A MIDDLE BRONZE AGE FIELD DITCH? EXCAVATIONS AT BANKSIDE CLOSE, ISLEWORTH

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With contributions by Steve Ford, Tessa Machling, Mark Robinson and David Williams

SUMMARY

An excavation in advance of development in Isleworth has produced evidence of Middle Bronze Age non-funerary activity in the form of a rectilinear ditch. It is argued that this feature is part of a field system which is a rare find in the regional context of the middle Thames Valley during the Middle Bronze Age.

INTRODUCTION

An archaeological evaluation (Ford 1998) and excavation were carried out during the summer of 1998 prior to the development of land off Bankside Close, Isleworth, for housing (TQ 1589574935) (Fig 1). Site Code BKC98. Thames Valley Archaeological Services were commissioned by St James Homes Ltd to carry out the fieldwork so that the archaeological condition on the planning application could be discharged. The site comprises a rectangular parcel of land, c.1.2 hectares in area, formerly used as allotments. It lies to the east of Mogden Water Treatment Works and to the rear of properties fronting Twickenham Road, Briar Close, Manns Close, and Trevor Close. The site is situated approximately 400m to the west of the River Crane and 1 km from the river Thames, at a height of 25m above Ordnance Datum. The underlying geology is brickearth above gravel (BGS 1981).

ARCHAEOLOGICAL DEPOSITS

An area centred on the archaeological deposits located during the evaluation (Ford 1998) was machine stripped of topsoil (Area A) and subsoil (Figs 1 and 2). (The topsoil was 0.3m deep and the subsoil 0.35m deep.) The subsoil had been disturbed by ploughing and gardening in the post-Medieval period. Two ditches that met at right-angles were revealed [2000 and 2001] and an area measuring 27m by 15m was stripped around them. The machined surface was cleaned by hand but no further archaeological features were found within the area. Ditch [2000] which ran north-south, terminated within Area A. However, to ensure that this was not a break in the ditch, a small area north of the main trench was also stripped; no continuation of the ditch was found. No indication of any more distant continuation of this ditch was found in the evaluation trenches to the north or north-west. A second area (B) was opened to the east of the main trench but this contained no archaeological deposits. A third area (C) to the west of the main trench showed that ditch [2001] probably continued in this direction. Also found in this area was posthole [1025].

Seven slots excavated across ditches [2000 and 2001] showed that they were between 0.78m and 1.25m wide, and 0.57m and 0.98m deep. The ditches have been dated by pottery to the Middle Bronze Age. In total, 50% of the area of the

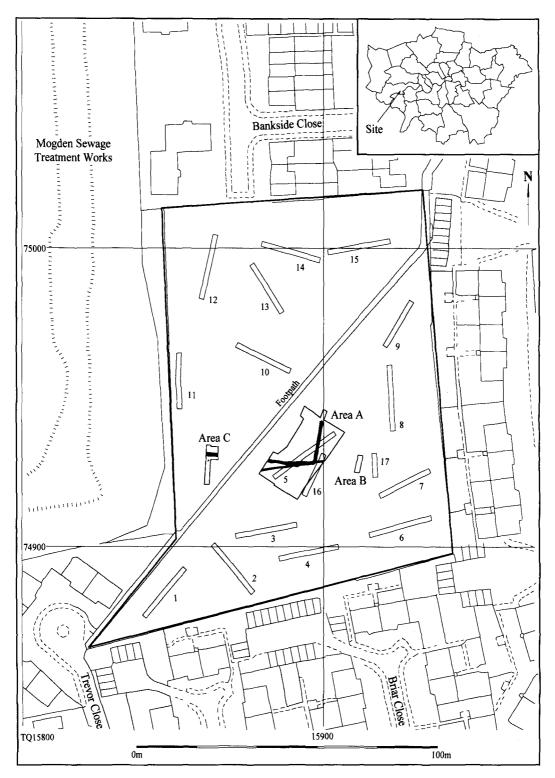


Fig 1. Location of the site in Greater London and Isleworth showing excavated areas and evaluation trenches

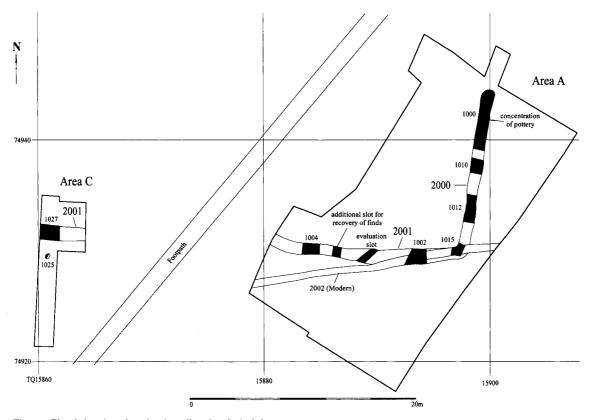


Fig 2. Trench location plan showing all archaeological features

exposed parts of the ditches was excavated. The ditch fills were not uniform across the site and between two and four phases of backfilling/ silting were observed (Fig 3). The slot targeting the junction of the two ditches [1015] established that they were probably originally dug as one event.

Apart from the two ditches and a modern gully [2002] there was only one other archaeological feature; an ovoid posthole in Area C [1025]measuring 0.50m by 0.32m in plan and 0.26m deep. Smears of charcoal within its dark humic fill, as well as the fact that it appeared to be cut from *c*.0.2m higher than the surviving level of the neighbouring ditch, suggest that it was relatively recent in date.

Out of a total of 176 sherds of Middle Bronze Age pottery recovered during the evaluation and excavation, 147 came from ditch [2000] and the majority of these came from a localised area near the terminus. A piece of possible quern was also recovered from this area. Twenty-nine burnt flints and 16 stuck flints were also recovered. The ditch fills were sampled (230 litres) for charred plant remains and small artefacts. These produced a single identifiable ancient cereal grain and ten fragments of burnt flint. No bone was recovered at any stage of the project.

THE FINDS

Pottery

Tessa Machling

The prehistoric pottery assemblage from Bankside Close comprised 176 sherds weighing 2479 gms. Of this total approximately 26% by number showed diagnostic traits (*eg* rims, bases, and decorated sherds). The assemblage quality was generally good with most sherds being reasonably large and unabraded. Most of the pottery came from secure contexts and, in conjunction with the high proportion of diagnostic sherds and the good quality of the assemblage, numbers and

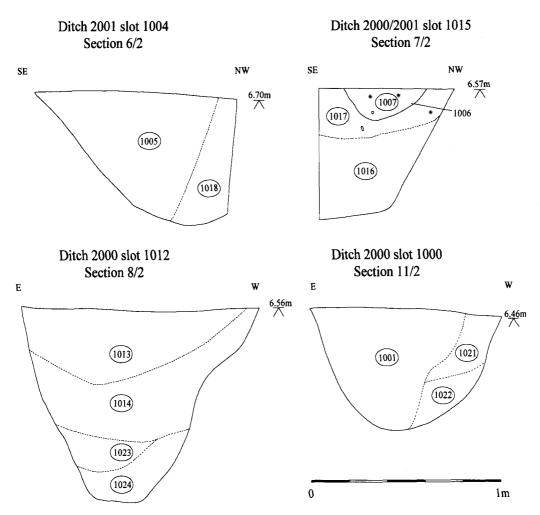


Fig 3. Selected sections (heights are in metres above Ordnance Datum)

forms of the vessels present can be given with reasonable confidence.

The assemblage was analysed and recorded following recommended guidelines for the analysis of prehistoric pottery (PCRG 1997). All sherds were assigned a fabric type after macroscopic examination and the use of a hand lens (\times 10 and \times 20 power), and the sherds were then counted and weighed to the nearest whole gramme. Surface treatment, evidence of manufacturing technology, and decoration, *etc.*, were also noted. The assemblage did not justify the use of further scientific analysis (*eg* thin sectioning).

Description of pottery fabrics

Three flint fabrics were identified. Table 1 shows the quantity and percentage of each fabric type present. In the descriptions below, the terms used to describe the size of inclusions are defined as follows: very fine (<0.1mm), fine (0.1-0.25mm), medium (0.25-0.5mm), coarse (0.5-1mm), very coarse (1mm+). Terms used to describe the frequency of inclusions are defined thus, based on the density charts devised by Terry and Chilingar (1955): rare (1-3%), sparse (3-10%), moderate (10-20%), common (20-30%), very common (30-40%), abundant (40% +).

Fabric F1: A hard, irregularly fired, very coarse fabric with sparse to moderate amounts of fine to very coarse (7mm) crushed, calcined flint temper. Similar amounts of fine to very coarse argillaceous material (possibly grog) is also present. Rare amounts of fine to medium quartz sand, ferruginous material and mica are also

Fabric Context	F1 No of sherds	F1 Weight (gms)	F2 No of sherds	F2 Weight (gms)	F3 No of sherds	F3 Weight (gms)	Total no. of sherds
Tr 5 (55, 56, 59)	5 (3%)	112 (5%)	6 (3%)	27 (1%)	_		11 (6%)
Unstratified	2 (1%)	24(<1%)	2(1%)	24(<1%)	6 (3%)	18(<1%)	10 (6%)
2000, 1000 (1001)			72 (41%)	1660 (67%)	1(<1%)	6(<1%)	73 (42%)
2000, 1010 (1011)	_				3 (2%)	2(<1%)	3 (2%)
2000, 1012 (1013)			4(2%)	10(<1%)	_ ,	_ ` `	4 (2%)
2000, 1012 (1014)	8 (5%)	238 (10%)		_ ` '	42 (24%)	168 (7%)	50 (29%)
2000, 1012 (1023)	1(<1%)	6(<1%)		_	16 (9%)	70 (3%)	17 (10%)
2001, 1004 (1005)	_ ,		4(2%)	34 (1%)	_``	_ ` `	4 (2%)
2001, 1015 (1017)			4 (2%)	80 (3%)			4 (2%)
Totals	16 (9%)		92 (52%)	_ ` `	68 (39%)	_	176` ´
Totals		380 (15%)	_`_`	1853 (74%)		264 (11%)	_

Table 1. Pottery fabric totals by context

present. This fabric comprises 9% by number of the assemblage and is usually associated with thick-walled vessels (17mm thick) and would seem to be associated with classic Middle Bronze Age bucket/barrel urns of the Deverel-Rimbury tradition.

Fabric F2: A hard, irregularly fired, coarse fabric with moderate to common amounts of fine to very coarse (4mm) crushed, calcined flint temper. Rare amounts of fine to medium quartz sand, ferruginous material and mica are also present. This fabric is similar to fabric F1, but is less coarse and is usually associated with thinner walled vessels (x-section 11mm). This fabric comprises 52% by number of the assemblage and would also seem to be associated with bucket/barrel urns of the Middle Bronze Age Deverel Rimbury tradition.

Fabric F3: A fine, irregularly fired, hard fabric with moderate to common amounts of medium to coarse crushed, calcined flint temper. Sparse to rare amounts of fine to medium quartz sand, ferruginous material and mica are also present. This fabric, which comprises 39% by number of the assemblage, is associated with thin walled (x-section 5mm) vessels highly burnished on the exterior surface. The form of these vessels corresponds with undecorated globular urns of the Middle Bronze Age Deverel Rimbury tradition.

Discussion of fabrics

The three fabrics from Bankside Close represent standard Middle Bronze Age types. The forms present support this interpretation (eg barrel/ bucket and globular urns). Comparison can be made with the Bankside Close material and other assemblages from the vicinity. Middle Bronze Age pottery is uncommon in this area and the material from Bankside Close provides one of the best assemblages of well-stratified, probable domestic material. There are a few Middle Bronze Age sites which show comparable heavily flint-gritted fabrics (eg Sunbury, Littleton Reservoir, Acton, Yiewsley (Barrett 1973), Kempton Park (Sheppard 1975), Osterley (Cotton 1981), and Yeoveney Lodge (Robertson-Mackay 1987)). However, many of these represent cemetery finds or isolated sherds with little contextual/depositional information.

The majority of sites in the locality, eg Caesar's Camp (Grimes & Close Brooks 1993), Moor Lane, Harmondsworth (Cotton 1990), Avenue Gardens, Acton (Cotton 1993), Carshalton (Adkins and Needham 1985), and Snowy Fielder Waye, Isleworth (Timby 1996), show only later Bronze Age and Early Iron Age activity, with the flint-gritted fabrics seen in the Middle Bronze Age sites continuing in use into the Iron Age. At Snowy Fielder Waye, Isleworth (*ibid*) the presence of ferruginous inclusions (found in all three of the Bankside Close fabrics) in the Late Bronze Age/Early Iron Age would suggest similar clay resource utilization from the Middle Bronze Age through to the Iron Age.

At Moor Lane, Harmondsworth (Cotton 1990), an apparent overlap between the classic Middle Bronze Age Deverel Rimbury type sites described by Barrett (1973), and the Late Bronze Age/Early Iron Age sites of Caesar's Camp (Grimes & Close Brooks 1993), can be seen. On this site, fabric 1 would seem to have an Early/Middle Bronze Age origin (indeed it compares very favourably with Bankside Close fabrics F1 and F2) and has been described as representing an initial phase of activity prior to the classic later Bronze Age phases on the site. However, the form and fabric of the Moor Lane vessel might suggest an even earlier date, preceding the classic Deverel Rimbury sites, in the Early Bronze Age.

The best evidence for comparison comes from five cemeteries (Barrett 1973; Sheppard 1975) and one possible domestic assemblage (Cotton 1981). At Kempton Park (Sheppard 1975) two barrel urns of a heavily flint-gritted fabric were located. Exact fabric descriptions are not given, but they would seem to be comparable to fabrics F1 and F2 at Bankside Close. Four cremation cemeteries discovered in the late 19th and early 20th centuries (Barrett 1973) also show a similar range of fabrics. At Sunbury, the fabric is described as having a flint filler of up to 7mm grain size which compares well with fabric FI from Bankside Close. From Littleton Reservoir, fabrics are again comparable and the crosssection measurements from the sherds of 13-15mm are similar to those typical of fabrics F1 and F2 at Bankside Close. Acton provides fabrics better compared with fabrics F2 and F3. At Yiewsley comparable fabrics can also be seen, although the presence of a probable biconical urn might suggest an earlier date for this site. From Osterley (Cotton 1981) a handful of sherds recovered from a possible domestic context show two fabrics comparable with fabrics F1/2 and F3, similarly associated with barrel/bucket urns and globular urns respectively.

Resources for the pottery

It is generally accepted that if suitable resources can be found within 7–10km of a site, the pottery made from those resources can be said to be of local production (Arnold 1985). Clays that derive from outside this area can be treated as non-local.

The presence of common inclusion types such as flint and quartz sand could suggest both a local or non-local source. However, the absence of any diagnostic, non-local inclusions would make a local resource more probable. Ferruginous pellets have been recognized on other, albeit later, sites in the vicinity and are provenanced locally (Timby 1996; Williams 1993). The flint and quartz inclusions can be seen to derive from the river sands and gravels which surround the site.

Vessel forms

Sherds representing at least three (and possibly five) vessels were found. Diagnostic form sherds comprise 26% by sherd number of the assemblage (2% rims, 22% bases, and 2% decorated sherds). This high percentage is biased by the presence of large sections of one/two vessels from context [1001], which comprise 15% of the total diagnostic sherds. Thirty-two sherds (18% of total) could not be assigned a definite form type although it is almost certain that fabrics F1 and F₂ correspond to barrel/bucket urns and fabric F3 to globular urns. Forms represented include barrel/bucket urns and globular urns. Parallel forms from other published sites are given in Table 2. The forms represented represent standard Middle Bronze Age types of the Deverel Rimbury tradition.

At least two barrel/bucket urns were present, both from ditch [2000], one each from slots [1000] (1001) and [1012] (1014). The slightly flaring profile of some of the sherds from [1000] (1001), if compared to the other sherds from this context, might suggest that two vessels were present in this context: one with a bucket-shaped profile and one with a barrel-shaped profile. Both of the vessels from slot [1000] (1001) were decorated with a finger-tipped, horizontal applied cordon around the neck of the vessel.

One plain, flat rim sherd (fabric F2) from [1000] (1001) gives a diameter of approximately 18-24cm for one of the vessels and this, alongside a base diameter of approximately 24-28cm, would give a standard barrel profile for the vessel. The vessel from [1012] (1014) (fabric F1) was slightly larger with a base diameter of 32cm, but not enough of the profile existed for this to be reconstructed with accuracy.

The globular urns represented all appeared to be undecorated but the lack of profiles does not allow them to be assigned a definite type. However, from evidence of the surrounding area it would be unlikely that the vessel would correspond with Calkin's (1962) vessel series (Barrett 1973).

One rim sherd from [1000] (1001) suggests a globular urn with a rim diameter of 18cm. Slot [1012] (1014) contained 42 sherds from another such vessel with a rim diameter of 16-20cm and a base diameter of 16cm, and would seem to have a more ovoid rather than a bag-shaped profile. Context [1023], in slot [1012], contained sherds from a globular urn with a base diameter

General form type	Specific vessel type	Context	Published example	Approx. number of vessels
Urn	Barrel/Bucket Urn (61% of total by fabric: F1 and F2)	1001	Sunbury, fig 1:3,13, Acton fig 4:5 etc. For possible bucket urn see Sunbury fig 2:26, Littleton fig 3:1	1/2
	_	1014	As above	1
	Globular: Type uncertain (39% of total by fabric: F3)	1001	Osterley, fig 1:5, Sunbury, fig 2:15	1?
		1014	As above	1
		1023	ditto	Same vessel as 1014
Total			_	3/5 Vessels

Table 2. Pottery vessel forms

of 16cm. As context [1023] was below [1014] and due to the similarity of the base diameter, it would seem that the sherds from [1014] and [1023] derive from the same vessel. The similarity of the rim diameter of the vessel from [1014] to that of [1001] might suggest that the sherd from [1001] also came from this vessel, although this cannot be proved.

Surface treatments, decoration and residues

Sixty-two percent of the total by sherd number show evidence of surface treatments, decoration and residues (55% surface treatments, 5% residues, and 2% decorated). The good quality of the assemblage and the high percentage occurrence of such treatments/residues, *etc*, suggests that a true proportion is represented and that this has not been remarkably altered during deposition.

Surface treatments were represented by burnishing and finger smoothing. Burnishing occurred on 48 sherds (27% of total) from contexts [1001, 1014 and 1023] and was solely associated with fabric F3 globular urns. Finger smoothing occurred on 48 sherds (27% of total) from [1001] and [1017] and is only associated with fabric F2.

Residues were found on only nine sherds (5%) of the total number) of fabric F2 from context [1001]. The residue appears to have been burnt and occurs on the interior of base and lower vessel sherds. No further comment may be made about the precise origin of these residues.

Four decorated sherds were recovered (2% of the total number). All four sherds came from [1001] and would appear to be associated with one (possibly two) bucket/barrel urns of fabric F2. The decoration consists of an applied horizontal cordon around the neck of the vessel

which has then been decorated with fingertipping. This classic Deverel Rimbury technique further reinforces the interpretation of a secure Middle Bronze Age date.

The one surviving rim sherd from this vessel did not show any finger-tipping, holes or lugs on the upper rim, a method of decoration often seen at Sunbury, Acton, and Littleton Reservoir (Barrett 1973), possibly suggesting that the Bankside Close vessel represents a slightly earlier phase or distinct local form. Unfortunately, this cannot be proved and further investigation in the area would be necessary to elucidate this problem. No decoration was seen on the globular urn sherds.

The distribution of the pottery

Eleven sherds were recovered from the evaluation and ten sherds from unstratified areas. The bulk of material came from secure contexts, a few of which were related stratigraphically. Ten sherds were recovered from soil samples. However, as the pottery would appear to be of a broadly contemporary date in the Middle Bronze Age, little phasing evidence can be seen. The pottery has been grouped according to ditch group number and then by ditch slot and context.

Ditch [2000]

This group provided pottery from two ditch slots [1000] and [1012] and produced by far the largest quantity of material, comprising 147 sherds (85% by total number of sherds). Pottery was recovered from five contexts, three from slot [1012] and one each from slots [1010] and [1000].

Slot [1012]: Seventy-one sherds (41% of the total number) were recovered from this slot. Context

[1013], the upper context, contained four small sherds of fabric F2 and, due to the truncation of the ditch, should probably be treated with caution. The middle context, [1014], contained 50 sherds, the main proportion of which comprised sherds from one globular urn of fabric F3. Seven sherds of fabric F1 were also included. Context [1023], a lower fill, contained a similar proportion of fabrics F1 and F3, the fabric F3 sherds belonging to apparently the same vessel as those from context [1014]. The lowest fill [1024] contained no pottery. It would therefore appear that contexts [1014] and [1023] may represent the same phase of activity, with perhaps context [1013] representing a later episode of silting which brought the small sherds into the ditch. From the diagnostic sherds recovered it would appear that the lower section of a globular urn had been deposited into the lower level of the ditch (see discussion below).

Slot [1010]: Two small sherds of fabric F3 were recovered from context [1011].

Slot [1000]: Seventy-one sherds (42% of the total number) were recovered from one context, [1001], from this slot. Of this total, only one small rim sherd of a F3 globular urn was found, the rest of the collection comprising sherds of fabric F2. As has already been discussed, the fabric F2 sherds may be evidence of two vessels, but it is accurate to say that at least one large lower section of a bucket/barrel urn is present, with a few decorated sherds and a single plain rim giving an accurate profile of the vessel.

Ditch [2001]

Two ditch slots [1004] and [1015] yielded pottery from two contexts [1005] and [1017], one from each slot. Only eight sherds (4% of the total number) were found.

Slot [1004]: Four small sherds (approximately 2% of the total number of sherds) of fabric F2 were recovered from [1005], the upper context of the ditch in this slot.

Slot [1015]: The middle context, [1017], of the ditch in this slot provided four small sherds (approximately 2% of the total number) of fabric F2. The sherds show evidence of finger-smoothing on the exterior surface.

Discussion of pottery distribution

Excluding the evaluation and unstratified pottery, the percentage proportions of the pottery found from ditch [2000] (96%) when compared to ditch [2001] (4%), even allowing for a greater excavated area in ditch [2000], showed a remarkable discrepancy. The low quantity and restricted range of the pottery recovered from ditch [2001], if compared to ditch [2000], might suggest a different phase of construction for each ditch. However, the apparently indistinguishable nature of the pottery fabrics does not allow for secure interpretation; the difference can be seen from the quantities of pottery alone.

Base sherds and lower vessel sherds are found in far larger proportions if compared to upper vessel sherds such as rims and decorated sherds. This would suggest that many of the vessels deposited in the ditch had already lost their upper sections prior to deposition, and that those that were deposited were introduced into the ditch in large sections. The fact that the ditch is thought to have been heavily truncated at a later date may also explain the loss of upper pot sections, if it is assumed that the vessels were placed upright into the ditch terminal and then subsequently lost their upper sections when the ditch was truncated.

The remarkable difference in the quantities of pottery from the two ditch groups and the sections of the vessels recovered, as well as the paucity of material from slot [1010], if taken together, could be seen as the result of deliberate selection and inclusion of the vessels as part of a 'foundation' deposit. However, it could equally be possible that once vessels had lost their upper portion they were dumped into the ditch as rubbish. The presence of the highest quantity of pottery in two distinct areas, one near the ditch terminal and the other in the area of slot [1012] and the absence of pottery from the lower levels of ditch [2001] would seem to make the former explanation likely, although neither can be proved with confidence.

Conclusions

The pottery assemblage recovered from Bankside Close, although small, included a reasonable range of forms and decoration typical of the Middle Bronze Age Deverel-Rimbury tradition. The contextual and stratigraphic relationships have allowed for the assemblage to be placed within a secure dating framework, and have provided possible phasing for the ditch and evidence for the cause of deposition.

The assemblage has further added to the picture of Middle Bronze Age sites in this little excavated area of the Thames Valley. The significance of this assemblage is further highlighted by a general lack of well dated, comparable assemblages within the area, especially from domestic sites of the period. The presence of equal proportions of bucket/barrel and globular urns further supports Needham's (1987) suggestion that the restricted range of form types, seen in cremations, does not continue into domestic sites of the period in this area.

Struck flint

Steve Ford

A small collection of 14 pieces of struck flint was recovered from the evaluation and excavation. This excludes a spall from chalk flint found during the evaluation, which is thought to be of recent origin. The collection comprised nine flakes, two spalls, a core fragment and two broken narrow flakes. Where cortex was still present, a gravel source for the raw material was evident. Most of the pieces were in a fresh condition.

The two possible broken blades or narrow flakes may be of Mesolithic or earlier Neolithic origin. The remainder of the material is not closely datable but would not be out of context in the Middle Bronze Age or Late Bronze Age.

Burnt flint

Thirty-nine pieces of burnt flint (231gms) were recovered from the fills of the ditches.

Stone

David Williams

A single piece of non-flint stone was recovered during the excavation from slot [1000] (1001) across ditch [2000]. It was a broken fragment of sarsen with one slightly concave surface, which shows some evidence of wear, suggesting that it may possibly have been part of a saddle quern. It weighed 655gms and was quite likely obtained from the local Tertiary formations.

Carbonised plant remains

Mark Robinson

The fills of the ditches were bulk sampled for artefacts and ecofacts. In total, 230 litres were floated for carbonised plant remains and the residues wet-sieved for finds. Approximately six carbonised cereal grains were recovered from the flots. The only ancient material recognisable was a single grain of *Triticum of Dicoccum* (emmer wheat). This cereal is typical of the Middle Bronze Age, as is the paucity of remains from that period.

DISCUSSION

Steve Ford and Graham Hull

The excavation has examined two small Middle Bronze Age ditches which met at right angles. The artefacts from the ditches were stratigraphically secure with no finds dating from later than the Middle Bronze Age. It was considered that the fairly discrete clustering of the majority of the pottery at the terminus of one of the ditches was residual, being the product, for example, of a later ditch having truncated an earlier feature. However, the fact that Middle Bronze Age pottery came from a context that extended the length of the ditch makes this an unreasonable proposition. Pottery placed at the terminus of ditch [2000] may have been a 'foundation event'. A possible parallel may be drawn with the later deposits at Petters Sports Field, Egham (O'Connell 1986). The pottery assemblage is likely to represent three to five vessels and these probably came from a domestic setting. Other finds from the ditches were: a piece of sarsen that may have been part of a saddle quern; a small assemblage of struck flints; some burnt flints, and a few burnt cereal seeds.

It has been considered that these features define a partially enclosed settlement, similar to those excavated on Cranborne Chase at Down Farm and Angle Ditch, Dorset (Barrett *et al* 1991, 185, 219), but there is little evidence to support this view. If occupation had been characterised by a small number of shallow cut features, then subsequent ploughing and allotment working may have removed all such traces, apart from the deeper ditches. However, other sites in the region such as Prospect Park, Harmondsworth (Andrews 1996a) do have evidence of Middle Bronze Age activity represented by a small number of cut features such as postholes and stray finds even though intensive ploughing has occurred. A ditch adjacent to an occupation site might have been expected to contain a greater range of finds and charcoal from hearths, but these were absent at Bankside Close. For the Bronze Age and earlier periods the characteristics of what constitutes a 'typical' settlement site is open to debate. The possibility that the deposits at Bankside Close represent occupation activity cannot be dismissed out of hand, but a more likely explanation for the function of the ditches is that they served to enclose an area of land and may be more appropriately described as field boundaries. If correct, this is a rare discovery for the region.

Evidence for Prehistoric field systems and enclosure has been widely recognized across the British Isles and Western Europe, for example fields of Neolithic date have been found in Ireland (Caulfield 1983), and Bronze Age fields have been discovered at Fengate (Pryor 1978), Corfe River, Dorset (Cox & Hearne 1991), Cranborne Chase, Dorset (Barrett et al 1991), and Dartmoor (Fleming 1978, 1983). The gravel terraces of the middle Thames Valley also have a share of Prehistoric field and enclosure systems such as at Reading Business Park (Moore & Jennings 1992) and Weir Bank Stud Farm, Bray (Barnes & Cleal 1995). The clearest examples comprise rectilinear arrangements of fields defined by ditches, banks, walls, or lynchets and can include trackways and boundaries. The larger rectilinear systems with a regular layout indicate a planned use of the landscape, whereas irregular or curvilinear fields point to a more piecemeal approach.

In order to assess the regional significance of the Bankside Close findings, Table 3 has been compiled to summarise the results of a search of published, unpublished, and Sites and Monuments Record sources for sites where field systems or enclosures of Bronze Age date have been suggested. Figure 4 shows the location of the sites detailed in Table 3. Despite prevailing opinion that Middle and Late Bronze Age field systems are widespread in the middle Thames

Valley, our search has suggested that sites with unambiguous dating evidence are surprisingly few. The table contains just 16 entries, including Bankside Close. The evidence for field systems of Middle Bronze Age date or earlier is very limited and the evidence is only marginally better for the Late Bronze Age and Early Iron Age. Three sites in Table 3 are attributed to the Middle to Late Bronze Age (8, 9 and 10) and four sites are dated to the Late Bronze Age (2, 3, 7 and 12). Five sites possibly have Middle Bronze Age elements (1, 4, 5, 6 and 11). Of these, two have only been reported in assessment or evaluation reports (4 and 5) and convincing evidence of Middle Bronze Age field systems has not been demonstrated. The site at Muckhatch Farm (1), has not been fully published and previously has been regarded as a settlement enclosure (Ford 1991). It is a poor candidate for a Middle Bronze Age field system. The interim report for Sipson Lane (8) provokes discussion as to what special circumstances allowed a Neolithic ditch to remain visible to be recut in the Middle Bronze Age.

There are a number of large scale projects currently in progress in the region for which there are no formal reports available. Two of the projects are being carried out by Oxford Archaeological Unit. At the Eton College Rowing Lake site at Dorney (13) a number of field ditches have been evaluated which are thought to be of Middle/Late Bronze Age date (Allen & Welsh 1998, fig 7). Similarly, excavation of sites at Dorney along the line of the nearby Maidenhead Flood Relief Scheme at Marsh Lane East (14) has revealed what is thought to be a Middle Bronze Age field system, and that at Lake End Road (15) has revealed a complete Bucket Urn in a boundary ditch (Yates 1997, G20; A Barclay pers comm). Work in advance of the extension to Heathrow Airport (16) has reputedly located widespread Bronze Age field systems (I Lewis pers comm) but no reports could be made available at this time to assess the extent, nature, and chronological basis for these claims.

The sites at Weir Bank Stud Farm (6) and Bankside Close (11), and possibly the more recent discoveries, may be the only well-dated and unambiguous Middle Bronze Age field systems recognised in the region.

The evidence for these field systems has also to be considered against the wider background of Bronze Age settlement in the region. Fieldwork and research in the 1970s generated a great deal

No	Site Name	Comments	Reference	
1	Muckhatch Farm, Thorpe Deverel-Rimbury pottery associated with a curvilinear ditch. Probably part of a settlement enclosure.		Johnson 1975	
2	Stanwell	Late Bronze Age trackway and field system? Some indication of scattered habitation.	O'Connell 1990	
3 4	Reading Business Park Wall Garden Farm, Sipson	Late Bronze Age settlement and field systems. Large elongated pit with pieces of Deverel-Rimbury pottery, struck flints, daub, and cylindrical loom weights. C14 date 1140 +/- 70 bc. Two unconnected stretches of ditch seen as possibly representing an enclosure.	Moore & Jennings 1992 MoLAS 1993	
5	Northolt Road, Longford, Hillingdon	Middle Bronze Age settlement and possibly field boundaries represented by pits and shallow ditches.	MoLAS 1995	
6	Weir Bank Stud Farm, Bray	Middle Bronze Age field system and occupation. C14 date cal BC 1872-1129 (26) UB-3513 and UB-3514.	Barnes & Cleal 1995	
7	Prospect Park, Harmondsworth	Late Bronze Age field boundaries and settlement.	Andrews 1996a	
8	Sipson Lane, Harlington	Middle Bronze Age recut of Neolithic enclosure ditch. Some linear and discrete features assigned broadly to Middle to Late Bronze Age.	WA 1997	
9	Holloway Lane, Harmondsworth	Middle to Late Bronze Age activity. Rectangular enclosure defined by three ditches. Middle Bronze Age pottery fragments in a pit nearby.	MoLAS 1997	
10	Cranford Lane, Harlington	Circle of cooking and refuse pits around a well that probably dates to the Middle Bronze Age. Middle to Late Bronze Age field system identified.	MoLAS 1997	
11	Bankside Close, Isleworth	Deverel Rimbury pottery associated with Middle Bronze Age ditches.	this report	
12	Jewsons, Yard, Uxbridge	Late Bronze Age trackway. Middle Bronze Age gully nearby.	Barclay et al. 1995	
13	Eton College Rowing Lake, Dorney	Field system ditches with Middle/Late Bronze Age pottery in evaluation trenches.	Allen & Welsh 1998	
14	Marsh Lane East, Dorney	Field system with Middle Bronze Age pottery.	Yates 1997; A Barclay pers comm	
15	Lake End Road, Dorney	Ditch with complete Middle Bronze Age bucket urn.	Yates 1997; A Barclay pers comm	
16	Heathrow Airport Terminal 5	Bronze Age field systems?	J Lewis pers comm	

Table 3. Bronze Age sites on the gravel terraces west of London with claimed evidence of field systems and related features

of interest in the Bronze Age (cf Barrett & Bradley 1980) and this work produced a framework with which to understand the period. One particular theme that emerged was the nature and chronology of Bronze Age settlement. Ellison (1981) provided an overview of the period and concluded that permanent well-established settlement commenced in the Middle Bronze Age (and see Childe 1947, 186-9). Subsequent research has looked at these broad patterns on a regional basis. For the middle Thames region it was concluded that the evidence to support Ellison's overview was insubstantial and that there was little evidence for large-scale permanent settlement or land use until the Late Bronze Age (Ford 1991). The number of Late Bronze Age and Late Bronze Age/Early Iron Age occupation sites far exceeds those of the Middle Bronze Age (*ibid*, figs 6.12 and 6.13). If this pattern was largely the result of taphonomic processes it

might be reasonable to expect that the considerable archaeological response to development pressure in recent years would have redressed the balance. This work has led to an increase in the number of Bronze Age sites recorded in the region (O'Connell 1990; Filer 1991; Moore & Jennings 1992; Grimes & Close Brooks 1993; Barnes & Cleal 1995; Cotton 1993; MoLAS 1995; Andrews 1996a; Andrews 1996b; Bell 1996; MoLAS 1997; WA 1997; Ford forthcoming; Allen & Welsh 1998) but has, if anything, reinforced the pattern in favour of the Late Bronze Age. As Table 3 shows, apart from Weir Bank Stud Farm and Bankside Close, and perhaps the sites not yet fully reported on, archaeological fieldwork has had little impact on either the numbers of claimed or genuine Middle Bronze Age field systems. Ellison's (1981) overview is now somewhat dated and for the middle Thames Valley it is not until the Late Bronze Age that permanent

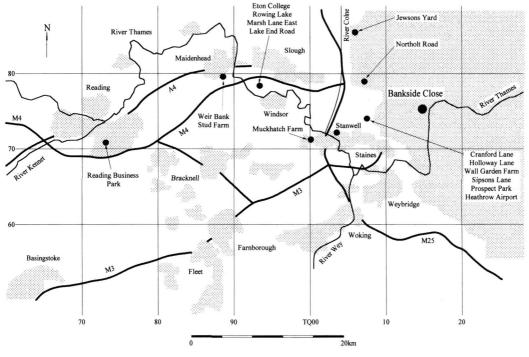


Fig 4. Location of sites mentioned in Table 3

well-established settlement is an appropriate description.

The Bankside Close site is, therefore, of particular interest. First, it adds to the modest corpus of non-funerary Middle Bronze Age pottery from the region. Secondly, the site appears, along with Weir Bank Stud Farm, to be unusual in indicating the presence of Middle Bronze Age field boundaries.

The ditches excavated at Bankside Close and this synthesis of recent work in the region suggest that field boundaries may have begun to be defined in the middle Thames Valley in the Middle Bronze Age. Like the *proven* examples of Bronze Age field systems on the chalk downlands of southern England (Bowden *et al* 1991-3, 130) they are, however, an uncommon occurrence. The development of enclosed landscapes, which leave physical traces, may have been a more gradual process than was hitherto supposed.

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BIBLIOGRAPHY

- ADKINS & NEEDHAM (1985), L Adkins & S Needham 'New Research on a Late Bronze Age enclosure at Queen Mary's Hospital, Carshalton' Surrey Archaeol Coll 76, 11-50
- ALLEN & WELSH (1998), T Allen & K Welsh 'Eton Rowing Lake, Dorney, Buckinghamshire' Second interim report South Midlands Archaeol 28, 25–34
- ANDREWS (1996a), P Andrews 'Prospect Park, Harmondsworth, London Borough of Hillingdon: settlement and burial from the Neolithic to the Early Saxon periods' in P Andrews & A Crockett, Three Excavations Along the Thames and its Tributaries, 1994 Wessex Archaeology Rep 10, 1-50
- ANDREWS (1996b), P Andrews 'Hurst Park, East Molesey, Surrey: riverside settlement and burial from the Neolithic to the Early Saxon periods' in P Andrews & A Crockett Three Excavations Along the Thames and its Tributaries, 1994 Wessex Archaeology Rep 10, 51-104
- ANDREWS & CROCKETT (1996), P Andrews & A Crockett Three Excavations Along the Thames and its Tributaries, 1994 Wessex Archaeology Rep 10

- ARNOLD (1985), D Arnold, Ceramic Theory and Cultural Process
- BARCLAY et al (1995), A Barclay, A Boyle, P Bradley & M R Roberts 'Excavations at the former Jewsons Yard, Harefield Road, Uxbridge, Middlesex' Trans London Middlesex Archaeol Soc 46, 1-26
- BARNES & CLEAL (1995), I Barnes & R Cleal 'Neolithic and Bronze Age settlement at Weir Bank Stud Farm, Bray' in I Barnes, W Boismier, R Cleal, A Fitzpatrick & M Roberts Early Settlement in Berkshire, Mesolithic-Roman Occupation in the Thames and Kennet Valleys, 1995 Wessex Archaeology Rep 6, 1-51
- BARNES et al (1995), I Barnes, W Boismier, R Cleal, A Fitzpatrick & M R Roberts Early Settlement in Berkshire, Mesolithic-Roman Occupation in the Thames and Kennet Valleys Wessex Archaeology Rep 6, 1-51
- BARRETT (1973), J Barrett 'Four Bronze Age cremation cemeteries from Middlesex' Trans London Middlesex Archaeol Soc 24, 111–134
- BARRETT & BRADLEY (1980), J C Barrett & R J Bradley Settlement and Society in the British Later Bronze Age Brit Archaeol Rep 93
- BARRETT et al (1991), J C Barrett, R J Bradley & M Green Landscape, Monuments and Society: the Prehistory of Cranborne Chase
- BELL (1996), C Bell 'An archaeological excavation on land adjacent to Snowy Fielder Waye, Isleworth, London Borough of Hounslow, Middlesex' *Trans London Middlesex Archaeol Soc* 47, 35–60
- BGS (1981), British Geological Survey, 1: 50,000, Sheet 270. Solid and Drift, Keyworth
- BIRD & BIRD (1987), J Bird & D Bird (eds) The Archaeology of Surrey to AD 1540
- BOWDEN et al (1991-3), M Bowden, S Ford & G Mees 'The date of the ancient fields on the Berkshire Downs' Berkshire Archaeol J 74, 109-133
- CALKIN (1962), J Calkin 'The Bournemouth Area in the Middle and Late Bronze Age with the 'Deverel-Rimbury' problem reconsidered' Archaeol \mathcal{J} 119, 1-65
- CAULFIELD (1983), S Caulfield 'Neolithic settlement of North Connaught' in T Reeves-Smith & F Hammond (eds) 'Landscape Archaeology in Ireland' Brit Archaeol Rep 116, 195-216
- CHILDE (1947), V Childe Prehistoric Communities of the British Isles 2nd edn
- COTTON (1981), J Cotton 'Bronze Age Pottery from Wood Lane, Osterley' Trans London Middlesex Archaeol Soc 32, 18-23
- COTTON (1990), J Cotton 'Excavations and observations in Moor Lane, Harmondsworth, Middlesex' in M O'Connell 'Excavations during 1979–1985 of a multi-period site at Stanwell' Surrey Archaeol Coll 80, 1–62
- COTTON (1993), J Cotton 'Excavations and observations of a Bronze Age cemetery and Roman site in Avenue Gardens, Acton, Middlesex, 1882 and 1981-5' Trans London Middlesex Archaeol Soc 44, 1-23

- COX & HEARNE (1991), P Cox & C Hearne 'Redeemed from the Heath' Dorset Natural History and Arch Soc, Monograph Series ix
- ELLISON (1981), A Ellison 'Towards a socioeconomic model for the Middle Bronze Age in southern England' in I Hodder, G Isaac & N Hammond (eds) Patterns of the past
- FILER (1991), J Filer (ed) 'Excavation round up 1990' London Archaeol 6, No 11
- FLEMING (1978), A Fleming 'The Prehistoric landscape of Dartmoor, Part 1, South Dartmoor' Proc Prehist Soc 44, 97–123
- FLEMING (1983), A Fleming 'The Prehistoric landscape of Dartmoor, Part 2, North and East Dartmoor' *Proc Prehist Soc* 49, 195–241
- FORD (1991), S Ford 'The Nature and Development of Prehistoric Settlement and Land Use in the Middle Thames region (8000-500 BC) with special reference to the evidence from lithic artefacts' PhD thesis, University of Reading
- FORD (1998), S Ford 'Land off Bankside Close, Isleworth an Archaeological Evaluation' Thames Valley Archaeological Services Report 98/38a
- FORD (forthcoming), S Ford 'Excavations at Cippenham, Slough, Berkshire'
- GRIMES & CLOSE BROOKS (1993), W Grimes & J Close Brooks 'The Excavations at Caesar's Camp, Heathrow, Harmondsworth, Middlesex 1944' Proc Prehist Soc 59, 303-360
- HODDER et al (1981), I Hodder, G Isaac & N Hammond (eds) Patterns of the past
- JOHNSON (1975), B Johnson Archaeology and the M25, 1971-75, Surrey Archaeol Soc
- MOLAS (1993), Museum of London Archaeology Service, S Mason & J Lewis 'The Developing Landscape of West London Gravels Assessment'
- MOLAS (1995), Museum of London Archaeology Service, 'Land to the North of Northolt Road, Longford, London Borough of Hillingdon, Archaeological Evaluation Report'
- MOLAS (1997), Museum of London Archaeology Service, 'West London Landscape Project, Updated Project Design, Vols 1 and 2'
- MOORE & JENNINGS (1992), J Moore & D Jennings Reading Business Park: a Bronze Age Landscape Thames Valley Landscapes: the Kennet Valley 1, Oxford Archaeological Unit
- NEEDHAM (1987), S Needham 'The Bronze Age' in J Bird & D Bird (eds) The Archaeology of Surrey to AD 1540
- O'CONNELL (1986), M O'Connell Petters Sports Field, Egham, Surrey, Excavation of a Late Bronze Age/Early Iron Age Site, Surrey Archaeol Soc, Research volume
- O'CONNELL (1990), M O'Connell 'Excavations during 1979–1985 of a multi-period site at Stanwell' Surrey Archaeol Coll 80, 1–62
- PCRG (1997), PCRG Study of Later Prehistoric Pottery; General Policies and Guidelines for Analysis and Publication Pottery and Ceramics Research Group, Occasional Papers 1 and 2 revised 1997

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- PRYOR (1978), F Pryor Excavations at Fengate, Peterborough, England, the second report Royal Ontario Mus Archaeol Monog, 5, Toronto
- REEVES-SMITH & HAMMOND (1983), T Reeves-Smith & F Hammond (eds) 'Landscape Archaeology in Ireland' *Brit Archaeol Rep* 116
- ROBERTSON-MACKAY (1987), R Robertson-Mackay 'The Neolithic Causewayed Enclosure at Staines, Surrey: Excavations 1961-3' Proc Prehist Soc 53
- SHEPPARD (1975), D Sheppard 'Two Bronze Age Urns from Kempton Park' Trans London Middlesex Archaeol Soc 26
- SHVETSOV (1955), M Shvetsov J Sedimentary Petrology 25, (3)
- TERRY & CHILINGAR (1955), R Terry & G Chilingar Summary of 'Concerning some additional aids in studying sedimentary formations' in M Shvetsov, J Sedimentary Petrology 25, (3), 229–234

- TIMBY (1996), J Timby 'The pottery' in C Bell 'An archaeological excavation on land adjacent to Snowy Fielder Waye, Isleworth, London Borough of Hounslow, Middlesex' Trans London Middlesex Archaeol Soc 47, 35-60
- WA (1997), Wessex Archaeology 'Imperial College Sports Ground, Sipson Lane, Harlington', Archaeological Assessment Report
- WILLIAMS (1993), D Williams 'Note on the Petrology', in W Grimes & J Close Brooks 'The excavations at Caesar's Camp, Heathrow, Harmondsworth, Middlesex, 1944' Proc Prehist Soc 59, 303-360
- YATES (1997), D T Yates 'Bronze Age Field Systems in Lowland Britain: The Thames Valley' MA dissertation, University of Reading