

Bromley Hall and Caley Wood Fieldwork 2009

by Mark Landon

Braughing Archaeology Group

Bromley Hall & Caley Wood 2009.

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Next, our thanks must go to Richard Maddams, whose detailed local knowledge and wide circle of friends have smoothed our path at every stage.

We would also like to thank:

Dr. Stewart Bryant, Dr. Isobel Thompson and Alison Tinniswood, MA, of the Hertfordshire Historic Environment Unit; Dr. Jonathan Hunn of Archaeological Services and Consultancy Ltd.; Dr. Chris Lydamore of Harlow Museum; Dr. Rosalind Niblett; Christina Harrison of The Forge Museum, Much Hadham.

To anyone inadvertently omitted, we offer our humble apologies.

Any errors that remain are entirely the responsibility of the author.

Mark Landon, Braughing Archaeology Group, January 2010.

Bibliography.

Only two written sources have been consulted in the course of this work: the Study Group for Roman Pottery Newsletter, February 2002, and the Hertfordshire HER. Otherwise, the source of information has been personal communication, and the informant credited in the body of the text.

Introduction.

Despite extensive excavation over many years, little has been published about the Bromley Hall potteries. Both fieldwork and analysis have tended to focus narrowly on the kilns and their products, and for this reason many questions remain unanswered.

The extent of the site, its origins, its relationship to the Caley Wood earthwork (itself hitherto largely ignored), and its place in the densely-packed Late Iron Age and Roman landscape of North-East Hertfordshire, are valid and important areas of study which have not so far been addressed.

The programme of fieldwalking carried out by Braughing Archaeology Group during the autumn of 2009 was an undertaking in many ways ideally suited to community archaeology. It required little funding (a scarce resource), calling instead on the four resources possessed in abundance by the Group – local knowledge, time, enthusiasm and people.

The project also provides a good example of the way in which close cooperation between amateurs and professionals can result in very useful archaeology.

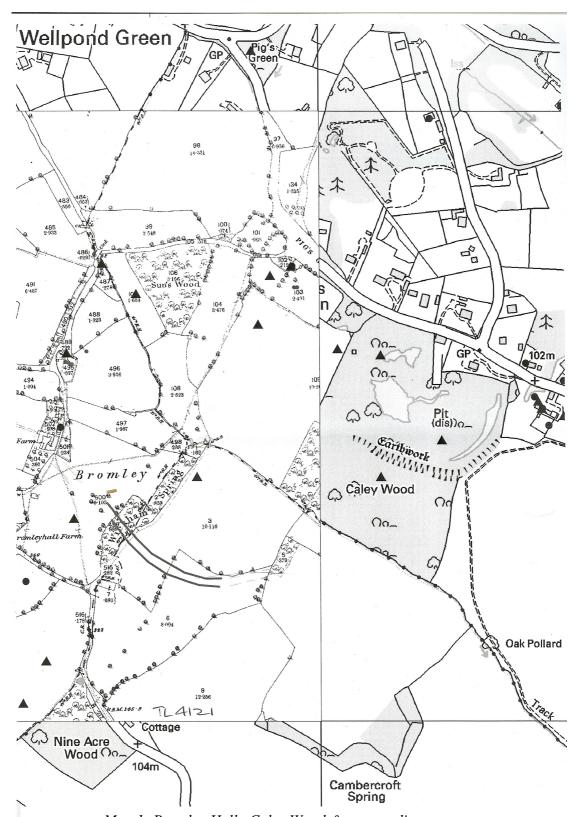
Personnel.



Plate 1: The Fieldwalking Team, 2010.

The following members of Braughing Archaeology Group took part in the 2009 season at Bromley Hall. Thanks are due to all for their stoicism and persistence, come rain or shine:

Caroline Baigent; Mary Cockburn; Mike Cockburn; Bridget Edgson; Lotte Farnham; Jenny Glazebrook; Amanda Halliday; Peter Heath; Zinnia Knapman; Sue Landon; Caroline Lovatt; Richard Maddams; Ian Pinder; Anne Rowe; Charlie Rowe.



Map 1: Bromley Hall, Caley Wood & surroundings

Bromley Hall From Space



Plate 2: The boundaries of the known site.

The site is located approximately five kilometres south-east of the Roman settlement at Braughing, and covers approximately one square kilometre at the head of a shallow valley north of Bromley Hall Farm. It is oriented roughly East-South-East/West-North-West.

The soil varies from a friable, very gravelly loam on the hilltops to heavy clay on the valley sides and floor.

At the bottom of the valley there is a ditch fed by Wickham Spring, which rises at a point some 80 metres south-east of the south-east corner of Sun's Wood, from where it is piped underground to the modern ditch-head. The 1^{st.} Edition Ordnance Survey (1895) shows a wood running between Bromley Road and the spring itself, labelling it 'Wickham Spring'. This wood has now disappeared, but the modern footpath roughly echoes its course.

The largest part of the known site is divided into four fields, and given over to agriculture. In addition, at the western end of the site a paddock is also suspected to contain archaeology while, in the north-east of the site, Caley Wood contains very visible remains.

There is considerable evidence of archaeology visible on the surface. Broadly, it comprises:

i. The Roman road entering the site from the north-west, forming the south-west boundary of Sun's Wood, and visible as a dark line in the ploughsoil of

Caley Wood West (Field 1). It has been assumed that this road joins Stane Street at some point along the southern edge of Darney Wood, about a kilometre east of the Braughing settlement. The course of the road beyond its visible termination near the Wickham Spring ditch remains uncertain, although it has been hypothesized either that it ran either southeast to Roman Harlow (Thompson, pers. comm.), or south to the small kiln site at Plashes Farm (Barr, pers. comm. to Maddams).

- **ii. Two semicircular cropmarks** running through Wickham Spring West (Field 2) and Wickham Spring East (Field 3) noted by Alison Tinniswood in aerial photographs of the site. They are not visible from the ground, and at present their date and function remain unknown.
- **iii. The bank and ditch** in the northern part of Caley Wood, and the very large extraction pits in the wood behind it. At its greatest, the bank is some 6 metres high, and the ditch at its foot is some 4 metres across, but no more than 1 metre deep as presently observed. The feature is linear, with a single, oblique, corner. For most of its length, it runs west-north-west/east-south-east, changing orientation through approximately 120° following the corner.

The material of which the bank is composed is friable and sandy with a large gravel fraction. It is very loose-packed, so that some have questioned whether it could be an ancient survival (Baigent, pers. comm. 2009). However, the presence of many very large 'coppiced' hornbeams both on the southern edge of the ditch and along the crest of the bank, and probable remains of plashed hedging, would seem to rule out a modern origin. In support of this contention may be adduced the fact that the major property boundary within the wood follows the southern edge of the ditch, which would seem to indicate that this was a much more prominent feature when the wood was subdivided than it is now.

At both the north-eastern and north-western extremities, both bank and ditch peter out inconclusively.

Within the rampart, the ground has been massively disturbed by gravel extraction during the Second World War (Pinder, pers. comm.). This disturbance is so extensive that it is questionable whether any of the original surface is left.

The !st. Edition Ordnance Survey Map shows that 'Castle Field', which lay behind the earthwork, was open parkland in the C19th. The dense woodland that we see today is therefore later, probably post World War II.

iv. Surface scatters of pot, covering large areas of the four ploughed fields and along the western edge of Caley Wood. Within the boundaries of the broader

scatter, there are definite concentrations where the density of finds is exceptional.

The History.

The site was first discovered in 1951 by the late J. Holmes. However, the first major excavations were carried out in 1962 by the late Bernard Barr. He intended to discover the course of the Roman road by means of limited excavation. Fortuitously, the trench he put in hit the remains of a C1^{st.} kiln containing large quantities of Grey Ware. It lay beneath the upcast from the road ditch. A second kiln contained 485 kg. of C3^{rd.} Hadham Ware (Hartley, Barr & Rigby, 'Hadham Revisited', S.G.R.P. Newsletter, Feb. 2002).

A further two kilns were excavated by Hartley and Rigby under the auspices of the Ministry of Works in 1968 (Hartley, Barr & Rigby, op. cit.)

Bernard Barr returned to the site in the 1970's, paying from his own pocket for extensive geophysical surveys in Fields 2 and 3(See Appendix II, p. 49). At the same time, he excavated a tile kiln in the Caley Wood West field. He is known to have expressed regret that he had focused exclusively on the excavation of kilns, and had not attempted to investigate either the possibility of structures associated with the manufacture of pottery, or the location of any settlement (Maddams, pers. comm. 2009).

Chris Lydamore of Harlow Museum has been working for some years to edit Bernard Barr's papers for publication under the auspices of the Study Group for Roman Pottery, but the task is not easy.

It is rumoured that a previous manager of Bromley Hall Farm, irritated by importunate archaeologists, deliberately attempted to destroy any in situ archaeology by means of deep ploughing (Maddams, pers. comm.).

In the years following, two independent finds of near complete vessels in the north-eastern corner of the field west of Caley Wood (Pinder, pers. comm.; Halliday, pers. comm.), the first of a substantially intact Samian bowl associated with large fragments of both glass vessels and grog-tempered jars; the second, conjoining fragments of a fine Hadham Ware jug, hinted at the presence of a cemetery in this part of the site.

Building work on the property immediately north of this field produced spoil reportedly 'stuffed' with Roman pottery (Pinder, pers. comm.)

Finds made in the vicinity of the site include two polished Neolithic axes. One remains in the possession of the current owner of the find site, 'Woodlands' at Westland Green (Halliday, pers. com.). It has been suggested that this axe may have originated in Ireland. The second, with a provenance of 'Bromley Hall Farm' on the H.E.R, is stated to have been jadeite. Its current whereabouts are unknown.

The Caley Wood earthwork was visited by the author in 1998 in the course of a survey of 'bury' sites in Hertfordshire. The probable Iron Age origin of the bank and ditch was noted, but no further action was taken.

In 2009 the Hertfordshire Historic Environment Unit, noting the Caley Wood earthwork, carried out a desk-based assessment of the archaeological potential of the site, using both documentary evidence and aerial and satellite photographs. As well as the kilns, the Roman road and the earthwork, they drew attention to cropmarks of two concentric curved ditches running across Fields 2 and 3 (Alison Tinniswood, pers. comm.). They also cited textual evidence for a medieval castle within the earthwork, in a field formerly known as 'Castle Field'. There are several textual references to 'Castell Farm alias Cales Farm' (1277) and the 'castle and manor of Cales' (C15^{th.}) (Hertfordshire HER 797), but the tendency for any ancient banked monument to attract the soubriquet 'castle' seems the most likely explanation for the name, in the absence of any evidence that the site was crenellated.

They were the first to note that 'Wickham Spring' is one of three such place names in the vicinity of Stane Street, and that the other two (Wickham Hill, Braughing, and Wickham Hall, near Stortford) have both yielded evidence of substantial Roman settlements.

It was decided that, in view of the importance and extent of the site, and the number of unanswered questions that it generated, an extensive programme of fieldwork should be carried out. Braughing Archaeology Group was asked to provide a research design for the initial investigation.

Research Design.

a. Aims.

The aims of this project were: to discover the extent of the site; to discover, if possible, the location of any settlement associated with the pottery and Wickham Spring; to examine and survey the Caley Wood earthwork, with a view to establishing its date, function and relation to the later archaeology of the site.

b. Method.

It was decided that the first priority should be to map the location and nature of the visible archaeology by means of fieldwalking. The results this generated would provide a framework within which further work would be carried out.

Bromley Hall presents a number of challenges to the fieldwalker. The mixture of ploughed field, paddock and woodland meant not only that no single technique would be applicable to the whole site, but also (in the case of the paddock) that fieldwalking would

not generate any results whatsoever. In addition, the extent of the site precluded formal gridding in the time available between ploughing and crop germination. Furthermore, preliminary inspection of the site revealed an unparalleled density of finds covering large areas, so that any strategy requiring the retention of all finds along a row would overwhelm any system of recording with the sheer volume of material.

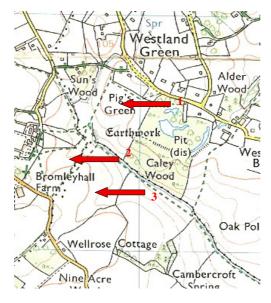
The strategy adopted for the ploughed fields attempted to meet these challenges, while still being able to produce useful data.

Walkers were set out 20 paces apart, and asked to stop every twenty paces, pick up all finds within arm's reach and place them in a bag labelled with Row and Bag number, before walking another twenty paces forward. Behind them, a recording team sorted the contents of each bag into 9 separate categories, counted the number of finds in each category, and listed the totals on a pre-printed record sheet (see below). The finds were then redeposited at their point of origin, unless of exceptional interest. The underlying aim was near-zero retention.

The results would then be plotted onto a large-scale map to provide a reasonably detailed picture for each of the fields of the density and distribution of finds. It was appreciated from the outset that the grid would be too coarse to enable the discrimination of features such as individual kilns or buildings.

Fieldwalking Results.

The Fields We Walked



Map 2: Fields 1, 2 & 3

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txe Xayen, Green end, Braugxing, Xerts. SG11 2PG
tel. 01920 822138 Mob. 07831 830641
email: Goldfincklandscapesitd@yaxoo.co.uk



Plate 2: Tiny figures in a large landscape – Walking Field 2, October 2009.

Three fields were walked during the Autumn 2009 season, spread over four days: 18/10/09; 25/10/09; 15/11/09; 22/11/09. Sorting was fairly rudimentary, and did not distinguish between Late Iron Age grog-tempered grey ware and later, Roman, grey ware.

Field 1, Caley Wood West, was walked in its entirety. The rows were oriented parallel with the western (Caley Wood) field boundary, and walked south to north, commencing 20 paces inside the southern field boundary. Row 1 was closest to Caley Wood. Seventeen rows were walked, and 193 bags were collected. Distribution maps of the results are presented in full in Appendix I, showing first aggregated finds, then Grey Ware, Rare & Off-Site Types, followed by Oxidized Ware, and finally, Brick/Tile.

Field 2, Wickham Spring West, was also walked in its entirety. Rows were oriented east-south-east/west-north-west, with Row 1 in the north-eastern corner of the field. Eighteen rows were walked, and 127 bags collected. The results are presented under the same conventions as those for Field 1.

Field 3, Wickham Spring East, was not completely walked. There were two reasons for this: first, because the crop had begun to sprout; second, because the final day of fieldwalking was cut short by heavy rain. Rows were oriented parallel with the Wickham Spring footpath, and walked north/south, with Row 1 commencing in the northwest

corner of the field. Nine rows were walked, and 190 bags were collected. The results are presented under the same conventions as before.

A total of 510 bags was collected. 60 bags contained no finds at all. The remaining 450 bags yielded a total of 7401 finds. This total is analyzed in Table 1 below.

Table 1: Breakdown of Finds Total by Field and Category

Field Number	Grey Ware	Oxidized	Brick/Tile	Other	Aggregate
1	1437	591	532	17	2577
2	331	323	301	6	961
3	1989	1497	353	36	3875
Total	3757	2411	1186	59	7401

From these basic figures, we can derive a series of averages against which we can measure find densities at particular points across the site. These are listed below in Table 2, accurate to one decimal place.

Table 2: Average Find Densities Per Plot by Category

Grey Ware	Oxidized	Brick/Tile	Other	Aggregate
7.4	4.7	2.3	0.1	14.5

Clearly, the first general point to be noted is the sheer quantity of surface finds. Given that this survey is effectively a 1/400 sample of the total area of the field, simple multiplication shows that around 2,900,000 surface finds can be expected across the area walked. Furthermore, in view of a known rate of retrieval by fieldwalking versus total number of finds in the soil of 2% - 8%, we might reasonably hypothesize that, even before any intact deposits are considered, the area walked may contain at least 36,000,000 finds.

The next general point to be noted is the very large area – some 20 hectares - over which the averages in Table 2 are maintained.

These averages are also very high. By way of comparison, fieldwalking on the sites of four farmsteads in the Braughing settlement hinterland has never generated a density of 14 finds per square metre, even at the points of greatest concentration. Within the Braughing settlement itself, 14 surface finds/m² is exceptional and very localized.

The two most common find types are Grey Ware and Oxidized Wares, at a ratio of more than 2 fragments of Grey Ware to 1 fragment of Oxidized Wares.

Another general point to be made from these figures is the extreme paucity of finds of pottery of off-site manufacture, only slightly better than 1 find per 10 m². This is to be expected: any inhabitants of the potters' settlement at Bromley Hall would have had very

little call to buy pottery from elsewhere. However, this tiny proportion is of disproportionate importance. Since the manufacture of pottery at the site has the effect of masking settlement activity, these few sherds are the best evidence we have of the rough location of any habitation.

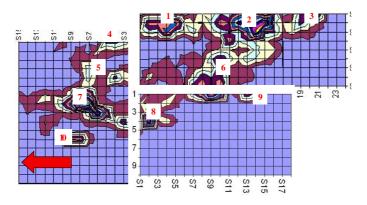
There is, however, an important caveat which should be borne in mind. We must be aware that the fieldwalking results are not necessarily an accurate reflection of the archaeology in the ground. The site encompasses hilltop, slopes and valley floor, which means that erosion and deposition have both occurred in different areas of the site, and this inevitably skews the data obtainable by fieldwalking. The data set is not firm enough to support very close interpretation.

Before proceeding with a more detailed examination of the fieldwalking results, it must be explained that, since the modern field boundaries in the portion of the site that has been walked seem to bear little or no relation to the distribution of the archaeology revealed so far, the results will be examined as a whole, rather than field by field. The convention adopted for referring to individual plots is *Field number/Row number/Bag number*.

Ten major concentrations of ceramic debris have been revealed during the course of surface investigation of the Bromley Hall site. They are shown on the schematic representation below, numbered for ease of reference. A major concentration was defined as 'Two or more contiguous plots with more than twice the site average of aggregated finds' (since the site average for aggregated finds = 14.5, this equates to 30+ finds per plot).

The two most significant concentrations discovered so far, numbers 2 and 6, coincide with extensive areas of black earth.

The Major Concentrations



Map 3: Aggregated finds density across the area walked

Table 3: The major concentrations listed.

	Conc. No. One No. of Plot				1		
P	03/07/02	03/07/03	03/07/04	03/07/05			
Plot		03/08/03	03/08/04	03/08/05			
Z							
Numl							
bers							
S ₂							

	Conc. No. Two			No. of Plots 25				
P			03/06/11	03/06/12	03/06/13			
Plot		03/07/10	03/07/11	03/07/12	03/07/13	03/07/14	03/07/15	03/07/16
	03/08/09	03/08/10	03/08/11	03/08/12	03/08/13	03/08/14	03/08/15	03/08/16
Numbers		03/09/10	03/09/11	03/09/12	03/09/13	03/09/14	03/09/15	03/09/16
bei								
S.								

		c. No. ree		No. of Plots 4			1	
P	03/08/19							
Plot	03/09/19	03/09/20	03/09/21					
Num								
B								
bers								
S								

Conc. No. No. of Plots Four 3					5		
P	01/01/03	01/01/04	01/01/05				
Plot							
-							
Num							
bers							
S							

		onc. No. Five			No. of Plots 2			
P	01/04/07							
Plot	01/05/07							
-								
Numbers								
bei								
Š								

		e. No. ix				No. of Plots 15	1	
P	02/07/01	02/08/01	02/09/01	02/10/01				
Plot	03/01/07	03/01/08	03/01/09	03/01/10				
Z		03/02/08	03/02/09	03/02/10				
l H				03/03/10				
Numbers			03/04/10	03/04/10	03/04/11			
Š								

	Conc. No. Seven					No. of Plots 10	}	
Ŧ			01/07/07	01/07/08	01/07/09			
Plot			01/08/07	01/08/09	01/08/10			
Ž	01/09/05	01/09/06	01/09/07					
Numbers								
bei								
3								

	Conc. No. Eight			No. of Plots 2			
P	02/02/03	02/02/04					
Plot							
2							
bers							
8							

Conc. No. Nine				No. of Plots 2					
P	02/13/01	02/14/01							
Plot									
Num									
bers									
S									

Conc. No. Ten				No. of Plots 2				
P	01/12/08	01/12/09						
Plot								
Z								
<u>B</u>								
bers								
si.								

Before proceeding with the detailed analysis of the makeup of each concentration, it is worth comparing actual finds totals with projections drawn from the site average. The table below shows very clearly how much greater is the density of finds in areas of major concentration than across the generality of the area walked.

Table 4: Comparing density of finds in major concentrations with projected totals.

Conc. | Projected | Actual |

Conc.	Projected	Actual
Number	Total	Total
1	101.5	338
2	362.5	1304
3	58.0	181
4	43.5	122
5	29.0	73
6	217.5	674
7	145.0	748
8	29.0	137
9	29.0	84
10	29.0	120

Moving on to compare the major concentrations one with another, it is at once clear that the ratio of the various find types in each concentration varies very significantly. It seems reasonable to assume that – at least in part – this results from a different history of activity in each of these areas.

Conc. No.	Grey	Oxidized	Brick/Tile	Aggregate
One	30.0	11.9	5.6	46.9
Two	28.9	19.4	3.7	52.2
Three	18.5	13.8	2.0	45.3
Four	23.7	12.4	4.3	40.7
Five	4.5	5.5	20.0	36.5
Six	29.3	20.0	3.3	53.0
Seven	53.4	13.4	6.7	74.8
Eight	10.5	25.0	32.5	68.5
Nine	17.5	22.5	2	42.0
Ten	38.0	14.0	8	60.5

Table 5: Concentration averages per plot listed by type

Find types other than these three are so rare that any talk of 'averages' would be vain, and they have therefore been omitted from the table above.

It will be observed that in each concentration the average number of finds of each of the three main find-types is far from constant, and that there appears to be no absolute link between variation in the three find types considered: a high concentration average for one find type implies neither that the other find-types will also have a higher concentration average, nor that they will have a lower. Moreover, although the concentration average for a given find type will often be many times higher than the site average for that type, the average quantities of individual find-types in a given concentration are also sometimes significantly less than the average for the site. The Grey Ware average for Concentrations 5 & 8 is significantly below the site average, as is the Oxidized Ware average for Concentration 5, and the Brick/Tile average for Concentrations 3 & 9.

The fact that the averages for the various find-types apparently vary independently from concentration to concentration would seem to indicate that the activities which gave rise to these find-types also took place independently of each other. This fits in well with what we know of the chronology of the two main pottery types: the commencement of the manufacture of Grey Ware on site occurred some two centuries before the commencement of the manufacture of oxidized wares, therefore during these two hundred years the manufacture of Grey Ware could not have had any direct relation to the manufacture of Oxidized Ware.

This becomes more obvious when one applies the '2 x Site Average/2 contiguous plots' standard to the individual find-types.

			ROWS		
		6	7	8	9
BAGS	1				
	2		G A	В	
	3		G A	G O B	
	4		G O A	G O B A	
	5		G A	G O B	
	6		G	GO	
	7		G		
	8				

Table 6: Concentration 1, distribution of '2 x site average' plots for each find type

Of the 11 plots shown, 3 contain only one find-type at a density greater than or equal to '2 x site average for that type' (or, in the case of 'Other', greater than or equal to 1), which will be termed 'significant density'. Four plots contain only two of the four find-types at the densities specified above, and only one plot out of the 11 contains all four find-types at the specified densities. Furthermore, referring back to the original data for Concentration 1, which was collected from aggregated finds totals, we see that none of the three plots containing a single find-type at significant density is included in Concentration 1.

From this we may deduce that although deposition of the various find-types can take place in the same general area, deposition of these find-types occurs preferentially in different parts of this general area.

However, a new factor for consideration emerges when the 'significant density' standard is applied to the part of Field 1 surrounding Concentrations **4**, **5** and **7**, defined by the plots 01/01/01; 01/01/13; 01/10/13; 01/10/01.

ROWS

BAGS

	10	9	8	7	6	5	4	3	2	1
13										
12			В	В	В					
11			В							
10			GB							
9			G B	G B	В				A	
8			G B	G B	В					
7		GO	GO	G B	В	В	В		A	
6		G O B	О	В		В				
5	AB	GO B								G O A
4	AB					G				GO
3	A					G				GO
2		A				GO				A B
1						GO				В

Key
= Major concentration G = Grey O = Oxidized B = Brick/Tile A = Other

Table 7: Field 1, areas of significant density compared with areas of major concentration

Thirty-four plots out of 130 contain significant densities of one or more find types, compared with 15 plots included as part of a major concentration. Nineteen plots with significant densities of individual find-types—more than 50% of plots with significant densities—are therefore not part of a major concentration.

It would not be unreasonable to conclude that the correlation here between significant densities of find-types and areas of major concentration is weak, particularly in the case of Brick/Tile: there are 22 plots showing a significant density of Brick/Tile, of which 13 - 59% - fall outside a major concentration.

However, the most obvious example of the weak correlation between areas of significant density and areas of major concentration appears in the area defined by plots 01/04/01; 01/05/02; 01/05/03 and 01/05/04. This cannot be considered a major concentration because, although two plots (01/05/01 and 01/05/04) meet the 2 x site average for aggregated finds, these are not contiguous. Yet it would be hard to deny that this is a concentration of a sort – a minor concentration.

It is not immediately clear what conclusions should be drawn from this observation, whether it reflects a genuine difference in patterns of activity across the field, or simply the shortcomings of the classification system adopted. Whatever the answer may be, it is very likely that this represents the furthest limit of meaningful analysis of the data retrieved so far.

What follows is a less minute and formal discussion of the evidence to discover how far it can help to answer the original aims of the investigation.

a. Kiln Debris.

Kiln debris has not proved common on the site to date, with only a handful of specimens from concentrations 2, 3 and 5. Indeed, on the basis of kiln debris alone, it would be hard to conclude from the fieldwalking evidence that this was a major centre for the manufacture of pottery. However, we know from the work of Barr and Hartley & Rigby that this picture would not be accurate. This is an important point, and one that requires consideration: why is there so little kiln debris?

There are several possible reasons for this. The first is a failure to retrieve the material during fieldwalking: irregularly shaped, unevenly fired, and lacking most of the features one might normally rely on to differentiate pottery from clods of mud, kiln debris is easily overlooked, and so this is a factor that cannot be ignored. The second possible reason for the paucity of kiln debris applies to the lower-lying parts of the site: the low levels of finds generally in the vicinity of the Roman road, at a point where we know that Bernard Barr found the remains of at least two kilns, could be taken to imply that deposits in the valleys may well be buried beneath hill-wash caused by ploughing. The third possible reason concerns differential preservation: kiln debris has not been purposively fired, nor has the material of which it is formed been prepared or worked prior to being applied to the withy framework of the kiln. It is therefore fragile, even friable, and ploughing and weathering could well reduce it to fragments too small to identify in the ploughsoil.

Chris Lydamore (pers. comm.) confirms that kiln debris does not survive long in the ploughsoil, and states that these few finds must indicate that fresh archaeology is being revealed at these points. The clustering of fragments represented by the fragments found at 03/07/18, 03/07/20, 03/09/19 and 03/09/20 could well represent the site of a group of kilns.

b. Tile and Brick

Tile and brick, much of it clearly of Roman origin, is found scattered across much of the site at very low levels. Only at two points, Concentration 7 and a minor concentration in Caley Wood West (Rows 4-6; Bags 6-8), does it show a density of more than 20 fragments per bag. Flue tile was found at both of these locations, as were kiln wasters. It would not be unreasonable to conclude that their manufacture was taking place at or near these points. In the case of Concentration 7, it should be noted that the ditch separating Wickham Spring West from the adjacent paddock immediately west of this concentration also produced large quantities of both pot and tile, suggesting that kiln activity may well extend into this field.

The more generalized, low-level, scatter of brick/tile across the site also requires explanation. The levels observed accord well with those observed on habitation sites in the hinterland of the Braughing Roman town, where they have been interpreted as the remains of buildings with tiled roofs. This idea will be further explored below.

c. The Pottery.

The salient feature of the surface pottery deposits on this site is their density and extent, which far exceed what has been observed on any habitation site in this area. Even without the evidence of previous excavations, it would be safe to conclude on the strength of this that Bromley Hall was more than the product of very dense habitation.

The next point to be noted is that all the major concentrations are composed of more than one type of pottery of on-site manufacture. This indicates that pottery manufacture took place in much the same locations throughout the period in which the site was in use, from the Late Iron Age right through to Late Roman.

It is important for our understanding of the Bromley Hall Kilns to bear in mind that many different types of pottery seem to have been made here.

Several clear variants of Grey Ware have been observed, with distinct differences in terms of hardness, temper and surface finish, among them a grog-tempered Rilled Ware with a Late Iron Age/peri-conquest date; a fine, hard fabric with little or no temper and a darker grey cortex which is occasionally lightly burnished, and sometimes decorated with complex and delicate impressed designs; a coarse, hard, grit-tempered fabric; a soft, porous fabric which may be sand-tempered.

There is also more than one type of oxidized ware: a fine, hard fabric which is occasionally partially coated with a black slip, and a thicker, softer ware with a burnished red slip – characterized by Pinder (pers. comm. 2009) as 'coming off on your fingers' – which imitates Samian.

On-site manufacture has also been suggested for:

- 1) A white-slipped oxidized ware imitating the white fabrics made at Verulamium and Colchester.
- 2) 'Romano-Saxon' ware.
- 3) A Black Burnished ware.
- 4) A soft, brown, grog-tempered, fabric
- 5) Mortaria in a hard oxidized fabric.
- 6) Herts, and Essex Ware.

However, these types occur with very different frequencies: Grey Ware is the most common, outnumbering oxidized wares by a ratio of about 3:2, with the coarse brown ware coming in a poor third. Black Burnished seems to be even less common; however, this may be the result of the destruction of surface finishes by abrasion: abraded Black Burnished is almost indistinguishable from abraded Grey Ware. Two fragments of mortarium were noted. There was only one (casual) find of confirmed Herts. & Essex Ware, and no fragments of white-slipped ware or 'Romano-Saxon' ware were recorded.

Given the very small quantities of the five minor types, it should be concluded that the current survey has not confirmed their on-site manufacture. It has been suggested above that the significant preponderance of grey wares over oxidized wares may be the result of the longer time-span during which the grey wares were manufactured, but it could as easily reflect a difference in the scale of production of each type.

The very occasional finds of pottery of off-site manufacture do not reveal any clear points of concentration, and are scattered almost at random across the obvious areas of use. This is only to be expected: the potters of Bromley Hall would have had very little call to import pottery of any save the most expensive kinds, such as Samian or Nene Valley ware.

Grog-tempered storage jar fragments are much less common than on known habitation sites from Braughing and its hinterland, where this fabric typically makes up between 10% - 30% of the total pottery finds. It might be concluded from this that grog-tempered storage jars were not commonly manufactured at Bromley Hall. A possible reason for this might be that, with their ability to manufacture very large quantities of better-quality wares, the inhabitants (if any) of Bromley Hall had no great need for this type of low-grade, hand-made storage jar. A second possible reason for this might be that the activity with which grog-tempered storage jars were associated did not often take place at Bromley Hall.

The Caley Wood Earthwork.



Plate 3: The Caley Wood bank and ditch, looking West.

The Caley Wood earthwork was inspected on three occasions: 22/08/08 (by Dr. Jonathan Hunn and Mark Landon); 09/11/09 (by Dr. Stewart Bryant, Dr. Rosalind Niblett, Dr. Isobel Thompson and Mark Landon); 15/11/09 (by Braughing Archaeology Group).

It was suggested by Dr. Hunn that the rampart might represent an unfinished hillfort. Limited exploration of the interior revealed that little, if any, original ground surface remains undisturbed, although this remains to be confirmed by a systematic survey. It was noted that the rampart varied in height from little more than a metre at either end to almost four metres at its south-eastern corner.

Dr. Niblett felt that the earthwork was intentionally linear, citing parallels with earthworks of similar size and extent at Colchester, and demonstrated that its most impressive aspect was sited to dominate the approach to the Wickham Spring valley from the south-east, rather than to dominate the valley itself.

Both Dr. Hunn and Dr. Niblett were emphatic that, on the basis of size, form and location, an Iron Age origin for the earthwork was most probable.

It was noted by Braughing Archaeology Group that the rampart had been breached at two points in order to drain the water that had accumulated in the extraction pits immediately behind it.

None of the inspections revealed any trace of a formal gateway. The only find of any antiquity made in the vicinity of the earthwork is the handle of a Herts. medieval grey ware jug retrieved by Susan Landon in 1998, with a date range C12^{th.} – C14^{th.}

Ideas and Interpretations

i. The Road

Given that excavation has shown that the Roman road overlay a Grey Ware kiln of the later C1st, it is undeniable that the construction of this road postdates the beginning of pottery manufacture on the site by a significant margin.

Furthermore, it is hard to see the course of the road, running from Stane Street to the centre of the Bromley Hall site, as being entirely fortuitous. Instead, it seems much more likely that the presence of the potteries influenced the choice of route, whatever the intended destination.

Finds from the Braughing settlement area and its hinterland show that very substantial amounts of Hadham Grey Ware and, in smaller but still significant amounts, the earlier Rilled Ware were used there well before the construction of the known road. They were not carried over fields and ditches, through hedge and forest, from Bromley Hall to Braughing.

The road dug by Barr in 1962 is therefore most likely a replacement for a much earlier route, which will have been in use since at least the Late Iron Age.

In itself, this conclusion is unsurprising, since it is well known that Stane Street, with which the Roman Bromley Hall road joins about 2 Km. East-North-East of Braughing, was an Iron Age road modified by Roman engineers. Indeed, this would not seem untypical in the Braughing area. Iron Age origins have been suggested for both the B1368 (Thompson, 'Braughing Extensive Urban Survey') and the Great Chesterford Road (Landon, 2005, unpubl.). Herein lies the interest: we are very possibly looking at the traces of an extensive Iron Age road system, and the possibility that this system reflected not only the importance of Braughing in the Late Iron Age as a focus for

importation and trade, but also the regional trading network of which Braughing was a part.

ii. The Caley Wood Earthwork.

An Iron Age origin for the Caley Wood earthwork has been assumed but, since the attribution is largely based on typological considerations, this is not yet by any means certain.

However, there are some facts that can be derived from the standing remains. First, the magnitude of the work required for its construction would seem to exclude any casual function: this is much too large for a field boundary or a woodbank in this region. Second, the siting of the earthwork at the top of a scarp slope makes a purely defensive function highly unlikely, since it leaves the easy approach to the hilltop via the dip slope entirely open and unprotected. Third, the scale of the construction would seem to suggest the use of a relatively large, coordinated workforce.

It is hard to believe that a settlement of the size of Wickham Spring, probably fewer than 15 compounds in all (based upon the known concentrations of pottery, and the certainty that the site extends well beyond the area walked), could have provided the labour necessary to achieve completion of the project within a reasonable timeframe. Moreover, it is also hard to believe that such a small community would have expended so much effort on a project which would seem to have brought them no tangible benefit: the probable cemetery between the south-west termination of the bank and the nearest pottery concentrations would seem to indicate that the area of the potteries lay some distance outside the bank and ditch – which, being linear, would anyway have afforded little or no protection to whatever lay behind it.

Although the precise function and date of the Caley Wood earthwork are not certain, one can say with some evidential force that a number of possible suggestions do not apply to it.

It is not a henge, because the ditch is undeniably outside the bank. It is not a cursus, as there is no second, parallel bank. It is not a hillfort, as the most imposing parts are not sited defensively, and there is no sign that it was an enclosure, or that it was ever intended to be so. On these grounds, a possible medieval origin, as part of the construction of Caley Castle, would also seem most unlikely, although medieval recutting of the ditch may be suggested by the fact that one of the internal boundaries of the wood follows the outer edge of the ditch, thus implying that it remained a very substantial feature when the wood was subdivided.

The earthwork is not associated with water management, either for irrigation or as a mill leat, for the ditch does not run from a source, neither does it debouch into any watercourse.

As noted above, it is too large for a field boundary or a woodbank.

Finally, an origin in the Industrial Revolution or later seems extremely unlikely – The bank appears to be upcast from the ditch, which rules out opencast extraction as a function, and it is certainly not a canal or a railway embankment.

These conclusions are all reasonably secure, but they are all negative: it is unlikely that the Caley Wood earthwork is Neolithic, Medieval, Tudor or Modern. The only remaining possibilities for the date of its construction are Bronze Age, Iron Age or Saxon. The only remaining possibilities for its function are ritual or symbolic.

However unwillingly, it must be allowed that the earthwork could mark a religious site. One might adduce the presence of a cemetery on its margins in support of this idea, as well as its clear separation from areas of high activity. Linear religious monuments are not unknown in the Iron Age: Beech Bottom Dyke (Bryant, pers. comm. 2007) is a well-explored example, but it differs from the Caley Wood earthwork more than it resembles it, being much longer, having no noticeable bank, and a broader ditch, which is much deeper than would have been possible for the Caley Wood ditch. If the Caley Wood earthwork is a religious monument, then it is unique in Iron Age Britain. If it is symbolic, then what does it symbolize?

In order to arrive at any positive suggestions for the date, nature and purpose of the monument, it is necessary to consider it in relation to the landscape and archaeology of its surroundings.

First, as has been mentioned, it is a linear feature which would appear to have an *inside* and an *outside*. The inside of the feature, north of the bank, could be characterized as uphill: the crest of the bank is easily accessible from this side; the bank itself, unimposing. The outside, beyond the southern edge of the ditch, could be characterized as downhill, dominated by the bank which, together with the ditch, is even today a serious obstacle.

Because it is not an enclosure, neither the land 'outside' the earthwork nor the land 'inside' has a definite limit at any point other than the earthwork itself. This is a demarcation, but a demarcation of finite length, and it does not seem unreasonable to conclude that this demarcation applied – 'made sense', if you like – only along the length of the earthwork.

Interestingly, although the evidence for kiln-sites and settlement found so far falls largely 'outside' the earthwork, the Braughing settlement could be construed as being on the 'inside'. Although there is no firm evidence that the Caley Wood earthwork was part of a much more extensive system of banks and ditches, as seen at Camulodunum, there are

nonetheless features in the surrounding landscape which enable us to consider this possible. The semi-circular cropmarks noted by Tinniswood south of Caley Wood should certainly be borne in mind in this context, but there are two features at some distance to the south of Bromley Hall which require note to be taken of them.

The tumulus on Barrow Hill, north of Widford, like the Caley Wood earthwork, is situated on an eminence west of, and overlooking, the Ash Valley. It is mentioned in the HER as Roman. Given that tumuli have often been interpreted as territorial markers, it is not too far-fetched to suspect that Barrow Hill might be denoting a continuation of the same territorial division as Caley Wood.

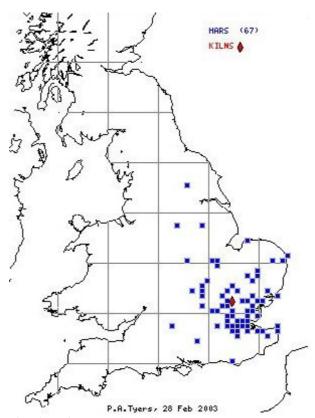
Immediately south of the barrow, and north-west of the junction of Pegs Lane and Nether Street with the B1004, a bank sufficiently substantial to warrant inclusion on the OS 1999 1:25000 map is certainly worth further investigation.

Next, we should examine the situation of the bank and ditch, at the mouth of the Wickham Spring valley, near the top of a steep slope in order to maximize its impressiveness, its most imposing aspect directed towards the valley approaches from the East and South-East. This is clearly the point at which the builders felt the statement of demarcation had to be made with greatest force. The further west one progresses along the valley, the less imposing the bank and ditch become, and then they stop altogether – The point has been made, and one is fully within the territorium which commenced at the valley mouth.

One suggestion for the course of the Roman road is that it ran eastwards along the valley floor, before striking a course for the Harlow settlement. If the course of this road, as has been hypothesized, echoes the course of an Iron Age predecessor, then the earthwork must be regarded as existing in relation to this road, and the mouth of the valley should perhaps be seen as a formal gateway in the frontier of a territorium which included the Braughing settlement and its hinterland.

If this interpretation is correct, and this is a frontier, then a Saxon origin can be discounted: the evidence is that Much Hadham was not even close to a Saxon border. Although possible evidence for Bronze Age activity has been noted in Caley Wood (one struck flake and one edged tool were found in the south-west portion of the Wood, well beyond the earthwork), there is much more evidence for Iron Age activity across the Bromley Hall site generally. However, the absence to date of any finds (other than the single medieval sherd noted above) from the area of the earthwork means that attribution and dating cannot be regarded as secure.

iii. The Potteries



Map 4: The distribution of Hadham Ware in Late Roman Britain.

Lydamore (pers. comm. 2009) is emphatic that the Bromley Hall kiln site is too small, and by a wide margin, to have produced all of the pottery generally classed as 'Hadham Ware' found on sites across the region. There are two possible reasons for this, which are not mutually exclusive. Lydamore himself feels that there must have been many more kiln sites producing Hadham Ware, so far undiscovered, and suggests that we should therefore refer to 'Hadham-Type Wares'. The second possibility is that the Bromley Hall potteries were much more extensive than hitherto suspected.

It was with this possibility in mind that fixing the limits of the site was included as one of the main objectives of the current survey.

In some ways it could be considered that this objective has not been achieved: at no point on the edges of the known site has it been possible to demonstrate a clear boundary to the kiln area. However, there is undeniable evidence that activity continued well beyond the northern boundary of Caley Wood West field (see above), and preliminary investigation has revealed traces of activity in the field south-east of Field 3 and south-west of Caley Wood. It is therefore certain that activity continues well beyond the boundaries of the known site. It only remains to fix exactly how far beyond, and in which directions.

In the portion of the site walked so far, it has been noted that areas of high concentration tend to contain more than one type of find in significant densities, regardless of period. This would seem to indicate a continuity through time in the way the site was organized: in those parts of the area studied where one may reasonably assume that the surface archaeology is a fair reflection of the archaeology in the ground – which is to say, the slopes and summits (which are subject to erosion), rather than the valley floor (where the colluvium is deposited) – the parts of the site where activity took place, and the parts of the site where activity did not take place, remained fairly constant for than three centuries. The presence on site of quantities of pottery with a Late Iron Age/peri-conquest provenance means that the possibility must be considered that this pattern of use was fixed in the Late Iron Age.

If this proves to be the case, then by 43 AD Bromley Hall must have been part of a settled economy, a settled economy that persisted until the last forty years of the Roman administration. We should, perhaps, envisage a community which generated at least part of its income by the commercial production of pottery, and was prepared to maintain this income by adapting the product to the taste of the day, and that this commercial activity originated in a pre-Roman economy which continued to influence patterns of trade until the late C4th. Indeed, while it is true to say that the taste and requirements of the Roman administration influenced the output of the potteries, and that the collapse of Roman rule almost certainly caused the cessation of production at Bromley Hall, it is equally true that the potteries influenced the Roman authorities: the choice of course for the Roman road was undeniably dictated by the presence (and possibly the requirements) of the potteries.

v. The Wickham Spring Settlement

The late Bernard Barr often expressed regret that he had concentrated his efforts on the excavation of kilns at Bromley Hall, to the exclusion of traces both of structures ancillary to the production of pottery, such as clay sumps and drying sheds, and of habitation. He doubted the existence of a permanent settlement, advancing instead a picture of seasonal occupation. However, although the firing of pots was carried out during the summer, the process of digging and preparing the clay took place during the autumn, winter and

spring, so the seasonality of activity cannot be adduced in support of temporary occupation.

Since such a pattern of use would have left minimal traces in the archaeology – one does not take one's best china on a camping holiday – it was hoped at the inception of the present project that the presence or absence of expensive pottery of off-site manufacture might enable a credible answer to the question of seasonal versus permanent settlement.

The possible cemetery in the north-east corner of Field 1 is perhaps the first indication that there was a degree of formality to habitation on site: since in Roman law a graveyard had to be outside a settlement, this implies some sort of agreed boundary to habitation on site.

Lydamore (pers. comm., 2009) had drawn attention to the occasional presence of Samian sherds on the site, and this was confirmed by the fieldwalking results: including 3 casual finds (one of them, found approximately 40 metres south-east of Plot 03/09/19, decorated), a total of 11 Samian sherds was found. The three fragments of Nene ware are also certainly of off-site manufacture, as is the one fragment of cream-coloured ware, and the single fragment of amphora. All of these finds are of relatively expensive or exotic types, and argue for permanent, as opposed to seasonal, occupation. The six sherds of grog-tempered storage jar found in Field 3 would usually indicate domestic activity.

However, perhaps the most convincing evidence for settlement found so far is the very substantial fragment of Roman quern found near Plot 03/06/10. It is made from 'German' igneous rock and, when complete, would have been nearly a metre in diameter. This would not have been an object to have been carried around on a whim: the fragment we have represents about 1/7^{th.} of the undamaged original, and weighs around 8 kilograms. The original would therefore have weighed around 56 kg., and would have been one of a pair. We can say with some evidential force, therefore, that it is quite likely that there was settled habitation in this area.

Although the relative paucity of these finds means that it would be ludicrous to speak of 'concentrations', or even of 'clusters' of pottery either of undeniable off-site manufacture or of probable domestic (as opposed to 'saleable') quality, there does seem to be at least one significant pattern in their distribution, associated with Concentration 1. Six fragments of pottery that was not grey ware, oxidized ware or brick and tile, were found in contiguous plots (03/07/02; 03/07/03; 03/07/04; 03/07/05; 03/08/04), adjacent to a minor concentration of brick and tile and partially overlapping major concentrations of both grey and oxidized wares. Despite being spread out over an area some 80 m. x 40 m., this must also mark an area where there is a high probability of settlement. Situated near the valley floor, Concentration 1 would also seem to extend some hope of intact archaeology beneath the ploughsoil.

On balance, therefore, the evidence recovered so far better fits a pattern of permanent, as opposed to seasonal, occupation.

What, then, might have been the nature of this settlement?

It seems likely that the area walked was divided up into several parts, possibly as many as 10, with dwellings, kilns and worksheds intermingled in each part – compounds, if you will – and that this arrangement persisted for at least 300 years. Some of the buildings may well have had tiled roofs – the evidence for tile production on the site is on a scale sufficient for this, but scarcely large enough to support Barr's theory that Bromley Hall tiles were shipped around the district to roof local villas and farmsteads. The presence of a number of fragments of flue tile and flue tile wasters may simply suggest that some of the buildings on site had some form of heating – domestic hypocausts are an obvious suggestion, but it is equally possible that the inhabitants used corn-dryers, as was the common practice, or even heated drying sheds for the pottery they made.

Future Plans.

i. Fieldwalking

It is proposed in the 2010 season to continue and complete the programme of fieldwalking in the ploughed area of the site. Field 3 remains uncompleted, and the field (henceforward, Field 4, 'Caley Wood South') south east of Field 3 and south-west of Caley Wood must also be walked in its entirety.

The extension of Concentration 4 within Caley Wood will be plotted out, to discover its extent, density and composition.

In addition, in pursuance of the goal of defining the boundaries of the site, it is proposed – should permission be granted – to examine the interior of Sun's Wood, the garden of the property adjacent to the north-eastern boundary of Field 1, and any other areas around the periphery of the known site to which we are able to gain permission for access.

ii. Geophysical Survey.

Dr. Colin Merrony of Sheffield University has agreed to carry out a full geophysical survey of all parts of the site where this might be expected to generate useful results.

- iii. Caley Wood Earthwork.
- a. Survey.

Mr. Brian Cushion will be commissioned by Dr. Stewart Bryant of the Hertforshire County Historic Environment Unit to carry out a detailed survey in plan and elevation of the Caley Wood earthwork bank and ditch. He will be asked to pay particular attention to recording the two breaches made in the rampart during modern gravel extraction.

b. Digging.

Using the results of the survey detailed above to aid accurate recording, it is proposed to section one face of one of the breaches in the rampart to determine, if possible: traces of the history and techniques of its construction; the possible survival of original ground surface immediately behind the rampart; and to uncover (if possible) finds which may be used to date the construction – or phases of construction – of the rampart.

It is further proposed to open a shallow trench to define the edges of the ditch, and section the counterscarp. It is then proposed to take core samples from the ditch using an auger to attempt to fix its depth and rough profile.

c. Walking the Interior.

Finally, it is proposed to carry out a close inspection of the interior of the earthwork, recording the nature and rough location of any archaeology, ancient or modern, and seeking the location of any possibly undisturbed areas.

Appendix IListed below are the results of the 2009 fieldwalking, presented in grid form and oriented as they were walked. 'North' is at the top of each grid.

Find Type: Aggregated Finds Field Number: 1

	24
	23
	22
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6 16 3 2 1 0 2	15
11 14 9 0 5 3 1 3 0	14
1 4 2 20 16 2 3 4 2 2 4	13
3 19 21 6 19 22 22 6 2 5 2	12
0 2 2 17 8 13 19 2 2 0 3 10 2	11
0 6 2 3 14 42 13 5 4 1 3 7 8	10
0 61 1 7 21 70 33 10 2 8 11 6 6	9
0 59 3 7 13 125 94 18 5 15 17 15	8
0 20 6 16 40 11 8 66 23 35 38 17 6 8	7
1 1 4 3 16 102 21 20 12 17 15 15 23 2	6

18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	Null	Null	Null	Null	Null	4	2	5	7	3	10	13	34	6	6	5	12	1
	Null	Null	0	0	0	4	17	15	11	10	8	13	26	6	5	9	23	2
	0	0	0	0	0	7	17	52	11	15	3	4	26	17	2	13	37	3
			2	1	2	8	7	27	11	11	3	2	46	4	3	17	43	4
			0	2	2	2	3	20	58	16	8	22	17	6	9	13	42	5

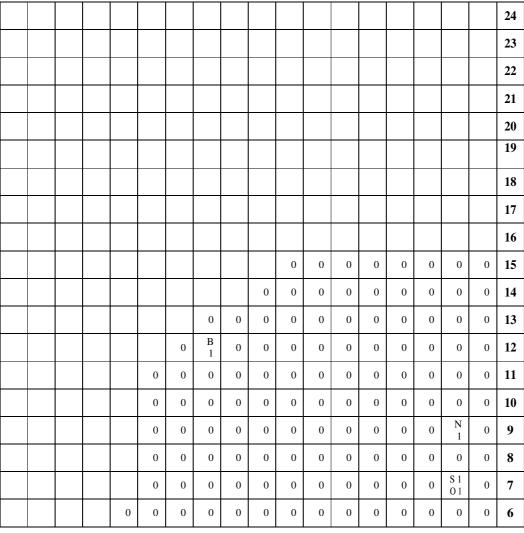
Field Number: 1 Find Type: Grey Ware

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					0	1	0	12	10	1	0	2	1	1	4	13
				0	7	10	3	7	11	11	2	1	5	0	2	12
			0	1	0	11	3	6	10	1	1	0	1	8	1	11
			0	3	0	2	7	21	5	3	1	0	2	4	6	10
			0	39	0	4	13	48	21	3	0	6	7	3	2	9
			0	37	0	0	9	115	69	7	3	6	8	10	2	8
			0	6	2	10	28	87	49	8	6	16	10	1	3	7
		0	0	1	0	14	62	7	7	5	1	10	7	16	1	6

			0	0	0	1	2	7	34	11	3	8	8	2	3	5	24	5
			2	1	0	5	3	11	8	3	0	1	35	1	2	10	29	4
	0	0	0	0	0	2	10	41	6	5	2	1	20	5	1	3	18	3
	Null	Null	0	0	0	0	11	6	3	4	1	5	16	2	1	2	6	2
	Null	Null	Null	Null	Null	0	2	0	2	0	4	8	21	4	2	2	5	1
18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Field Number: 1 Find Type: Other

Key: G = Grog; S = Samian; N = Nene; B = Black Burnished; O = Other; K = Kiln Debris; A = Amphora; M = Mortarium



			0	02	0 1	01	0	O 1	0	0	0	0	0	0	0	0	B 1	5
			0	0	0	0	0	O 1	0	0	0	0	0	0	0	0	0	4
	0	0	0	0	0	0	0	О3	0	0	0	0	0	0	0	0	0	3
	Null	Null	0	0	0	0	0	0	O 1	0	0	0	0	0	0	0	01	2
	Null	Null	Null	Null	Null	0	0	0	0	0	0	0	0	0	0	0	0	1
18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Field Number: 1 Find Type: Oxidized Wares

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							3	3	2	0	0	0	0	0	0	14
					1	3	0	4	4	0	0	2	0	0	0	13
				2	3	6	1	3	1	1	0	0	0	0	1	12
			0	1	1	3	2	1	7	0	0	0	0	1	1	11
			0	3	1	0	4	8	5	1	1	0	0	1	0	10
			0	10	0	0	4	10	2	2	0	0	2	2	3	9
			0	18	2	4	1	2	18	6	0	3	6	3	1	8
			0	4	1	3	10	29	9	1	0	11	7	2	2	7
		0	0	1	2	1	34	11	7	3	1	4	6	7	1	6
	0	0	0	0	1	7	12	4	1	10	5	3	1	4	11	5

			0	0	1	3	0	7	2	6	0	1	9	1	0	7	11	4
	0	0	0	0	0	3	4	6	2	7	0	2	6	5	0	5	15	3
	Null	Null	0	0	0	0	2	5	4	3	5	5	10	2	2	5	6	2
	Null	Null	Null	Null	Null	2	0	3	2	0	4	4	13	1	2	1	1	1
18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

Field Number: 1 Find Type: Brick & Tile

																24
																23
																22
																21
																20
																19
																18
																17
																16
																10
								0	5	0	2	0	0	0	0	15
							2	4	1	0	3	1	1	0	0	14
					0	0	2	4	2	1	3	0	1	1	0	13
				1	8	5	2	9	10	10	4	1	0	2	1	12
			0	0	1	3	3	6	2	1	1	0	2	1	0	11
			0	0	1	1	3	13	3	1	2	1	1	2	2	10
			0	12	1	3	4	12	10	5	2	2	2	0	1	9
			0	4	1	3	3	8	7	5	2	6	3	2	1	8
			0	10	3	3	2	2	8	14	29	11	0	1	3	7
		1	1	2	1	1	6	3	6	4	15	1	2	0	0	6
	0	0	0	0	0	5	12	1	4	4	4	1	5	4	6	5

			0	0	1	0	4	8	1	2	3	0	2	2	1	0	3	4
	0	0	0	0	0	2	3	2	3	3	1	1	0	7	1	5	4	3
	Null	Null	0	0	0	4	4	4	3	3	2	3	0	2	2	2	10	2
	Null	Null	Null	Null	Null	2	0	2	3	3	2	1	0	1	2	2	6	1
18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

 \mathbf{ROW}

Field Number: 2 Find Type: Aggregated Finds

BAG

18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
												8	15	14	6	21	Null	1
														102	35	18	20	2
														19	15	17	10	3
														27	5	25	14	4
														12	3	13	21	5
														3	4	1	14	6
													0	0	1	4	40	7
											1	3	1	1	3	9	61	8
										2	3	1	3	0	0	3	11 2	9
									1	0	1	4	0	0	0	0	74	10
								0	0	0	1	1	0	1	0	1	8	11
								0	0	0	0	0	1	0	0	4	15	12
									1	1	1	3	0	0	1	7	54	13
									1	1	0	0	0	0	3	3	30	14
									2	0	3	2	2	4	0	3	2	15
									1	1	0	1	1	1	8	3	0	16
									0	2	0	1	0	0	1	1	3	17

				7	1	0	0	0	0	1	4	Nuoo	18
													19
													20
													21
													22
													23
													24

Field Number: 2 Find Type: Grey Ware

BAG

18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
												1	4	3	0	1	Null	1
														18	3	0	0	2
														2	3	14	1	3
														3	2	12	4	4
														0	0	5	4	5
														0	0	0	3	6
													0	0	1	3	17	7
											0	0	0	1	1	2	29	8
										1	1	0	0	0	0	2	68	9
									0	0	0	1	0	0	0	0	54	10
								0	0	0	0	0	0	1	0	1	5	11
								0	0	0	0	0	1	0	0	1	11	12
									0	0	1	0	0	0	0	0	22	13
									0	0	0	0	0	0	1	1	13	14
									0	0	0	0	0	0	0	2	2	15
									0	0	0	0	0	1	2	1	0	16
									0	0	0	0	0	0	0	0	1	17

ROWS

				0	0	0	0	0	0	0	0	Null	18
													19
													20
													21
													22
													23
													24

Field Number: 2 Find Type: Other

Key: G = Grog; S = Samian; N = Nene; B = Black Burnished; O = Other; K = Kiln Debris; A = Amphora; M = Mortarium

BAG

18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
											0	0	0	0	0	0	Null	1
														S 1	0	0	0	2
														0	0	0	S 1	3
														0	0	0	O 1	4
														0 1	0	0	0	5
														0	0	0	0	6
													0	0	0	0	0	7
											0	0	0	0	0	0	0	8
										0	0	0	S 1	0	0	0	0	9
									0	0	0 1	0	0	0	0	0	0	10
									0	0	0	0	0	0	0	0	0	11
									0	0	0	0	0	0	0	0	0	12
										0	0	0	0	0	0	0	0	13
										0	0	0	0	0	0	0	0	14
										0	0	0	0	0	0	0	0	15

					0	0	0	0	0	0	0	0	16
					0	0	0	0	0	0	0	0	17
					0	0	0	0	0	0	0	Null	18
													19
													20
													21
													22
													23
													24

Field Number: 2 Find Type: Oxidized Wares

BAG

18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
												2	5	3	3	6	Null	1
														34	16	6	7	2
														9	4	3	3	3
														6	3	7	7	4
														1	1	4	7	5
														1	1	0	5	6
													0	0	0	1	13	7
											0	0	0	0	1	6	22	8
										0	0	1	0	0	0	0	39	9
									0	0	0	3	0	0	0	0	20	10
								0	0	0	0	1	0	0	0	0	2	11
								0	0	0	0	0	0	0	0	3	4	12
									1	0	0	0	0	0	1	5	29	13
									0	0	0	0	0	0	1	1	16	14

				0	0	0	0	0	2	0	1	0	15
				0	0	0	0	0	0	1	0	0	16
				0	0	0	0	0	0	0	1	2	17
				0	0	0	0	0	0	0	2	Null	18
													19
													20
													21
													22
													23
													24

Field Number: 2 Find Type: Brick & Tile

BAG

18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
												5	6	8	3	14	Null	1
														49	16	12	13	2
														8	8	0	5	3
														18	0	6	2	4
														10	2	4	10	5
														2	3	1	6	6
													0	0	0	0	10	7
											1	1	1	0	1	1	10	8
										1	2	0	2	0	0	1	5	9
									1	0	0	0	0	0	0	0	0	10
								0	0	0	1	0	0	0	0	0	1	11
								0	0	0	0	0	0	0	0	0	0	12
									0	1	0	3	0	0	0	2	3	13
									1	1	0	0	0	0	1	1	1	14

				2	0	3	2	2	2	0	0	0	15
				1	1	0	1	1	0	5	2	0	16
				0	2	0	1	0	0	1	0	0	17
				7	1	0	0	0	0	1	2	Null	18
													19
													20
													21
													22
													23
													24

Field Number: 3 Find Type: Aggregated Totals

ROW

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	16	3	4	9	3	2	19	11	4									
2	6	25	8	7	2	1	37	23	6									
3	5	12	14	7	1	4	32	54	12									
4	8	13	13	12	3	4	65	52	11									
5	14	15	10	5	5	7	32	66	13									
6	9	8	6	15	3	0	23	29	14									
7	48	25	13	14	9	11	35	20	14									
8	54	49	21	12	4	6	9	19	29									
9	39	39	20	60	17	9	21	33	22									
10	60	48	51	52	22	14	33	56	40									
11	18	19	16	35	21	57	39	50	32									
12	8	13	11	22	13	31	32	87	51									
13	4	19	16	37	15	38	60	75	62									
14	2	8	3	29	34	27	105	82	49									
15	5	4	1	23	20	23	43	102	33									

RAG

16	1	4	3	11	22	11	42	31	41					
17	1	1	2	4	9	5	18	19	6					
18	1	1	4	4	0	6	25	22	12					
19		1	1	7	3	5	15	43	44					
20			4	4	4	9	13	29	41					
21				2	7	7	18	19	13					
22					1		3	0	2					
23								0	0					
24									0					

Field Number: 3 Find Type: Grey Ware

ROW

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1	0	2	6	2	2	10	3	3									
2	2	3	1	3	0	0	30	10	4									
3	2	6	1	4	0	0	24	29	7									
4	3	3	1	7	2	1	42	20	3									
5	2	5	2	3	0	2	26	39	5									
6	1	2	1	9	1	Null	15	16	7									
7	19	9	1	10	8	7	21	8	4									
8	16	23	12	4	1	1	6	5	18									
9	16	17	8	38	8	4	12	9	12									
10	38	25	28	32	7	9	25	19	28									
11	13	11	6	27	11	27	22	19	19									
12	6	2	6	10	16	17	14	53	29									
13	2	11	7	18	4	27	44	29	38									
14	0	4	2	17	11	24	74	51	22									
15	3	1	0	13	3	16	25	48	24									

16	1	0	3	4	7	4	16	15	27					
17	0	0	1	2	2	3	13	12	4					
18	0	0	2	2	0	5	14	9	9					
19		0	0	6	1	3	11	23	28					
20			1	1	1	6	5	11	17					
21				0	0	2	4	10	6					
22					0		1	0	0					
23								0	0					
24									0					

Field Number: 3 Find Type: Other

Key: G = Grog; S = Samian; N = Nene; B = Black Burnished; O = Other; K = Kiln Debris; A = Amphora; M = Mortarium

ROW

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0	0	0	0	0	0	0	0	0									
2	0	0	0	0	0	0	G 1 S 1	0	0									
3	0	0	0	0	0	0	O 1	0	0									
4	0	0	0	0	0	0	N 1	O 1	0									
5	0	0	0	0	0	0	G 1	0	0									
6	0	0	0	0	0	Null	0	0	0									
7	B 1	0	0	0	0	0	A 1	0	0									
8	0	0	0	0	0	0	0	0	K 1									
9	0	O 1	0	03	0	0	0	0	0									
10	О3	0	0	G 1 O 1	S 1	0	0	0	0									
11	0	0	0	0	0	G 1	0	0	0									
12	0	0	0	0	0	0	0	0	0									
13	0	0	0	0	0	0	0 1	0	0									
14	K 1	0	0	K 1	0	0	S 2	O 1	O 1									

15	0	0	0	0	0	N 1	0	0	0					
16	0	0	0	G 1	0	0	0	0	0					
17	0	0	0	0	0	0	0	0	0					
18	0	0	0	0	0	0	G 1 K 1	0	0					
19		0	0	0	0	0	0	0	K 1					
20			0	0	0	0	K 1	0	K 1					
21				0	0	0	0	M 1	0					
22					0		0	0	0					
23								0	0					
24									0					

Field Number: 3 Find Type: Oxidized Wares

ROW

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	13	1	1	2	0	0	6	5	0									
2	3	17	4	2	1	0	4	5	1									
3	3	4	12	2	1	3	6	10	4									
4	4	9	11	3	1	2	20	21	2									
5	10	10	8	2	5	1	3	19	4									
6	3	5	3	5	1	Null	5	11	6									
7	23	14	12	2	1	2	10	8	6									
8	29	26	9	8	2	2	3	13	10									
9	22	20	9	19	8	5	8	23	9									
10	19	23	19	15	14	3	7	32	11									
11	5	7	6	5	10	20	13	26	11									
12	2	11	4	9	6	11	12	30	18									
13	2	8	9	16	11	10	13	39	22									
14	1	4	0	11	20	2	21	22	25									
15	2	1	1	10	13	3	18	48	7									

16	0	3	0	5	15	7	16	16	14					
17	1	0	1	2	7	2	3	4	1					
18	0	1	0	0	0	1	7	12	2					
19		0	0	1	1	2	1	17	11					
20			0	0	3	3	4	14	22					
21				1	0	4	2	8	5					
22					1		2	0	0					
23					·	·		0	0	·				
24					·	·			0	·				

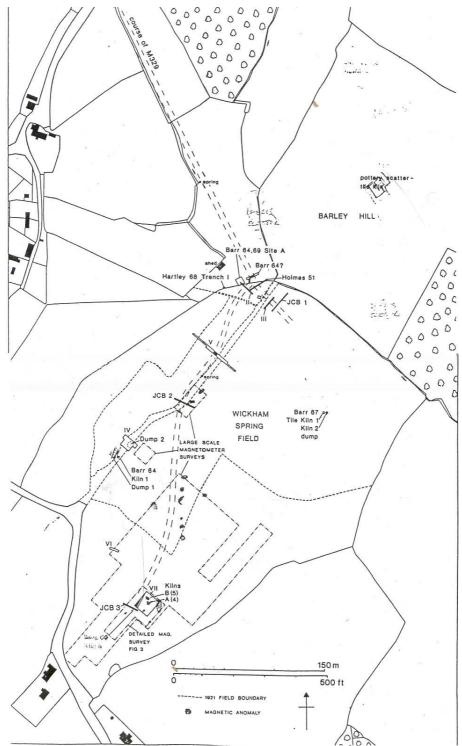
Field Number: 3 Find Type: Brick & Tile

ROW

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	2	2	1	1	1	0	3	3	1									
2	1	5	3	2	1	1	1	8	1									
3	0	2	1	1	0	1	1	15	1									
4	1	1	1	2	0	1	2	10	6									
5	2	0	0	0	0	4	2	8	4									
6	5	1	2	1	1	Null	3	2	1									
7	4	2	0	2	0	2	3	4	4									
8	9	0	0	0	1	3	0	1	0									
9	1	1	3	0	1	0	1	1	1									
10	0	0	4	3	0	2	1	5	1									
11	0	1	4	3	0	9	4	5	2									
12	0	0	1	3	1	3	6	4	4									
13	0	0	0	3	0	1	2	7	2									
14	0	0	1	0	3	1	8	8	1									
15	0	2	0	0	4	3	0	6	2									

16	0	1	0	1	0	0	10	0	1					
17	0	1	0	0	0	0	2	3	1					
18	1	0	2	2	0	0	2	1	4					
19		1	1	0	1	0	3	3	1					
20			3	3	0	0	3	4	2					
21				1	7	1	2	0	2					
22					0		0	0	0					
23								0	0					
24									0					

Appendix II: Barr and Hartley



Map 5: The work of Barr and Hartley. Can be enlarged to A2 size.

Appendix III: Blank Record Sheet.

Bromley Hall Farm Fieldwalking

Field No.

Sheet No.

Row	Bag	Grey	Oxid.	Grog	Samian	Nene	Black Burnish	Tile/ Brick	Other	Kiln Debris
	<u> </u>									
	1									
	1									
	1									
	†									
	+									
	1									
	<u> </u>									