The Excavation of an Iron Age site at Brigstock, Northants, 1979-81

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In the autumns of 1979 and 1981 an Iron Age circular earthwork at Brigstock, Northants, was excavated to evaluate survival and effects of ploughing. The excavation was carried out on behalf of the Department of the Environment and the Archaeology Unit of Northamptonshire County Council. The site lay some $1\frac{1}{2}$ miles south-west of Brigstock village (SP 925841) and $3\frac{1}{2}$ miles to the south-east of Corby (FIG 1).

Thanks are due to Doreen Field, C French, D Gurney, R Moore, and Maisie Taylor for specialist contributions to the report, and to P J Foster who took the photographs and gave other valuable help on the site. The illustrations are the work of Dorrie Orchard of the Northamptonshire Archaeology Unit. Particular thanks are due to Mr J Jones, the farmer, for his tolerance and help.

THE SITE

During the Medieval period the site lay within

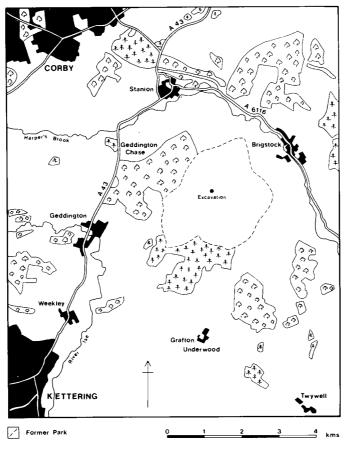


Fig 1 Brigstock: location map

the confines of Brigstock Great Park, and therefore escaped the archaeologically damaging effect of ridge and furrow cultivation. Earthworks have been recorded in the park by the Ordnance Survey and by the Royal Commission on Historical Monuments, but before the excavation began the archaeological potential of the area was virtually unknown. In the last few years fieldwork by the Northamptonshire Field Group and photographs of soil marks taken from the air (FIG 2) have shown that the enclosure is in an area of extensive Iron Age and Roman activity which extends over much of the former park. The greater part of the area has a Boulder Clay subsoil which in places contains much chalk. Good fertile loams are now common in the area and if this was so in the prehistoric period it may have been an attraction to early settlers. The excavated enclosure was situated on a low spur with wide views to the east (OD 330). It is rather remote from any substantial streams, the nearest major water course being Harpers Brook which at its nearest point is $1\frac{1}{4}$ miles to the north. There are, however, a number of minor streams closer to the site.

Excavation and fieldwork began in the area in 1979 when it was realised that the previously well preserved bank and ditch of a circular enclosure, some 30m in diameter, was being levelled by ploughing (PL 1). According to local farm workers the bank had originally stood to a considerable height but had been ploughed twice in the last war and several times in the 1950's. After this, the field reverted to pasture until the late 1970's when ploughing recommenced with the farmer attempting gradually to level out the earthwork because of the difficulties it presented to modern harvesting machinery.

THE EXCAVATION

In the autumn of 1979 it was decided to excavate part of the enclosure in order to determine its date

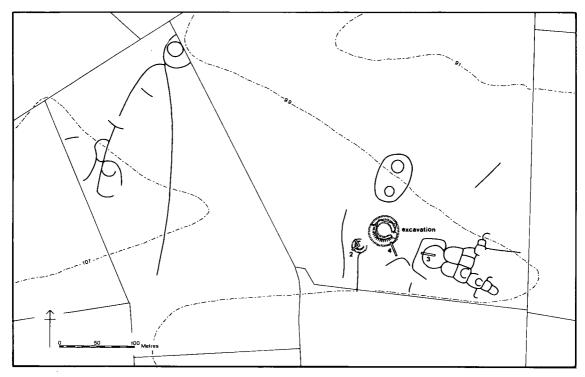


Fig 2 Brigstock: site of the excavation, showing nearby soil marks (soil marks photographed by G Foard, NCC Archaeology Unit).



Plate 1 Brigstock: the Iron Age enclosure: in the foreground the bank has been exposed; in the background it can be seen as a soil mark. The stone path in the entrance through the bank can also be seen as well as part of the interior of the round house.

and function before it became completely levelled. Prior to the excavation, the only clues as to the date of the site consisted of a few scraps of Iron Age pottery found nearby by the local fieldworker Burl Bellamy and the recording of an adjacent low mound as a barrow by the Royal Commission.

The entrance to the enclosure was clearly on the east side and it was therefore decided to excavate the eastern half of the interior (PL 1). This established that the enclosure was Iron Age in date and that a single round house once stood within the confines of the bank and ditch. In 1979 the Iron Age ground surface had apparently not been disturbed by ploughing and because of the good state of preservation it was decided to complete the excavation of the enclosure and round house in 1981. Three other trenches were also excavated in 1981 to try to answer specific questions about the surrounding area (FIG 2). The method of excavation was to remove the topsoil with the ditching bucket of a JCB excavator and then excavate all other layers by hand. Where depths are given in this report they refer first to the depth from the subsoil level followed by the depth, or

estimated depth, from the Iron Age surface.

PRE-IRON AGE ACTIVITY

Although evidence for pre-Iron Age settlement is rare on boulder clay, a quantity of prehistoric worked flints were found during the excavaton (FIG 10 and p 27).

PRE-ENCLOSURE FEATURES (FIG 3)

A number of features, including some possible semi-circular structures, were found that pre-date the enclosure bank. Although most of these features contained little dating evidence, the pottery from the area as a whole suggests that occupation occurred on the site from the 5th to the 1st century BC or possibly earlier. There were five ditches or gullies (F4, 5, 47, 60 and 64) and four pits (F1, 2, 71 and 74) that were stratigraphically earlier than the enclosure. Another gully (F22) and a number of postholes are also assumed to belong to this earlier phase.

'SEMI-CIRCULAR' GULLIES

F47. F47 was apparently a semi-circular feature, with a diameter of 8m, and an open side to the east. Although it was only cut shallowly into the subsoil it seems unlikely to have continued beyond the terminals shown on the plan. The gully, which had been recut, was shallow for a drainage channel, with a maximum depth of 250mm below the Iron Age surface (FIG 5). There was no evidence that the gully held anything structural but this would have been hard to detect as in the main only the bottom of the feature had survived. The filling was a homogeneous dark silty loam, which contained little in the way of dating evidence. However, some sherds found under the bank at the south end of the gully suggest a middle Iron Age date is likely (FIG 8, Nos 39-41). It is possible that postholes F31-2 and 61-3 are contemporary with the feature.

F22. Although this gully appears to be associated with the entrance to the round house found within the enclosure, it is considered more likely to have been an earlier feature, of semicircular type. It is to some extent unusual in having an open side to the WSW instead of facing in the more normal easterly direction. The terminals of the feature had been destroyed by the drainage gully of the round house but it would seem to have been roughly the same diameter as F47 (8m). The gully, which had fairly steep sides and a flat bottom, was on average 230mm (320) deep, and varied from 350 to 450 mm wide at the top and from 150 to 250mm wide at the bottom. The filling consisted mainly of dark brown loam with some clay at the bottom in places (FIG 5). There was little evidence of erosion from the sides of the gully, and no post impressions were detected. The function of the gully is therefore uncertain. The 65 sherds of pottery found in the feature did not contain any of the late forms found in the environs of the round house.

There was a roughly circular setting of burnt and unburnt pieces of limestone (1m in diameter) situated in a fairly central position within the semicircle (F48), and there were a number of postholes which may also be associated (ie F16-18, 42-44, 51, 52, and perhaps 49 and 50).

F5. It is possible that this was also a semicircular feature, but with only a partial plan this hypothesis is conjectural. Unlike F47 and F22, this gully was irregular in depth and profile; the depth varied from 300mm (400) to 500mm (600) and the width from 400mm to 1.1m. There was no clear evidence that the gully held posts, although it appears to have been recut at least once. The filling consisted mainly of dark loam or clayey loam and the few Iron Age sherds it contained were not diagnostic.

COMMENT

Iron Age semi-circular features are not uncommon in Northamptonshire. A late Iron Ageearly Roman example was excavated at Wakerley (Jackson and Ambrose, 1978) and two of early Iron Age date have been excavated at Great Oakley just over 5 miles from Brigstock. The function of these features in general is discussed by Paul Drury in a report on the Great Oakley site (Jackson 1982).

THE BANK AND DITCH (FIGS 3, 5 and 6 PL 1)

The roughly circular earthwork formed by the bank and ditch surrounded an internal area approximately 20m in diameter. Its purpose appears to have been to enclose a single round house, situated close to the bank on the south side, and perhaps a yard area. Althouth there was no direct stratigraphical link between the bank and the house, it is possible that the house was in existence prior to being enclosed and that the bank and ditch were a later feature on the site. The position of the bank on the south side of the entrance seems to suggest this.

The V-shaped ditch was 2m deep, below the modern surface, and was apparently continuous. It can be assumed that it was bridged at the entrance but no structural evidence for this was found. There appeared to be some deliberate infilling in Trench 2, near the entrance (FIG 5), but in Trenches 1 and 3 the ditch had silted up naturally (FIG 6). The bank was considerably eroded at the time of the excavation and only stood to a height of 300mm, with a base width of 3.5m to 4m. There was no surviving evidence of a stockade on top of the bank or of any revetment. On the south side of the entrance there was a single posthole which may have been supported a gatepost (F53). There was also tentative evidence, in the form of stones set on edge, of a shallowly set post situated

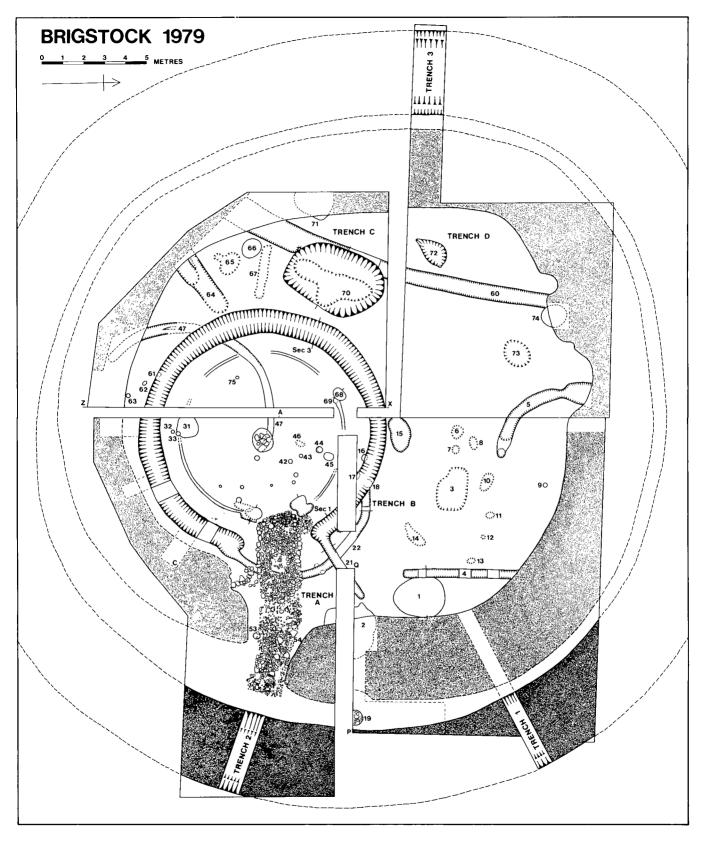


Fig 3 Brigstock: enclosure plan

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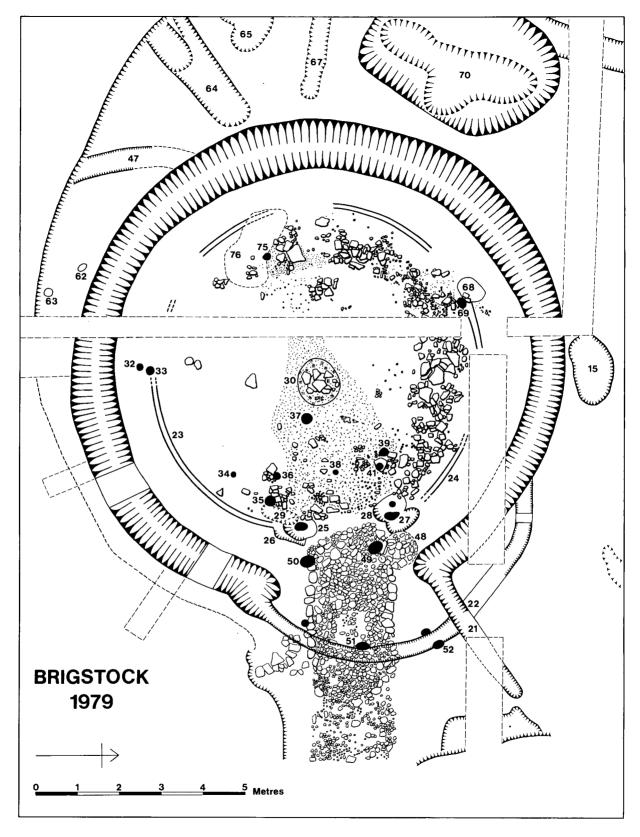


Fig 4 Brigstock: plan of the round house

Feature	Depth (mm)	Diameter	Filling	Dating	Comments
Ditch F60	500(620)	_	Natural silting (FIG 5)	Decorated sherd from primary silt (FIG 8, No 51)	Enclosure or boundary ditch. Probable early feature.
Ditch F4	300(440)	—	Mixed clay and loam (FIG 5)	None	Neatly cut. Perhaps in part deliberately filled
Ditch F64	300(420)	_	Brown gritty loam	None	Shallow near hut gully. Recut near bank
Pit Fl	380(520)	2.45m x 2m	See FIG 5	Late I A pottery from hollow in top of pit	Eroded edges suggest it was left open. Pottery could have accumulated after bank was built?
Pit F2	740(840)	2.5m	See FIG 6	? Middle I A	Probably left open for a time. Bank filling top of pit
Pit F71	320(440)	Uncertain	Dark loam	? Early to middle I A	
Pit F74	400(520)	1.1m	Grey-brown silty loam	None	

TABLE 1Other pre-enclosure features

on the opposite side of the entranceway. Such a post would not stand unsupported and it may suggest there was a fence or stockade, set within the bank, to which the post was connected. A stone path ran from the entrance through the bank to the doorway of the round house.

THE INTERNAL AREA

The effect of the encircling bank would have been to create a pond-like area within the enclosure. As a result, a layer of silt deposit had protected the Iron Age surface from modern ploughing. Although the enclosure may have been used for some other purpose when the house became obsolete, the Iron Age surface had subsequently remained undisturbed. The average thickness of the buried soil beneath the bank and inside the enclosure was not more than 150mm.

The following are the main contexts within the enclosure: (1) topsoil, (2) brown silt, sealing the Iron Age surface, (3) upper bank slip, (4) the buried surface, (5) lower bank slip, (6) disturbed surface, (? trampling), Trench A, SE quarter of round house, (7) the buried soil within the enclosure, (8) disturbed surface, Trench A, north side of path, (12) buried soil beneath the bank.

THE ROUND HOUSE (FIGS 3 and 4 PLS 1-3)

The round house, which was7.8m in diameter, was defined by a wall trench, substantial postholes at the entrance and an encircling drainage gully. There was also evidence of the use of stonework inside the house and of chalk for flooring.

THE STRUCTURE

The wall of the house was defined by a narrow slot, on average 120mm wide, which could only be detected where it shallowly cut the clay subsoil. The wall could have been constructed of wattle and daub but no remains of daub were found during the excavation. With one exception, all the internal postholes thought to be contemporary with the house were not more than 200mm in depth below the Iron Age surface and were therefore little deeper than the existing soil layer. Most of them occurred near the doorway and none were clearly roof supports. If there were any internal roof supports it is assumed that they were either supported by padstones or the postholes were very shallow and could not be detected. There were, however, some flat limestone slabs just east of the centre of the hut which may have supported a central post. The stones lay both in and above a shallow pit or scoop (F30); the pit itself being only 50mm deep in the soil profile and 1m in diameter (FIG 5). The filling of the pit around the stone slabs consisted of small glacial pebbles and shelley clay or marl; the filling itself being overlain by the chalk 'floor' of the house.

The entrance to the house was 2m wide and faced east, with deep postholes on each side of the entranceway (F25 and F28) which appear, at some stage, to have been either replaced or the doorway modified (FIG 5). Some 700mm east of the entrance there were two possible postholes (F49 and F50), and a circular setting of stones (F48), which were overlain by the stone path but which may have been part of a porch arrangement in an early phase of the house. However, it is possible that the setting of stones was associated with an earlier feature (gully F22) and that the parallel alignment of postholes 49 and 50 with the doorway of the house is coincidental. Other postholes inside the house may have supported screens or had other functions related to the doorway. A 'gap' 400mm wide was found between the external path and the floor of the house and it is conceivable that there was a wooden threshold between the entrance posts.

On the north side of the house the wall trench widens and appears to terminate with a posthole (F69). However, with no comparable posthole to the west there is insufficient evidence to suggest with any confidence that there was a side entrance to the house at this point. There was a large posthole (F68) (FIG 5) adjacent to posthole 69 but it is uncertain if this is associated with the round house or is a later feature. There was another posthole (F33) roughly on the line of the wall on the south side of the house and it is possible that this was a structural element in the wall. The adjacent posthole, F32, was filled with a partly burnt shelly clay or marl, a similar clay being found in posthole 63 which lies outside the house.

There was a group of features on the north side of the house (F42-6, FIG 3) which are considered to pre-date the structure. Of these Nos 42-4 were deep postholes, 45 was a shallow pit, and 46 a depression situated in a small area of burnt subsoil. All of these features were filled with a grey-brown silty loam, similar to that found in F16-F18, features which lay outside the house perimeter.

THE CHALK 'FLOOR'

A thin layer of chalk grits extended from the doorway into the centre of the hut and appears to have been a limited area of flooring. Despite the fact that an area on the south east side of the house had been disturbed at a later date, it seems unlikely that the floor would have originally covered a much larger area. The chalk grits had presumably been hand selected from the local Boulder Clay and may have been washed out on nearby banks.

THE STONEWORK INSIDE THE HOUSE WALL

A layer of limestone slabs and glacial pebbles lay inside the outer wall along the north and west sides of the house. The stone extended for a distance of 1.4m from the wall itself and appeared to be following the same curvature. The possibility of stone robbing after the house went out of use makes it difficult to assess the function of the stone, nevertheless a number of possible uses might be suggested; that the stone was the remains of a drystone wall which originally ran right around the house; that it was all that remained of a more extensive stone floor; or that it was part of a stone bench built around the wall, which may have served to keep beds or produce off the damp floor. The last theory could be reinforced by the possible remains of a turf 'wall' which were found where the main concentration of stones ended on the west side of the house (see below).

THE 'TURF WALL' (F76)

After the removal of the topsoil an area of loam containing yellow clay was visible standing through the silt layer (layer 2). Although sections through the deposit failed to produce a turf pattern it is possible that it is the remains of a collapsed turf wall.

PIT F29

A small pit, some 1m x 400mm in diameter and 30mm (160) deep was found within the house. It partly overlay the entrance posthole, F25, but was not overlying the position of the post. It is therefore likely to be contemporary with the house. The pit contained a quantity of animal bones which may have been food refuse buried by the inhabitants of the house. Most of the bones came from sheep or goat (Appendix 1).

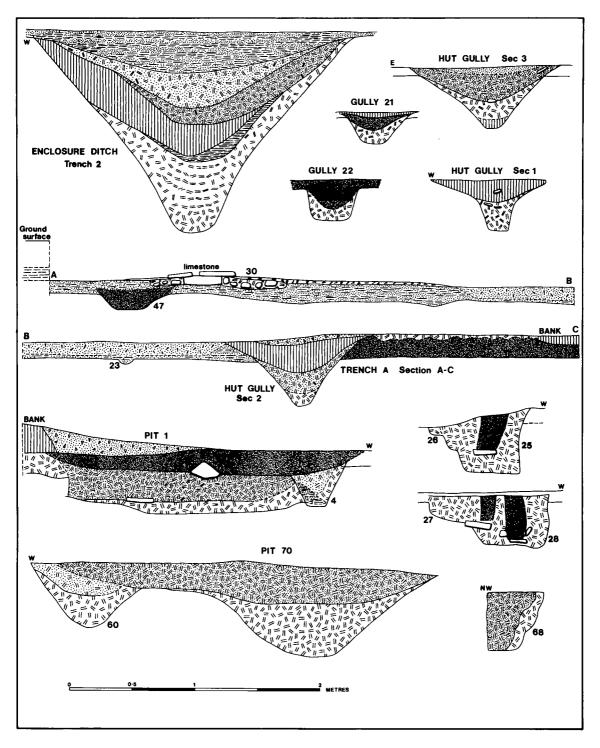


Fig 5 Brigstock: the sections (for key see Fig 6)

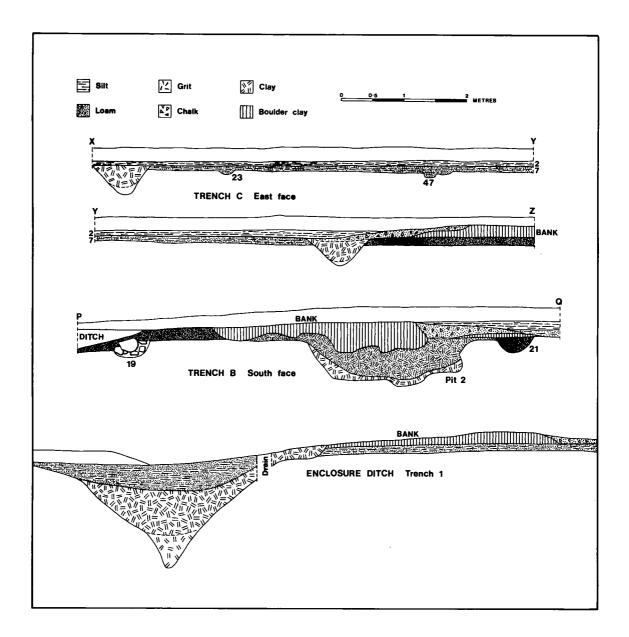


Fig 6 Brigstock: the sections

HEARTHS

No surviving hearth was found in the house, but there was some burning of the chalk floor just to the east of the centre of the house.

THE DRAINAGE GULLY

The house was encircled by a pennanular drainage gully 400mm (520) deep, the centre of which lay some 1.4m from the house wall around most of its circumference. The gully was broken by a causeway 3.25m wide opposite the doorway to the house. A short length of gully, 220mm (320) deep (F21), running east from the north side of the entrance, had probably been designed to act as an overflow, but during the excavations the house gully was found to be largely self draining. It was clear that the drainage gully had been deliberately filled at some time (FIG 5, Section 1), but it is uncertain whether this happened during the life of the house or to facilitate some post-house activity.

Gully F22, which loops round the entrance is considered to be an earlier semi-circular feature (p 10 above). Its position suggests it may have served to keep the entrance to the house dry, perhaps in an early phase when the house could have had a porch. However, there do not appear to be any parallels for a gully looping round the entrance in this way and its position in relation to the house may therefore be coincidental.

THE STONE PATH (FIGS 3 and 4, PLS 1 and 2)

The stone path running from the house doorway to the entrance through the bank may have been of two phases. For a distance of 3.6m from the house doorway, the path was found to be composed of a layer of glacial pebbles (2m wide) supported by a row of larger pebbles along each side. To the east of these pebbles the path was less compact and consisted of a mixture of pebbles and limestone. The limestone also partly overlay the pebbles near the doorway and occurred as a layer of rubble on either side. It is assumed that the surface of the path had not survived as the pebbles, as found, would have been too uneven to walk on with comfort.

COMMENT ON THE STRUCTURE OF THE HOUSE

The wall trench and the entrance postholes are clearly two structural elements in the Brigstock house, but there was no conclusive evidence of internal roof supports. There may have been a post in the centre of the house, but recorded central posts are rare in Iron Age houses. The wall trench was situated 1.4m from the centre of the drainage gully, and the roof would have had to overhang the wall by at least 1m if rainwater was discharged directly into the gully. At Ardleigh in Essex a wall trench was situated over 2m from the encircling drainage ditch and the excavators suggest that the ends of the rafters may have rested on a low bank thrown up on the inside of the ditch (Erith and Holbert 1970). At Brigstock there was no surviving evidence of an outer turf or clay 'wall' situated between the timber slot and the drainage gully, although such a wall could have given the structure more stability, and reduced the presumed overhang of the rafters.

OTHER FEATURES WITHIN THE ENCLOSURE (FIG 3)

Of the various features found within the enclosure only the large pit, F70, produced pottery similar to the wares found in the vicinity of the round house. The other small pits and depressions produced no dating evidence and most had no stratigraphical relationship with the house or enclosure. Perhaps surprisingly there were no obvious storage pits or post structures between the bank and the house gully, nor was there any other evidence of agricultural or domestic activities. There was also little evidence of fires being lit within the enclosure (Appendix 2).

F70 (FIG 5)

This was a large irregular pit some 4.6 x 3m in diameter at the surface. The bottom was very uneven with the pit having a maximum depth of 740mm (840) where an elongated section had been dug to a greater depth. The eroded sides and nature of the filling suggest the pit was left open for some time after it was dug, but it was eventually filled with a deposit of grey-brown silty loam. It is a point of interest that part of the nearby house gully was filled with a similar material, perhaps implying that the two features were filled at the same time (FIG 5, Section 3). In view of the high chalk content of the clay in the area of the pit it is possible that it was dug to extract the material. Chalk grits were found as a surface in part of the round house. Part of a broken pot (FIG 7, No 21) was found in a small hole in the bottom of the pit.

TABL	Ξ2
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No	Depths (mm)	Diameters (mm)	Comments
9	200(320)	200	Smaller at bottom. Dark loam.
16	220(320)	320	Cut by house gully. Silty loam.
17	260(360)	400	Cut by house gully. Silty loam.
18	140?(240)	320?	Cut by house gully. Silty loam.
19	200(400)	700	Many large stones. Possible pit (FIG 6)
25	370(520)	800 x 650	Base of post resting on a stone (FIG 5).
26	100(250)	?	Not a definite posthole.
27	150(250)	850 x ?400	Clay filling (FIG 5).
28	350(450)	850 x 600	Base of post(s) resting on stone(s) (FIG 5).
32	150(260)	170	Burnt shelly clay and ash in filling.
33	200(310)	200	Dark loam with charcoal.
34	40(190)	150	Not observed above subsoil.
35	70(200)	260	Not observed above subsoil.
36	180(320)	170	Probably disturbed above subsoil.
37	60(180)	270	Entirely filled with Boulder Clay from surface.
38	50(170)	130	Probably disturbed above subsoil.
39	40(160)	250	Visible from I A surface. Pebbles in filling.
41	30(150)	150	Probably disturbed above subsoil.
42	290(400)	240 x 200	Undercut. Post diameter 140mm.
43	220(330)	170	Visible above subsoil.
44	300(410)	400 x 300	Sloping sides. Bottom diameter 230mm.
49	300(400)	400 x 300	Filled with clay. Some charcoal.
50	320(440)	380 x 300	Filled with clay ?Not a definite posthole.
51	320(420)	290 x 190	Oval shape. Surviving post impression.
52	330(430)	270 x 220	Oval shape. 120mm deeper than F22.
53	300(400)	350	Post impression. 120-180mm diameter.
61	400(510)	200	Earlier than house gully?
62	350(460)	240 x 140	Probably related to 61.
63	220(330)	260	Similar filling to 32.
68	460(540)	700 x 480	Funnel shaped core of dark loam.
69	180(260)	250 x 200	Filling — dark clayey loam.
75	20(140)	170	Not observed above subsoil. Not certain.

Details of the postholes (estimated depth from Iron Age surface in brackets)

ANGLO-SAXON ACTIVITY

A few unstratified sherds of probable Anglo-Saxon date were found during the excavation. As sites of this period are not commonly found on Boulder Clay they may be the result of people camping within the enclosure. A scatter of Anglo-Saxon pottery has been found by fieldwalking on other Iron Age sites in the area.

TRENCHES 2, 3 and 4 (FIG 2)

Three trenches were excavated in 1981 to answer specific questions about the area outside the enclosure. The trenches were in each case 2m wide with the plough soil being removed by a JCB excavator.

Trench 2 was situated over an adjacent earthwork, thought by the RCHM to be a barrow (RCHM 1975). Only the ditch was still visible on the surface at the time of the excavation. The trench was L-shaped and ran from the centre of the earthwork to a line across the ditch on the northwest and south-west sides. The ditch was found to be of Iron Age date, and a few fragments of Iron Age pottery were found beneath the ploughsoil in the interior. The area enclosed by the ditch was about 14m in diameter; no bank survived and no internal features were found.

TABLE 3

F No	Description	Depth (mm)	Diameter (mm)	Filling	Comments
F3 6-8 & 10-14	Depressions or shallow pits	(50-150)	Various	Dark charcoal flecked loam. Some yellow clay in F3	Features barely deep enough to penetrate the underlying subsoil
15	Pit	540(620)	1650 x 950	Mostly clean clay	Date and function uncertain
31	Pit	180(300)	1000	Brown loam and clay	Irregular
65	Uncertain	70(170)	_	Brown gritty loam	Not a definite archaeological feature
66	Pit	100(200)	1000 x 850	Dark loam	
67	Uncertain	40(140)	Width 450	Brown gritty loam	Flat bottomed feature - 2.7m long
72	Pit	300(410)	1750 x 1000	Brown clayey loam	Bowl shaped
73	Pit?	100(200)	_	Brown gritty loam	Possible tree hole

Details of other features excluding F70

Trench 3 was sited on a slight earthwork nearby, where stone was being unearthed by the plough. The stone was found to have derived from an Iron Age feature with a pitched stone surface, that lay just beneath the ploughsoil. The feature was cleaned and photographed but no further excavation took place. A presumed enclosure ditch at the west end of the trench was found to be some 6m wide, but only 400mm (600) deep, where excavated.

Trench 4 was excavated across a large black patch adjacent to the circular enclosure. It was approximately 20m in diameter. Black patches are common on the surface of fields in the area but their date and function was uncertain. The cause of the soil discolouration was found to be the high charcoal content, due to charcoal burning, with the wood for this practice possibly coming from oak coppices (Appendix 4). A single radiocarbon determination, from charcoal taken from the base of the fire, gave an uncalibrated date of 1230AD ± 80 (Har4928) thus confirming a Medieval date for this activity. It is of interest that the base of the fire was directly on Iron Age levels, suggesting that the turf had been stripped before the clamp was built.

A stone path and other Iron Age features were located beneath the black topsoil but were not excavated. Some early-middle Iron Age pottery was also recovered (FIG 8, Nos 53-55).

COMMENTS

Two sherds of Medieval pottery were found in

the topsoil during the excavation, and pottery of this date has been found subsequently on other black patches in the area. The recent excavation of a 'black patch' in the north of the park produced stratified 14th century pottery and further evidence that any turf or topsoil was removed before the charcoal burning took place (Foster, Bellamy and Johnston, forthcoming). It now seems likely that most of the black patches are the result of Medieval charcoal burning.

DISCUSSION

THE SITE

Excavation and survey work has shown that the Brigstock enclosure was by no means an isolated feature but was situated in an area of widespread and prolonged Iron Age activity. With evidence of occupation occurring not only in the immediate area of the excavation but also in the neighbouring fields, the site was extensive and probably of some significance in the Iron Age period. Other major sites excavated in the region include the settlements at Twywell which is situated 4 miles to the south-east (Jackson 1975) and at Weekley which lies 3 miles to the south-west (publication forthcoming) Although there are considerable areas of Boulder Clay in this part of the county, the density of sites appears to be just as high as in localities with lighter soils. The early Iron Age sites found in the area at Corby and Oakley were both sited on Boulder Clay (Jackson 1982).



Plate 2 Brigstock: the base of the stone path leading to the round house. The postholes at the entrance and the bottom of the wall can be seen at the end of the path.



Plate 3 Brigstock: the west side of the round house showing the drainage gully, the wall trench, and stone within the house.

The pre-enclosure features found during the excavation are of interest mainly in portraying the length of occupation on the site. The possible semi-circular features are worthy of comment, as features with gullies varying between one-third and two-thirds of a circle are probably more common than is generally realised. It is sometimes assumed that partially surviving gullies were originally hut circles but there is often insufficient evidence to support this. A good example of semi-circular and similar features, facing in different directions, occurred at Fengate, Peterborough, in association with normal round houses (Pryor and Cranstone 1978, FIG 5).

THE ENCLOSURE AND ROUND HOUSE

The circular enclosure at Brigstock was built in the latter part of the Iron Age presumably to protect the house of a single family unit. Why the inhabitants thought it necessary to enclose an area around the house with a substantial bank and ditch is a question not answered by the excavation, but with such a small internal area it is likely to have been designed to keep animals (or unwanted guests) away from the house. The phosphate survey yielded no evidence that animals were kept within the enclosure (Appendix 2). There is no firm evidence that the enclosure and house were not domestic in function, although the rather meagre occupation debris and lack of surviving hearths is perhaps surprising.

Two small enclosures, one circular and one rectangular, each containing a single house, have been excavated at Fengate, and another circular enclosure and house was found at Bozeat, Northants (Hall 1971). The enclosure excavated at Draughton, Northants (Grimes 1961) is perhaps the nearest parallel to the Brigstock example, although the Draughton enclosure was slightly larger and more oval in plan. As at Brigstock the settlement at Draughton was sited on Boulder Clay and had an enclosure ditch which was continuous, and overflow gullies for the houses. The Draughton enclosure contained a main house, situated on the south side, and two smaller structures; it is possible however that one of these structures pre-dates the enclosure (Grimes 1946). The reason why some Iron Age houses are individually enclosed whereas others are not could be a question of status. In the Midlands many Iron Age enclosures were designed to contain single

family units (Cunliffe 1978, 171).

So called hut circles are a common feature on Iron Age sites. In Northamptonshire, at sites such as Wakerley and Aldwincle (Jackson 1977) the 'hut circle' was a trench designed to hold the outer wall of the house and there was no apparent eavesdrip gully. In most cases however drainage around the house was necessary, particularly on clay sites such as Brigstock, Draughton, Twywell, Geddington (Jackson 1979) and Moulton Park, Northampton (Williams 1974). The wall trench for the house at Brigstock was very tenuous and it is not surprising that they often do not survive on less well preserved sites. However, traces of a wall trench, within the surrounding drainage gullies, have survived on gravel terrace sites at Fengate and at Mucking, Essex (Jones 1974). The stakes in the house wall at Brigstock would have presumably been set in a continuous trench rather than driven into the ground as some were at Danebury, Hants (Cunliffe 1981). The postholes for the doorway at Brigstock were substantial, as they were at Danebury, Aldwincle, Wakerley and Weekley. It is therefore surprising that they are not more commonly found where the wall itself may have left no trace. The limestone which appears to have been extensively used at Brigstock was brought at least $\frac{1}{2}$ mile to the site. This may suggest it was more commonly in use on less well preserved sites where the stone was more readily available.

The settlement area at Brigstock is not close to major streams, pervious soils, or mineral outcrops, but it was obviously attractive to people in the prehistoric period. The excavation suggests that the soil cover, above the underlying chalky Boulder Clay, probably averaged no more than 150mm thick in the Iron Age period: the soil itself has probably always been fertile, ie base rich, but could have been difficult to plough until the ironshod plough was introduced (personal communication from Mr C French).

The quantity of animal bones recovered from the site was small, but together with the spindle whorls found within the enclosure, they do perhaps suggest that sheep played an important part in the economic base of the settlement (Appendix 1). An emphasis on sheep farming was also suggested from a study of the animal bones found on the nearby site at Twywell, and it could be that the subsistence economy of the region was largely biased towards pastoralism. This would conform to the pattern reflected elsewhere in southern Britain (Cunliffe 1978, 183-4).

Arable farming on the clay subsoils was presumably practised and pieces of quernstone have been found on neighbouring Iron Age sites by fieldwalking. However, the old theory that the clay lands were largely covered by woodland in the prehistoric period is refuted by the density of sites and perhaps by the proportion of sheep bones to those of pigs and deer.

THE POTTERY (FIGS 7 and 8)

The pottery assemblage from Brigstock is not large (830 sherds) but clearly covers a long period of time. The illustrated pottery consists of the wares thought to be largely contemporary with the enclosure and round house (Group A, Nos 4, 17, 19, 24-37) and sherds which are either stratigraphically earlier than the enclosure, or are of early type, and as such are of interest in themselves (Group B). The amount of pottery recovered from pre-enclosure features or sealed beneath the bank was small. None of the illustrated sherds from these contexts (Nos 1, 8, 22-3, 39-41 and 51-2) are of recognisably late date but the assemblage includes scored ware and it has been argued elsewhere that this is rare in the region before the 3rd century BC (Jackson 1979).

GROUP A — POTTERY FROM THE ENVIRONS OF THE ROUND HOUSE

Two sites have been excavated to the south-east of Brigstock which have produced similar pottery to the later Brigstock material. At Twywell an assemblage was found dating from the 4th century BC to the 2nd or early 1st century BC, while the nearby site at Aldwincle produced pottery largely dating to the 1st century BC and 1st century AD. The forms and decoration of the Group B pottery are similar to the later material from Twywell and to the Iron Age pottery from Aldwincle.

It was possible to reconstruct the complete profiles of only two vessels. No 21 from Pit F70 can be compared with similar forms from Twywell (FIG 24 No 4 for example; but without the expanded base) and could date to the 2nd century BC on that site. The other vessel, No 29 from the house drainage gully is a long lived form and not easy to classify. Parallels for the vessels with scored surfaces or with finger impressions on the rims occurred at both Twywell and Aldwincle and were fully discussed in the Twywell report by D W Harding (Harding in Jackson 1975).

Ten sherds decorated in the Hunsbury-Draughton style (Cunliffe 1978, A:21) are illustrated (Nos 5-7, 10-13 and 15-17) but possibly only two or three vessels are represented. At Aldwincle similar pottery was found to date to the late pre-Belgic period (? 1st century BC) and there is no reason why a similar date should not be assigned to the Brigstock sherds. Small quantities of pottery with this decorative style are found on most Iron Age sites in central Northants with a greater number of sherds being found on the Hunsbury hill-fort (Fell 1936) and at Weekley near Kettering (report forthcoming). Although the site at Weekley is only 3 miles away, the Brigstock settlement is the most northerly point in the county where curvilinear decorated pottery has so far been found.

A single sherd of wheel turned Belgic pottery was found in the enclosure (No 38) and other sherds of apparently early Belgic type were found in the area of the round house (Nos 34-7). Activity within the enclosure is therefore attested until a late phase of the Iron Age period.

The fabric of the sherds in this group is basically similar to that of other late Iron Age collections in the region. Shell inclusions predominate, and where surviving, are often pounded or fine. Some sherds contained small amounts of grog, ironstone or quartz.

GROUP B — POTTERY OF THE EARLY/MIDDLE IRON AGE

It is not easy to draw a line between the two groups and some early residual pottery may be included in Group A. However, a number of sites of the early/middle Iron Age have now been excavated in the Corby region and it is possible to make comparisons between the pottery from these sites and the Brigstock sherds. Sherd types which are uncommon in published collections, but which have been found elsewhere in the region, are the decorated sherd with a zig-zag ornament (No 51), the sherd with a corrugated internal bevel on a flaring rim (No 45) and the body sherd with a small external 'boss' (No 23). Where individual sherds can be paralleled with those from other sites this has been done in the catalogue.

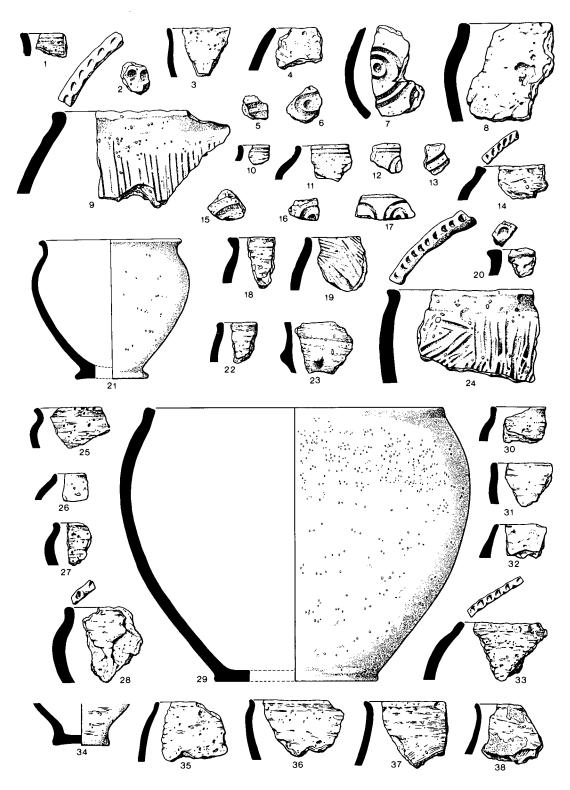


Fig 7 Brigstock: the pottery: probably contemporary with the enclosure (1/4)

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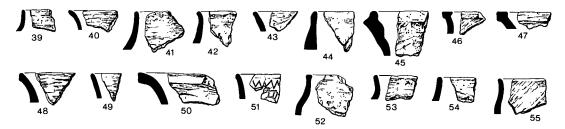


Fig 8 Brigstock: the pottery; pre-enclosure? (1/4)

CATALOGUE OF THE POTTERY

Except where stated otherwise, the surface of the sherds is moderately smooth.

- 1. Ext and int: dark grey; section: dark grey-brown; moderately shelly. TrA, layer 12.
- 2. Ext: brown; int: black brown; section: black; sparse fine shell and ironstone grits. Stone path.
- 3. Ext: brown bumpy surface; int: grey-brown; section: brown; some grog and sparse quartz, slightly harsh. Stone path.
- 4. Ext, int, and section: grey-brown; sparse grog and fine grits. Stone path.
- 5. Ext, int, and section: black; sparse quartz and fine cavities. TrA, layer 6.
- 6. Ext, int, and section: black; smooth, burnished surface, sparse quartz, grog and fine cavities. TrA, layer 8.
- 7. As No. 6. Stone path.
- 8. Ext and int: black-brown; section: black; fine shell and ironstone grits. Stone path.
- 9. Ext: buff to black, uneven, spaced vertical scoring; int: dark grey; section: dark brown; pounded shell. TrA, layer 5.
- 10. Ext: brown to dark grey; int: brown; section: dark grey; fine grits. TrA, layer 6.
- 11. As No. 10. TrA, layer 4.
- 12. As Nos 10 and 11. TrB, layer 7.
- 13. Ext, int, and section: dark grey to black; sparse quartz, grog and fine cavities. Enclosure ditch. Trench 2, layer 4.
- 14. Ext, int, and section: dark grey; uneven, bumpy surface, moderately shelly. Enclosure ditch. Trench 2, layer 4.
- 15. Ext, int, and section: black; sparse quartz and fine cavities. TrA, layer 6.
- 16. Ext, int, and section black; a little grog and fine cavities. TrA layer 6.
- 17. Ext: brown, int and section: dark grey; fine cavities. TrA, layer 4.
- Ext: brown; int and section: dark grey; bumpy uneven surface, large shell grits. Pit F2.
- 19. Ext, int, and section: brown to dark grey; surface uneven with random scoring, sparse but large shell grits. TrA, layer 4.
- Ext, int, and section: dark brown; uneven, bumpy surface, fine cavities. TrC, layer 7.
- 21. Ext: black-brown; int: black; section: dark grey; moderately shelly soft ware. Pit F70.

- 22. Ext, int, and section: dark grey; uneven bumpy surface, moderately shelly. F22.
- 23. Ext: smooth brown ware with a protruding knob of clay or boss; int and section: dark grey; moderately shelly. F22.

Three sherds with similar bosses were found during excavations at Clay Lane, Earls Barton, Northants (information from Patricia Aird). Possible copy of metal phototypes (Harding 1974, 139-40).

- 24. Ext, int, and section: orange-brown to dark grey ware; external surface uneven, random scoring with a rounded tool. Abundant shell. F26.
- 25. Ext, int, and section: dark grey-brown; moderate cavities, sparse grog. Pit F1 (1).
- 26. Ext: brown; int: light brown; section: dark grey; fine shell. Pit F1 (1).
- 27. Ext and section: dark grey-brown; int: brown; moderate cavities. Pit F1 (1).
- 28. Ext and section: dark grey-brown; int: light brown; sparse shell, quartz and grog. Hut gully, layer 1.
- 29. Ext: red-brown to black; int and section: dark greybrown; pounded shell, sparse ironstone grits and grog. Hut gully, layer 1.
- Ext and int: orange-brown; section: dark grey; fine cavities. TrA, layer 7.
- 31. Ext: smooth black burnished ware; int: brown, section: dark grey; fine shell. TrA, layer 7.
- 32. Ext, int, and section: dark grey; some quartz and grog slightly harsh. Hut gully, layer 1.
- 33. Ext and int: light-brown; section: dark grey; uneven bumpy surface, ironstone grits, slightly harsh. Hut gully, layer 1.
- 34. Ext: orange-brown; int and section: dark grey; fine grits. TrA, layer 6.
- 35. Ext, int, and section: brown to dark grey; fine cavities. TrA, layer 6.
- 36. Ext, int, and section: brown to dark grey; surface smooth, fine grits. TrA, layer 6.
- 37. Ext: dark grey-brown; int and section: dark grey; surface smooth, fine shell grits. TrA, layer 6.
- Ext and int: red-brown; section: dark grey; wheelmade, fine shell grits, some quartz. Hut threshold.
- Ext: red-brown; int: grey-brown; section: dark grey; moderately shelly. F47.
- 40. Ext: dark brown; int and section: dark grey; fine shell. F47.
- 41. Ext: khaki-brown; int: brown; secton: dark grey; fine grits and grog. F47.

IRON AGE SITE AT BRIGSTOCK

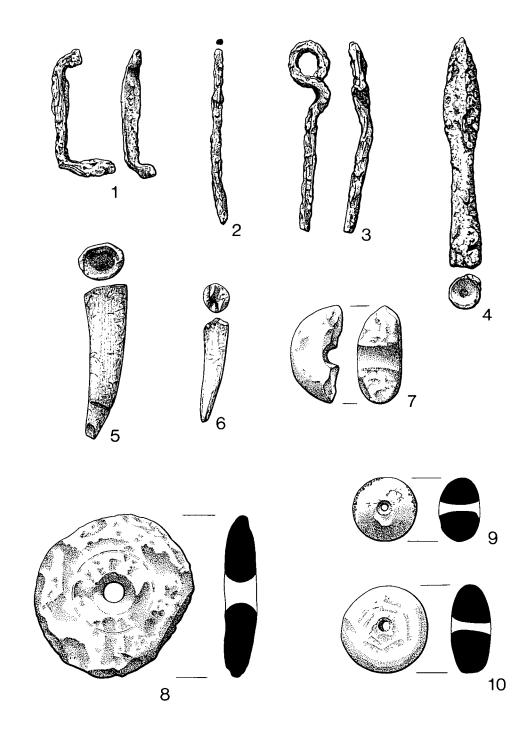


Fig 9 Brigstock: the small finds (1/2)

- 42. Ext and int: black-brown; section: black; fine shell. TrB, layer 7.
- 43. Ext and int: light brown to khaki; section: grey; bumpy surface, various grits. TrB, layer 7a.
- 44. Ext and section: dark grey; int: light brown; hard with quartz grits. TrC, layer 7.
- Ext, int, and section: dark brown; moderate cavities. TrC, layer 7.
 A similar sherd, from a ditch with uncalibrated radiocarbon dates of 290 and 260 BC was found at Gretton, Northants (publication forthcoming).
- Ext, int, and section: dark brown; sparse fine grits. TrC, layer 7. As Corby (Jackson 1982, FIG 9, No 32).
- Ext, int, and section: dark brown; fine grits. TrC, layer
 7. As Gretton (see No 45), Harringworth, Northants (Jackson 1981, FIG 6, No 36).
- 48. Ext, int, and section: dark grey-brown; sparse fine shell. TrA, layer 4.
- 49. Ext, int, and section: dark grey-brown; smooth surface, possibly burnished, no obvious grit. TrA, layer 7.
- 50. Ext and int: brown; section: dark grey; fine shell. TrA, layer 6.
- 51. Ext: light brown; decorated with zig-zag ornament; int and section: dark grey; fine shell grits. F60. Decoration similar to that found on Chinnor-Wandlebury group (Cunliffe 1978, A.10). Other local find spots of this decorated pottery are Wellingborough (Northamptonshire Archaeol 10, 1975, 144) and Islip (Northamptonshire Archaeol 17, 1982, 93).
- 52. Ext: brown; int: dark brown; section: grey-brown; fine shell and quartz grits. F60.

- 53. Ext and int: brown; section: dark grey; moderate cavities. Tr4, layer 2.
- 54. Ext and int: black to light brown; section: black; fine cavities and some quartz. Tr4, layer 2.
- 55. Ext, int, and section: dark grey to dark brown; fine cavities. Tr4, layer 2.

THE SMALL FINDS (FIG 9)

OBJECTS OF IRON

- 1. Staple or similar fitting. One end is flattened out and the other broken. Length 68mm. Pit F1, layer 1.
- 2. Tool or rod. One end possibly broken. Length 64mm. TrA, layer 4.
- 3. Ring-headed pin. Length 100mm. TrA (7) (below level of house floor and probably residual). The pin is similar to, but larger than, an example found at Gretton, Northants (excavations by the author, report forth-coming). The Gretton pin came from a ditch with uncalibrated radio-carbon dates of 460 and 440 bc. Bronze examples have been found in the county at Hunsbury hill fort (Dunning 1934, FIG 3) and at Ecton (Jackson 1973, FIG 5). The latter was associated with late Bronze Age early Iron Age pottery.
- 4. Socketed spearhead. Length 121mm. The socket is not split and has an internal diameter of 10mm at its open end. There are two small opposing holes, 1mm in diameter, some 4mm from the end of the socket. Iron Age ground surface, near the bank on the west side of the enclosure TrC. Hunsbury (Fell 1936, PL V) A1.

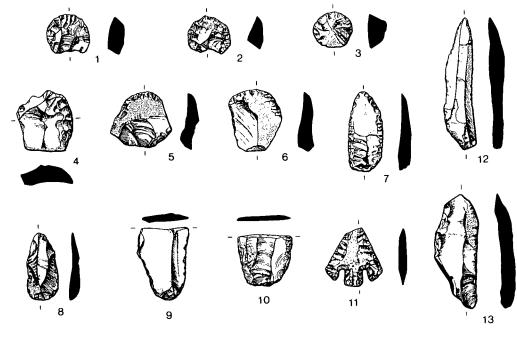


Fig 10 Brigstock: the flints (1/2)

OBJECTS OF BONE

- Tool? Made from an antler tine. No internal hole for knife shaft. A shallow groove had been cut 17mm from the broken tip. Length 80mm. Outer edge of bank.
- 6. Awl or similar tool. Made from an antler tine. Surviving length 55mm. TrB, layer 4.
- 9. Spindle whorl. Probably made from the femur of an ox. Diameter 34mm. Width 22mm. TrA, layer 4. Within confines of round house.

OBJECTS OF STONE

- 7. Broken spindle whorl. Sandstone. Diameter 62mm. Width 22mm. TrB, F3.
- Spindle whorl. Made from a flat piece of limestone. Average diameter 87mm. Thickness 10mm. TrA, layer 4.

OBJECT OF CHALK

10. Spindle whorl. Diameter 44mm. Width 20mm. TrB, layer 3. Inner edge of bank.

THE FLINTS (FIG 10) by W R G MOORE

A total of 57 struck flints were found scattered over the site both in Iron Age features and in the topsoil. They are considered here as a single residual assemblage and selected items are illustrated in FIG 10.

Material. The flint is predominantly dark grey in colour with a small proportion of medium grey. Cortex, present on 45 pieces, can be described as 2% heavily iron stained, 53%slightly iron stained and 44% with a thin pebble surface. Local gravels or drift deposits are likely to have been the source of this material. Most of the flints have acquired a thin mottled patination although some are unpatinated. Two retouched blades (Nos 12, 13) differ in having thick white patination.

Core. The single core retains a substantial part of the cortex of the nodule from which it was made. A number of flakes have been detached in irregular fashion from at least four platforms.

Waste flakes. Thirty-six flakes were found and most (81%) of these are cortical. Of the 27 unbroken pieces, there are no blades with length/breadth ratio exceeding 5:2 and 33% are broad flakes, wider than 5:5.

Scrapers. There are six examples of generally small, convex scrapers (Nos 1-6). Three are of small discoidal shape, less than 25mm in diameter. Two of these have been carefully worked over the whole of the dorsal surface and the medium-angled scraping edge extends around most of the perimeter excluding only the striking platform (Nos 1, 2). The third example differs in having a steep, sub-conical cross-section and about a quarter of the dorsal surface remaining as unworked cortex (No 3). Two other incomplete scapers have a medium-angled convex scraping edge around the end and sides of short stout flakes (Nos 4, 5). One end-scraper has a shallow-angled scraping edge with scale flaking around the convex distal end of a short flake and light trimming along one side (No 6).

Retouched pieces. This is a miscellaneous group of twelve pieces with areas of deliberate retouch not classified as specific tools. Most could result from the casual use of waste flakes as scrapers or knives although a few could be unfinished or fragmentary tools. One small flake, for example, with minimal retouch at the rounded distal end and inverse squilling along parts of both sides may have been a knife/scraper (No 8). Another flake with edge retouch along one side and chipping and lustre along the opposite side has evidently been used as a knife (No 9). A small thermal flake with a notch 9mm across formed by steep retouch was perhaps a hollow scraper. The proximal end of a broken flake or wide blade is carefully trimmed along both edges and is possibly a broken tool (No 10).

Two patinated blades were also found. One has light retouch at the pointed distal end and inverse chipping resembling light denticulation along one fairly straight side (No 12). The other blade has some very steep trimming along one edge together with a little inverse step flaking in the same position (No 13).

Plano-convex knife. A single example was found with a leafshaped outline and regular trimming around most of the perimeter leaving primary flake scars and cortex remaining on the dorsal surface (No 7).

Arrowhead. A bifacially worked barbed-and-tongued arrowhead was found with tip missing and barbs and tongue neatly squared off (No 11). Scale flaking over the whole of one side and most of the other leaving part of an old patinated flake bed visible. The arrowhead if of Green's Conygar Hill type (Green 1980, 117).

Discussion. The assemblage is a small residual collection which may result from more than one period of activity in the area. The two well patinated blades (Nos 12, 13) appear to be older than the other flint artifacts on the site and the use of large blades would tend to suggest an earlier Neolithic (or earlier) context. Among the remaining flints the arrowhead is the most diagnostic item being an Early Bronze Age type often having Food Vessel associations (Green 1980, 130-39). The planoconvex knife is a Late Neolothic/Early Bronze Age type and is also not infrequently associated with Food Vessels (Simpson 1968, 198-9). Although the scrapers and waste flakes are not sufficiently numerous for detailed analysis, it may be said that the generally broad nature of the flakes and the small size of the scrapers would tend to support the view that the flint collection as a whole is predominantly of Late Neolithic/Early Bronze Age date.

It is of interest to note that the Brigstock flint assemblage comes from an area of extensive upland boulder clay. Such areas in Northamptonshire have not hitherto yielded much evidence for settlement before the Iron Age (eg Hall and Hutchings 1972, 2-3). Recent fieldwork continues to demonstrate that most flint scatters in the county, and by implication Neolithic and Bronze Age settlements, occur on the areas of lighter soils, particularly on ironstone, sands or gravels (Martin and Hall 1975, 11-12; 1980, 5-13). The significance of the few small flint assemblages that are being found on the boulder clay as at Brigstock (and Quinton; Moore 1979) is difficult to assess. The occurrence of waste flakes certainly shows that some flint-knapping took place but whether this was associated with a limited settlement of the Northamptonshire boulder clay during the Neolithic or Bronze Age is not known.

APPENDIX 1

THE ANIMAL BONES by DOREEN FIELD

The small amount of animal bones from the site are grouped into two assemblages. The bones from Pit 29 are regarded as being contemporary with the round house, whereas those from the enclosure probably include residual material and are described as a single group. A total of 591 pieces were recovered from the enclosure, and 264 from Pit 29. The number of bones from the site is too small to allow firm conclusions to be reached.

Species identified were as follows:-

Enclosure

Ox (Bos longifrons) Celtic Shor	rthorn type
Sheep (Ovis aries L)	Goat (Capra hircus L)
Horse (Equus caballus L)	Dog (Canis familiaris L)
Fox (Vulpes vulpes L)	Roe Deer (Capreolus
	capreolus L)
Red Deer (Cervus elephus L)	Pig (Sus domestica/scrofa)
Pit 29	
Sheep (Ovis aries L)	Goat (Capra hircus L)

Pig (Sus domestica/scrofa) Ox (Bos longifrons)

TABLE 1

Roe Deer (Capreolus

capreolus L)

NUMBER OF IDENTIFIABLE BONES FROM EACH SPECIES

The Enclosure		Pit 29		
Ox	180	Ox	7	
Sheep/Goat	183	Sheep/Goat	164	
Pig	46	Pig	21	
Roe Deer	2	Roe Deer	12	
Red Deer	1	Total	204	
Horse	11			
Dog	5			
Fox	2			
Total	430			
		** ** *** * *	~ ~ ~	

Unidentified fragments 161 Unidentified fragments 60

MINIMUM NUMBER OF ANIMALS

In estimating the minimum number of animals of each species (Chaplin 1971 70-75), ribs, vertebrae and phalanges were disregarded, and only mandibles and long bones were considered, these were sorted into species and skeletal order and the following assessments made:

The Enclosure

Ox - 6 animals Sheep/Goat - 9 animals Pig - 2 animals

Pit 29

Sheep/Goat - 5 animals Pig - 1 animal Roe Deer - 1 animal

The Enclosure

The animal remains recovered were from ox, sheep/goat, pig and horse. All parts of the skeleton were present, and the fragmentary condition plus some evidence of butchery and gnawing suggests domestic refuse. None of the bones appeared to be diseased, and there was no indication of use as tools. Traces of other animals included a complete metacarpal from a red deer, two small fragments of roe deer antler, an ulna and two teeth from a medium size dog, and a mandible of a small fox.

Ox. The remains are from small, medium sized and robust mature animals, with ages ranging from 6 months to 4 years. The only two horncores came from a shorthorn breed, and the cores had only vestiges of skull attached. There is a marked absence of skull remains from this area and from the pit.

Sheep/Goat. The dimensions of the long bones are similar to those recovered from the pit with the exception of some tibia which were of more slender proportions. Apart from two fragments of pelvis, possibly foetal, the remains were from animals between 1 year and $3\frac{1}{2}$ years old, and came from at least nine animals (Silver 1969). This estimate is supported by the number of long bones and mandibles, but among the loose teeth there were seven right and eight left M_3s , which can be ascribed to eleven animals.

Pig. Part of a humerus and ulna and two left incomplete calcaneum, plus fragments of mandible and a few loose teeth from two animals between one year and three years of age, are the only remains from pig, indicating how unimportant they seem to the economy.

Horse. The scant remains suggests little need for horses in agricultural work, or as a means of transport, although the smallness of the sample must be borne in mind.

TABLE 2 MINIMUM NUMBER OF ANIMALS

		No of	
Animal	Bone	animals	Estimated age
Ox	Tibia	2	1 under 2 years
			1 over 2 ¹ / ₂ years
	Femur	2	1 at 3 ¹ / ₂ years
			1 over 4 years
	Humerus	5	4 poss 1 ¹ / ₂ years
			1 over 3 ¹ / ₂ years
	Radius	5	4 over 11/2 years
			1 over 3 years
	Ulna	6	not ageable, possibly part
			of radius above
	M/carpal	3	1 under 2 years
			2 over 2 ¹ / ₂ years
	M/Tarsal	2 5	not ageable
	1st Phal.	5	5 over 1 ¹ / ₂ years
	Astragulus	3	not ageable
	Calcaneum	3	3 over 3 ¹ / ₂ years
	Mandibles	3	not ageable
	Scapula	4	
	Horncore	1	<u> </u>
Sheep/	Humerus	3	2 over 10 months
Goat	_		1 over 3 ¹ / ₂ years
	Femur	1	1 over 3 ¹ / ₂ years
	Radius	9	1 over 3 years
			8 possibly 3 years

	Tibia	6	3 under 2 years
			3 not ageable
	M/Carpal	5	not ageable
	M/tarsal	2	not ageable
	Pelvis	4	not ageable
	Scapula	3	_
	Calcaneum	1	l over 2 ¹ / ₂ years
	Astragulus	2	not ageable
	Horncore	2 2	_
	Mandibles	9	1 under 2 years
			3 over 3 ¹ / ₂ years
			5 not ageable
	Loose	11	11 between 3-4 years
	teeth M ₃ s		
Pig	Calcaneum	2	2 between 2-2 ¹ / ₂ years
-	Humerus	1	not ageable
	Ulna	1	not ageable
	1st Phal	1	5 over 2 years
			4 under 2 years
	Mandibles	3	1 at 1 year
			2 over 21/2 years
Horse	Radius	1	1 under 3 years
	1st Phals	2	2 between 15-18 months
	Astragulus	1	not ageable
	Teeth (5)		21/2-4 years
A few re	emains from de	er, do	
			-

Pit F29

The condition of the bones from the pit showed little variation to those from the enclosure. The remains of sheep/goat were the most abundant, with small samples of pig, roe deer and ox. Whilst the numbers of sheep/goat remained high, cattle remains decreased possibly indicating some change in the economy of the site.

Sheep/Goat. Four fragments of horncore were obviously caprine, one 'pair' showing chop marks had no skull attached, a second 'pair' had vestiges of skull, but none of the horns were complete. A single fragment, possibly caprine, coming from the base of the core was from a large animal.

Considering there were horncore remains from three animals, fragments of skull were meagre (not enough for one animal); this, and the absence of phalanges, indicate the animals were not killed on the part of the site excavated. There were more complete long bones recovered from this feature than from the enclosure, some of the bones had epiphyses present but loose, an indication of young animals, in others epiphysial fusion was complete denoting mature stock. These remains are from a minimum of five animals (Table 2).

Roe Deer was represented by left and right tibia, femur, scapula, and a fragment of pelvis, other small fragments of long bone could also be deer.

Pig. No long bones were present; this may be due to the fact that pig bones do not survive well, or that pig did not play an important part in the economy. A partial mandible containing incisors and canines, and several 1st and 2nd phalanges were the only remains that could be ascribed to pig.

MINIMUM NUMBER OF ANIMALS

		No of	
Animal	Bone	animals	Estimated Age
Sheep/	Tibia	4	1 under 2 years
Goat			2 over 2 years
			1 at 3 ¹ / ₂ years
	Humerus	3	l under l year
			2 over 3 ¹ / ₂ years
	Femur	2	1 at 2 years
			1 at 3 ¹ / ₂ years
	Radius/Ulna	5	2 at 10 months
			l under 3 years
			2 over 3 years
	M/Carps	4	4 over 2 years
	M/Tars	5	2 at 1 ¹ / ₂ years
			3 at 2 ¹ / ₂ years
	Astragulus	2	—
	Calcaneum	1	1 at 3 years
	Mandibles	3	1 over 2 years
			1 over 4 years
		_	1 not ageable
	Scapula	3	—
	Pelvis	5	_
_	H/Core	3	
Roe	Tibia	1	—)
Deer	Femur	1	—) immature animal
	Scapula	1	—)
	Pelvis	1	—) —)
Pig	Mandibles	1	1 at 2 years
	Phalanges	1	1 at 2 years

APPENDIX 2

SOIL PHOSPHATE AND MAGNETIC SUSCEPTIBILITY ANALYSIS AT BRIGSTOCK 1981 by D A GURNEY

Introduction

Samples for soil phosphate and magnetic susceptibility analysis were taken from Trench C during the 1981 excavations. Phosphate samples were taken from layer 7 on a 1m grid, and magnetic samples from layer 7 on a 2m grid. Samples for both phosphate and magnetic analysis were also taken from layers 1 and 2 along the northern and eastern sides of Trench C. Samples were collected by Maisie Taylor and Charles French, who also provided soil descriptions. The basic method of analysis is fully described in Craddock *et al* forthcoming. The author is grateful for the continued support and encouragement of Dr Paul Craddock (British Museum Research Laboratory) and Dr Tony Clark (Ancient Monuments Laboratory, Fortress House).

Grid Samples

At the time of sampling, layer 7, a buried soil associated with the enclosure and house of 1st century date, was exposed over the area of Trench C. Layer 7 is a silt loam 80-150mm thick, sealed by layer 2, a silt loam 50-100mm thick, and layer 1, a dark brown silty clay loam 200mm thick. Below layer 7 is a weathered boulder clay subsoil.

At the level of layer 7, the house gully itself had been totally excavated, so this could not be sampled. Where a sampling

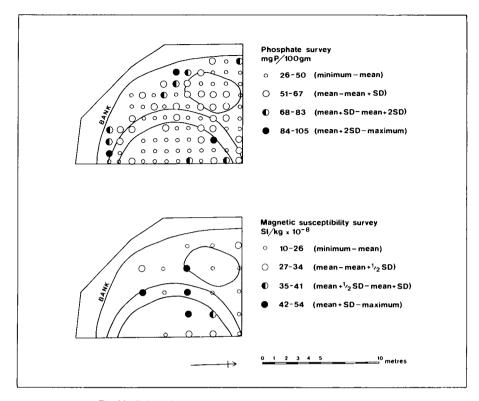


Fig 11 Brigstock: phosphate and magnetic susceptibility survey

point fell on the excavated ditch, the nearest available point was sampled. The only other feature apparent at this level was F70, a large pit behind the house, and probably contemporary with it, and with a fill of a dark silty loam. The other features on the plan were sealed by layer 7, and finds suggest considerable pre-enclosure activity from at least the 5th century BC. These features were clearly sealed by layer 7, so earlier activity on the site should not distort the evidence from analysis of the buried soil relating to the main structure.

The 88 phosphate samples from the layer 7 grid (see FIG 11) have a range of 26-105mgP/100gm, and a mean value of 51mgP/100gm. This range of values would not suggest the presence of either human organic occupation debris in large quantities, or the presence of livestock within the enclosure. Twenty-seven samples fall within the circular drainage gully of the house, and in range and mean value, these hardly differ from the range and mean values of the 61 samples from the yard, although in the yard some values.

A similar pattern is demonstrated by the magnetic susceptibility survey, although limited to only 20 samples (FIG 11). Again, the range of values and mean value within the house and in the yard are very close, and do not suggest either the presence of hearths or industrial activity within the enclosure.

Section Samples

Samples were taken from layers 1 and 2 along the northern and eastern sections of Trench C. The north-south section

bisects the house, while the east-west section runs from the northern edge of the house across the yard behind the house. Thus the two sections sample the upper layers within the house, and the upper layer across the yard.

The phosphate results from layer 2 show consistently low values in both house and yard, but consistently higher values in layer 1, deriving from use of the area as pasture for livestock.

Layer 2 values are consistently low and these phosphate values probably do not derive from archaeological deposits. It seems unlikely that these bear any relation to activities associated with the enclosure. This is also true of the magnetic susceptibility results which are consistent and low in value. It does, however, confirm the belief that evidence relating to the house and enclosure is securely sealed in layer 7, and that the evidence was not in the topsoil as at Maxey (Gurney and Craddock forthcoming).

Discussion

The generally low and consistent values for phosphate and magnetic susceptibility samples both within the house and in the yard suggest that both areas were kept relatively clean of human occupation debris, that livestock were not kept in the yard, and that there were no hearths within the sampled area.

An alternative explanation of the low values would be a short-lived or occasional occupation of the enclosure, but the nature of the site would suggest that this is unlikely. It seems far more probable that given the small enclosed area, occupation debris would be deposited either outside the enclosure, or at least in the enclosure ditch, and that the house itself and yard were kept clean. The yard is also rather small for livestock and the fact that the enclosure bank is internal might support this view.

The values obtained for three 'background' samples, taken from test pits outside the enclosure were 78, 110 and 115mgP/100gm and 85, 91 and 101 SI/Kg x 10⁻⁸. These values are considerably higher than the values from within the enclosure, and this might suggest that human occupation debris and/or livestock were kept outside the enclosure, and similarly that hearths associated with the house might also be beyond the enclosure ditch. Further sampling and/or excavation would be necessary to confirm or refute this hypothesis.

It should be noted that the area available for sampling was only approximately one-third of the total area of the house and yard, and that the above conclusions are based on this limited sampling strategy. It is possible that activities which may have led to an enhancement of phosphate or soil magnetism might well have taken place elsewhere within the enclosure. The pit F70, contemporary with the house, dominates the area sampled behind the house, and if open would have limited if not prevented access to the area.

Conclusion

A limited phosphate and magnetic susceptibility survey of the buried soil relating to the house and enclosure phase of the 1st century BC suggests that the house and yard were kept relatively clean of human occupation debris, that the yard within the enclosure was not used for livestock, and that there is no evidence to suggest the presence of hearths within the enclosure or house.

APPENDIX 3

A NOTE ON THE MOLLUSCS FROM BRIGSTOCK, NORTHAMPTONSHIRE, 1981 by C A I FRENCH

The only molluscs evident were found in the south-west quadrant of the excavation of the enclosure at Brigstock. They were preserved on the occupation surface on the inside edge of the surrounding bank.

The topsoil consisted of a dark brown clay loam with a welldeveloped blocky ped structure. It overlies a very dark brown apedal loam with gravel pebbles which is regarded as the Iron Age occupation surface within the enclosure. The soil and occupation horizon are developed on boulder clay at a depth of c600mm.

The molluscan assemblage represents an impoverished shade-loving fauna (Table 1). It is dominated by *Discus rotundatus*, a common woodland species which is often found in leaf litter (Evans 1972). The next most abundant species, *Carychium tridentatum*, prefers similar habitats (Evans 1972). But its relatively low abundance suggests that there may have been some disturbance in the area, possibly human activity within the enclosure. The presence of a few *Oxychilus cellarius* and *Clausilia bidentata* suggests some nearby debris, perhaps the rubble of small stones and exposed ground of the bank. The remainder of the assemblage is comprised of a few other shadeloving and tolerant species, with open-country snails virtually absent.

It is suggested that this assemblage represents an impoverished and very locally relevant fauna living within the shelter of the bank of the enclosure. But the lack of species indicating open habitats suggests that there may well have been other shaded habitats in the vicinity.

TABLE 1 THE MOLLUSCS FROM WITHIN THE ENCLOSURE BANK AT BRIGSTOCK

Dry weight 2.0 kg

Carychium tridentatum (Risso)	10
Cochlicopa sp	1
Pupilla muscorum (Linnaeus)	1
Vallonia pulchella (Müller)	2
V. excentrica Sterki	1
Discus rotundatus (Müller)	56
Aegopinella pura (Alder)	6
Oxychilus cellarius (Müller)	4
Clausilia bidentata (Ström)	7
Trichia hispida (Linnaeus)	4
Cepaea spp	5

APPENDIX 4

THE CHARCOAL FROM TRENCH 4 by MAISIE TAYLOR

The charcoal samples taken from Trench 4 at Brigstock were all *Quercus* sp (oak). They all came from fairly substantial logs with the smallest pieces of wood, in the charcoal, coming from branches about 50mm in diameter. There appears to have been an obvious selection of oak with even sized timbers (between 50 and 100mm in diameter) being selected. The charcoal was extremely well carbonised and was being produced under very well controlled conditions.

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