

# An evaluation and excavation of Iron Age and Roman occupation at Mansfield Road, RAF Chessington, 1994

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with contributions by

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*A series of evaluation trenches and an excavation at Mansfield Road, Chessington, revealed a number of ditches and associated finds. A small assemblage of pottery dating to the mid–Late Iron Age through to the 3rd century AD suggests continuing activity on the site over this period. The small number and poor condition of the finds indicate that the site was perhaps an impoverished farmstead or was peripheral to a more densely settled area. A number of well-preserved grain samples recovered from the site provide an insight into crop growing and processing for this region.*

## Introduction

An archaeological evaluation and subsequent excavation were carried out by Thames Valley Archaeological Services prior to the redevelopment of the former RAF Rehabilitation Centre at Mansfield Road, Chessington, Surrey, London Borough of Kingston upon Thames (figs 1 and 2; TQ 1740 6375). The eastern and northern parts of the proposal site were to be developed for housing and were subject to archaeological investigation carried out to specifications agreed with English Heritage (London Region), which acts as an archaeological adviser to the local planning authority.

The site is located in the Eocene Basin in north Surrey. The geology in this area consists mostly of London Clay and the sands and clays of the Woolwich and Reading Beds (Macphail & Scaife 1987). The local geology is London Clay which, within the confines of the site, included clay with some cobbles, stone-free clay and silty clay. The site lies at a height of about 45m OD.

Relatively little archaeology has been recorded previously in the immediate area. The only evidence of prehistoric activity listed on the Greater London and Surrey Sites and Monuments Records (SMR) comprises a flint scraper of Mesolithic–Bronze Age date found to the north of the site (SMR 300041). A possible Roman villa is reported to the south at Barwell Court Farm (SMR 30131) and a probable medieval ditched enclosure (the Grapsome) is located to the south-west (SMR 31841). In the light of the findings described below, the record of a cropmark interpreted as a possible Roman road to the south of the site (SMR 31886), running more or less north–south, took on added significance as the projected line of the cropmark crossed the development area.

The finds are to be deposited with the Museum of London (site code RCK93).

## The evaluation (figs 2–3)

The evaluation of the site, carried out in April 1993, comprised 29 evaluation trenches (fig 2) dug using a JCB fitted with a toothless bucket. These trenches revealed Iron Age and Roman deposits in the north-western part of the site, comprising: ten possible ditches (2–5, 10, 11, 18–20 and 22); four pits/scoops (7, 21, 25 and 27); five postholes (8, 9 and 15–17), and five possible gullies (12, 13, 23, 24 and 26). Most of the archaeological features were located in trenches 7 and 25–28 (figs 2 and 3), and seven (2, 3, 7, 10, 13, 16 and 26) were partially excavated during the evaluation (Ford 1993). As this area was designated as public

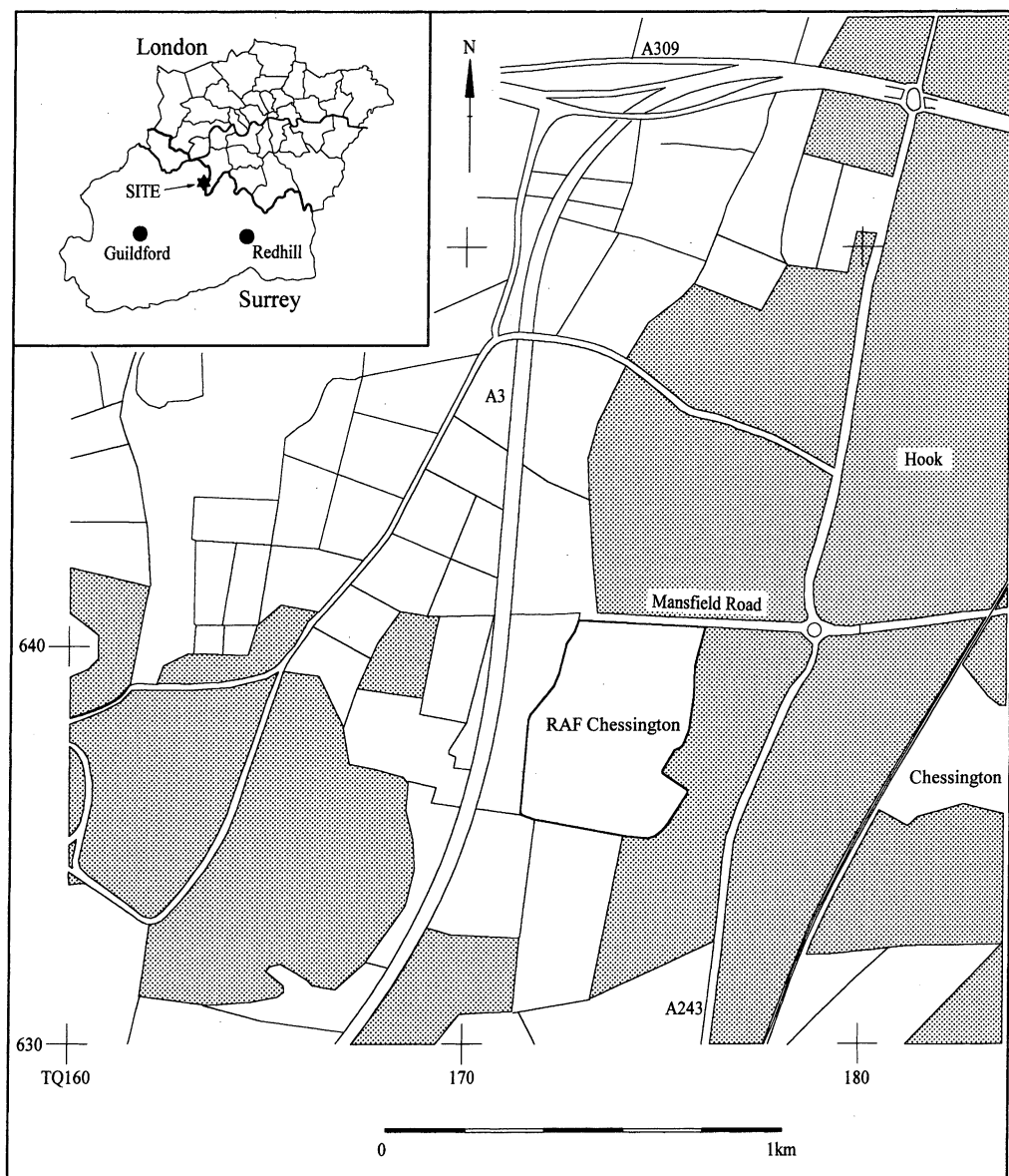


Fig 1 RAF Chessington: general location of site. (© Crown Copyright. MC 100014198)

open space in the planning proposal, the archaeology was not threatened by the development. However, the area just to the east of this, in the vicinity of trenches 1, 2 and 29, contained archaeological features which were likely to be damaged or destroyed by the development (fig 2). A further programme of investigation in this particular area was therefore required as a condition of the granting of planning permission. The excavation was carried out in the following year.

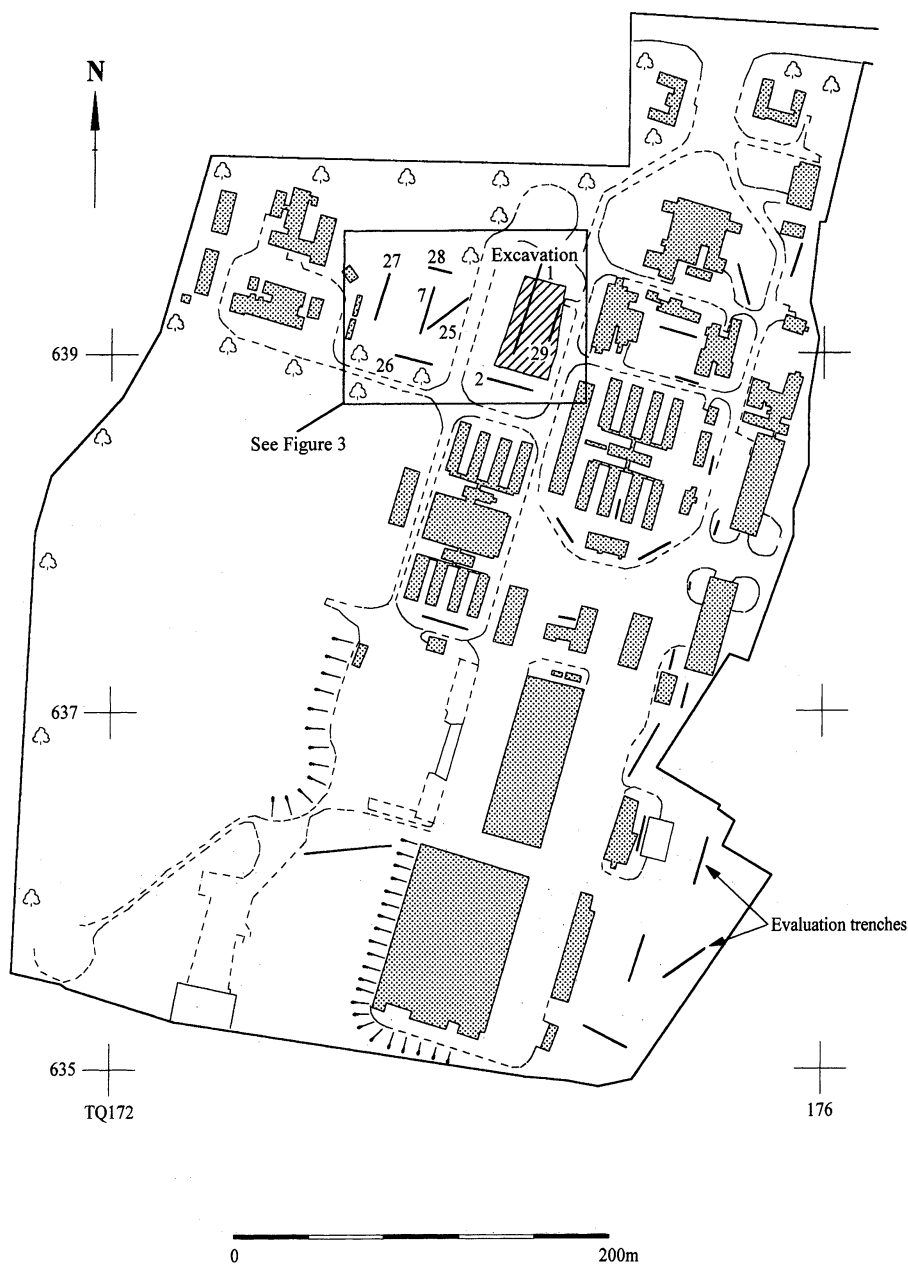


Fig 2 RAF Chessington: location of evaluation trenches and excavated area. (© Crown Copyright. MC 100014198)

**The evaluation trenches outside the excavated area** (figs 3–4)

**DITCHES AND GULLIES**

Two ditches (4 and 5) and two gullies (23 and 24) were revealed in trench 7 (fig 3). All were aligned approximately east–west and at least one (5) may have continued into trench 25 (20). Two sherds of Roman pottery were recovered from the top of ditch 5. Trench 25 also

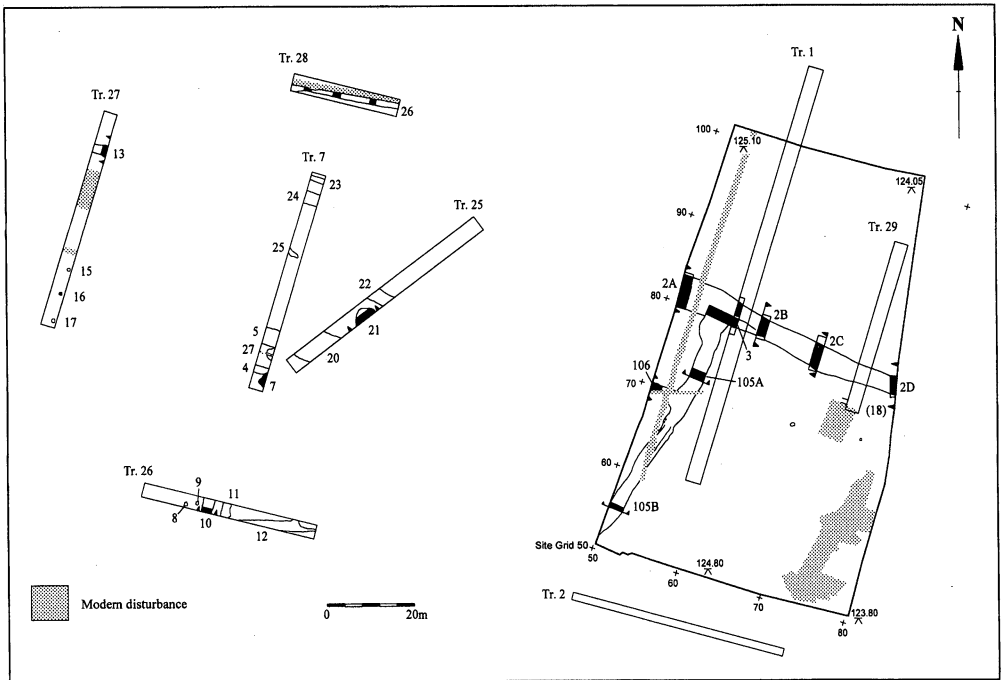


Fig 3 RAF Chessington: excavated features from evaluation and excavation (heights are in metres OD).

contained gully 22. In trench 26 were two north–south ditches (10 and 11) and an east–west gully (12). Single, undated, pottery sherds were retrieved from the tops of both ditches. In trench 27 the east–west gully 13 contained eight Roman pot sherds, two of which are of 3rd–4th century date. Without further trenching beyond the areas threatened by development it was not possible to ascertain whether some of these linear features enclosed a settlement.

#### PITS AND POSTHOLES

Three pits were discovered within trench 7 (7, 25 and 27). Of these, pit 7 was partially excavated and found to be quite shallow with an irregular base – possibly caused by burrowing animals. Its fill (53) contained two Roman pot sherds. Five possible postholes were revealed in trenches 26 and 27 (8, 9 and 15–17); the latter three (in trench 27) formed a line. Posthole 16 was very shallow (fig 4) but it did contain a pot sherd which suggests a Roman *terminus post quem*.

#### The excavated area (figs 3–4)

An area of approximately 1500m<sup>2</sup> (30 × 50m) was stripped of topsoil using a 360° excavator fitted with a toothless bucket. Where no archaeological deposits were apparent, slightly deeper stripping took place to ensure that any possible features were not obscured by subsoil deposits. Two evaluation trenches (1 and 29) were within, or partially within, this area.

Trench 1 contained two features, ditch 2 and a possible further ditch 3, both aligned approximately east–west. These features appeared to continue in an unexcavated stripe across trench 29. Ditch 3 produced only Iron Age pottery, whereas the pottery from ditch 2 includes

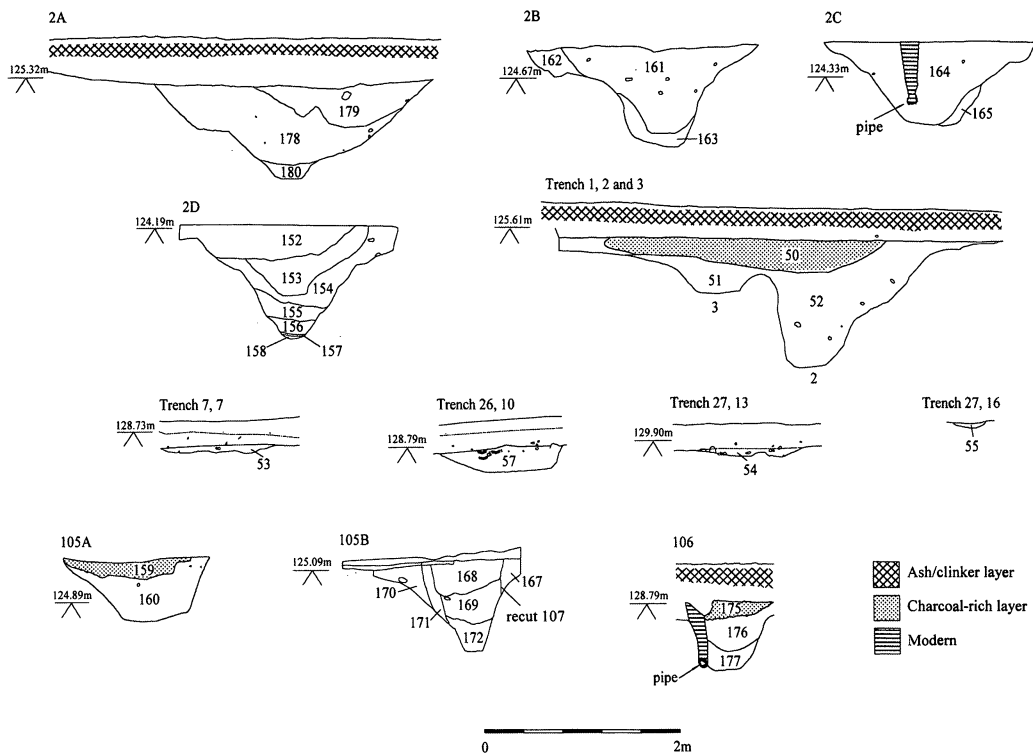


Fig 4 RAF Chessington: selected sections of features (heights in metres OD).

Roman material. At that stage of the project it was thought that ditch 2 replaced an earlier ditch, 3.

The excavation revealed 27m of ditch 2 and four 1m-wide slots were dug across it (fig 3, 2A–2D). The profile of the ditch varied from slot to slot (fig 4), although this may be related to the difficulty in determining the base of the cut from the bedrock. The distinction between 2 and 3 was not well-evidenced in these additional slots, except perhaps in slot 2A where there was a step on this side of the feature, and in slot 2B where fill 162 occupied a slight step. In the other sections the smaller feature (3) appeared to have been largely dug away, if it had been present at all.

A 25m+ length of ditch 105, which ran at right-angles to ditch 2, was revealed. Three slots, one 0.5m wide and two 1m wide, were excavated in order to examine it and to determine its relationship with ditch 2. This ditch was particularly notable for the large deposit of carbonized plant remains in its upper fill (fig 4, 159), presumably a dump of burnt grain. There was evidence also of a recut to this ditch (107) in the section of slot 2B, although this was not apparent in slot 2A. Only 2m of gully 106, which ran parallel to ditch 2, was revealed in the excavated area and this was examined by means of a 1.4m-long slot (fig 4).

The evidence from the sections across the three ditches implies that they were all open at the same time and had silted up together. Once the silting-up process had largely filled the ditches, the carbonized material centred on 105A (159) must have been dumped on top, as this clearly overlaid all three features (2/3 (50), 105A (159) and 106 (175)). There was no indication of banks to accompany any of the ditches.

These ditches/gullies produced a quantity of finds of Iron Age and Roman date. From the small assemblage of pottery recovered it appears that the possible ditch 3 is Iron Age and

was re-used or replaced by ditch 2 in Roman times. Other finds (from ditch 2) include a fragment of a bracelet made out of shale, two large quern fragments and some poorly preserved animal bone.

Each feature was sampled to recover carbonized botanical remains by flotation. Apart from within the charcoal-rich layer in the tops of features 2/3, 105A and 106 (fig 4, 50, 159 and 175), very few carbonized residues were observed. Additionally, a bulk sample (12 litres) was taken from pit 7 (53) in trench 7 and sieved for carbonized plant remains.

## The finds

POTTERY, by Jane Timby (fig 5)

In total 140 sherds of pottery were recovered in the course of the evaluation and excavation: 67 from the evaluation and 73 from the excavation. The material broadly splits into two chronological groups – one Roman, the other prehistoric. In addition to the pottery a small quantity of fired clay and brick and tile (including *imbrex* and *tegula* fragments from the evaluation) was present, the fired clay including part of a triangular loomweight from the excavation and possible loomweight fragments from the evaluation.

### *The evaluation assemblage*

The assemblage was in exceptionally poor condition, the sherds being very small and abraded, and in many cases discoloured. The material was difficult to identify owing to its condition but sherds of prehistoric, Roman, medieval and post-medieval date could be identified. The number of featured or diagnostic sherds was very low and the prehistoric component of the assemblage yielded no decorated or featured examples (for catalogue of pottery see *Endnote*, below).

Sixteen of the sherds are likely to be of prehistoric origin and nearly all were recovered from trench 1, and in particular ditch 3. Although it is difficult to be precise, a date in the mid–Late Iron Age may be appropriate for this material. The sherds are typical of other similarly dated assemblages from the London area (H Swain, pers comm). An absence of typical later Iron Age fabrics would suggest that this assemblage does not extend into the very latest phase of the Iron Age period although the fabrics represented here could still occur into the 1st century AD.

The Roman sherds were distributed across trenches 1, 7 and 25–27. The only diagnostic sherds from these seem to be an Oxfordshire colour-coated base sherd produced in the period AD240–400, an Oxfordshire whiteware mortarium body sherd (2nd–3rd century AD), two sherds of Central Gaulish samian (2nd century AD) and two flanged bowls and a dish, also typical of the later Roman period. The last three vessels are probably products of the Alice Holt kilns near Farnham, Surrey. Several of the other unfeatured greywares may similarly derive from this production source. A single sherd from the Verulamium region was present in trench 26. On balance, the Roman material suggests occupation or other activity belonging to the later 2nd–4th centuries AD. This would suggest at present that there is no continuity of occupation from the prehistoric period. The condition of the material is poor, being typical of material recovered from fields or areas peripheral to a settlement focus, suggesting that the source of activity is beyond the immediate area investigated.

The later material recovered from the evaluation trenches was represented by two sherds of Kingston ware dating to the period AD1250–1350, one miscellaneous sandy ware, and one miscellaneous post-medieval sherd.

### *The excavation assemblage*

A moderately small assemblage of *c*73 sherds of pottery was recovered from the excavation.

The Roman material was catalogued with reference to the Museum of London type fabric series (see *Endnote*, below). The prehistoric sherds are briefly described in the absence of a corresponding fabric series.

### The prehistoric pottery

In total sixteen sherds of prehistoric pottery were recovered, complementing that from the evaluation (Ford 1993). Only one rimsherd was present, a simple, handmade, slack-sided vessel with an upright rim (fig 5, no 3). The remaining sherds comprised unfeathered body sherds. Five main fabric types were identified and are described below. Some of the prehistoric sherds occurred alongside Roman material. Features that appear to have been exclusively producing prehistoric pottery include ditch 2 slots B (161), C (164) and D (152/3). A substantial part of a triangular loomweight showing at least one pierced hole was recovered from ditch 2 slot C (164). With such a small group and so few diagnostic sherds it is not possible to be very precise about the date of this material. The loomweight and rim would suggest activity during the mid-Late Iron Age (3rd–1st centuries BC). This is likely to encompass most, if not all, of the associated material.

#### PREHISTORIC FABRICS

- P1 A thick-walled handmade ware with red/brown surfaces and a grey core. The relatively hard sandy-textured ware has a sparse scatter of moderately fine (<1mm across) angular flint and sparse, reddish ferruginous pellets >2mm across.  
Contexts: 105 (159); 2 (163); 2 slot B (161); 2 slot B (161) two sherds; 2 slot C (164).
- P2 A handmade coarse-textured ware with a moderate scatter of white angular calcined flint fragments, some >5mm in length. A scatter of rounded clay pellets can also be discerned macroscopically. The fabric has a reddish-brown exterior surface with a dark grey core and interior.  
Contexts: 105 (171) slot B; 2 slot B (161) two sherds; 2 slot C (164).
- P3 A moderately thick-walled handmade ware with reddish-brown surfaces and a dark grey core.  
Contexts: 2 slot B (161); 2 (163); 2 slot D (152/3).
- P4 A handmade ware with reddish-brown to black surfaces and a black core. A hard sandy fabric with a sparse occurrence of fine organic voids, rounded quartz, rare flint and iron. Represented by a single rimsherd from a bowl. Possible traces of vertical striations are visible on the exterior surface.  
Contexts: 2 slot B (161); 2 slot D (152).
- P5 A very small fragment of a slightly finer, thinner-walled handmade ware. Dark brown to black in colour, the sherd has a fine sandy, slightly micaceous fabric.  
Context: 2 slot B (161).

### The Roman pottery

The remaining 57 sherds of pottery could be assigned to the Roman period. Again there were very few featured or clearly chronologically diagnostic sherds. The few rim sherds present include a grey sandy ware butt beaker (fig 5, no 7), an Alice Holt product probably manufactured in the later 1st century AD. Two straight-sided dishes from 100 (fig 5, no 4) and 105 are probably of 2nd or 3rd century AD date. The base of a strainer (fig 5, no 10), recovered from 105, is probably 3rd century in date.

#### Conclusion

Taken together, the pottery from the evaluation and excavation would suggest a fairly long-lived period of occupation which was not necessarily continuous and of relatively low intensity. Generally speaking, the condition of the material was variable. While some fairly large, relatively unabraded pieces were present, other sherds were small and fairly abraded, indicating some disturbance of deposits. As stated above, this may indicate that the area investigated was peripheral to the main focus of settlement activity.

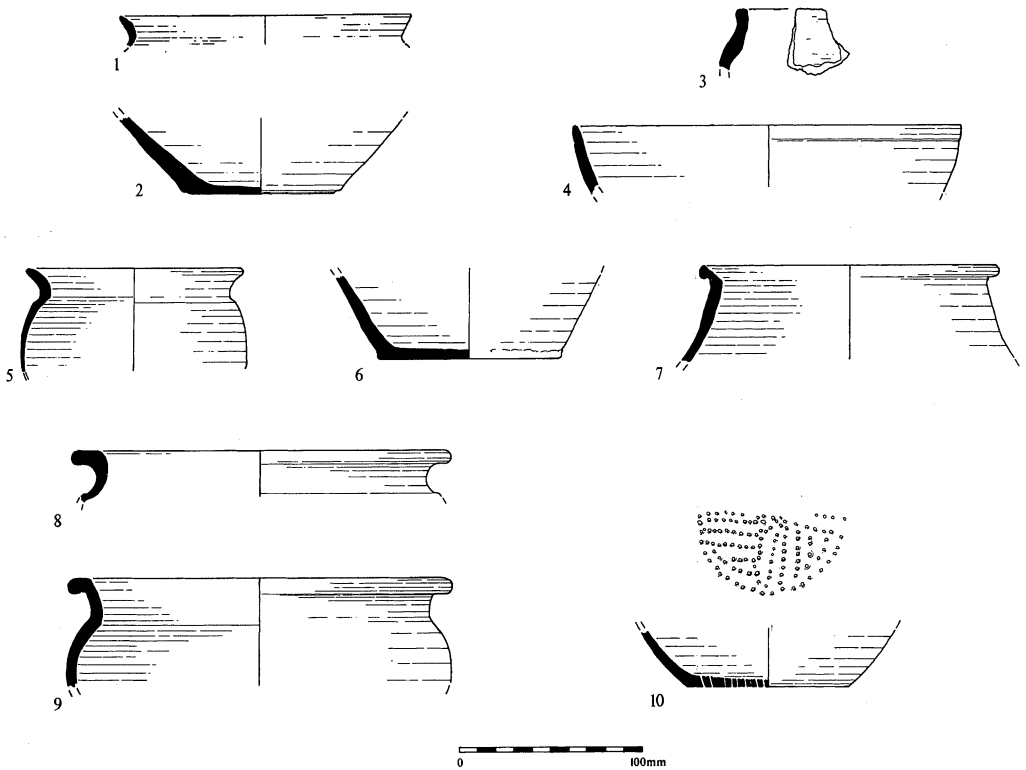


Fig 5 RAF Chessington: pottery. 1: jar rim (Roman) from ditch 2 (164); 2: jar? base (Roman) from ditch 2 (164); 3: rimsherd from prehistoric bowl, ditch 2 (161/163); 4: straight-sided dish, feature 100 (150), 2nd or 3rd century AD; 5: jar from ditch 105 (159) (Roman); 6: jar base, ditch 105 (159) (Roman); 7: butt beaker from ditch 105 (173/4), late 1st century AD; 8: jar rim from ditch 105 (181) (Roman); 9: necked bowl from ditch 105 (181) (Roman); 10: base of a strainer, ditch 105 (181), probably 3rd century AD.

#### WORKED STONE, by David F Williams

Three pieces of stone were recovered from the excavation of ditch 2 (all from slot C, 164), to add to the four fragments of argillaceous greensand found during the evaluation (trench 1, ditch 2, 52). The first of the three is a large irregularly shaped block of malmstone (210 × 128 × 115mm) from the Upper Greensand, almost certainly an import to the site. The second is a large fragment (depth 350mm, thickness 140mm) of the ?upper stone of a quern of Millstone Grit of fairly coarse texture. This probably originated from the Derbyshire/Yorkshire region rather than from another part of the country (King 1986). A further large fragment of ?upper stone is probably from the same quern (depth 330mm, thickness 120mm).

#### THE SHALE BRACELET, by Tess Durden

A fragment of shale bracelet was recovered during the excavation of ditch 2 (slot D, 154). The piece is 25mm long and 4mm thick with a 'D' section. The estimated diameter of the complete bracelet is about 70mm. The bracelet is almost certainly the product of the Roman shale industry, using raw material from Kimmeridge in Dorset (Calkin 1953).



## CHARRED PLANT REMAINS, by John Letts

Of the nine flotation samples submitted for analysis, most contained small amounts of comminuted charcoal and all but one contained charred cereal grain. In most cases this grain was poorly preserved and only two of the samples, both from ditch 105 (slot A, 159 and slot C, 173), contained sufficient material to justify additional analysis. The sample from 105 (159) was visibly rich in cereals, chaff and weed seeds, but was congealed into a solid lump with silt and fine charcoal as a result of being collected on a fine-meshed sieve (to maximize the recovery of smaller items). Both samples were gently reprocessed in the laboratory, which greatly improved the efficiency and accuracy of the subsequent analysis.

The sample from ditch 105 (173) was sorted in its entirety, but that from 105 (159) was separated into standard-size fractions and subsampled within these fractions in order to speed analysis while maintaining the statistical accuracy of the results. The remaining material was scanned in detail for rare items, unusual seeds, or chaff fragments that did not figure prominently in the sorting. Corrected values for the sample from 105 (159) are presented in the table of results (table 1). Specimens were identified by comparison with modern reference material held in the Ancient Monuments Laboratory, and nomenclature follows Clapham *et al* (1987).

*Results and discussion*

## Sample from ditch 105, slot A, 159

This sample was sieved into 0.3, 0.4, 0.5 and 1mm size fractions prior to analysis. The 0.3mm fraction contained a large quantity of unusually well-preserved charred and silicified barley awn fragments – ‘fine cleanings’ from the processing of barley (*Hordeum vulgare*). The presence of silicified awns suggests that combustion occurred in an oxygen-deficient environment at a high temperature. The fine fractions also contained numerous seeds of stinking mayweed (*Anthemis cotula*), a common denizen of arable fields prior to the introduction of chemical herbicides. The proliferation of stinking mayweed in archaeobotanical assemblages in Britain is believed to be linked with the expansion of cultivation on to heavier clay soils that occurred in the Late Iron Age/Roman period. The *c*80 seeds recorded in the 0.4mm fraction is supplemented by a further *c*1840 in the 0.5mm fraction – a strong showing in archaeobotanical terms even though one mayweed plant can produce several thousand seeds. Subsamples of 0.5mm and 1mm fractions also contained seeds of additional weed species such as orache (*Atriplex* sp.), scentless mayweed (*Tripleurospermum inodurum*) and chess (*Bromus* sect. *Eubromus*) that are common on disturbed and waste ground. A detailed scan of the unsorted fractions also revealed three specimens of sheep’s sorrel (*Rumex cf acetosella*) and single seeds of knapweed (*Centaurea cf nigra*), thistle (*Carduus/Cirsium* sp.) and black bindweed (*Convolvulus arvensis*) – all of which would have been common on fertile, disturbed and waste ground in the Roman period.

Most of the wheat grain in this sample is too poorly preserved to be identified as either spelt (*Triticum spelta*) or emmer (*T. dicoccum*) wheat, but the sorted subsample contains at least three definite spelt grains and additional grain was observed during scanning. Spelt glume bases also occur in the 1mm fraction, but most of the glume bases present are too fragmented to be identified beyond a ‘hulled wheat’ (ie either spelt or emmer wheat) category. A few of the grains in this sample were short, blunt and similar in some respects to charred free-threshing wheat (*T. aestivum/turgidum*), but none possessed sufficient ‘aestivoid’ characteristics to be classified with certainty as bread wheat. Unfortunately, no chaff was recovered that would support the identification of free-threshing wheat. Wheat taxonomy is currently in a state of flux, and researchers are now much more hesitant when attributing grain to type in the absence of distinctive chaff. One of the spelt grains shows clear evidence of having sprouted before being charred. It seems probable, however, that the chaff and weed by-product from the processing of hulled wheat was used as fuel.

TABLE 1 Details of contexts sampled for charred plant remains

Species	Sample								
	2 164	2 165	2 178A	105 159A	105 160	105 173C	106 176	107 168	107 172
<i>Triticum spelta</i> L. (spelt wheat)	—	—	—	12	—	—	—	—	—
<i>T. spelta/dicoccum</i> (spelt/emmer)	—	—	—	52	—	1	—	1	—
<i>Triticum</i> sp. (wheat)	—	—	—	24	—	5	1	—	—
cf <i>Triticum</i> sp.	—	—	1	12	—	—	—	—	—
<i>Triticum</i> sp. (sprouted)	—	—	—	—	—	2	—	—	—
<i>T. spelta</i> (glume base, spelt)	—	—	—	32	—	15	—	—	—
<i>T. spelta/dicoccum</i> (glume base hulled wheat)	—	—	—	208	—	94	—	1	—
<i>H. vulgare</i> ssp. <i>hexastichum</i> (six-row barley)	—	—	—	12	—	2	—	—	—
<i>Hordeum vulgare</i> L. (barley)	—	—	—	16	—	—	1	—	—
cereal indet.	—	—	—	320	1	1	1	—	—
cereal indet. (frags.)	1	—	—	80	x	x	x	—	x
cf <i>Secale cereale</i> (rachis node, rye)	—	—	—	1	—	—	—	—	—
<i>Atriplex</i> sp. (orache)	—	—	—	40	—	—	—	—	—
<i>Chenopodium album</i> L. (fat hen)	—	—	—	56	—	2	1	—	—
<i>Fallopia convolvulus</i> (L.) <i>A. Löve</i> (black bindweed)	—	—	—	1	—	—	—	—	—
<i>Polygonum</i> sp. (bistort)	—	—	—	1	—	—	—	—	—
Polygonaceae indet.	—	—	—	16	—	1	—	—	—
<i>Rumex</i> cf <i>acetosella</i> (sheep's sorrel)	—	—	—	3	—	—	—	—	—
<i>Rumex crispus</i> -type (dock)	—	—	—	4	—	—	—	—	—
<i>Rumex</i> sp.	—	—	—	3	—	—	—	—	—
<i>Centaurea</i> cf <i>nigra</i> (knapweed)	—	—	—	1	—	—	—	—	—
<i>Carduus/Cirsium</i> sp. (thistle)	—	—	—	1	—	—	—	—	—
cf <i>Lapsana communis</i> (nipplewort)	—	—	—	—	—	1	—	—	—
cf <i>Artemisia</i> sp. (mugwort)	—	—	—	1	—	—	—	—	—
<i>Tripleurospermum inodorum</i> (L.) <i>Schultz-Bip.</i> (scentless mayweed)	—	—	—	32	—	1	—	—	—
<i>Anthemis cotula</i> L. (stinking mayweed)	—	—	1	1840	—	16	5	—	—
Compositae indet. (inner seed)	—	—	—	8	—	—	—	—	—
<i>Avena</i> sp. (oat)	1	—	—	—	1	—	—	—	—
<i>Avena</i> sp. (awn fragment)	—	—	—	—	—	1	—	—	—
<i>Avena</i> sp. (ligule, wild oat)	—	—	—	1	—	—	—	—	—
Umbelliferae indet.	—	—	—	1	—	—	—	—	—
<i>Bromus</i> sp. (chess)	—	—	—	188	—	11	1	—	x
Gramineae indet. (grass)	—	—	—	—	—	2	2	—	—
indet.	—	—	—	2	—	2	—	—	—
charcoal	x	—	x	x	x	x	x	x	x
<i>Volume (litres of soil processed)</i>	<i>10</i>	<i>7</i>	<i>7</i>	<i>10</i>	<i>10</i>	<i>5</i>	<i>10</i>	<i>6</i>	<i>5</i>

'x' indicates present in small numbers. A and C refer to excavated slots.

This sample also contains grain of six-row barley (*Hordeum vulgare* ssp. *hexastichum*), but in all cases charring has obscured any evidence of hulls or of possible processing of the grain. The sorting and scanning of the 1mm fraction also revealed three small rachis nodes of six-row barley, confirming the presence of 'fine cleaning' waste from barley processing. Ethnographic and archaeobotanical data suggest that waste chaff from barley processing was also used for fuel in the past.

In summary, the sample appears to be Roman in date, and is typical of the period in being dominated by spelt wheat, hulled wheat chaff, and the seeds of annual weeds which were harvested accidentally with the cereal crop (and probably burned with waste chaff as fuel). Some of the charcoal in the sample was derived from four-year-old twigs of a ring-porous tree or shrub.

## Sample from ditch 105, slot C, 173

The three rachis nodes in this sample form indisputable evidence for the use of free-threshing wheat, but the sample is clearly dominated by spelt wheat chaff, and includes grain of six-row hulled barley and rachis segments of rye (*Secale cereale*). Rye is an unusual find on pre-Saxon sites in southern England, as spelt is in Saxon assemblages, and Saxon settlement was clearly marked by a greatly increased emphasis on the cultivation of free-threshing (ie bread) wheat. The weed species represented include the usual assemblage of annual arable weeds that proliferate in cultivated soils and disturbed waste places. The stinking mayweed again suggests post-Iron Age cultivation on heavy clay soils. The fragments of oat (*Avena sativa*) awn are expected having been an inevitable and possibly semi-managed crop weed in the past. Oat only emerged as an important cereal crop in its own right in the early medieval period, and the wild and cultivated species can be separated only if their diagnostic floret bases have also survived.

This sample is probably Roman in origin, but the presence of free-threshing wheat and rye may indicate later activity as well. However, no Saxon pottery was discovered to support this. As in the sample from 105 (159), waste chaff from the de-husking of hulled wheats was burned either purposely, or accidentally, along with the fine weed seeds harvested with the crop.

## ANIMAL BONE, by Sheila Hamilton-Dyer

A small number of animal bone fragments were recovered from the excavation, exclusively from ditches 2, 105 and 106 (table 2: see *Endnote*, below). The bone material from these ditch contexts has a well-preserved surface, but is brittle and most bones were recovered in a fragmentary state. After reconstruction, 30 bones were recorded. Material from ditches is often biased in favour of large cattle and horse bones. This is the case here where cattle limb bones dominate and horse bones and teeth are also common. A few pig bones and some sheep/goat teeth are also present.

The butchery marks on a cattle scapula and tibia in ditch 2 (164) are characteristic of Roman material, particularly of urban and military sites, but also occasionally encountered at villa sites in the South East. The single measurable fragment, a cattle tibia, also fits well with other Roman material from southern England.

**General discussion**

The site investigated at Chessington provides information relating both to the changing settlement pattern of the later Iron Age and Roman periods, and also to the economy of the region in these times. The soils in the area are poorly drained and difficult to cultivate and, therefore, not thought to be a favoured area for settlement. Most Iron Age activity appears to be to the south on the chalk and greensand, or, if located in the north, on alluvium or valley gravels (Hanworth 1987, fig 6.1).

Roman sites are similarly distributed, the villas in particular being located on better soils, for example the villa at Sandilands (now Sandlands) Road, Walton on the Hill, which is situated on the chalk (Lowther 1949), with only a few on the London Clay (Bird 1987, fig 7.7). A concentration of Roman farmsteads also exists south of the Hog's Back, where the soil consists of a fertile, easily-cultivable loam (Clark & Nichols 1960). However, recent fieldwork to the west in Berkshire has begun to locate small sites of Iron Age and Roman date on the London Clay and other outcrops of the London basin (OAU 1989; Ford 1987; Ford 1991; Freke 1991; Jones 1992; Roberts 1995; Torrance & Durden 2003). This suggests that more settlement may be expected on this geological formation than is shown by the evidence available to date.

The Greater London SMR documents a number of small-scale sites within a 10km radius

of Chessington dating to the Late Iron Age and Roman periods. The Iron Age sites consist mainly of pottery scatters and ditches. A possible Iron Age banjo enclosure and trackway exist at Weston Road, Merton (SMR 021173); possible settlements are at Alpine Avenue, Tolworth (Hawkins & Leaver 1999) and Percy Gardens, Malden (SMR 021386), consisting of possible roundhouses, ditches, gullies and pottery dating to the mid and Late Iron Age. A number of unassociated pottery scatters testify to some later Iron Age activity on the London Clay in the area of north Surrey. An Iron Age hillfort also exists at Caesar's Camp, Wimbledon (SMR 030731; Bishop 1971).

The evidence for Roman activity is a little more frequent, and occupation is often a continuation of Iron Age sites. Old Malden may be a typical example, where an Iron Age settlement was superseded by a Roman one (SyAS 1949, xxii; Hanworth 1987, fig 6.3; Andrews 2001). Purberry Shot, Ewell, may have witnessed continuous occupation from 200BC to AD150 (Lowther 1946). Aymand Park Road, Twickenham (SMR 021594–9) is the site of a possible Roman farmstead which had superseded Iron Age occupation. However, some Roman features do not have any Iron Age antecedents, for example those at Hampton Wick, Richmond (SMR 021266) and Phipps Bridge Road, Mitcham (SMR 020606). A possible villa site exists at Barwell Court Farm, Chessington (SMR 030131). Stane Street, the Roman road running from Chichester to London, also crosses the London Clay to the east of Chessington and Malden, and may have been the stimulus for the development of many Roman sites in the vicinity.

The site discovered at Chessington fits easily into this pattern of activity, and provides a standard of evidence similar to other contemporary sites in the area. The limited nature of the archaeological investigation does not allow any further interpretation of the site's function or importance, but the pottery found provides some reasonably sound dating evidence for a mid–Late Iron Age presence followed by Roman activity in the 2nd and 3rd centuries.

The grain varieties identified from the site are useful indicators of site function and also the broader economy of the area. Intensified land use in the Iron Age and Roman periods meant that expansion on to more marginal soils was a necessity. Hence crop types typical of this period are those with a tolerance to soil which was acid, heavy or damp. Cereals suited to such conditions are spelt and bread wheat, rye and oats (Jones 1982, 98). These varieties are represented at Chessington, with the addition of barley, all being ideal for the heavy clay soil. Spelt wheat and barley are typical of the Late Iron Age and Roman periods, although bread wheat and rye are more typically Saxon crops. This information supports the dates suggested by the pottery recovered, indicating occupation from the mid–Late Iron Age through to the 3rd century AD (although the pottery sequence is not continuous). There is no evidence to indicate any post-Roman activity on the site.

The low densities of pottery recovered suggest the site was not intensively occupied; it may have been a small farmstead or even just a small activity area associated with a nearby farm or villa. A number of activities appear to have taken place on site: grain, chaff and quern fragments recovered suggest that crop-processing was taking place, and the loomweight fragments may indicate that textiles were being produced in the vicinity. The importance of this activity in the region is attested by the numerous finds of loomweights and spindle whorls, and the high proportion of sheep bones in faunal assemblages (Hanworth 1987, 145).

This site adds further insight into the settlement and economy of north Surrey in the Iron Age and Roman periods, representing activity over a considerable length of time in a relatively marginal location. The site is therefore a good example of the apparent increase in rural settlement at this time and the ability to sustain it in an area not previously favoured for occupation.

## Endnote

The catalogue of pottery and details of faunal remains recovered are available via the Archaeology Data Service website (<http://ads.ahds.ac.uk/catalogue/library/surreyac/>).

The information can also be accessed via the Society's own website (<http://www.surreyarchaeology.org.uk>) by following the links to *Surrey Archaeological Collections*.

Printed copies of this material will be deposited with: the Society's library; Surrey History Centre, Woking, and the Surrey Sites and Monuments Record, Kingston. Photocopies can also be supplied by post – enquiries should be addressed to the Hon Editors, Surrey Archaeological Society, Castle Arch, Guildford GU1 3SX.

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