

A 3rd century AD cremation cemetery at Franklands Drive, near Addlestone

MICHAEL HENDERSON and ISCA HOWELL

with contributions by

JON COTTON, KAY HARTLEY, MICHAEL MARSHALL, BETH RICHARDSON and VAL RIGBY

Archaeological investigations on an open field site to the south-west of Addlestone revealed two foci of Middle–Late Bronze Age activity that involved the setting of pottery vessels in pits. A lone Late Iron Age unurned cremation burial was accompanied by an unusual North Gaulish Gallo-Belgic facet-cut barrel beaker, dated to c 10 BC–AD 14. An isolated pit contained a range of early/mid-2nd century ceramics related to consumption. However, the most significant feature of the site was a mid–late 3rd century AD cremation cemetery that comprised 28 urned cremation burials and nine possible (or unurned) cremation burials. The remains were indicative of a rural population and the urns were mostly of a regional type. A curious aspect of the cemetery was the near absence of grave goods but there is some evidence for pyre goods and analysis of the iron nails from cremation deposits reveals the presence of footwear and possibly upholstered biers. It is suggested that this cemetery was located in a special place in the landscape with little evidence for an adjacent settlement. There was no evidence for any later land use until the site was crossed by field boundaries, in the 18th century.

Introduction

Archaeological investigations on an 8.3ha site south of Franklands Drive, Row Town, to the south-west of Addlestone (fig 1), took place between September 2008 and May 2013 in advance of residential development. The investigations involved two phases of evaluation (undertaken by Wessex Archaeology (WA)) and a programme of strip, map and sample excavations (undertaken by Museum of London Archaeology (MOLA)). The main excavation of the cemetery took place in September 2010. The centre of the site lies at OS grid reference TQ 04050 63300. The site had been in agricultural use until the late 19th century, when it was incorporated into the parkland of a nearby house. Prior to the excavation, the site was waste ground, including a former plant nursery.

The site codes for the project were WA70350 (evaluation phase) and SY-FDA10 (excavation phase). Where context or finds accession numbers are given in this report, they are preceded by a letter prefix to identify the specific site to which it belongs, thus A[100], A<1> refers to context [100] and accession <1> from site SY-FDA10, while the prefix B is used to denote contexts and accessions from site WA70350. Irrespective of site code, selected pottery vessels have been numbered for illustration and/or cataloguing in this report as <P1>–<P44>, and all human burials have been assigned to a single series of burial numbers (Bu1–Bu38). Prehistoric pottery fabric codes used in this report are listed in the detailed Middle Bronze Age pottery report (see *Endnote*), while the various subdivisions of late Alice Holt reduced ware follow those used by the MOLA fabric reference collection (unpublished) and other fabric codes for Romano-British and Gallo-Belgic wares are those of Tomber and Dore (1998). The site archives will be deposited under their respective site codes at Chertsey Museum, The Cedars, 33 Windsor Street, Chertsey, Surrey, KT16 8AT.

Geology and topography

All the archaeological features on the site were cut into brownish-orange sand with abundant gravel, a Quaternary drift deposit overlying the Tertiary Bagshot formation. The sand could be hand excavated with ease, although cut features proved difficult to define. This free-



Fig 1 Franklands Drive, Addlestone. Location of the site and the strip, map and sample areas.

draining deposit extended across the site beneath a thin capping of topsoil, *c* 200mm thick. The site lay on a south-facing slope between 30m OD and 37m OD, while to the south of the site boundary there is a pronounced break of slope to the river Bourne at the bottom of the valley. Therefore, the site would have been in a prominent location when viewed from the south (fig 2). In the wider landscape the site is situated at the south-eastern edge of the geographical area known as Bagshot Heath.

Middle Bronze Age activity

Seven small Middle Bronze Age pits were found in two dispersed groups, 170m apart, in the south-west and north central parts of the site (fig 3). The pits were steep-sided, sub-circular, 0.3–0.5m in diameter and up to 0.4m deep. Although disturbed, presumably by post-medieval ploughing, at least three of these pits (B[4106], A[130] and A[133]) originally contained complete bucket urns, set upright.

The southern group comprised four small pits. Three of these, B[4104], B[4106] and B[4108], form a tight linear arrangement and each contained sherds of single coarse urns; pit B[4106] in particular was barely large enough for its urn <P1> and must have been deliberately dug to receive it. A fourth pit, A[154], in this southern group lay *c* 2.1m to the east and contained the sherds of a small decorated jar or bowl <P3> and a part of a small plain bowl or cup. There was also the stray find of sherds from a contemporary small plain bowl or cup <P4> on the surface of the natural sand, a further 12m to the north-east.

The most northerly group comprised three small pits, of which pit A[130] and pit A[133] some 30m apart, both contained substantial portions of single coarse bucket urns, including

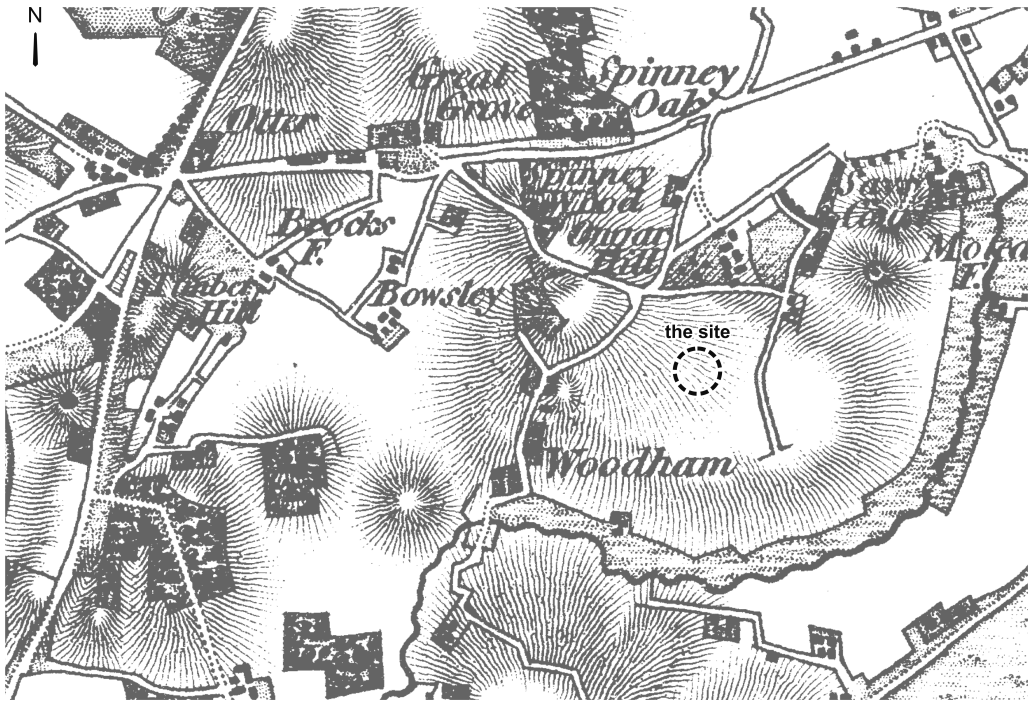


Fig 2 Franklands Drive, Addlestone. Location of the site and wider area in 1862 as shown on the OS 1-inch Old Series map (Margary 1981, map 14).

decorated urn <P2>. Pit A[133] was adjacent to smaller pit A[135] that was filled with burnt sandstone/quartzite.

Some level of continued activity on the site into the Late Bronze Age/Early Iron Age transition may be suggested by a handful of small abraded sherds found in pit B[5003] on the southern limit of the excavation and in a topsoil context (see *Endnote*, table 2).

MIDDLE BRONZE AGE POTTERY, by Jon Cotton

The ceramic assemblage (full details available online; see *Endnote*) has clear Middle Bronze Age Deverel-Rimbury affinities and includes both elements characteristic of such assemblages: large bucket urns and smaller thin-walled vessels (fig 4). Four of the bucket urns were probably plain (eg <P1>); only one was certainly decorated (<P2>) and a similar range of large plain and decorated vessels has been reported from both funerary and domestic contexts across the region (eg Barrett 1973).

The small bossed jar/bowl <P3> from pit A[154] and the plain upright cup/bowl <P4>, found on the natural ground surface, are less easily paralleled in local assemblages, although examples of both occur alongside bucket and globular urns in the large domestic assemblage from Thorpe Lea Nurseries (Jones 2012, 127, fig 5.29 no 32), while a sherd of a small bossed jar or bowl in CALC 1 fabric (see *Endnote*) was recovered from the fill of a ring ditch at Coldharbour Lane, Thorpe (Lambert *et al* 2013, 157 and fig 3.27 no 7). Small knobbed cups in various coarse fabrics have also been discussed by Needham (1987, 111), who notes their use as accessory vessels in graves alongside bucket urns.

Middle Bronze Age pottery is widely distributed across this area of north-west Surrey, and an increasing number of assemblages, from both domestic and funerary contexts, are now available for comparison (eg Barrett 1973; Needham 1987, fig 5.7; Cotton 2004, 35; Hayman 2002; Jones 2012, 125–9; Lambert *et al* 2013, 82, 157–8). The closest geographically

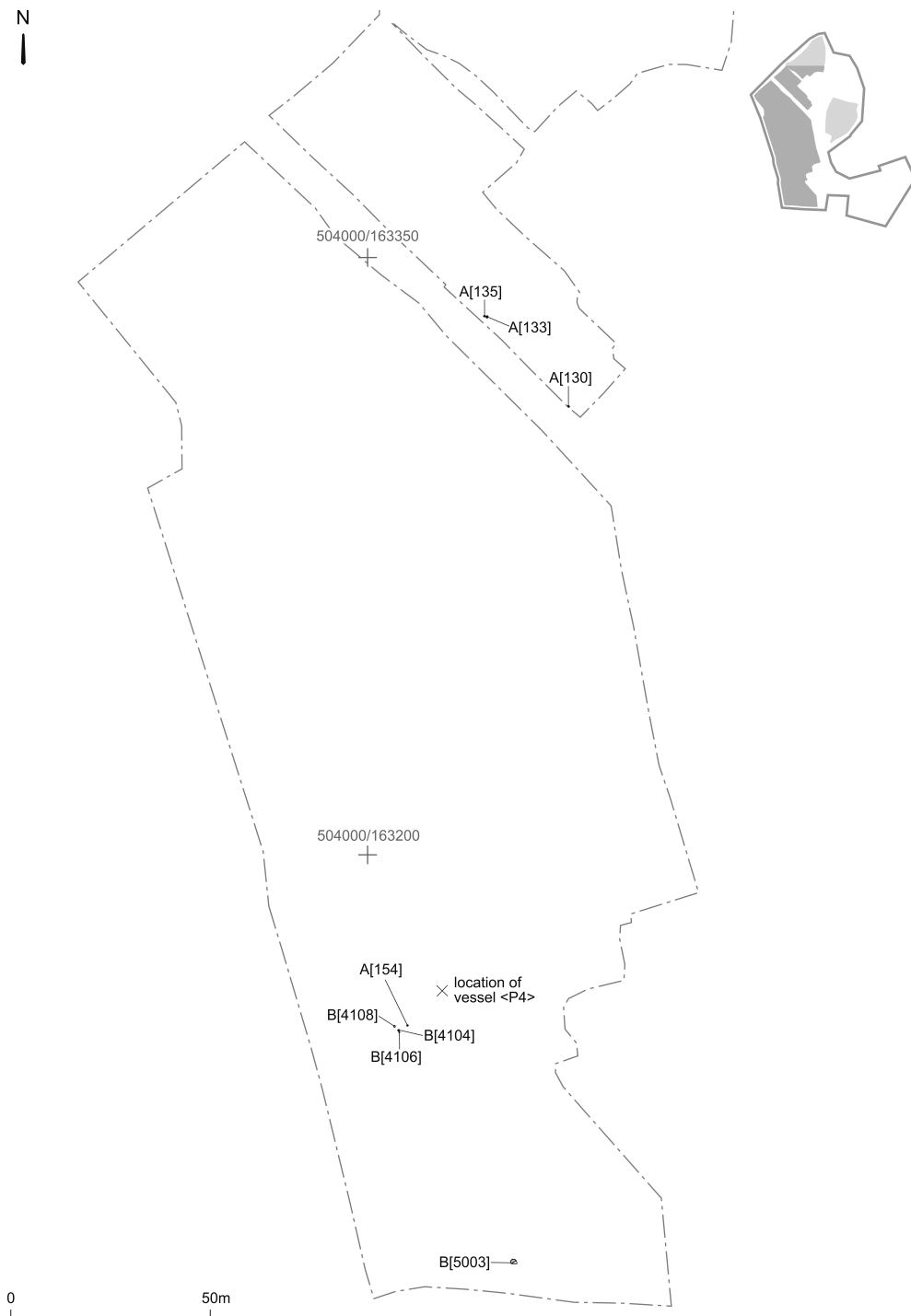


Fig 3 Franklands Drive, Addlestone. Middle Bronze Age features.

are those from the former Marconi site at Painesfield Allotments, Addlestone (Phil Jones, pers comm), and the large cremation cemetery recorded at the end of the 19th century at Oatlands Park, Walton on Thames (Gardner 1924a, 23–6).

However, despite the copious comparanda, the function of the Franklands Drive ceramic assemblage remains ambiguous. The absence of cremated bone from the bucket urns suggests that they were not primarily used as funerary vessels. Nonetheless there can be little doubt that the largely complete urns were deliberately placed, perhaps as part of some domestic or customary observance – though the motivations that prompted their burial are unclear. This otherwise unremarkable location seems to have been regarded as in some way special by the local Bronze Age community; although there is no evidence for the presence of burials, a barrow or other monument, it could be that something of its numinous nature survived to influence the siting of burials here in later periods (below).

Catalogue of the illustrated Middle Bronze Age pottery

A fuller discussion of the Middle Bronze Age pottery is available online (see *Endnote*).

<P1> Bucket urn (fig 4)

B<->, B[4105] (fill of pit B[4106])

Near complete plain straight-sided and rather slender bucket urn in FLIN3, with flint crusted base. 186 sherds, reconstruction of profile problematic but H c 380mm, Wt 1834g.

<P2> Bucket urn (fig 4)

A<->, A[131] (fill of pit A[133])

Substantial portions of the rim, body and base of a large, thick-walled bucket urn in FLIN1 with fingertip decoration on top of the rim and an applied finger impressed cordon at the girth. 40 sherds, Wt 1384g.

<P3> Jar or bowl (fig 4)

A<->, A[155] (fill of pit A[154])

Part of a small, thin-walled jar or bowl in FLIN4 with at least two, possibly three, raised dimples or applied bosses below the rim and a flint crusted base. 51 sherds, Wt 342g.

<P4> Bowl or cup (fig 4)

A<->, A[153]

Part of a small, plain, thin-walled bowl or cup in FLIN5. Eleven sherds, Wt 68g.

The site in the Late Iron Age and early Roman period

In terms of the recovered evidence it would appear that there was little activity on the site between the Middle Bronze Age and the 3rd century AD. Only two features could be dated to this period: a Late Iron Age unurned cremation burial (Bu1) and a disturbed 2nd century AD pit A[173] (fig 5).

LATE IRON AGE ?UNURNED CREMATION BURIAL (Bu1)

Cremation burial Bu1 was a small pit containing 124g of burnt human bone from a single individual of undetermined age and sex (below, ‘Burial catalogue’). A small quantity of unburnt and weathered animal bone (13.4g) was also recovered, including an unfused ulna and tibia from a juvenile pig and the calcaneum and rib of a possible sheep or goat (Alan Pipe, pers comm). While this could be the remains of food offered and/or consumed as part of the funerary rites, it could equally be weathered material redeposited from the contemporary ground surface. All bone appeared evenly mixed in the backfill, perhaps as a consequence of disturbance, which might also account for the small quantity of human bone retrieved.

Sherds from three Late Iron Age vessels (<P5>, <P6> and <P7>, fig 6) were also scattered throughout the fill. These are thought to have been accessory vessels in an unurned cremation burial, although truncation makes the original arrangement of the burial uncertain. A small copper-alloy domed fitting A<1> was also recovered (fig 6). The function of this object is not clear, but it may have been a terminal that fitted on to the end of a narrow object or an unusual type of stud head.

The pottery assemblage is dated to (or shortly after) the Late Augustan period (c 10 BC–AD 14) by substantial rim and upper body sherds from an imported North Gaulish Gallo-Belgic

barrel beaker with high-relief facet-cut decoration <P5>. This would have been an expensive and prestigious vessel. There is an absence of lower body and base sherds and the surfaces and fracture edges are heavily abraded suggesting disturbance or possible reburial. The small fragments from two other pots (<P6> and <P7>) are sand-tempered with small amounts of grog and may be local products. These vessels are described in more detail below ('Burial catalogue', which includes a report by Val Rigby on the imported beaker).

Interpretation is hampered by the absence of any other contemporary features. The barrel beaker, at least, suggests this may have been the burial of a wealthy individual. The burial lies some distance away from the two foci of earlier prehistoric activity (above). There is no direct evidence that the presence of Bul was marked above ground in any way, but it may be significant that the main cluster of 3rd century burials (below) was sited just to the south-east.

2ND CENTURY AD PIT A[173]

An isolated feature, probably a pit, but disturbed by probable animal burrowing or root action, lay to the south-east of the cluster of later cremation burials (below), close to the edge a former quarried area. Owing to the circumstances of excavation, the feature is only approximately located in figure 5. The pit produced a small group of pottery (<P8>–<P14>) and is of interest because of its early to mid-2nd century date and wide range of forms (fig 7), catalogued below.

The group consists of three jars (<P8>, <P9>, <P10>), two with a distinctive pale grog temper (<P8>, <P9>), a sand-tempered strainer base (<P11>), a Verulamium/London region white ware mortarium (<P12>), the base from a Verulamium/London region white ware flagon (<P13>; not illustrated) and a Les Martres-de-Veyre samian Dragendorff form 33 cup with a notably worn interior (<P14>). The mortarium has an early to mid-2nd century stamp and rim form. The samian cup has a date range of *c* AD

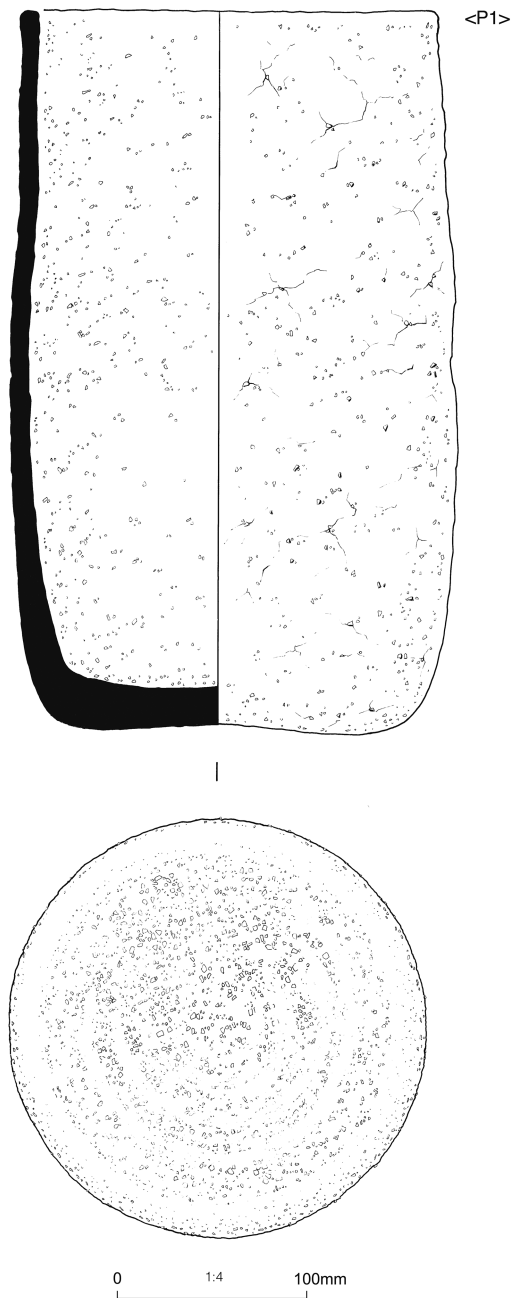


Fig 4 Franklands Drive, Addlestone. Middle Bronze Age pottery: <P1>–<P4> (scale 1:4).

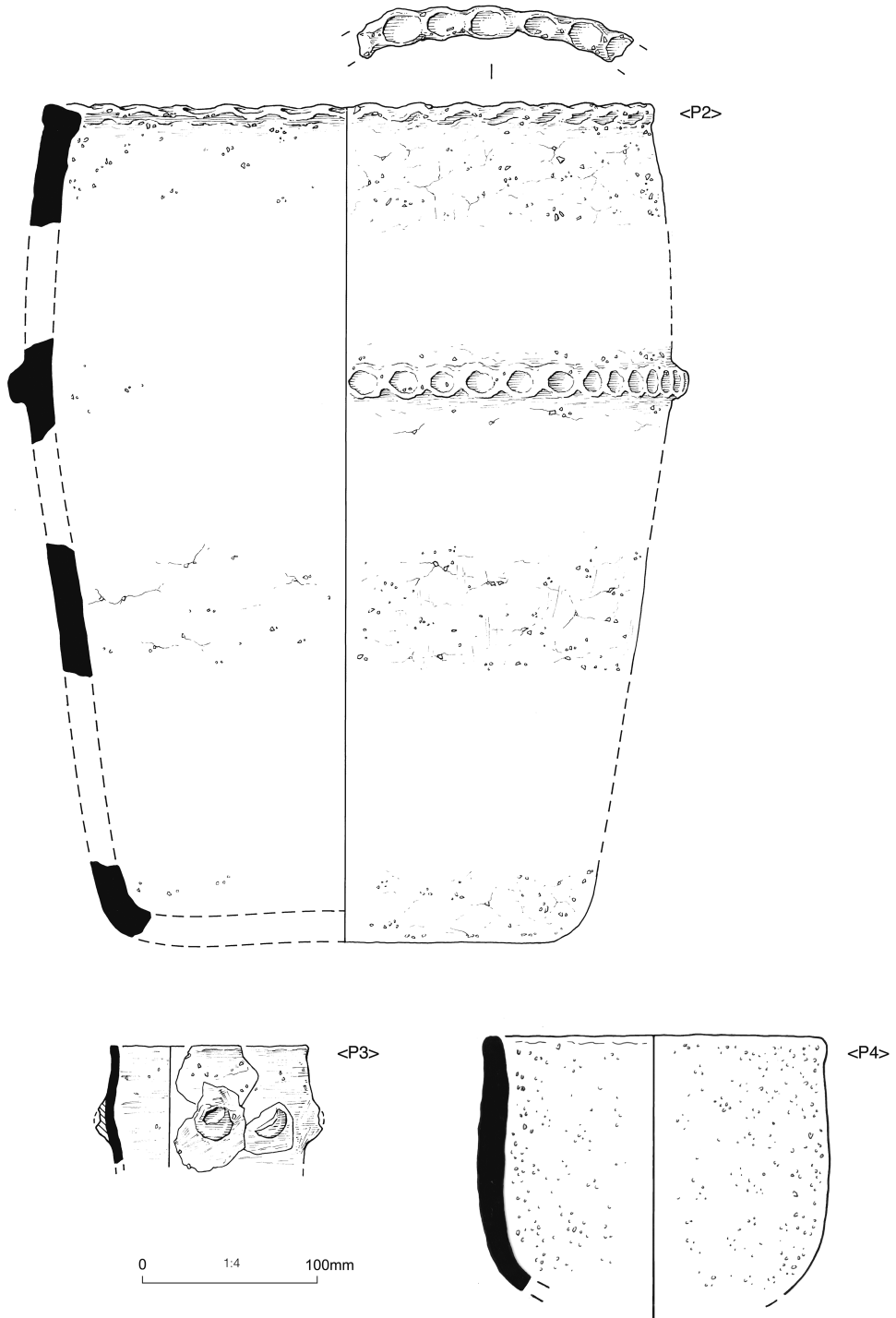


Fig 4 (contd.)

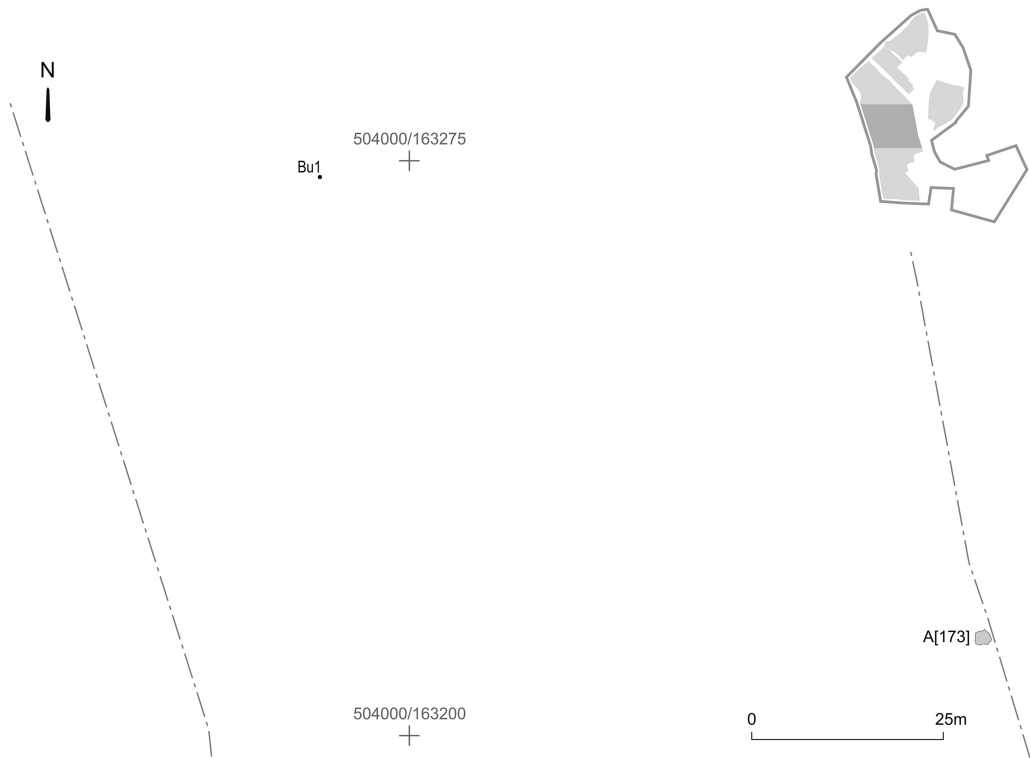


Fig 5 Franklands Drive, Addlestone. Late Iron Age and early Roman features.

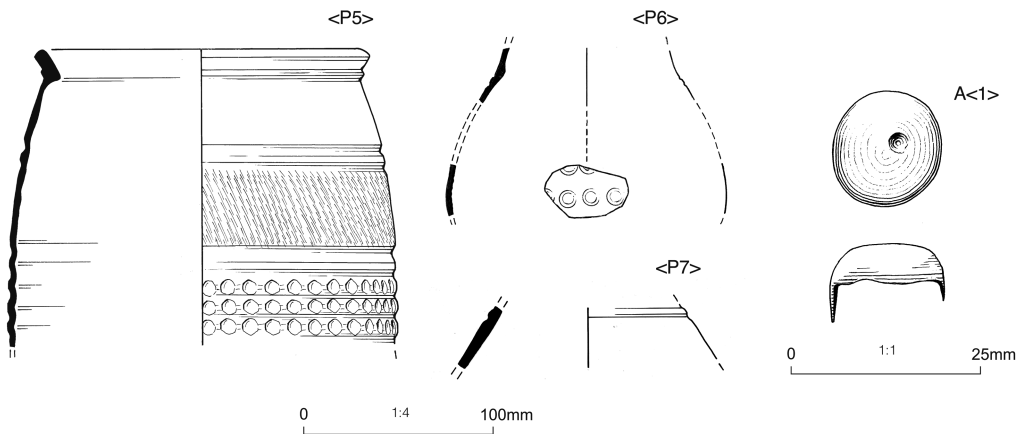


Fig 6 Franklands Drive, Addlestone. Finds from Late Iron Age cremation burial Bu1: facet-cut barrel beaker <P5>; thin-walled cordoned-necked vessel with impressed ring decoration <P6>; cordoned neck sherd <P7>; and copper-alloy terminal or stud head A<1> (scale 1:4, copper alloy 1:1).

100–125. The source of the pale grog-tempered wares is not known but similar fabrics have been found in Surrey at Ashted (J Bird, pers comm), Ewell (L Rayner, pers comm) and Wanborough (Bird 1994, 135).

There is a wide functional range. The jars would have been used for storage, food preparation and perhaps transport of foodstuffs to the site, the mortarium for food preparation, and the

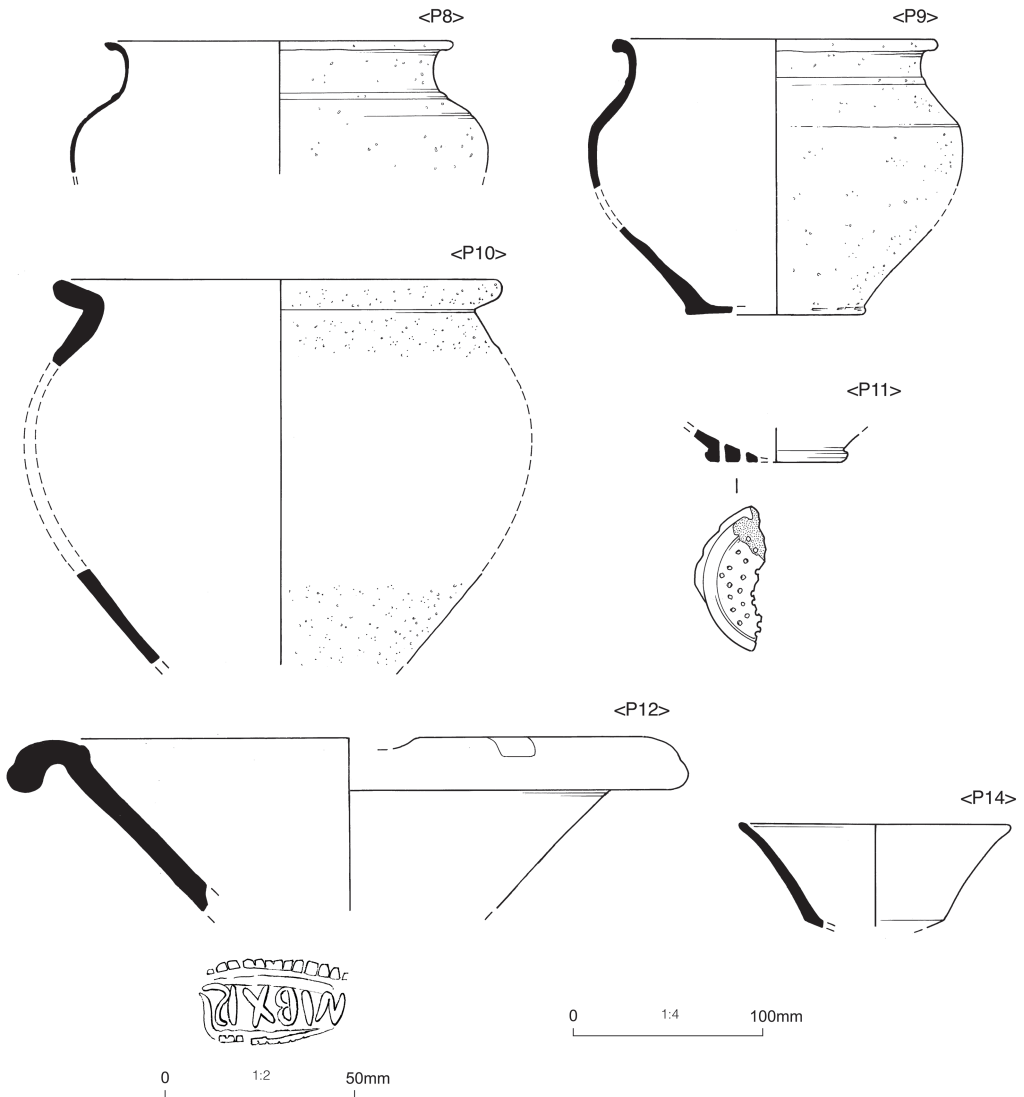


Fig 7 Franklands Drive, Addlestone. Selected Romano-British pottery from pit A[173]: <P8>–<P12> and <P14> (scale 1:4, detail of stamp 1:2).

flagon, cup and strainer are related to drink preparation and consumption. This material, apparently unrelated to any settlement, may represent a ritual deposit or commemorative feasting near a cemetery (cf Evans 2004, 364; Pearce 2013, 34), particularly if contemporary burials existed outside the perimeters of the excavations, a forerunner of the excavated 3rd century cemetery (below).

Catalogue of pottery from pit A[173]

<P8> Jar (fig 7)
 A<31>, A[174]
 Rim and upper body; neck cordon; shoulder groove. Unsourced oxidised grog-tempered ware. Notably thin-walled; brick red surfaces with grey core; matrix contains

silt-sized quartz, larger rounded quartz, red and black iron ore and off-white fine micaceous clay pellets (poorly sorted but up to 2mm or more), some protruding through the surfaces. Rim diam 180mm; Wt 165g.

<P9> Jar (fig 7)

A<33>, A[174]

Rim, upper and lower body; shallow neck cordon. Unsourced reduced grog-tempered ware. Light grey surfaces and matrix; poorly sorted with silt-sized quartz, off-white and light grey pellets (some as large as 4mm) and lenses of off-white/grey clay, abundant black iron ore (some rounded pieces also very large), occasional large rounded quartz. The clay pellets protrude through the surfaces. Rim diam 164mm; estimated H 144mm; Wt 228g.

<P10> Jar or bowl (fig 7)

A<32>, A[174]

Rim, neck and lower body sherds (reconstructed as a jar but it is also possible that this is a bowl). Unsourced sand-tempered ware. Medium grey surfaces, light grey core. Silt-sized quartz and black iron ore with occasional larger black iron ore and medium to abundant quantities of much larger rounded quartz 2–3mm. Rim diam. 232mm; Wt 134g.

<P11> Strainer base (fig 7)

A<34>, A[174]

Approximately 33% of a strainer base with 20 surviving perforations. Unsourced sand-tempered ware. Mid-dark grey surface and matrix; the dominant inclusion is reddish-brown iron ore (0.5–2mm) with silt-sized and occasional large rounded pieces of quartz. Wt 28g.

<P12> Mortarium (fig 7)

A<2>, A[174]

Rim and upper body of a Verulamium/London region white ware hooked flange mortarium. The following report is by Kay Hartley.

The cream fabric is fired to brownish-cream at the surface but also has a distinct cream slip which is quite unusual. It is otherwise typical in every way of the finer version of Verulamium/London region white ware fabric (Tomber & Dore 1998, 154–5). It is very heavily worn; the slip survives for a depth of *c* 2.5cm on the inside.

The right-facing stamp survives, reading from the bead outwards, MBXR[...] retro, M incomplete. The reading for the full stamp is uncertain as there is no clear and complete impression for either end of the stamp. Only further finds will provide a clear version of the whole stamp, but it is an easy stamp to recognise. Mortaria stamped with the same die have been recorded from: St Albans (Stead & Rigby 1989, fig 32 no 1; Hartley 1999, 271 no 5; Hartley 1984, 288, fig 119 no 104), Ewell, Surrey and London (Drapers' Gardens; site code: DGT06). The rim profiles of the three mortaria illustrated by Hartley (1984) fit perfectly within the period *c* AD 110–140.

<P13> Flagon (not illustrated)

A<->, A[174]

Flagon base and lower body sherds; burnt; orange ?Verulamium/London region white ware.

<P14> Cup (fig 7)

A<->, A[174]

Les Martres-de-Veyre samian; Dragendorff form 33 cup with a notably worn interior. Rim diam. 140mm; Wt 68g. Date *c* AD 100–125.

The 3rd century AD cremation cemetery

THE CEMETERY

A mid-late 3rd century AD cremation cemetery was represented by 37 burials (Bu2–Bu38; fig 8; table 1; below, Burial catalogue), of which 28 were urned cremation burials and nine were recorded as possible unurned cremation burials. Most burials lay on the western side of the site, in a loose cluster some 45m across, with five outlying graves to the north-west, north and south-east, the most distant being unurned cremation burial Bu32, some 110m to the north-west, at the northern limit of excavation. Although at least ten cremation urns were missing their rims, an indication of post-medieval plough damage, there were no signs of differential truncation across the stripped area, suggesting that the recovered distribution of graves broadly reflects that within the original cemetery.

No boundary features were recorded, suggesting that the cemetery was unenclosed, although insubstantial gullies, banks or fences could have been lost to truncation. There was, however, no evidence of Romano-British ditches in any of the stripped areas, making it possible that the site lay in an area of open heathland.

Dating of the cemetery is entirely reliant on the pottery from the urned and accompanied burials (below), which indicate that its use was confined to the 3rd century AD. The unurned burials are undated, but do not form a distinct spatial or stratigraphic group and they are probably broadly contemporary with the urned burials. The remains were probably interred within a relatively short timespan, presumably in clearly visible (if not formally marked) graves, as there is no intercutting.

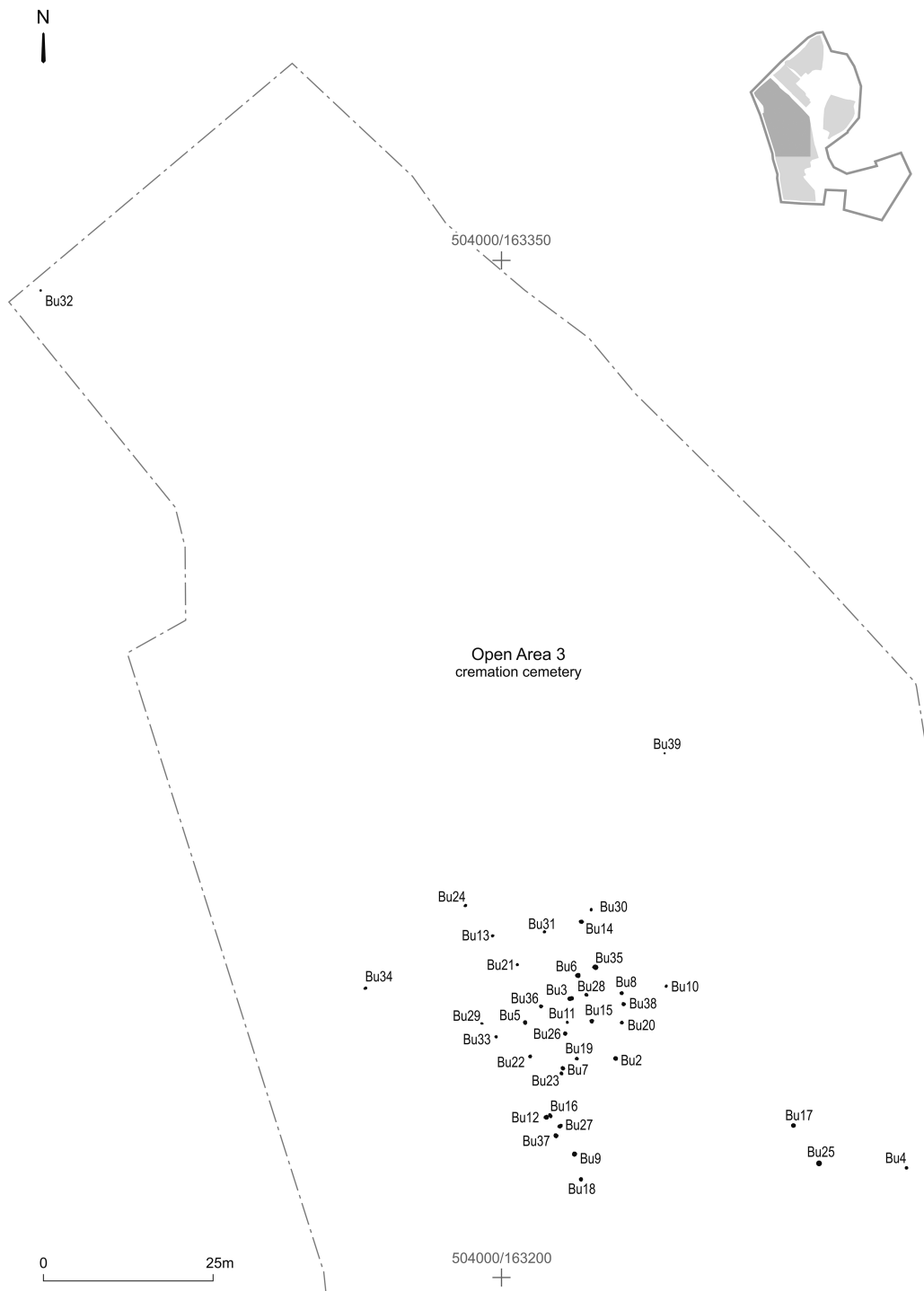


Fig 8 Franklands Drive, Addlestone. The 3rd century AD cemetery.

Table 1 Franklands Drive, Addlestone. Summary of the 3rd century AD burials

	no of burials	
Burial type	urned cremation burials	28
	(of which dual burials:	2)
	urned cremation burials	9
Age category	1–4 years	1
	<12 years	1
	adult	19
	26–35	1
	36–45	1
	?adults	4
	adult and subadult	3
	undetermined	7
Sex category (age ≥ 18 years)	male	1
	?male	3
	female	1
	?female	2
	undetermined	22
Pathology recorded (see catalogue for details)	3	
Pyre/burial goods (see catalogue for details)	secondary vessels	2
	hobnails	4
	other nails	28
	animal bone	2
	other items	3

Most burials represented a selection of the remains of a single individual, although there were three instances of a burial containing bone from two individuals. The cremation process, the selection of material for burial and the method of interment places constraints on the information that could be retrieved (McKinley 1989; 2000a & b). Twenty-eight adults (>18 years old) could be identified (28/37: 75.7%). Only two adults could be aged more precisely: adult female Bu8 (36–45 years old) and adult of undetermined sex Bu9 (26–35 years old). The sex of seven adults (7/37: 18.9% of all burials; 7/28: 25% of identified adults) could be determined: one male (Bu4), three probable males (Bu14, Bu18 and Bu21), one female (Bu8) and two probable females (Bu6 and Bu16). Two identified subadults were buried in individual graves (Bu19 aged <12 years, Bu24 aged 1–4 years), while an additional three subadults represented by small amounts of bone in adult burials (presumed dual cremation: Bu2, Bu17 and Bu18).

The burial population is considered in more detail below (see *Discussion*). All burials are catalogued at the end of this article, with the full specialist report on the human bone available as a digital supplement (below, *Endnote*). The burials provide evidence for a narrow variety of funerary and burial practices, set out below.

FUNERARY PRACTICE

Crementation comprises not only the physical remains of one or more individuals but the product of a series of ritual acts that comprise the disposal of the dead by the mortuary rite of cremation (McKinley 2000a, 403). The cremation pyre served as a source of fuel, support for the body and any pyre goods and provided sufficient temperature, time and oxygen to complete the cremation (McKinley 2000b, 39; 2006, 84). The body would have most likely been placed in a supine position on the pyre, possibly in a coffin or bier, clothed or unclothed and often cremated with a range of pyre goods (Barber & Bowsher 2000, 300). Most individuals appear to have been cremated separately, but the presence of three dual cremation burials (above) implies that adults and subadults were occasionally cremated on the same pyre.

Pyre technology

The coloration and fragmentation of the burnt human bone (see *Endnote*, table 5) has shown that pyres were generally adequately fuelled and combustion well managed. The majority of bone was white in colour indicating fully oxidised remains. Colour variations were seen in many burials, with some evidence for incomplete combustion (charring) particularly in the extremities, but this is widely observed in Romano-British cremation burials and seems unrelated to age, sex, or the availability of resources (eg McKinley 2000c, 268–9). Full oxidation may not have been a prerequisite of the rite and a ‘complete’ cremation may not have been considered necessary (McKinley 2000a, 404; 2006, 84), although environmental factors such as strong winds or heavy rain may also have impacted individual pyres (McKinley 2000a, 407). Observed bone fragmentation (see *Endnote*, fig 18, table 6) was also typical, with no indication of deliberate mechanical fragmentation after cremation and prior to burial. Characteristic fracturing patterns observed on many burnt bone fragments suggested bodies placed on the pyre in a fleshed state (Buikstra & Ubelaker 1994, 97).

The cremation process would have produced a large quantity of pyre debris including fragments of cremated bone, pyre goods, wood and charcoal (McKinley 2000b, 41). It is possible that some of the features described as unurned burials (below), but containing less than 10g of burnt bone may actually represent pyre debris accumulating or intentionally placed in existing features. The distinction between unurned burials and small pits containing residual bone or pyre debris is not always possible (Barber & Bowsher 2000, 104–5).

Despite occasional flecks of charcoal and burnt flint, there was no evidence of large quantities of pyre debris being placed in graves or other features, or accumulating as surface deposits. Well-sorted bone with no mixed pyre debris has been commonly found in early Romano-British cremation burials (Weekes 2008, 154). A paucity of pyre sites in Roman Britain has previously been interpreted as evidence of cremation away from the site of burial (Philpott 1991, 8). At Addlestone such sites may have been located outside the area of excavation. However, if pyres were constructed directly on the ground, they may leave only a temporary trace on the surface, easily removed by disturbance or plough damage (McKinley 2000b, 39).

Following the cremation and after the pyre had collapsed, a skeletonised body would have remained, lying in rough anatomical position above the wood ash (McKinley 2000b, 39). It is estimated that it would take around 7–10 hours for the pyre to cool sufficiently to allow for the collection of bone (McKinley 2000a, 407). Collection of the bone for burial would have been a time-consuming process undertaken by relatives or friends of the deceased. This would have been carried out by hand or possibly using rakes, winnowing, tongs or shovels (McKinley 2006, 85). There was no evidence for the deliberate collection or selection of skeletal elements or body areas from the pyre site for burial (see *Endnote*, fig 19).

Pyre goods

Materials found cremated with the dead may offer insights into the beliefs of the population regarding the afterlife. These can include intrinsic personal items worn by the deceased and extrinsic food offerings or other personal items required for a journey into the afterworld, gifts, mementoes or ritual offerings (McKinley 2006, 82). There was limited evidence for the inclusion of artefacts and pyre goods in the burials at Addlestone. Not all the items placed on the pyre would show visual signs of heating. Much of what went on the pyre would have been organic – clothing, wood, horn, basketry and foodstuffs – items that rarely survive. As not all the human bone was buried, it is also likely that some surviving pyre goods were also deliberately or accidentally excluded (McKinley 2006, 83; Weekes 2008, 155).

Small numbers of iron hobnails (2–15 nails) were found in four cremation burials (Bu8, Bu11, Bu22, Bu30), providing a reminder that some, if not all, individuals may have been clothed for cremation, or alternatively that hobnail-soled footwear may have been placed unworn beside the deceased on the pyre (Philpott 1991, 165–5; below, *Endnote*, ‘The iron nails...’).

It should be noted that the burnt and fragmented jar <P34> (fig 12) found in urned cremation burial Bu19 may have been exposed to fire either on or beside the pyre or at the graveside (below, *The burial vessels...Accessory vessels*). Other possible pyre goods for which evidence survived include small quantities of unidentified burnt animal bone from urned burial Bu2 and unurned burial Bu32. Burnt animal bone may represent food for the dead, amuletic animals, status, or consumption during funeral feasts (McKinley 2000a, 416; 2006, 83) and has previously been found in *c* 10–50% of Roman cremation burials (Barber & Bowsher 2000, 71–6; McKinley 2006, 83). The practice does not seem to have been common in the 3rd century at Addlestone (2/37: 5.4%). There was no evidence for the deliberate inclusion of plant foods in the pyre material.

Orange or red staining was observed on the surfaces of burnt bone from seven burials (Bu2, Bu4, Bu7, Bu9, Bu20, Bu24 and Bu32). This may represent staining from contact with an iron object in within the burial fill, most probably a nail, given their ubiquity in cremation deposits at Addlestone.

The iron nails have been analysed in detail (below, *Endnote*, ‘The iron nails...’). Excluding the hobnails (above), iron nail fragments, often representing a considerable number of nails, were found associated with 28 cremation burials (28/37: 75.6%; below, *Endnote*, table 3). Nails were found distributed through the cremated bone deposits in 23 urned burials, of which eleven also had nails in the surrounding backfill, sometimes in greater numbers than found within the urn. Nails were also found in the fills of five unurned burials. Many of the nails showed signs of having been burnt and a few had adhering fragments of cremated bone.

Flat circular/sub-square heads of Manning’s type 1b (1985, 134, fig 132), the most common style of nail on most Roman sites, dominated this assemblage. What is particularly distinctive here, however, is the very strong concentration of small nails, perhaps better described as tacks, mostly within the length range 16–35mm (fig 9; below, *Endnote*, fig 15, table 4). Medium-sized nails (<75mm in length) were uncommon, with no concentrations in particular burials and they could simply derive from the reuse of structural timber as fuel. Similar assemblages are known from a number of Roman cremation burials, for example at Wallington Road, Baldock (Hertfordshire; Fitzpatrick-Matthews & Stevenson 2007), Passenham Quarry, Milton Keynes (Buckinghamshire; Hylton 2011) and Brougham (Cumbria; Cool 2004), suggesting that these small nails point to a widespread and perhaps long-lived cremation funerary rite. The presence of clenched nails seems to confirm that at least some of the nails derived from wooden objects burnt on the pyre, such as wooden boxes, or, perhaps more likely in view of the quantities recovered, upholstered wooden



Fig 9 Franklands Drive, Addlestone. Iron nails from cremation burials, showing the range of sizes and different types of clenching (scale *c* 1:1).

biers. However, the potential symbolic or ‘magical’ possibilities of nails as burial goods in their own right should also be considered (Dungworth 1998; Alfayé 2010) and may also have encouraged the collection of nails from the pyre site and their inclusion in the final burial.

BURIAL PRACTICE

Selection of bone for burial

The total bone weight recorded in each burial (see *Endnote*, table 6) was comparable to urned and unurned burials at Westhampnett (171.2–618.3g), St Stephens (71–1447.2g) and Baldock Area 15 (<0.1–1599.1g) (McKinley 1997). Variations in bone weight may reflect an individual’s status, wealth or popularity with greater effort used in collecting the bone (McKinley 2006, 85). No burials at Addlestone contained the expected total bone weights for the cremation of a single adult individual. On average *c* 40–60% of expected bone weights are recovered from adult burials (*ibid*). This suggests that the inclusion of all cremated bone at burial was not considered necessary. The remaining burnt bone may have been left with the other pyre debris, discarded or perhaps distributed among friends and relatives (McKinley 2000b, 42; 2006, 85).

All skeletal areas were represented and the excavation of the intact cremation vessels revealed the burnt bone to be distributed, apparently randomly, throughout, with no evidence of the selection of specific body areas for burial. This selection process was the normal practice (McKinley 2000b, 42). The apparent random distribution of bone within the urns may imply they were raked off the pyre before collection and mixed. Bone from different individuals could have been collected at the same time, or the ‘primary’ vessel (urn) might not have been the original receptacle (McKinley 1997, 252). The near-absence of pyre debris from the burials would nonetheless suggest that time and care was dedicated to the collection of material for burial.

The majority of the burnt bone was in a highly fragmented state and an average fragment size of 25mm was recorded. Natural fragmentation of the bone occurs as part of the cremation process, through the movement of hot and brittle bone on the pyre. Quenching of the pyre with water or wine may also have increased breakage, and raking to collect the cooled bone for burial would also have increased fragmentation (McKinley 1994, 340). The protection afforded by a cremation urn would have reduced breakage and helped prevent soil infiltration (*ibid*, 341). This was reflected in the greater bone weights and reduced fragmentation observed in urned as opposed to unurned contexts.

?Unurned burials

Nine sub-circular, shallow pits were identified as possible unurned burials (below, 'Burial catalogue'), due to their similar form to the definite urned cremation graves and the presence of varying amounts of burnt human bone, charcoal and iron nails in their backfills. There is uncertainty as to their interpretation because it can be difficult to distinguish genuine unurned burials from intentional deposits of token amounts of pyre material, or from small pits the fills of which accidentally incorporated debris from nearby pyres, pyre clearance, or disturbed urned cremation burials. 'Burials' Bu36, Bu37 and Bu38, are the most suspect, containing <10g of burnt human bone. Few demographic details are recoverable from this material, but no subadult bone was identified. One unurned burial (Bu32) is notably isolated from other burials on the site (fig 8).

The bone may in some cases have been interred loose, or within an organic container that had since entirely rotted *in situ* (Weekes 2008, 155), or in nailed wooden boxes (Barber & Bowsher 2000, 106). At Addlestone the burnt bone appeared to be evenly distributed within the pit fills, together with iron nails and small quantities of charcoal, presumably derived from the pyre. There was no evidence for organic containers or for discrete tips and deposits of pyre material and no burial goods were identified.

Urned burials

Twenty-eight urned cremation burials were recorded. Grave cuts for urned burials were sub-circular, shallow (0.3–0.5m in diameter), and rarely larger than needed to accommodate the vessels they contained. The ceramic primary vessels (cremation urns) were all placed upright and there was no evidence for the use of lids to close the vessel, or for secondary vessels or boxes to contain the urn.

Within the urn, the bone appeared to have been selected and distributed randomly (above). Nine urned cremation burials also produced small amounts of cremated human bone in the grave backfill, but not in significant concentrations. Most primary vessels produced evidence of only one adult individual, although there was evidently no attempt to collect all the remains from a pyre site (above). One vessel produced only subadult remains, aged <12 years (Bu19) and there were three probable dual cremation burials, each of an adult with some subadult bone (Bu2, Bu17, Bu18), although the possible unintentional mixing of residual material at the pyre site should not be ruled out. There was no evidence that graves containing subadult remains were clustered in particular parts of the site, although the low numbers may be significant (below).

Only two potential burial goods were identified, both ceramic vessels from urned cremation burials. One (<P31>) is complete and clearly an accessory vessel in a possible dual cremation burial of an adult and child (Bu17), but the other (<P34>) from the burial of a child (Bu19) is fragmentary and burnt – something that may have occurred at either the pyre or the graveside. Ceramic primary and accessory vessels are discussed below. Significant numbers of iron nails from objects burnt on the pyre are found in burnt bone deposits from urned cremation burials (above), suggesting that their selection and inclusion in the burial may have been a deliberate part of the rite.

The burial vessels, by Beth Richardson

In total, 28 cremation urns and two accessory vessels have been recorded from burials on the site (<P15>–<P44>). These vessels are illustrated in figures 10–13, except those few recovered in too poor a condition for accurate reconstruction drawing. In addition, detailed descriptions of the primary vessels (urns), and accessory vessels, are given in the burial catalogue. Other burial vessels may have existed but have been lost to later depredations (principally later post-medieval ploughing) as evident from several stray finds.

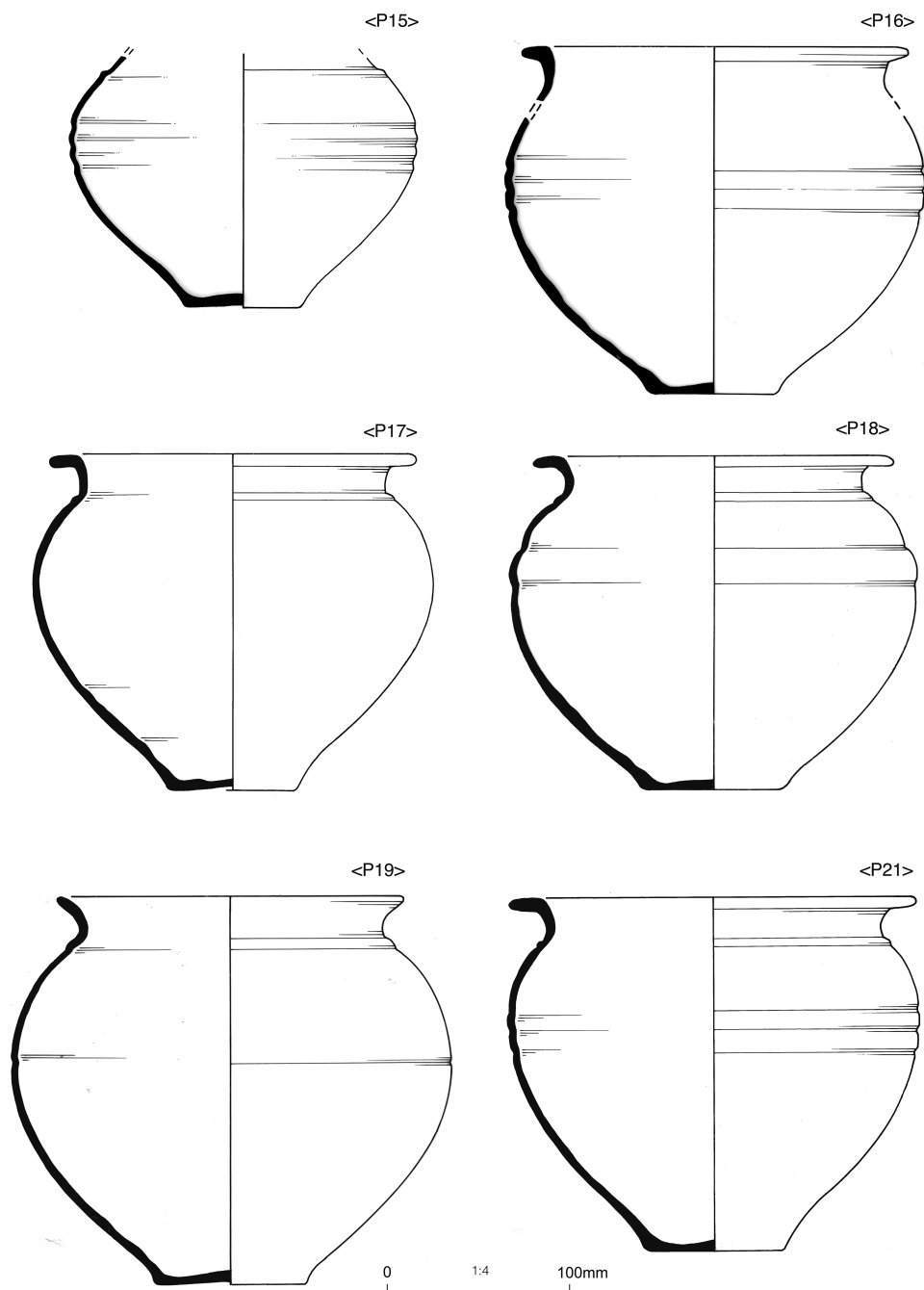


Fig 10 Franklands Drive, Addlestone. Alice Holt reduced ware cremation urns <P15> (Bu2), <P16> (Bu3), <P17> (Bu4), <P18> (Bu5), <P19> (Bu6) and <P21> (Bu8) (see Burial catalogue for details).

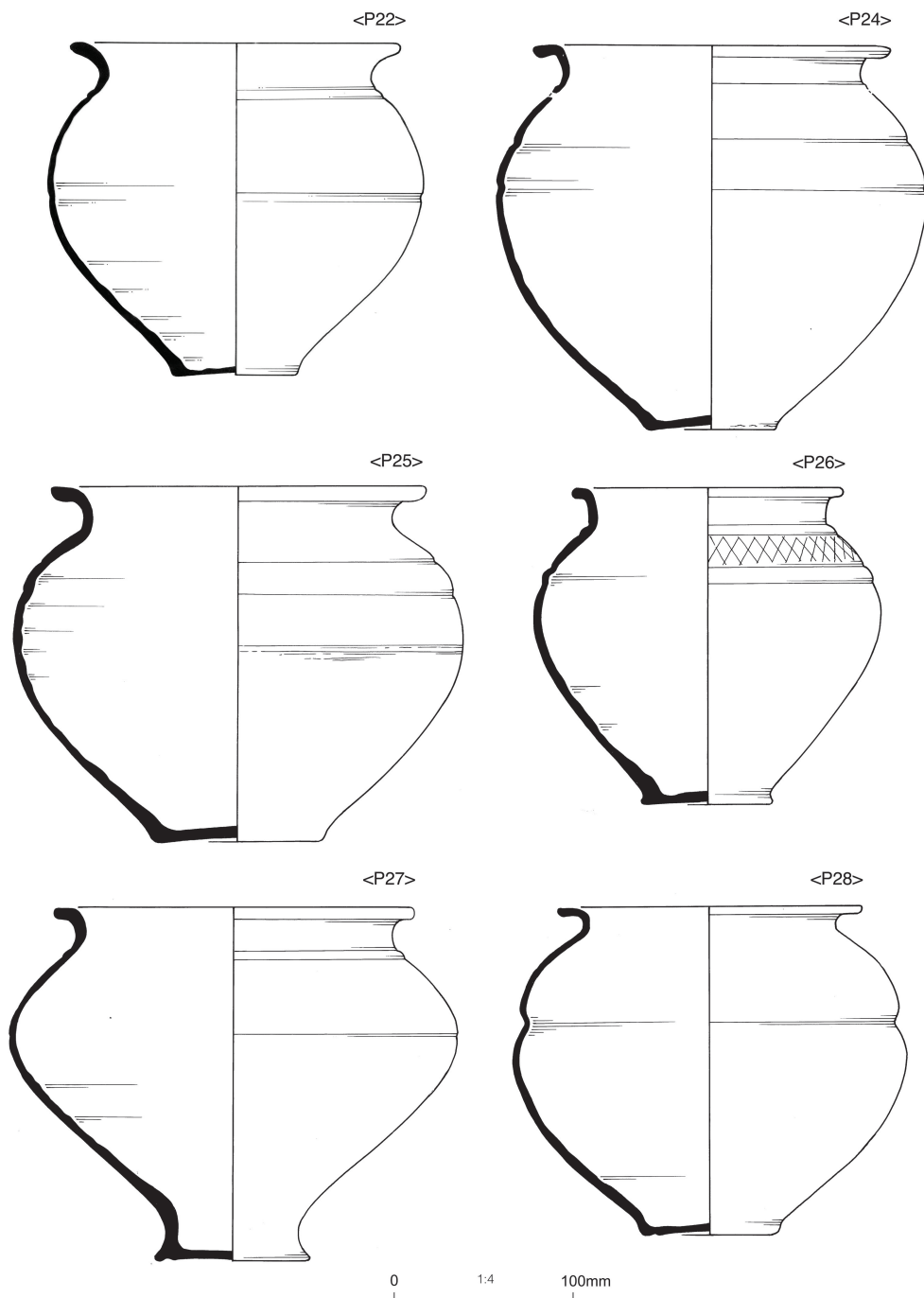


Fig 11 Franklands Drive, Addlestone. Alice Holt reduced ware cremation urns <P22> (Bu9), <P24> (Bu11), <P25> (Bu12), <P26> (Bu13), <P27> (Bu14) and <P28> (Bu15) (see Burial catalogue for details).

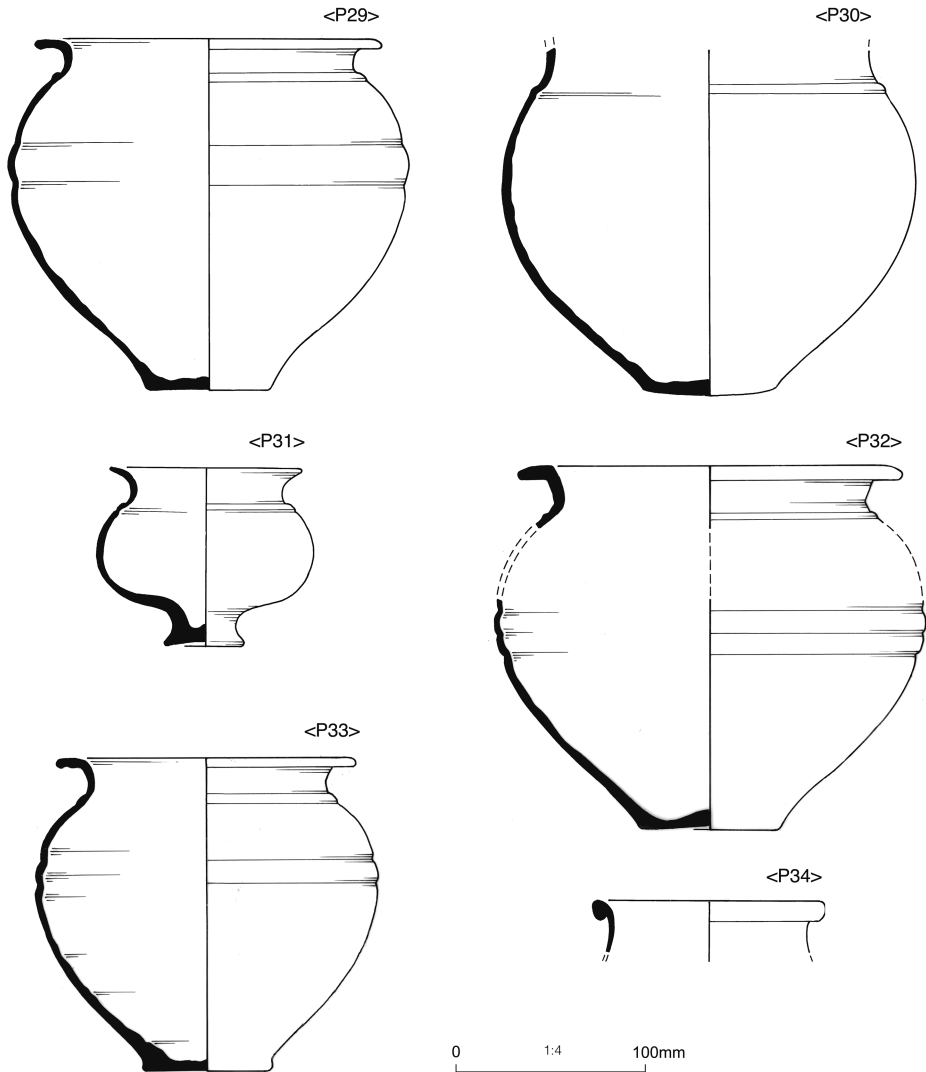


Fig 12 Franklands Drive, Addlestone. Alice Holt reduced ware cremation urns <P29> (Bu16), <P30> (Bu17), accessory pedestal beaker <P31> (Bu17), cremation urns <P32> (Bu18), <P33> (Bu19) and ?accessory ?Verulamium/London region white ware jar or beaker <P34> (Bu19) (see Burial catalogue for details).

Primary vessels (cremation urns)

Many primary vessels were cracked and in very poor condition when excavated. A few were intact but most are now fragmentary. The partially oxidised surface of many of the vessels suggests that they may have been under-fired and chosen because imperfect, a common occurrence on burial sites where 'seconds' or damaged vessels were used for reasons of ritual or thrift (eg Philpott 1991, 36; Pearce 2013, 39; Bird 2013, 156). None appear to have been deliberately damaged. Most are uniform jars from the Alice Holt kilns on the Surrey-Hampshire border, but there are also two pedestal-based beakers from the same source, <P31> in Bu17 (fig 12) and <P39> in Bu24 (fig 13), a south-east Dorset black-burnished ware 1 (BB1) jar <P43> in Bu28 (fig 13), an unsourced grog-and-shell-tempered ware jar

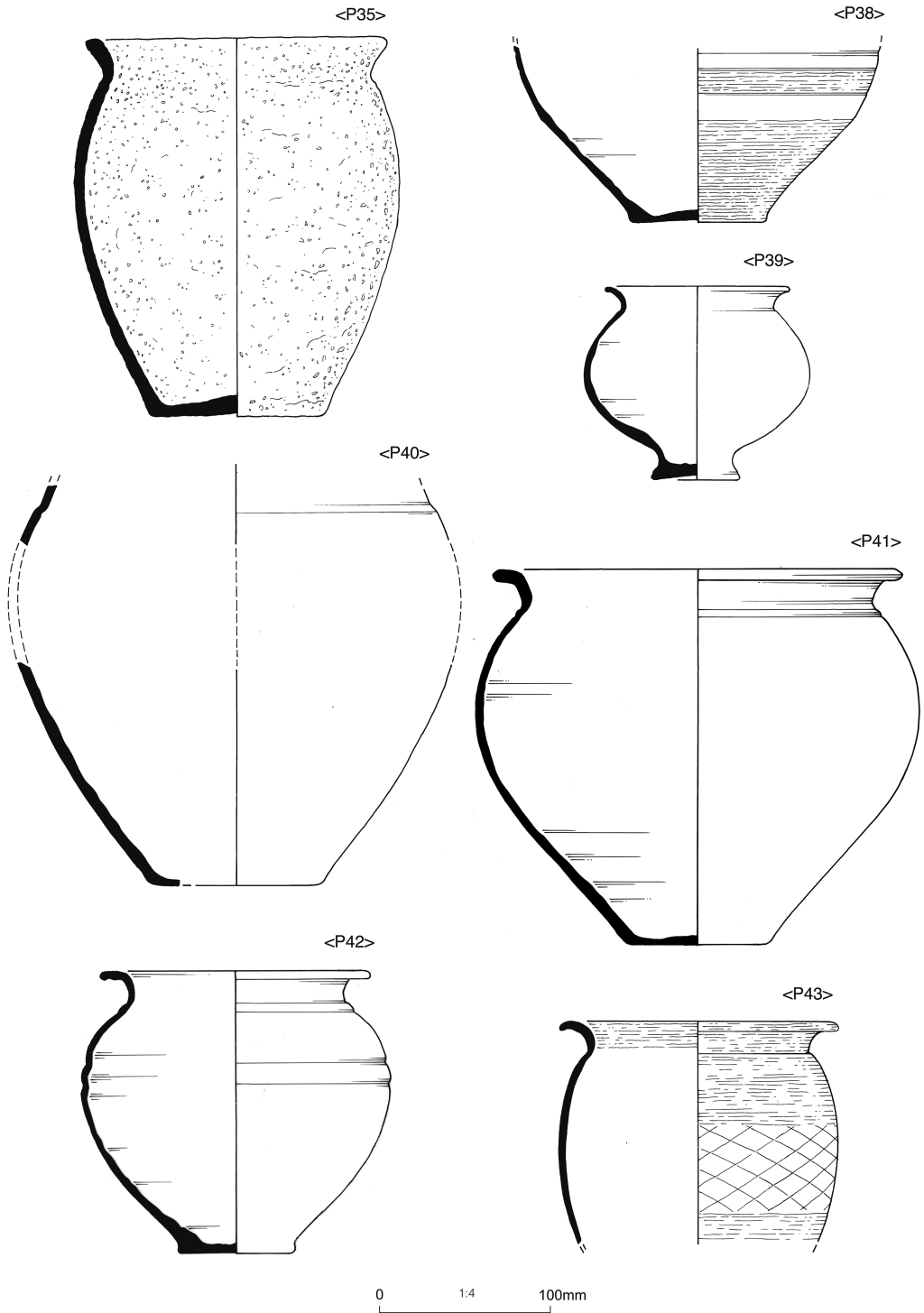


Fig 13 Franklands Drive, Addlestone. Unsourced grog-and-shell-tempered ware cremation urn <P35> (Bu20), Alice Holt reduced ware cremation urns <P38> (Bu23), <P39> (Bu24), <P40> (Bu25), <P41> (Bu26), <P42> (Bu27) and black-burnished ware 1 cremation urn <P43> (Bu28) (see Burial catalogue for details).

<P35> in Bu20 (fig 13) and the rim from a burnt but originally oxidised jar or beaker, possibly from the Verulamium region kilns, <P34> in Bu19 (fig 12).

The lack of stratigraphy or other artefactual evidence makes close dating difficult but some vessels – the BB1 jar <P43> (fig 13), two everted-rimmed Alice Holt reduced ware jars <P19> (fig 10) and <P22> (fig 11), the two pedestal-based beakers <P31> (fig 12) and <P39> (fig 13) and the grog-and-shell-tempered jar <P35> (fig 13) – are datable to the mid-late 3rd century AD or slightly later. The uniform Alice Holt jars with flat or slightly downturned rims, which together constitute all but five of the cremation urns, are more broadly dated to *c* AD 180–250 or *c* AD 200–300 (Alice Holt ‘Great Mavins’ forms 1.26, 129–130; Lyne & Jefferies 1979, 36). Their ubiquity on this site and their spatial position, clustered with the more closely datable mid-late 3rd century jars and beakers, makes it likely that they are of a similar date to the later vessels or possibly slightly earlier.

Most of the cremation urns have typical late Alice Holt reduced ware fabrics (Tomber & Dore 1998, 138; Staines Roman pottery type series Group 3A, Jones 2012, 141). They are predominantly sand-tempered with fine granular matrices containing abundant well-sorted rounded and sub-angular quartz (generally 0.2–0.3mm) and varying but generally sparse amounts of black or brown iron-rich inclusions (ill-sorted; <0.2mm–1–3mm), larger rounded quartz (0.5mm–>1mm), white or light grey clay pellets (also ill-sorted) and black organic voids. Surfaces are micaceous with traces of burnished zones where undamaged and fairly smooth and light to mid-grey or buff in colour, often mottled due to firing conditions in the kilns. The fabrics have been subdivided and assigned MOLA fabric reference collection codes, described in the introduction to the burial catalogue at the end of this report.

Most jar forms are extremely similar with wide mouths, flat or slightly downturned rims and globular bodies with shoulder cordons and/or single or double-girth grooves. These are Alice Holt late flat-rimmed jar forms found in the 3rd century Great Mavins kilns (Lyne & Jefferies 1979, types 1.26–31, 36–7) and in 3rd and 4th century contexts at several settlement sites in Surrey, such as Ewell, Thorpe, Staines and Chertsey (*ibid*, 68; Phil Jones, pers comm). The form is also classified as Neatham type 24 and (with a slightly more curved downturned rim) Neatham type 78 at the small Roman town of Neatham (Hampshire) where the jars first occur in the late 2nd century and peak in the 3rd and early 4th centuries when the town is thought to have been a marketing outlet for Alice Holt products (Millett 1979, 133, fig 3 no 21; 1986, fig 61 no 74).

Four of the Alice Holt jars from Addlestone have slightly different forms or decoration. Two jars with everted rims, <P19> (fig 10) and <P20> (fig 11), are Lyne and Jefferies’ Alice Holt type 3B.12 dated *c* AD 270–420 (1979, 42); there is an almost complete example of this jar form from Thorpe Lea Nurseries, Chertsey (a few miles from Addlestone) dated to the 3rd century (Jones 2012, 143, 146, fig 5.43 no 382). A jar with a narrow band of lattice decoration between two shoulder cordons, <P26> (fig 11), has a slightly narrower mouth than the others and may be earlier in date. A jar with a high shoulder and pedestal base, <P27> (fig 11), is very similar in form to two much smaller beakers from the site.

These globular pedestal-based beakers, <P31> (fig 12) and <P39> (fig 13), are also Alice Holt products, present in small quantities from kilns dated *c* AD 270–300 (Lyne & Jefferies 1979, 41, fig 26 no 2.3) and late 3rd–early 4th century contexts at Neatham (Millett 1986, 85, fig 61 no 79). Two beakers of this type were used as accessory vessels in two large cremation assemblages at Daneshill, Hampshire (near Neatham) where they are dated to the 3rd century (burial 2; Millett & Schadla-Hall 1992, 103, fig 13 D) and the second half of the 3rd century (burial 1; *ibid*, 101, fig 11 G). The beakers also occur in a late 2nd century dedicatory deposit at Wanborough temple, Surrey, suggesting earlier production of the form (Bird 1994, 150–1, figs 48–9, nos 106–8). Photographs from early 20th century excavations in Surrey suggest that they were also present in a group of accessory vessels accompanying a late 3rd or early 4th century burial at Mitcham Common (Bidder 1928) and (with calcined bone and pyre debris) mid-late 3rd century cremations at Wisley (Gardner 1911, pl 4). The form is rare on settlement sites (at Neatham it occurs in ritual deposits), and it has been

suggested it may have had a liturgical function on burial sites (Millett & Schadla-Hall 1992, 100). As small vessels, the form may also have been used to contain infant cremations (cf Evans 2004, 360). At Addlestone, one of the beakers (<P39>) contained the remains of one of the very few subadults from the cemetery (Bu24), while the other (<P31>) is an accessory vessel.

Two cremation urns are not Alice Holt products. A grog-and-shell-tempered jar (<P35>) has a friable fabric full of bivalve shell fragments (ill-sorted, several larger than 1.0mm) and reddish-brown grog in the same size range. The shell in the buff/grey surfaces has burnt and/or decomposed to voids. No parallel has been found for this fabric but it may correspond to the 'corky' late shell-tempered wares from Rapsley Roman villa, Ewhurst (Hanworth 1968, 55, fig 25 no 157) and Cobham bath-house (Frere 1950, 91, fig 8 nos 42 & 44); from both sites there are illustrated examples of similar rather straight-sided shell-tempered jars with upright everted rims, dating from the late 2nd/3rd–4th centuries. The jar form is also similar to Late Roman grog-tempered ware jars, common in Hampshire (eg Millett 1986, 91, fig 68 nos 18–19). A single black-burnished ware 1 (BB1) jar has also been used as a cremation urn (<P43>). It is in the standard (south-east) Dorset fabric, containing abundant well-sorted quartz and fragments of red-brown shale, and dated to the mid–late 3rd century by obtuse lattice decoration (post *c* AD 220) and the length of the everted rim, which has an external diameter equal to or just exceeding the diameter of the vessel's girth (Gillam 1968, fig 22 nos 9–10). On many broadly contemporary burial sites BB1 jars are the main type of burial urn or accessory vessel (eg Brougham, Cumbria, a military cremation cemetery where several mid–late 3rd century BB1 jars contained nails with calcined bone and other pyre debris; Cool 2004).

Accessory vessels

Only one definite accessory vessel was recovered, although there is another possible example. A complete Alice Holt reduced ware pedestal-based beaker <P31> (fig 12) was found with the primary vessel in Bu17. Burnt rim sherds from a small ?Verulamium/London region white ware jar or beaker <P34> (fig 12) found beside the primary vessel in Bu19 may have been part of a burial accessory vessel but are perhaps more likely to have performed a similar function on the pyre. It is notable that both small vessels were found with two of only five burials containing subadult remains, one a single burial (Bu19), the other probably the dual burial of an adult and subadult (Bu17). A further small pedestal beaker <P39> was used as a cremation urn for an infant burial (Bu24).

Discussion, by Michael Henderson and Isca Howell with Michael Marshall and Beth Richardson

THE LOCAL CONTEXT

The nearest major Roman urban centre in Surrey is in Southwark, with the closest large settlements found at Staines (*Ad Pontes*) to the north, and Ewell to the east (Bird 2006, 42). The cemetery was located *c* 8km south of the settlement at Staines, where the main London–Silchester road crossed the Thames, but it is unlikely that it provided a service to this community. The middle Thames Valley would have been a relatively well-settled landscape, with farmsteads, field systems and other activity recorded, for example, at Shepperton, Thorpe, Spelthorne and Egham. Other settlement evidence appears distributed along Thames tributaries such as the river Wey. Along the Windle Brook, several kilometres to the west of the site, Roman buildings have been excavated around Bagshot and Windlesham (Cole 1989; 1996; Stevens 1994) and coins have also been found in the area of Stonehill that may relate to the earthwork known as 'Old Slade', which lies just under 5km to the west (Gardner 1924b).

The siting of the Roman settlement at Wickham Bushes, near Crowthorne (Corney & Gaffney 1983), close to the hillfort known as Caesar's Camp, may be no coincidence, perhaps reflecting a degree of continuity of an established social order across the Iron Age/Roman transition in a similar fashion as suggested for the oppidum of Dyke Hills and the development of the town at Dorchester-on-Thames (Oxfordshire; Cunliffe 1995, 70). Other hillforts in the Addlestone area include St George's Hill, *c.* 4.5km to the south-east, which could have influenced the trade along both the Mole and Wey valleys, including the Bourne and Windle Brook, especially because of the proximity of their confluences with the Thames to the north. There is dense activity in the Late Iron Age along the Thames and its tributaries in this area with enclosed farmsteads and field systems, for example at Thorpe Lea Nurseries, Egham (Poulton 2004, 52) and Brooklands, Weybridge (Hanworth & Tomalin 1977). Both these sites showed continuity of occupation into the Roman period.

The villa/bath-house at Cobham (Frere 1950), adjacent to the river Mole, suggests the presence of a local elite. However, the Romano-British rural settlement pattern in the immediate vicinity of the site remains largely unknown and outside of the river valleys, land use on the north-west Surrey heathlands may have been dominated by grazing and related activities, as it was in the Iron Age and early medieval periods (Poulton 2004, 54).

There is equally scant evidence for formal religious activity in the immediate vicinity and none of the currently known sites is likely to have influenced activity at Addlestone. Temples at Wanborough and Farley Heath (Bird 2004a, 85) probably reflect the significance of their setting close to the ridges of the Hog's Back and North Downs. However, structured deposits of probable ritual significance (see Smith 2018b, 184–91) and votive offerings, have been increasingly recognised in a number of riverine locations and settlements in north-west Surrey (eg Staines: McKinley 2004b, 21). Some potential evidence of Christian influence in the general area is provided by the discovery, at Bagshot, of a part of an engraved finger-ring fashioned from jet, engraved with a rho-cross symbol and thought to date to the later 4th century (Graham 2002), and a lead tank, possibly a font, from Perry Oaks, Heathrow (Petts 2006; Crerar 2012). The 13th century church of St John the Baptist, near Bisley, *c.* 9km to the south-west, is associated with an 'eccles' place name (Blair 1991, 111) and possibly has Roman brick in its rubble walls, but there is currently little evidence for a Roman settlement, let alone Roman Christianity in that location.

THE BURIED POPULATION

The majority of the population in the Roman period would have resided in the countryside. This is not reflected in the archaeological evidence where there is a general under-representation of rural burials compared with those known from large towns and urban areas (Davidson 2000, 231; Esmonde-Cleary 2000, 127; Roberts & Cox 2003, 107). These rural based communities, situated away from major towns and roads, may have remained somewhat isolated from urban burial fashions and traditions (Philpott 1991, 52; Esmonde-Cleary 1999, 166; Barber & Bowsher 2000, 300, 310).

Despite evidence of rural cremation in south-west Surrey, burial evidence is limited and this may hinder comparisons with burials from London and Southwark (Bird 2006, 47). Inhumation and cremation burials occur in small numbers within rural settlements, villas and field systems at Ewell, Godalming, Worplesdon, Beddington, Egham, Farleigh Court Golf Course near Warlingham, Farnham Quarry (Runfold), Haslemere, Albury and Farnham, and more are known from Staines, both within the settlement and along the roads to the south and east. Two 1st century AD cremations were found at 42 London Road, Bagshot together with two later 4th/early 5th century AD inhumations (Cole 1996). A third feature described by Cole as an inhumation grave at that site (which produced the ring referred to above) has been discounted and, given the absence of human remains, all should be treated with caution (Graham 2002; Bird 2004b, 142; Bird 2004c, 71). Evidence of an early Roman cremation cemetery (AD 43–150) was identified at Hurst Park, East Molesey (Andrews &

Crockett 1996). At Waynflete Tower Avenue, Esher, cremated remains of an adult male are likely to be of 3rd/4th century date (Holling 1969). North of Staines, a small dual-rite 3rd–4th century cemetery was located at Prospect Park, Harmondsworth (Andrews *et al* 1999). Further afield, comparisons can be made with a small number of sites within the county and south-east England including 36 cremation burials excavated at Westhampnett, West Sussex (Fitzpatrick 1997) and 30 cremation burials recovered from the late Roman cemetery at Lankhills, Winchester (Booth *et al* 2010).

A minimum number of 40 individuals were present in the 37 3rd-century AD cremation burials at Addlestone. While demographic analysis was limited by the incomplete nature of the burials, it was possible to identify 28 adults including five males and three females, and five subadults. Where survival of skeletal elements permitted age to be refined, this ranged from an infant aged 1–4 years (Bu24), a child aged <12 years (Bu19) to an adult aged 26–35 years (Bu9) and female aged 36–45 years (Bu8).

The low number of subadult burials corresponds to contemporary sites at Westhampnett, West Sussex (10–12%) and Baldock Area 15, Herts (12%) where no infants <1 year of age were identified (McKinley 1997, 248). This pattern was also seen at Brougham, Cumbria (Cool 2004) and in the eastern cemetery of Roman London (*c* 10–11%) (McKinley 2000c, 265–6). In contrast, at St Stephens, St Albans, Hertfordshire, almost one-quarter of the cremation burial assemblage was subadult (21%) and two fetuses/neonates were identified (McKinley 1992; 1997, 248).

The youngest individuals in a population may be at greater risk from disease and therefore higher mortality. If subject to the same burial rites and taphonomic factors as adults, a low number of subadult cremation burials would suggest an under-representation (Redfern & Gowland 2012, 113; Esmonde-Cleary 2000, 135). However, differences in the burial rites accorded to non-adults are apparent in the type, frequency of grave furnishings, treatment of the body and burial location throughout the Roman period. Clear distinctions are often made between the rites accorded to infants and those considered appropriate for children of about 18 months and above (Philpott 1991, 97, 101). Particularly at rural sites the burial of infant remains with little apparent ceremony, without grave goods and usually in domestic settings, close to dwellings or outbuildings and away from cemeteries is not unusual (Philpott 1991, 98; Gowland 2001, 157). At Addlestone, accessory vessels (above) occur only in burials containing a single subadult (Bu19) or mixed adult and subadult remains (Bu17), which may suggest that some subadults were afforded particular rites. The five identified subadults, at least, were interred with or alongside the adult buried population. Subadult bone does survive the cremation process, but small and fragile elements may be more affected by soil conditions and disturbance. The fragmented remains of young infants may also be overlooked in heavily mixed contexts (McKinley 2000c, 266).

Three of the subadults identified at Addlestone were from mixed contexts associated with adult remains. This included evidence of an adult male and subadult within the same cremation vessel. McKinley (2006, 85) found that *c* 5% of cremation burials contained the remains of two individuals or more. Commonly these included an adult and non-adult and, in many cases, may represent a parent and child, siblings, or two close relations (Philpott 1991, 99; McKinley 2006, 85). Dual cremations were also identified at Westhampnett (7–11%), Baldock Area 15 (4.8%) and St Stephens (3%) (McKinley 1997, 252). This practice may imply the cremation of two individuals on a single pyre, the inclusion of the remains of two individuals into a single urn prior to burial or also the reuse of a pyre site and subsequent unintentional mixing of deposits (Cool 2004, 437; McKinley 2006, 85; Weekes 2008, 151).

There was limited evidence of pathological bone changes to infer the health and disease status of the population. Evidence of degenerative joint disease identified in two adult cremation burials (7.1%: 2/28) may indicate age related bone changes, trauma or increased stresses placed on the joints through manual work, possibly farming (Roberts & Cox 2003, 77). Roberts and Cox estimated that *c* 14.4% of contemporary (inhumed) skeletons

examined had evidence of joint disease with degenerative spinal changes recorded in 7.1% of individuals (*ibid*, 145). Although the number affected by joint disease at Addlestone seems low by comparison, this is unsurprising given the problem of identification of unique to incomplete and fragmentary cremated remains. The findings should be considered in the light of a large-scale study, which demonstrated that rural Romano-British populations were particularly adversely affected by adult joint disease, perhaps due to the demands of agricultural labour, significantly more so than either their urban contemporaries or their Iron Age predecessors (Rohnbogner 2018, 338–9, 345).

Evidence of *cribra orbitalia* observed in the orbits of a subadult are among the most commonly observed bone lesions in this period present in 8.05% of burials (Roberts & Cox 2003, 140). This may reflect increased stresses, dietary deficiencies, increased parasite load or poor living conditions (*ibid*). The condition has also been linked to weaning practices, and poor absorption of iron due to an exclusively cereal-based diet (Redfern & Gowland 2012, 127).

THE CHARACTER OF THE CEMETERY

The lack of known contemporary settlement evidence in the immediate area is intriguing, but may simply reflect the insubstantial nature of such remains (especially given a presumed surface-built box-frame building tradition in the county, see Bird 2017, 20–2) and the limited opportunities for modern fieldwork. Alternatively, this may have been a short-lived communal cemetery serving several nearby rural settlements, a type of burial ground that has been increasingly recognised, particularly in the upper Thames Valley (Smith 2018a, 249–51, 278). Possibly the south-eastern aspect of the site, overlooking the Bourne valley, was attractive for inhabitants of the community or communities that buried their dead here. The cemetery may have been in use for only a short time (principally the mid/late 3rd century AD) and may have been one of a number of funerary sites in the general area.

The burials excavated at Franklands Drive, Addlestone provide evidence of a single rite cemetery in a rural location in the 3rd century AD. The absence of inhumation burials at this date is unusual. Both cremation and inhumation rites were practised side by side in many parts of Britain, but the popularity of cremation declined from the mid-2nd century AD and inhumation burial gradually became the dominant rite (Philpott 1991, 8, 50). Regional variation in the choice of rite is well known, and late Roman cremation burials are often seen as reflecting military influence or the maintenance of particular Iron Age traditions by a conservative rural population (*ibid*, 50–2). The complexity of the chronological trends in the two rites has been demonstrated by Smith (2018a, 216–26). Inhumation burials are not particularly well represented in 3rd century Surrey (Alex Smith, pers comm) and late Roman cremation burials occur even in major urban centres such as London (Barber & Bowsler 2000; Ridgeway *et al* 2013) and Winchester (Booth *et al* 2010), suggesting that the motivations behind the choice between inhumation and cremation would repay further research (cf Harward *et al* 2015, 78).

There was no clear evidence for any individual having or being afforded a status above that of the general population. The near absence of accessory vessels (or any other burial goods) from these burials is notable. There is a marked regional variability in Romano-British burial traditions, with, for example, ‘East Hampshire tradition’ cremation burials with large numbers (ten or more) of ceramic accessory vessels found at the 3rd century Daneshill cemetery only 30 miles from Addlestone (Pearce 2013, 130; Millett & Schadla-Hall 1992). Outside Hampshire many other 3rd and 4th century burial sites also have significant grave furnishings (eg Ridgeway *et al* 2013; Cool 2004), but there is considerable chronological, regional and site-to-site variation in burial goods provision across the South and South-East (Smith 2018a, 279–80). The low numbers of burial goods at Franklands Drive does not necessarily indicate poverty (below); the cremation urns and their contents were obviously selected with some care and investment of time and resources.

The apparent focus here is on the pyre ritual, with some evidence for clothing in the form of hobnailed footwear and widespread indications for the presence of upholstered biers or similar wooden objects on the pyre. Biers of this sort may have represented a significant expense, contributing to the impression that cremation was often a resource-intensive form of burial. Nails were found in a very high proportion of the burials and, taken together with the high degree of uniformity seen among other aspects of the funerary rite, particularly the selection of burial vessels (above), it would seem that this is a reflection of strong shared beliefs or traditions to which many adhered rather than a means for competition or display among the buried population. However, it must be noted that there are very few burial sites elsewhere in Surrey for comparison, particularly from the late Roman period, so it is difficult to place this community into its wider social context.

In conclusion, the Franklands Drive cremation cemetery belonged to a rural community and represented two to three generations of use in the mid/late 3rd century AD. Even if this was a dispersed community, it would appear that it expressed an aspect of its shared identity in a very narrow range of funerary and burial practices. In the absence of evidence for earlier monuments, barrows or similar landscape features, the fact that ritual activity took place here in the Middle Bronze Age and a potentially high-status cremation burial in the Late Iron Age (Bu1), may have had no influence on the choice of site for the later cremation cemetery. A single early/mid-2nd century pit is a reminder that the nature of activity on and near the site in the early Roman period is uncertain. The spread of Christianity in the late Roman period is just one of many possible explanations for the abandonment of the cemetery.

APPENDIX

Burial catalogue

All burials on the site are catalogued here by period and burial number. Burials are assumed to be single individuals unless stated otherwise. The colour of burnt human bone is discussed and listed for each burial in the detailed specialist report (see *Endnote*, 'The human bone...' & Table 5) and is not repeated here, except to highlight unusual features. Bone recovery is summarised by body area (skull, axial, upper limb, lower limb); more details are given in Table 6 (see *Endnote*). Full details of the individual elements identified from each burial are available in the project archive. The recovery of iron nail fragments is summarised here and discussed in more detail above and in the online report (see *Endnote*). A report on the Gallo-Belgic beaker <P5> by Val Rigby is integrated into the catalogue entry for Bu1.

The burial assemblage was dominated by late Alice Holt reduced ware fabrics. This fabric has been subdivided and assigned MOLA fabric reference collection codes. Fabric Sw 4172 is notably granular with well-sorted quartz and sparse iron. Fabric ISw 1473 has slightly less well-sorted inclusions with occasional large clay pellets or poorly mixed clay and more iron sometimes showing as black streaks on the surface. Fabric Sw 4174 (three examples only) has slightly finer quartz, typically 0.1–0.2mm). Additionally, a single example of unsourced grog-and-shell-tempered ware has been assigned a MOLA fabric code (GHw 4175, described below, Bu20).

The Late Iron Age burial

Bu1

Unurned cremation burial in pit A[6] (fig 5, fig 6)

Burnt bone A[5]

Total Wt: 124.0g

Recovery: skull (parietal).

Age: undetermined.

Sex: undetermined.

Burial goods

<P5> Ceramic accessory vessel (fig 6)

A<4>, A[5]

Rim and body sherds from Gallo-Belgic (north Gaulish)

facet-cut barrel beaker; cream-coloured fabric and surfaces; fine sand temper with small quantities of red iron ore. Deep rim with external cordon, burnished rim and neck, two zones of decoration (rouletted; facet-cut relief diamond shapes). Camulodunum form 113 (Cam 113, variant 1A2) (Hawkes & Hull 1947). Rim diam 156mm; Wt 201g. Date *c* 10 BC–AD 14.

Val Rigby comments as follows. This beaker is unique in the published record. The surviving decoration consists of a zone of three horizontal circlets of facet-cut diamond shapes on the maximum girth below a typical rouletted band both defined by the usual 5mm-wide cordons. The facets were cut directly into three standard hollow raised cordons leaving raised diamond shapes in relief that are notably even in size. Either a fretted roulette wheel with teeth about 5mm wide or a flat ended tool of the same size was used to incise the circlets while the vessel was turned on a wheel or lathe.

Given the basic form and fabric it seems certain that the vessel was manufactured in northern Gallia Belgica in the area of Amiens and Arras in the Late Augustan period (Dubois & Binet 1996). It was most probably imported with other early related Barrel Beakers (Cam 113, variant 1A1), possibly as early as 10 BC (Rigby 1989, 137).

The closest published parallel to the decoration of the Addlestone beaker was found in 1900 at Harmignies, Mons, Hainaut, Belgium. It has a single facet-cut circlet but is in Gallia-Belgica terra rubra with a red slip (GAB TR1 A). It was found in cremation 1, with an Arretine cup type Haltern 2, a large terra nigra platter (form: Cam 2) and a carinated cup in TR1A (form: Cam 53). Using the date of manufacture of the Arretine cup Deru argues that the burial belongs to the final decade BC (Deru 1993, fig 2 no 4, fig 9 T1). A similar beaker also in TR1A was found in 1911 at Peronne-lez-Binches, Hainaut. It combines a double circlet defining the upper and lower edges of two bands of rouletting each with several applied circular bosses (Faider-Feytmans 1947, pl 2 no 4.1494). A second TR beaker has a single broad zone comprising ten circlets of faceting (*ibid*, pl 2, no 3.1492). The site collection includes three necked jars in local coarse ware with varying arrangement of circlets as decoration, which suggests that this was a popular type of relief decoration in the region (*ibid*, pl 3, nos 3.1478, 4.1484, 5.1486).

It is a significant find for southern Britain and Gallia Belgica. The rim and shoulder profile belong to the early and rare barrel-shaped versions of Camulodunum 113, variant 1A1. In all, five examples have been found in Late Iron Age burials: three in phase 1 cremations in the King Harry Lane cemetery, St Albans, Hertfordshire, two with adult males (Stead & Rigby 1989, burials 238, 241 & 268), two in pre-conquest cremation burials from different cemetery areas in Deal, Kent and one in a warrior inhumation at Brisley Farm, Ashford, Kent (Parfitt 1995, grave X11, 1 & grave 4, c; Stevenson

2013, 152–8, fig 6.6–7 no 45). Two of the three found in the King Harry Lane cemetery and the Brisley Farm example had been broken and repaired in antiquity. The general condition of the pair in the King Harry Lane cemetery suggests they were fractured in transit but were worth skilled repair since there was still a market for repaired and second-hand vessels. Such a market could partly account for the survival of fine table wares in much later contexts.

<P6> Ceramic accessory vessel (fig 6)

A<5>, A[5]

Small abraded body sherds from thin-walled cordoned-necked vessel in sand-and-grog-tempered fabric with partially reduced orange/red core and orange/light red surfaces (rounded quartz 0.5–1mm; light red grog 0.5mm–1.5mm); some burnishing on cordons. Impressed ring decoration; Wt 61g.

<P7> Ceramic accessory vessel (fig 6)

A<6>, A[5]

Cordoned neck sherd from a thicker-walled vessel; fabric as <P6>; Wt 20g.

Copper-alloy fitting (fig 6)

A<1>, A[5]

Small copper-alloy domed fitting, 16.5mm in diameter, with no evidence for a central shank on the reverse but with two opposing tabs projecting downward from the edge, one of which is now broken.

Pyre goods

Animal bone A[5]

Identifiable fragments of juvenile pig (ulna, proximal and distal tibia) & sheep/goat (calcaneum, rib), total Wt 13.4g, extracted from burnt human bone, but appear not to have been heated to such a high temperature.

The 3rd century burials

Bu2

Urned dual cremation burial in pit A[87] (fig 8, fig 10)

Container

<P15> Ceramic primary vessel (fig 10)

A<18>, A[84]

Alice Holt reduced ware (MOLA Fabric Sw 4172) jar with cordon, three girth grooves, missing rim; hard; very light grey surfaces with buff (oxidised) patches; Wt 513g. Date *c* AD 180–300.

Burnt bone A[85], A[86]

Total Wt: 907.8g (886.4g from urn, 21.4g in backfill).

Colour: iron staining, black charring to the surfaces of several femoral fragments and hands and feet.

Recovery: mostly adult – skull, axial, upper & lower limb; subadult – skull, axial, upper & lower limb (fused C2 odontoid, unfused sternal clavicle).

Age: mixed adult and subadult.

Sex: undetermined.

Pathology: subadult orbits show cribra orbitalia.

Pyre goods

Iron nails A[85], A[86]

Seventeen fragments from urn; 31 fragments from pit backfill, suggesting bier.

Animal bone A[85]

Unidentified burnt animal bone (Wt 4.0g) from within urn.

Bu3

Urned cremation burial in pit A[38] (fig 8, fig 10)

Container

<P16> Ceramic primary vessel (fig 10)

A<9>, A[35]

Alice Holt reduced ware (MOLA fabric ISw 4173) jar with horizontal slightly thickened rim, triple girth groove, in a light grey fabric with grey/buff patchy surfaces (cf Alice Holt form 1.29; Lyne & Jefferies 1979, 36–7), complete, found with top smashed; rim diam 208mm; H 188mm; Wt 938g. Date *c* AD 200–300.

Burnt bone A[36]

Total Wt: 618.8g.

Recovery: skull, axial, upper & lower limb (large fragments of upper limb elements).

Age: adult.

Sex: undetermined.

Pyre goods

Iron nails A[36]

Nineteen fragments from urn, suggesting bier.

Bu4

Urned cremation burial in pit B[3404] (fig 8, fig 10)

Container

<P17> Ceramic primary vessel (fig 10)

B<28>, B[3405]

Alice Holt reduced ware (MOLA fabric Sw 4172) jar with horizontal rim, shoulder cordon and dark grey partially burnished surfaces, in sandwich matrix buff/grey (cf Alice Holt form 1.26; Lyne & Jefferies 1979, 36–7), complete; rim diam 200mm; H 184mm; Wt 1118g. Date *c* AD 180–250.

Burnt bone B[3405]

Total Wt: 501.2g.

Colour: iron staining, widespread charring to the internal aspects of the lower limb bones.

Recovery: skull, axial, upper & lower limb.

Age: adult.

Sex: male.

Pyre goods

Iron nails B[3405], B[3406]

Twenty fragments from urn, ten from backfill, suggesting bier.

Bu5

Urned cremation burial in pit A[18] (fig 8, fig 10)

Container

<P18> Ceramic primary vessel (fig 10)

A<36>, A[15]

Alice Holt reduced ware (MOLA fabric Sw 4172) jar with horizontal rim, shoulder cordon, double-girth groove and single groove on underside of base, in a light grey/buff fabric (cf Alice Holt form 1.26; Lyne & Jefferies 1979, 36–7), complete, found with top smashed; rim diam 196mm; H 184mm; Wt 1072g. Date *c* AD 180–250.

Burnt bone A[16]

Total Wt: 495.8g.

Recovery: skull, axial, upper & lower limb.

Age: probable adult.

Sex: undetermined.

Bu6

Urned cremation burial in pit A[66] (fig 8, fig 10)

Container

<P19> Ceramic primary vessel (fig 10)

A<14>, A[63], A[64], A[65]

Alice Holt reduced ware (MOLA fabric Sw 4172) jar with everted rim, neck cordon, thin girth groove and hard; buff/light grey surfaces, mid-grey matrix (cf Alice Holt form 3B.12; Lyne & Jefferies 1979, 42), complete, top damaged; rim diam 188mm; H 208mm; Wt 1375g. Date *c* AD 270–420.

Burnt bone A[64], A[65]

Total Wt: 495g (434.1g from urn, 60.9g in backfill).

Recovery: skull, axial, upper & lower limb.

Age: possible adult.

Sex: probable female.

Pyre goods

Iron nails A[64], A[65]

Twenty-seven fragments from urn, 27 from backfill, suggesting bier.

Bu7

Urned cremation burial in pit A[103] (fig 8)

Container

<P20> Ceramic vessel (not illustrated)

A<->, A[100]

Alice Holt reduced ware (MOLA fabric Sw 4172) jar, shattered with only base/lower body surviving; Wt 636g. Date *c* AD 180–300.

Burnt bone A[101]

Total Wt: 494.2g.

Colour: red/orange staining with iron adhering to multiple bone fragments.

Recovery: skull, upper & lower limb.

Age: adult.

Sex: undetermined.

Pyre goods

Iron nails A[101]

Six fragments from urn.

Bu8

Urned cremation burial in pit A[82] (fig 8, fig 10)

Container

<P21> Ceramic primary vessel (fig 10)

A<17>, A[79]

Alice Holt reduced ware (MOLA fabric ISw 4173) jar with horizontal rim, shoulder cordon, triple girth groove, mid-grey surfaces with black iron streaks and lighter grey core (cf Alice Holt form 1.26; Lyne & Jefferies 1979, 36–7), complete, top cracked; rim diam 220mm; H 196mm; Wt 730g. Date *c* AD 180–250.

Burnt bone A[80], A[81]

Total Wt: 496.1g (490.6g from urn, 5.5g in backfill).

Recovery: skull, axial, upper & lower limb.

Age: 36–45 years old (auricular surface stage 9).

Sex: female (sciatic notch).

Pyre goods

Iron nails A[80], A[81]

Nine fragments from urn, 58 from backfill, suggesting ?bier.

?Hobnailed footwear A[80], A[81]

A minimum of fifteen of the above iron nails are hobnails, probably from the leather soles of items placed or worn on the pyre.

Bu9

Urned cremation burial in pit A[123] (fig 8, fig 11)

Container

<P22> Ceramic primary vessel (fig 11)

A<30>, A[120]

Alice Holt reduced ware (MOLA fabric ISw 4173) jar with everted rim, shoulder cordon, single shallow girth groove and mid-grey/buff surfaces, lighter grey core (cf Alice Holt form 1.26; Lyne & Jefferies 1979, 36–7), near complete; rim diam 180mm; H 184mm, Wt 800g. Date *c* AD 180–250.

Burnt bone A[121], A[122]

Total Wt: 510.8g (489.0g from urn, 21.8g in backfill).

Colour: charring to femoral elements, iron staining. Recovery: skull, axial, upper & lower limb (large fragments including os coxae, sacrum & long bones).

Age: 26–35 years old (auricular surface stage 2).

Sex: undetermined.

Pyre goods

Iron nails A[121], A[122]

Thirty-one fragments from urn, 89 from backfill, suggesting bier.

Bu10

Urned cremation burial in pit A[54] (fig 8)

Container

<P23> Ceramic primary vessel (not illustrated)

A<->, A[51]

Alice Holt reduced ware (MOLA fabric Sw 4174) jar. No obvious decoration; dark grey surfaces and a dull red core, only lower half survives; Wt 449g. Date *c* 180–300.

Burnt bone A[52]

Total Wt: 479.9g.

Recovery: skull, axial, upper & lower limb.

Age: adult.

Sex: undetermined.

Pyre goods

Iron nails A[52]

Three fragments from urn.

Bu11

Urned cremation burial in pit A[34] (fig 8, fig 11)

Container

<P24> Ceramic primary vessel (fig 11)

A<8>, A[31]

Alice Holt reduced ware (MOLA fabric ISw 4173) jar with hard, light grey/buff surfaces, horizontal slightly downturned rim, shoulder cordon, shoulder and girth grooves (cf Alice Holt form 1.26; Lyne & Jefferies 1979, 36–7), fragmented but near complete; rim diam 199mm; H 216mm; Wt 1101g. Date *c* AD 180–250.

Burnt bone A[32]

Total Wt: 462.4g.

Recovery: skull, axial, upper & lower limb (including large fragments of skull, vertebrae and upper limb bones).

Age: adult.

Sex: undetermined.

Pyre goods

Iron nails A[32], A[33]

Twelve fragments from urn, 1 from backfill, suggesting bier.

?Hobnailed footwear A[32]

Two of the above iron nails were hobnails.

Bu12

Urned cremation burial in pit A[111] (fig 8, fig 11)

<P25> Ceramic primary vessel (fig 11)

A<23>, A[108]

Alice Holt reduced ware (MOLA fabric ISw 4173) jar with horizontal slightly everted rim, two shoulder grooves, girth lines, buff/grey surfaces (cf Alice Holt form 1.26; Lyne & Jefferies 1979, 36–7), complete; rim diam 208mm; H 200mm; Wt 1294g. Date *c* AD 180–250.

Burnt bone A[109], A[110]

Total Wt: 434.0g (414.9g from urn and 19.1g in backfill).

Recovery: skull, axial, upper & lower limb (well-preserved fragments of vertebrae including largely complete axis and lower thoracic and lumbar vertebrae).

Age: adult.

Sex: undetermined.

Pathology: marginal (vertebral) osteophytes.

Pyre goods

Iron nails A[109], A[110]

Forty fragments from urn, 108 from backfill, suggesting bier.

Bu13

Urned cremation burial in pit A[9] (fig 8, fig 11)

Container

<P26> Ceramic primary vessel (fig 11)

A<7>, A[7]

Alice Holt reduced ware (similar to MOLA fabric ISw 4173 but with less iron ore and larger quartz) jar with short horizontal rim, patchy buff/grey fabric, traces of burnish on upper body, and short horizontal rim. Zone of burnished cross-hatched decoration between neck and shoulder cordons, fragmented; rim diam 152mm; H 176mm; Wt 765g. Date ?c AD 100–250.

Burnt bone A[10]

Total Wt: 411.8g

Colour: charring to internal aspects of long bone fragments.

Recovery: skull, axial, upper & lower limb (high survival of trabecular bone).

Age: adult.

Sex: undetermined.

Pathology: degenerative joint disease (osteophyte on intermedial finger phalanx).

Bu14

Urned cremation burial in pit A[62] (fig 8, fig 11)

Container

<P27> Ceramic primary vessel (fig 11)

A<11>, A[59]

Alice Holt reduced ware (MOLA fabric ISw 4173) jar with horizontal rim, neck cordon, globular body with single shallow girth groove, pedestal base, patchy mid-grey surfaces, shattered; rim diam 200mm; H 200mm; Wt 747g. Date c AD 180–300.

Burnt bone A[60]

Total Wt: 411.8g

Recovery: skull, axial, upper & lower limb.

Age: possible adult.

Sex: probable male (nucal crest & mastoid process).

Pyre goods

Iron nails A[60], A[61]

Four from urn, one from backfill.

Bu15

Urned cremation burial in pit A[74] (fig 8, fig 11)

Container

<P28> Ceramic primary vessel (fig 11)

A<13>, A[71]

Alice Holt reduced ware (MOLA fabric Sw 4172) jar with horizontal rim, deep girth groove, buff/light grey fabric with lines of grey burnishing on interior rim and upper body (cf Alice Holt form 1.26; Lyne & Jefferies 1979, 36–7), shattered; rim diam 172mm; H 184mm; Wt 960g. Date c AD 180–250.

Burnt bone A[72], A[73]

Total Wt: 422.9g (407.7g from urn, 13.8g in backfill).

Recovery: upper & lower limb.

Age: adult.

Sex: undetermined.

Pyre goods

Iron nails A[72], A[73]

Three fragments from urn, one from backfill.

Bu16

Urned cremation burial in pit A[115] (fig 8, fig 12)

Container

<P29> Ceramic primary vessel (fig 12)

A<24>, A[112]

Alice Holt reduced ware (MOLA fabric Sw 4172) jar with horizontal rim, shoulder cordon, double-girth groove, mid-grey/buff surfaces with light grey core, shattered, with most of rim missing; rim diam 180mm; H 184mm; Wt 673g. Date c AD 180–300.

Burnt bone A[113]

Total Wt: 312.5g

Recovery: skull, axial, upper & lower limb.

Age: possible adult.

Sex: probable female (nucal crest).

Pyre goods

Iron nails A[113]

Three fragments from urn.

Bu17

Urned dual cremation burial in pit A[145] (fig 8, fig 12)

Container

<P30> Ceramic primary vessel (fig 12)

A<26>, A[146]

Alice Holt reduced ware (MOLA fabric Sw 4174) jar with shoulder cordon, grey/buff fabric with grey core, incomplete (rim missing); Wt 888g. Date c AD 180–300.

Burnt bone A[147], A[148]

308.3g (299.9g from urn, 8.4g in backfill).

Recovery: mostly adult – skull, axial, upper & lower limb; subadult – skull (right zygomatic).

Age: mixed adult and subadult.

Sex: undetermined.

Burial goods

<P31> Ceramic accessory vessel (fig 12)

A<27>, A[148]

Alice Holt reduced ware (MOLA fabric Sw 4172) pedestal-based beaker with everted rim, shoulder cordon, light buff with mid-grey core (cf Alice Holt Form 2.3; Lyne & Jefferies 1979, 41), near complete; rim diam 100mm; H 96mm; Wt 213g. Date c AD 270–350.

Pyre goods

Iron nails A[147], A[148]

Six fragments from urn, 120 from backfill, suggesting bier.

Bu18

Urned dual cremation burial in pit A[119] (fig 8, fig 12)

Container

<P32> Ceramic primary vessel (fig 12)

A<25>, A[116]

Alice Holt reduced ware (MOLA fabric ISw 4173) jar with horizontal rim, shoulder cordon, triple girth groove, double base groove, light/mid-blue/grey fabric, near complete (cracked); rim diam 200mm; H c 192mm; Wt 850g. Date c AD 180–250.

Burnt bone A[117], A[118]

Total Wt: 298.4g (283.9g from urn, 14.5g from backfill). Recovery: mostly adult – skull, axial, upper & lower limb (large proportion of cranial fragments); subadult – skull (zygomatic).

Age: mixed adult and subadult.

Sex: adult – probable male (nucal crest); subadult – infant (zygomatic).

Pyre goods

Iron nails A[147]

Thirty-five fragments from urn, suggesting bier.

Bu19

Urned cremation burial in pit A[70] (fig 8, fig 12)

Container

<P33> Ceramic primary vessel (fig 12)

A<15>, A[67]

Alice Holt reduced ware (MOLA fabric Sw 4174) jar with abraded surfaces, originally partially burnished dark grey, sandwich matrix buff/dark grey, and horizontal rim with slight ridge under lip, shoulder cordon and double-girth groove (cf Alice Holt form 1.26; Lyne & Jefferies 1979, 36–7), near complete; rim diam 156mm; H 164mm; Wt 756g. Date c AD 180–250.

Burnt bone A[68], A[69]

Total Wt: 290.0g (288.2g from urn, 1.8g in backfill).

Colour: some charring (5%).

Recovery: skull, axial, upper & lower limb.

Age: <12 years old (morphology of unfused humeral epiphysis and metatarsal).

Sex: undetermined.

?Burial goods

<P34> Ceramic ?accessory vessel (fig 12)

A<12>, A[69]

Jar with squared beaded rim in possible Verulamium/London region white ware, oxidised fabric contains abundant ill-sorted rounded quartz, sparse iron ore, abundant fine mica. Rim, fragmentary body sherds, burnt; rim diam 120mm; Wt 76g. Date c AD 180–300. Condition makes it uncertain whether burial or pyre good.

Pyre goods

Iron nails A[69]

Three fragments three from urn, nineteen from backfill, suggesting bier.

Bu20

Urned cremation burial in pit A[91] (fig 8, fig 13)

Container

<P35> Ceramic primary vessel (fig 13)

A<19>, A[88]

Unsorted grog-and-shell-tempered ware (MOLA fabric GHw 4175) jar, ill-sorted bivalve shell and grog-tempered fabric (shell voids on surfaces), upright everted rim, yellowish buff/grey with dark grey core, near complete (cracked); rim diam 176mm; Ht 220mm; Wt 841g. Date c AD 180–300.

Burnt bone A[89]

Total Wt: 256.6g.

Colour: orange/red staining to some outer bone surfaces.

Recovery: skull, axial, upper & lower limb.

Age: adult.

Sex: undetermined.

Pyre goods

Iron nails A[89]

Five fragments from urn (one adhering to a cranial fragment).

Bu21

Urned cremation burial in pit A[14] (fig 8)

Container

<P36> Ceramic primary vessel (not illustrated)

A<->, A[11]

Alice Holt reduced ware (MOLA fabric ISw 4173) jar with smooth light grey surfaces and streaks of black iron ore but no obvious burnishing, lower half only, fragmented; Wt 450g. Date c AD180–300.

Burnt bone A[12]

Total Wt: 249.4g.

Colour: colour variation of internal aspects, charred possible distal ulna.

Recovery: skull, axial, upper & lower limb.

Age: adult.

Sex: probable male (sciatic notch).

Pyre goods

Iron nails A[12]

Twenty-nine fragments 29 from urn, suggesting bier.

Bu22

Urned cremation burial in pit A[25] (fig 8)

Container

<P37> Ceramic primary vessel (not illustrated)

A<->, A[28]

Alice Holt reduced ware (MOLA fabric ISw 4173) jar with hard, light grey surfaces and matrix, only lower half surviving. Date c AD 180–300.

Burnt bone A[26]

Total Wt: 227.9g.

Colour: lower limbs less well oxidised than upper body elements.

Recovery: skull, axial, upper & lower limb.

Age: adult.

Sex: undetermined.

Pyre goods

?Hobnailed footwear A[26]

Two fragments of iron hobnails from urn.

Iron nails A[26]

Two fragments.

Bu23

Urned cremation burial in pit A[107] (fig 8, fig 13)

Container

<P38> Ceramic primary vessel (fig 13)

A<22>, A[104]

Alice Holt reduced ware (MOLA fabric Sw 4172) jar with flattened zones of possible knife trimming, girth groove, grey/buff fabric with grey core, shattered (only lower half surviving). Date *c* AD 180–300.

Burnt bone A[105]

Total Wt: 209.5g.

Recovery: skull, axial, upper & lower limb.

Age: adult.

Sex: undetermined.

Pyre goods

Iron nail A[105]

One fragment from urn.

Bu24

Urned cremation burial in pit [78] (fig 8, fig 13)

Container

<P39> ceramic primary vessel (fig 13)

A<16>, A[75]

Alice Holt reduced ware pedestal-based beaker/small jar with everted rim. The fabric is similar to MOLA fabrics Sw 4172 and ISw 4173, abundant well-sorted rounded and sub-angular quartz (<0.3mm with occasional larger rounded pieces <0.5mm), also conspicuous flecks of black organics and iron ore; patchy buff/mid-grey surfaces; light grey core with grey/white margins (cf Alice Holt form 2.3; Lyne & Jefferies 1979, 41), near complete; rim diam 104mm; H 112mm; Wt 368g. Ddate *c* AD 270–350.

Burnt bone A[76]

Total Wt: 177.2g.

Colour: iron stains on cranial fragments.

Recovery: skull, axial, upper & lower limb.

Age: 1–4 years old (unfused femoral metaphysis, first maxillary molar crown).

Sex: undetermined.

Pyre goods

Iron nails a[76]

Three fragments from urn.

Bu25

Urned cremation burial in pit a[149] (fig 8, fig 13)

Container

<P40> ceramic primary vessel (fig 13)

A<38>, A[150]

Alice Holt reduced ware (MOLA fabric ISw 4173) jar with abraded mid-grey surfaces with lighter matrix, incomplete (neck/rim missing).

Burnt bone A[151]

Total Wt: 147.3g.

Recovery: skull, axial, upper & lower limb.

Age: adult.

Sex: undetermined.

Bu26

Urned cremation burial in pit A[42] (fig 8, fig 13)

Container

<P41> Ceramic primary vessel (fig 13)

A<37>, A[39]

Alice Holt reduced ware (MOLA fabric Sw 4172) jar with horizontal rim, neck cordon, light grey/buff patchy surfaces (cf Alice Holt form 1.26; Lyne & Jefferies 1979, 36–7), fragmented; rim diam 240mm; H 220mm; Wt 1290g. Date *c* AD 180–250.

Burnt bone A[40]

Total Wt: 140.9g.

Recovery: skull, upper & lower limb.

Age: adult.

Sex: undetermined.

Pyre goods

Iron nails A[40]

Twenty-seven fragments from urn, suggesting bier.

Bu27

Urned cremation burial in pit A[97] (fig 8, fig 13)

Container

<P42> Primary ceramic vessel (fig 13)

A<21>, A[94]

Alice Holt reduced ware (MOLA fabric ISw 4173) jar with horizontal rim, shoulder cordon, double-girth groove and hard, light grey fabric with a few large quartz inclusions visible on the surface (cf Alice Holt form 1.26; Lyne & Jefferies 1979, 36–7), near complete; rim diam 158mm; H 164mm; Wt 976g. Date *c* AD 180–250.

Burnt bone A[95]

Total Wt: 136.7g.

Recovery: skull, upper limb.

Age: undetermined.

Sex: undetermined.

Pyre goods

Iron nails A[95]

Eleven fragments from urn.

Bu28

Urned cremation burial in disturbed pit A[58] (fig 8, fig 13)

Container

<P43> Ceramic primary vessel (fig 13)

A<10>, A[55]

Black-burnished ware 1 (BB1) jar with everted rim and diameter equal to girth. Also obtuse lattice zone on girth (no groove); cf Gillam (1976, nos 7–8, early to mid-3rd century, c AD 240–70, also nos 10–11, later 3rd century), fragmented and incomplete (base missing); rim diam 164mm; Wt 189g. Date c AD 220–300.

Burnt bone A[56]

Total Wt: 35.2g.

Recovery: upper & lower limb.

Age: undetermined.

Sex: undetermined.

Bu29

Urned cremation burial in truncated pit A[22] (fig 8)

Container

<P44> Ceramic primary vessel (not illustrated)

<->, A[19]

Alice Holt reduced ware (MOLA fabric Sw 4174) jar. Abraded, originally ?burnished dark grey surfaces; sandwich matrix buff/dark grey, only lower half surviving. Date c AD 180–300.

Burnt bone A[20]

Total Wt: 31.9g.

Recovery: skull, axial, upper limb.

Age: undetermined.

Sex: undetermined.

Bu30

?Unurned cremation burial in pit A[48] (fig 8)

Burnt bone A[47]

Total Wt: 260.7g.

Recovery: skull, axial, upper & lower limb.

Age: adult.

Sex: undetermined.

?Pyre goods

Iron nails A[47]

Sixteen fragments from fill.

?Hobnailed footwear A[47]

Four of the above iron nails were hobnails.

Other finds A[47]

One small body sherd in under-fired unsourced oxidised fabric; undated.

Bu31

?Unurned cremation burial in pit A[44] (fig 8)

Burnt bone A[43]

Total Wt: 129.9g.

Recovery: skull, axial, upper & lower limb (very fragmented).

Age: adult.

Sex: undetermined.

?Pyre goods

Iron nails A[43]

Fourteen fragments in fill.

Bu32

?Unurned cremation burial in pit A[2] (fig 8)

Burnt bone A[1]

Total Wt: 93.6g.

Colour: iron staining to some bone surfaces.

Recovery: upper & lower limb.

Age: undetermined.

Sex: undetermined.

Pyre goods

Animal bone A[1]

Mixed fragments of unidentified burnt animal bone.

Other finds A[1]

Fragment of fuel slag and degraded iron object (?pyre debris/clearance).

Bu33

?Unurned cremation burial in pit A[24] (fig 8)

Burnt bone A[23]

Total Wt: 90.9g.

Recovery: skull, upper & lower limb.

Age: undetermined.

Sex: undetermined.

Bu34

?Unurned cremation burial in pit B[1611] (fig 8)

Burnt bone B[1613]

Total Wt: 78.3g.

Recovery: skull, axial, upper & lower limb.

Age: adult.

Sex: undetermined.

Bu35

?Unurned cremation burial in pit A[50] (fig 8)

Burnt bone A[49]

Total Wt: 22.3g (pit heavily truncated).

Recovery: skull, upper & lower limb.

Age: adult.

Sex: undetermined.

Pyre goods

Iron nails A[49]

Three fragments in fill.

Other finds A[49]

Twenty-four small fragments of curved daub.

Bu36

?Unurned cremation burial in pit A[30] (fig 8)

Burnt bone A[29]

Total Wt: 8.5g (pit heavily truncated).

Recovery: skull, upper limb.

Age: undetermined.

Sex: undetermined.

Bu37

?Unurned cremation burial in pit A[99] (fig 8)

Burnt bone A[98]

Total Wt: 6.8g (pit heavily truncated).

Recovery: lower limb.

Age: adult.

Sex: undetermined.

Pyre goods

Iron nails A[98]

Thirty-five fragments in fill.

Bu38

?Unurned cremation burial in pit A[46]

Burnt bone A[45]

Total Wt: 2.6g.

Recovery: lower limb (pit heavily truncated).

Age: undetermined.

Sex: undetermined.

Pyre goods

Iron nails A[45]

Forty-three fragments in fill.

Other finds A[45]

Four abraded lid sherds with patchy oxidised surfaces in presumably local fabric with ill-sorted rounded quartz and red iron ore inclusions.

Endnote

The supplementary reports, tables and figures listed below are available on the Archaeology Data Service website <https://doi.org/10.5284/1000221>

Select *Surrey Archaeological Collections* volume 102 and the files are listed as supplementary material under the title of the article.

SUPPLEMENTARY REPORTS

The Middle Bronze Age pottery from Franklands Drive, Addlestone, by Jon Cotton

The iron nails from Franklands Drive, Addlestone, by Michael Marshall

The human bone from Franklands Drive, Addlestone, by Michael Henderson

FIGURES

Fig 14 Franklands Drive, Addlestone. Distribution of iron nail fragments from burials

Fig 15 Franklands Drive, Addlestone. Length distribution of measurable iron nails by type

Fig 16 Franklands Drive, Addlestone. Comparison of the percentage of type 1b nails falling into different size ranges from cremation burials on the site and from selected published Romano-British nail assemblages from a variety of site types

Fig 17 Franklands Drive, Addlestone. Comparison of the percentage of type 1b nails falling into different size ranges from cremation burials on the site with selected published nail assemblages from Romano-British cremation burials

Fig 18 Franklands Drive, Addlestone. Bone fractions as a percentage of total weight of bone

Fig 19 Franklands Drive, Addlestone. Percentage of identifiable bone by weight

TABLES

Table 2 Franklands Drive, Addlestone. Summary of all prehistoric pottery

Table 3 Franklands Drive, Addlestone. Summary of iron nail fragments and estimated number of nails from burials

Table 4 Franklands Drive, Addlestone. Length distribution of measurable nails by type

Table 5 Franklands Drive, Addlestone. Colour and fragmentation patterns of burnt human bone from burials

Table 6 Franklands Drive, Addlestone. Total weight and fragmentation of burnt bone from burials and distribution of identifiable bone by body area

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BIBLIOGRAPHY

- Alfayé, S V, 2010 Nails for the dead: a polysemic account of an ancient funerary practice, in R L Gordon & F M Simón (eds), *Magical practice in the Latin West: proceedings from the international conference held at the University of Zaragoza, 30 Sept–1 Oct 2005*, Leiden; Boston: Brill, 427–56
- Andrews, P, Brook, R, & Farwell, D E, 1999 Prehistoric, Roman and early Saxon settlement at Prospect Park, London Borough of Hillingdon, unpub Wessex Archaeol rep (<https://doi.org/10.5284/1027269>; accessed November 2017)
- Andrews, P, & Crockett, A, 1996 *Three excavations along the Thames and its tributaries, 1994: Neolithic to Saxon settlement and burial in the Thames, Colne, and Kennet valleys*, Wessex Archaeol Rep, **10**
- Barber, B, & Bowsher, D, 2000 *The eastern cemetery of Roman London: excavations 1983–90*, MoLAS Monogr Ser, **4**
- Barrett, J C, 1973 Four Bronze Age cremation cemeteries from Middlesex, *Trans London Middlesex Archaeol Soc*, **24**, 111–34
- Bidder, H F, 1928 Roman pottery found at Mitcham, *SyAC*, **39**, 145–6
- Bird, D, 2006 Surrey archaeological research framework 2006: providing the foundations for future archaeological work in Surrey, Surrey County Council/SyAS (<https://www.surreyarchaeology.org.uk/sites/default/files/sarf2006.pdf>; accessed November 2017)
- , 2017 Rural settlement in Roman-period Surrey, in D Bird (ed), *Agriculture in industry in south-eastern Roman Britain*, Oxford: Oxbow, 111–33
- Bird, D G, 1987 The Romano-British period in Surrey, in Bird & Bird 1987, 164–96
- , 2004a Roman religious sites in the landscape, in Cotton *et al* 2004, 77–90
- , 2004b *Roman Surrey*, Stroud: Tempus
- , 2004c Surrey in the Roman period: a survey of recent discoveries, in Cotton *et al* 2004, 65–76
- Bird, J, 1994 The Roman pottery, in M O'Connell & J Bird, The Roman temple at Wanborough, excavations 1985–6, *SyAC*, **82**, 133–8
- , 2013 An elaborately repaired flagon and other pottery from Roman cremation burials at Farley Heath, *SyAC*, **97**, 151–9
- Bird, J, & Bird, D G (eds), 1987 *The archaeology of Surrey to 1540*, Guildford: SyAS

- Blair, J, 1991 *Early medieval Surrey: landholding, church and settlement before 1300*, Stroud: Alan Sutton & SyAS
- Booth, P, Simmons, A, Boyle, A, Clough, S, Cool, H E M & Poore, D, 2010 *The late Roman cemetery at Lankhills, Winchester: excavations 2000–2005*, Oxford Archaeol Monogr, **10**
- Buikstra, J E, & Ubelaker, D H (eds), 1994 *Standards for data collection from human skeletal remains: proceedings of a seminar at the Field Museum of Natural History*, Arkansas Archaeol Survey Res Ser, **44**, Fayetteville, AR
- Cole, G H, 1989 Reading the earth at Lightwater, Bagshot, unpubl rep
- , 1996 An introductory note to archaeological research excavations at no 42 London Road, Bagshot, Surrey, Surrey Heath Archaeol Heritage Trust unpubl rep (<https://doi.org/10.5284/1027439>; accessed November 2017)
- Connell, B, & Rauxloh, P, 2007 A rapid method for recording human skeletal data, 2 edn (1 edn 2003), unpub MOLA rep
- Cool, H E M, 2004 *The Roman cemetery at Brougham, Cumbria: excavations 1966–7*, Britannia Monogr, **21**
- Corney, M, & Gaffney, V, 1983 Wickham Bushes, in A Taylor & R Taylor (eds) *Recent archaeology in Berkshire*, Reading: Berkshire Archaeol Soc Field Res Grp, 17
- Cotton, J, 2004 Surrey's early past: a survey of recent work, in Cotton *et al* 2004, 19–38
- Cotton, J, Crocker G, & Graham A (eds), 2004 *Aspects of archaeology and history in Surrey: towards a research framework for the county*, Guildford: SyAS
- Crerar, B, 2012 Contextualising Romano-British lead tanks: a study in design, destruction and deposition, *Britannia*, **43**, 135–66
- Crummy, N, 1983 *The Roman small finds from excavations in Colchester 1971–9*, Colchester Archaeol Rep, **2**
- Cunliffe, B W, 1995 *English Heritage book of Iron Age Britain*, London: English Heritage
- Davidson, C, 2000 Gender imbalances in Romano-British cemetery populations: a re-evaluation of the evidence, in Pearce *et al* 2000, 231–7
- Deru, X, 1993 Un ensemble funéraire gallo-romain précoce à Harmignies (Mons, Hainault), *Bull des musées royaux d'Art et Histoire*, **T64**, 197–213
- Driel-Murray, C van, 2001 Vindolanda and the dating of Roman footwear, *Britannia*, **32**, 185–97
- Dubois, S, & Binet, E, 1996 La céramique à Amiens (Somme) dans la deuxième moitié du 1^e siècle après J-C, d'après fouilles du Palais du Sport, in *Actes du congrès de Dijon, 16–19 mai 1996: les productions céramiques gallo-romaines en Bourgogne, actualité des recherches céramiques*, Marseilles, 331–52
- Dungworth, D, 1998 Mystifying Roman nails: *clavus annalis*, *defixiones* and *minkisi*, in C Forcey, J Hawthorne & R Witcher (eds), *TRAC 97: proceedings of the seventh annual theoretical Roman archaeology conference*, Nottingham 1997, Oxford: Oxbow, 148–59
- Esmonde-Cleary, S, 1999 Roman Britain: civil and rural society, in J Hunter & I Ralston (eds), *The archaeology of Britain: an introduction from the Upper Palaeolithic to the Industrial Revolution*, London: Routledge, 157–75
- , 2000 Putting the dead in their place: burial location in Roman Britain, in Pearce *et al* 2000, 127–42
- Evans, J, 2004 The pottery vessels, in Cool 2004, 333–64
- Faider-Feytmans, G, 1947 La Nécropole de Perennes-lez-Binche, *L'Antiquité Classique*, **T16**, 79–104
- Fitzpatrick, A P (ed), 1997 *Archaeological excavations on the route of the A27 Westhampnett Bypass, West Sussex, 1992: Vol 2, The Late Iron Age, Romano-British and Anglo-Saxon cemeteries*, Wessex Archaeol Rep, **12**
- Fitzpatrick-Matthews, K, & Stevenson, R, 2007 Iron nails, in K J Fitzpatrick-Matthews & G R Burleigh (eds), *Excavations at Baldock 1978–1994: fieldwork by G R Burleigh*, unpubl draft, 178–82 (<https://www.saveruralbaldock.co.uk/documents/45915206-Excavations-at-Baldock-1978-1994-fieldwork-by-G-R-Burleigh.pdf>; accessed November 2017)
- Frere, S S, 1950 The excavation of a late Roman bath-house at Chatley Farm, Cobham, *SyAC*, **50**, 73–98
- Gardner, E, 1911 The British stronghold of St George's Hill, Weybridge, *SyAC*, **24**, 39–55
- , 1924a Bronze Age urns of Surrey, *SyAC*, **35**, 1–29
- , 1924b A triple-banked enclosure on Chobham Common, *SyAC*, **35**, 105–13
- Gillam, J P, 1968 Coarse pottery, in L P Wenham, *The Romano-British cemetery at Trentholme Drive, York*, Archaeol Rep **5**, London: HMSO, 56–86
- , 1976 Coarse fumed ware in north Britain and beyond, *Glasgow Archaeol J*, **4**, 57–80
- Gowland, R, 2001 Playing dead: implications of mortuary evidence for the social construction of childhood in Roman Britain, in G Davies (ed), *TRAC 2000: proceedings of the tenth annual theoretical Roman archaeology conference, London 2000*, Oxford: Oxbow, 152–68
- Graham, T, 2002 A rho-cross engraved on a jet finger-ring from Bagshot, Surrey, *Oxford J Archaeol*, **21**, 211–16
- Gustafson, G, & Koch, G, 1974 Age estimation up to 16 years of age based on dental development, *Odontologisk Revy*, **25**, 297–306
- Hanworth, R, 1968 The Roman villa at Rapsley, Ewhurst, *SyAC*, **65**, 1–70
- Hanworth, R, & Tomalin, D J, 1977 *Brooklands, Weybridge: the excavation of an Iron Age and medieval site, 1964–5 and 1970–1*, SyAS Res Vol, **4**
- Hartley, K, 1999 The stamped and selected unstamped mortaria, in R Niblett, *The excavation of a ceremonial site at Folly Lane, Verulamium*, Britannia Monogr, **14**, 271–3
- Hartley, K F, 1984 The mortarium stamps, in *Verulamium excavations: Vol 3* (ed S S Frere), Oxford Univ Comm Archaeol Monogr, **1**, 280–91

- Harward, C, Powers, N, & Watson, S, 2015 *The upper Walbrook valley cemetery of Roman London: excavations at Finsbury Circus, City of London, 1987–2007*, MOLA Monogr Ser, **69**
- Hawkes, C F C, & Hull, M R, 1947 *Camulodunum: first report on the excavations at Colchester 1930–9*, Rep Res Comm Soc Antiq London, **14**
- Hayman, G, 2002 Archaeological discoveries, principally of Neolithic and Bronze Age date, within the Home Farm, Laleham, mineral extraction site, 1991–1999, unpubl Surrey County Archaeological Unit rep
- Holden, J L, Phakey, P P, & Clement, J G, 1995a Scanning electron microscope observations of heat-treated human bone, *Forensic Sci Int*, **74**, 29–45
- , 1995b Scanning electron microscope observations of incinerated human femoral bone: a case study, *Forensic Sci Int*, **74**, 17–28
- Holling, F W, 1969 Romano-British cremation burial at Esher, *SyAC*, **66**, 119
- Hylton, T, 2011 Other finds, in C Walker, An assessment of the archaeological excavation of Areas 5, 6 and 7, Passenham Quarry, Calverton, Milton Keynes, Buckinghamshire, unpubl Northamptonshire Archaeology rep 11/136, 25–8 (<https://doi.org/10.5284/1020464>; accessed November 2017)
- Jones, P, 2012 The pottery, in G Hayman, P Jones & R Poulton, *Settlement sites and sacred offerings: prehistoric and later archaeology in the Thames Valley, near Chertsey*, SpoilHeap Monogr, **4**, 117–57
- Lambert, R, Margetts, A, & Robertson, J, 2013 *Prehistoric, Roman and Saxon discoveries near Thorpe and Virginia Water*, SpoilHeap Occas Pap, **3**
- Lovejoy, C O, Meindl, R S, Pryzbeck, T R, & Mensforth, R P, 1985 Chronological metamorphosis of the auricular surface of the ilium: a new method for the determination of adult skeletal age at death, *American J Phys Anthropol*, **68**, 15–28
- Lyne, M A B, & Jefferies, R S, 1979 *The Alice Holt/Farnham Roman pottery industry*, CBA Res Rep, **30**
- McKinley, J I, 1989 Cremations: methodologies, expectations and realities, in C A Roberts, F Lee & J Bindliff (eds), *Burial archaeology: current research, methods and developments* BAR Brit Ser, **211**, 65–76
- , 1992 Cremation and inhumation burials from St Stephen's cemetery, St Albans, unpubl Verulamium Museum rep
- , 1994 Bone fragment size in British cremation burials and its implications for pyre technology and ritual, *J Archaeol Sci*, **21**, 339–42
- , 1997 The cremated and inhumed human bone from burial and cremation-related contexts, in Fitzpatrick 1997, 55–74, 244–53
- , 2000a The analysis of cremated bone, in M Cox & S Mays (eds), *Human osteology in archaeology and forensic science*, London: Greenwich Medical Media, 403–22
- , 2000b Phoenix rising: aspects of cremation in Roman Britain, in Pearce *et al* 2000, 38–44
- , 2000c Cremation burials, in Barber & Bowsher 2000, 264–77
- , 2004a Compiling a skeletal inventory: cremated human bone, in M Brickley & J I McKinley (eds), *Guidelines to the standards for recording human remains*, Inst for Archaeol Pap, **17**, 8–12
- , 2004b 'Welcome to Pontibus ... gateway to the West', *SyAC*, **91**, 1–69
- , 2006 Cremation: the cheap option?, in R Gowland & C Knüsel (eds), *Social archaeology of funerary remains*, Oxford: Oxbow Books, 81–8
- Manning, W H, 1985 *Catalogue of the Romano-British iron tools, fittings and weapons in the British Museum*, London: British Museum
- Margary, H, 1981 *The old series Ordnance Survey maps of England and Wales, scale: 1 inch to 1 mile: a reproduction of the 110 sheets of the survey in early state in 10 volumes: Vol 3, South-central England (Hampshire and the Isle of Wight and parts of Berkshire, Dorset, Somerset, Surrey, Sussex and Wiltshire)*, Lympne Castle, Kent: Harry Margary
- Millett, M, 1979 The dating of Farnham (Alice Holt) pottery, *Britannia*, **10**, 121–37
- , 1986 The pottery, in M Millett & D Graham, *Excavations on the Romano-British small town at Neatham, Hampshire, 1969–79*, Hampshire Fld Club Archaeol Soc Monogr, **3**, 63–93
- Millett, M, & Schadla-Hall, R T, 1992 Rescue excavations on a Bronze Age and Romano-British site at Daneshill, Basingstoke 1980–1, *Proc Hampshire Fld Club Archaeol Soc*, **47**, 83–105
- Needham, S, 1987 The Bronze Age, in Bird & Bird 1987, 97–137
- Parfitt, K (ed), 1995 *Iron Age burials from Mill Hill, Deal*, London: British Museum Press
- Pearce, J, 2013 *Contextual archaeology of burial practice: case studies from Roman Britain*, BAR Brit Ser, **588**
- Pearce, J, Millett, M, & Struck, M (eds), 2000 *Burial, society and context in the Roman world*, Oxford: Oxbow
- Petts, D, 2006 The Roman lead tank from Perry Oaks, in L Brown, J Lewis & A Smith, *Landscape evolution in the middle Thames valley. Heathrow Terminal 5 excavations: Vol 1, Perry Oaks*, Framework Archaeol Monogr, **1**, 227–30
- Philpott, R, 1991 *Burial practices in Roman Britain: a survey of grave treatment and furnishing AD 43–410*, BAR Brit Ser, **219**
- Poulton, R, 2004 Iron Age Surrey, in Cotton *et al* 2004, 51–64
- Powell, K, 2010 Structural nails and coffin fittings, in Booth *et al* 2010, 320–33
- Powers, N, 2014 Guidelines for the assessment of burnt bone, unpub MOLA rep
- Redfern, R C, & Gowland, R L, 2012 A bioarchaeological perspective on the pre-adult stages of the life course: implications for the care and health of children in the Roman Empire, in M Harlow & L Larsson Loven (eds), *Families in the Roman and late antique world*, London: Continuum, 111–40

- Rhodes, M, 1991 The hoard of iron nails, in T Wilmott, *Excavations in the Middle Walbrook valley*, London Middlesex Archaeol Soc Spec Pap, **13**, 132–8
- Ridgeway, V, Leary, K, & Sudds, B, 2013 *Roman burials in Southwark: excavations at 52–56 Lant Street and 56 Southwark Bridge Road, SE1*, Pre-Construct Archaeology Monogr, **17**
- Rigby, V, 1989 Pottery from the Iron Age cemetery, in Stead & Rigby 1989, 112–210
- Roberts, C A, & Cox, M, 2003 *Health and disease in Britain: from prehistory to the present day*, Stroud: Sutton
- Roberts, C A, & Manchester, K, 2005 (1983) *The archaeology of disease*, 3 edn, Stroud: Sutton
- Rogers, J, & Waldron, T, 1995 *A field guide to joint disease in archaeology*, Chichester: Wiley & Sons
- Rohnbogner, A, 2018 The rural population, in Smith *et al* 2018c, 281–345
- Scheuer, J L, & Black, S M, 2000 *Developmental juvenile osteology*, London: Academic Press
- Smith, A, with Allen, & Lodwick, L, 2018a Death in the countryside: rural burial practices, in Smith *et al* 2018, 205–80
- Smith, A, with Allen, M, Brindle, T, & Lodwick, L, 2018b Religion and the rural population, in Smith *et al* 2018, 120–204
- Smith, A, Allen, M, Brindle, T, Fulford, M, Lodwick, L, & Rohnbogner, A, 2018c *New visions of the countryside of Roman Britain: Vol 3 Life and death in the countryside of Roman Britain*, Britannia Monogr Ser, **31**
- Stead, I M, & Rigby, V, 1989 *Verulamium: the King Harry Lane site*, Engl Heritage Archaeol Rep, **12**
- Stevens, P, 1994 *Surrey Heath in the Dark Ages*, Surrey Heath: Surrey Heath Local History Club & Phil Stevens
- Stevenson, J, 2013 *Living by the sword: the archaeology of Brisley Farm, Ashford, Kent*, SpoilHeap Monogr, **6**
- Tomber, R, & Dore, J, 1998 *The National Roman Fabric Reference Collection: a handbook*, MoLAS Monogr Ser, **2**
- Weekes, J, 2008 Classification and analysis of archaeological context for the reconstruction of early Romano-British cremation funerals, *Britannia*, **39**, 145–60
- Wessex Archaeology, 2009 Land at Franklands Drive, Addlestone, Surrey: archaeological evaluation report, ref 70350.01, November 2009, unpubl Wessex Archaeology rep (<https://doi.org/10.5284/1027453>; accessed November 2017)