice designed to appease and show gratitude to the local deities.

The *pars pro toto* principle evident in pit [3998] could apply equally to many of these other deposits. Many of the animal bone groups were of partial carcasses, with some animals partly eaten, with the remaining portions, or whole animals possibly offered in sacrifice; even a whole sheep carcass could be viewed as representative of the larger flock. This may also apply to less apparently structured deposits; while it is easy to characterise these as dumps of simply domestic waste, they could be samples of midden material selected for their symbolic value, and deposited in pits for essentially similar reasons. While some of the more notable deposits may seem like unique events, we should not draw too sharp a distinction between them and the seemingly more mundane routines of daily rural life. These may have also found symbolic expression, through the deposition in pits of more everyday objects and materials.

1. A.B. Powell *Queen Mary's Hospital, Carshalton: an Iron Age and Early Romano-British Settlement* Wessex Archaeology Occ. Pap. (2017). An open settlement was established in the Early-Middle Iron Age, to be enclosed by the end of Middle Iron Age, and was subsequently modified in the Roman period.
2. N.F. Robarts 'Notes on a recently discovered British camp near Wallington' *J Royal Anthropol Inst New Ser* 8 (1905) 387–97; N.F. Robarts 'Recent discoveries at Wallington' *Surrey Archaeol J* 22 (1909) 195–6; N.F. Robarts 'The British town of Wallington in the first century BC' *Proc Croydon Natural Hist Soc* 6 (1910) 143–52.
3. A.W.G. Lowther 'Report on excavations on the site of the Early Iron Age camp in the grounds of Queen Mary's Hospital, Carshalton, Surrey' *Surrey Archaeol Collect* 49 (1944–5) 56–74.
4. L. Adkins and S. Needham 'New research on a Late Bronze Age enclosure at Queen Mary's Hospital, Carshalton' *Surrey Archaeol Collect* 76 (1985) 11–49.

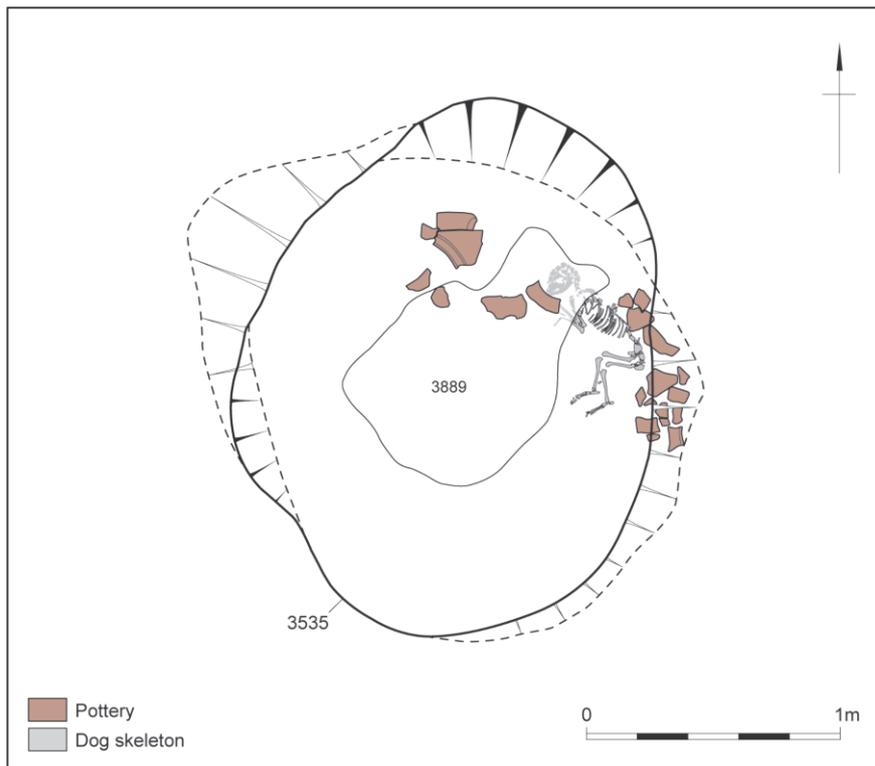


Fig 7: plan of dog burial in the base of pit [3535]

### Acknowledgements

This project was commissioned by CgMs Consulting Ltd, and Wessex Archaeology would like to thank Duncan Hawkins for his assistance throughout. Thanks are also due to John Brown, Jane Sidell and Mark Stevenson of the Greater London Archaeological Advisory Service (GLAAS) who monitored the work on behalf of the Local Planning Authority.

The excavations were managed by Sue Farr, and directed by Mike Dinwiddy (2008) and Chloe Hunnisett (2010). The post-excavation analysis was managed by Alistair Barclay. Philippa Bradley edited this report.

5. S. Tucker *Queen Mary's Hospital: an archaeological assessment* MoLAS archive report (1988); P. Bruce and J. Giorgi 'Recent work at Orchard Hill, Queen Mary's Hospital, Carshalton' *London Archaeol* 7 (1994) 171–7; J. Groves and J. Lovell 'Excavations within and close to the Late Bronze Age enclosure at the former Queen Mary's Hospital, Carshalton' *London Archaeol* 10 (1) (2002) 13–19.
6. *Op cit* fn 8.
7. S.F. Wyles 'Charred plant remains' in *op cit* fn 1.
8. L. Higbee 'Animal bone' in *op cit* fn 1.
9. Diodorus Siculus V, 28, 4.
10. R. Seager Smith 'Pottery' in *op cit* fn 1.
11. A.P. Fitzpatrick 'Objects of metal' in *op cit* fn 1.
12. J.-L. Brunaux and A. Rapin *Gournay II. Boucliers et lances, dépôts et trophées*. Errance & Revue Archéologique de Picardie (1988) 88–94.
13. A Bayesian approach has been adopted for the interpretation of the chronology from this site (Bayliss *et al.* 2007). The ranges quoted in *italics* are

The illustrations were by Will Foster (plans and sections) and S. E. James (finds). The project archive will be deposited with the Museum of London Archaeological Archive under the MOL site code OHH08.

*Andrew Powell has worked on a wide range of fieldwork projects for Wessex Archaeology since 1991 before specialising in post-excavation analysis and reporting. He has authored and contributed to many publications, including the archaeology of the Olympic Park.*

- posterior-density estimates derived from mathematical modelling of given archaeological problems. A. Bayliss, C. Bronk Ramsey, J. van der Plicht, and A. Whittle 'Bradshaw and Bayes: towards a timetable for the Neolithic', *Cambridge Archaeol J* 17 (2007) 1–28.
14. J. Mazzorin, and A. Tagliacozza 'Morphological and osteological changes in the dog from the Neolithic to the Roman period in Italy' in S. J. Crockford (ed) *Dogs Through Time: an Archaeological Perspective* *Brit Archaeol Rep Int Ser* 889 (2000) 141–61.
  15. R.A. Harcourt 'The dog in prehistoric and early historic Britain' *J Archaeol Sci* 1 (1974) 151–75; K. M. Clark 'Dogged persistence: the phenomenon of canine skeletal uniformity in British prehistory' in S.J. Crockford (ed) *op cit* fn 14, 163–70.
  16. L. Cram 'Varieties of dog in Roman Britain' in S.J. Crockford (ed) *op cit* fn 14, 171–80.
  17. See [www.reading.ac.uk/silchester/discoveries-at-silchester/sil-discoveries.aspx](http://www.reading.ac.uk/silchester/discoveries-at-silchester/sil-discoveries.aspx).