# A ROMAN FIELD SYSTEM AT BROUGHTON, BUCKINGHAMSHIRE

## M. R. PETCHEY

With a contribution from C. WOODFIELD

The recording, under emergency conditions, of a Roman field system is described. Rectangular fields of many sizes opened off a trackway.

Parallels in the Upper Thames Valley are described. Pottery evidence dates the

settlement to A.D. 150 - 400 +.

The excavation of a gravel pit in Broughton parish during the autumn of 1978 to provide material for the construction of the new route of the A5 through Milton Keynes was not expected to produce new archaeological information. Field-walking in advance of the planning application in the early months of 1978 had produced only the usual scatter of post-medieval pot and tile. However, after the topsoil scrape, in October 1978, R. A. Adkins, then an assistant archaeologist with Milton Keynes Development Corporation, noticed ditches containing Roman pottery cut into the gravel in the south-eastern half of the site, over an area of 45,000m². These were surveyed by the present author, R. A. Adkins and R. A. Croft, using a plane table and microptic alidade. Though a full-scale excavation of the field system thus revealed was both impractical and undesirable, a short weekend salvage excavation was undertaken by members of the Bletchley and Milton Keynes & District Archaeological Societies to provide more dating evidence.

The site, in Broughton parish, (Fig. 1.) is centred on SP 9150 4040. To avoid confusion with G. F. X. Hartigan's gravel pit, actually in Milton Keynes parish but known as Broughton Pit, it is suggested that the site take its name from the nearest geographical feature recorded by the Ordnance Survey, a wood known as Old Covert and itself

partially destroyed by the gravel pit.

The site lies on the edge of the valley of the River Ouzel at an average elevation of 69.75m O.D., immediately adjacent to a small stream which rapidly joins with an unnamed brook tributary to the Ouzel. The land in the immediate vicinity is fairly level, falling gradually to the south and west, and rising to the clay plateau to the north and east.

The gravel on which the site lies is the first terrace gravel of the small stream to which it is adjacent. This is a narrow band only and outside it, in a radius of 0.5 km,

are mixed alluvium, terrace grayel, head deposits and Oxford clay.1

Though it is dangerous to place too much reliance on modern classifications of agricultural lands to assess the utility of ancient soils, it is instructive to note that, in 1.75 sq. kms centred on the Broughton field system, 82% are classified Grade III and the remaining 18% Grade II by the Ministry of Agriculture. Most land in North Buckinghamshire is in Grade III, a wide grade into which, indeed, most land in Midland

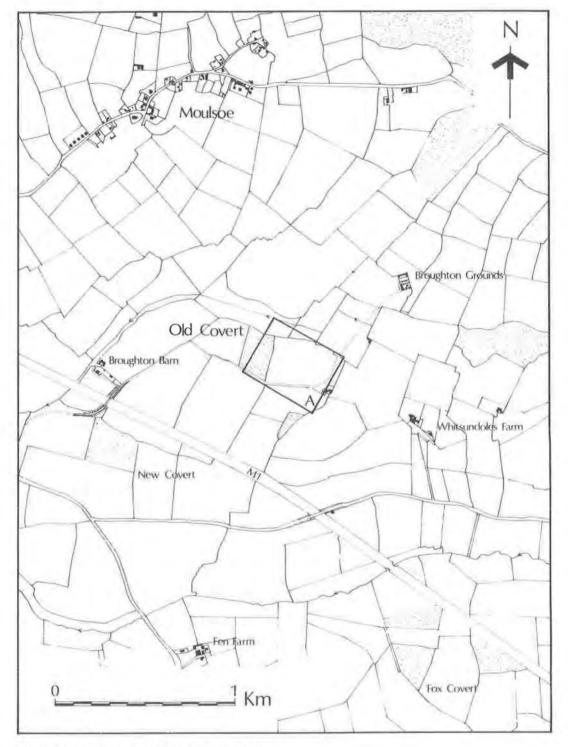


Fig. 1. Broughton, Old Covert: Location plan.

A: Area of fig. 2. Reproduced from the Ordnance Survey Map with the sanction of the Controller of Her Majesty's Stationery Office. Crown Copyright reserved.

England will always fall. Grade II is a narrow grade indicating land only marginally out of Grade I. To inject these figures with meaning, it is necessary to compare them with those for other sites of similar period close by. The Bancroft villa in Wolverton could call on an area with 40% Grade II, whilst the settlement at Caldecotte, Bow Brickhill, had no Grade II and 10% Grade IV. On the clay plateau the site at Wood Corner had to make do with 50% Grade IV. In this local heirarchy, therefore, the land available to the community at Broughton was only inferior to the best areas occupied by the villa and its satellites.

# The Features (Fig. 2)

The features discovered in the gravel pit at Old Covert fall into three groups; the trackway; its associated enclosures; and a small pennanular gully. These were not always continuously visible after the removal of between 0.5m and 0.75m of topsoil and the top layer of gravel, since the box scrapers had created ruts and areas obscured by spilt spoil, running like furrows across the site. Only in the clear areas between could features be discerned as darker or different in texture from the surrounding gravel.

The trackway was defined by two parallel ditches approximately 7.5m apart. It ran without interruption across the site from north-west to south-east, a slight curve giving it a more westerly inclination at the northerly end. The topsoil strip would have removed evidence of metalling had any existed,

The southern ditch was sectioned (Fig. 3, section 1). It survived to a depth of 0,35m, and was U-shaped, 1.4m wide, filled with the brown clayey sand typical of the fill of features cut into gravel.

On either side of the trackway were rectangular enclosures of a wide variety of sizes. It is clear that not all were in use at the same time; for example, the square field toward the north-west end of the planned area lies concentrically inside a rectangular field. This arrangement would have resulted, had they been in simultaneous use, in long, very narrow projections, utterly useless for agricultural purposes.

In so far as they can be sorted by size, the fields fall into three categories: small enclosures of circa 500m<sup>2</sup>, enclosures of intermediate size of circa 1,000m<sup>2</sup> and larger

fields of circa 10,000m<sup>2</sup>.

In many of the enclosures features were observed that might be interpreted as pits or wells. In view of the impossibility of confidently distingushing man-made features from periglacial features on the one hand, and machine trample on the other, without time for careful cleaning, these have not been marked on Fig. 2.

The field boundaries were sectioned. Section 2 (Fig. 3) examined one of the boundaries parallel to the trackway: it was slightly smaller than that of the trackway, 0.26m x 0,94m, but otherwise a similar U-shape. Section 4, (Fig. 3), sampling one of the boundaries perpendicular to the trackway, showed it to be surviving as a shallow flatbottomed ditch, 0.1m x 0.79m, and filled with a great deal of charcoal and ash.

The only suggestion of any structure was a pennanular gully, probably associated with a sub-rectangular enclosure which clearly stopped before reaching the gully. A pile of spoil made it impossible to to establish the relationship between this gully and an enclosure ditch which ran across it. A section (Fig. 3, section 3) showed the gully to be 0.17m x 0.57m.

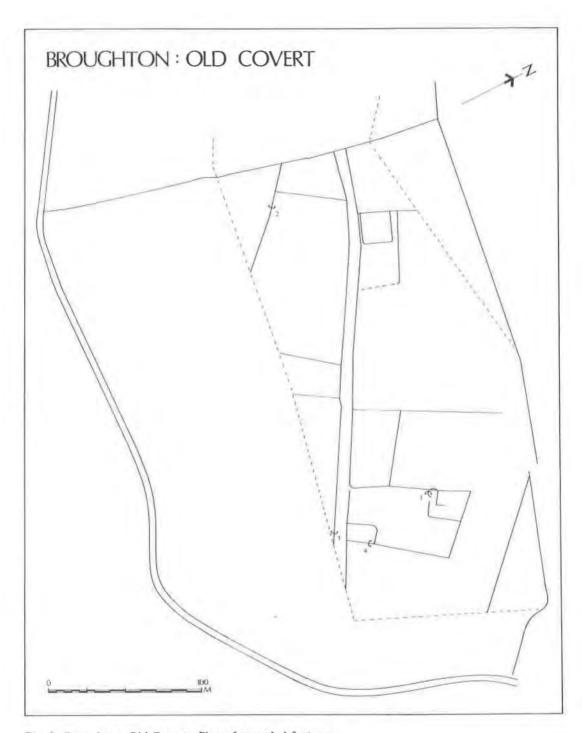


Fig. 2. Broughton, Old Covert: Plan of recorded features.

# Dating and Interpretation

The pottery recovered from this site, both stratified and unstratified, is the only material evidence for dating the site. As discussed more fully below, the range of pottery found dates from circa A.D. 130–180 to A.D. 301–420+. Stratified pottery came only from sections 2 and 4. Section 2 contained forms suggested below to date from A.D. 150–250; a sherd possibly of fourth century date was found in section 4.

The site may be interpreted as one of the types of Roman field systems typified by enclosures opening off a central trackway which has been identified, from both excavations and aerial reconnaissance, in the Thames Valley, where they are considered to form the yards, closes and paddocks of adjacent settlements. This is a valid explanation of the field system at Old Covert.

What was not found was the nucleus of the settlement, though it cannot be far away, perhaps in one of the large enclosures such as were associated in the trackway field systems at Ufton Nervet, Berks; Abingdon, Berks; or from the Ouse Valley at Odell, Beds.<sup>4</sup>

The trackway system at Farmoor, Oxon. might be thought to be similar, but there a different economic purpose is being served. The ecological evidence suggests that the farm at Farmoor was set in a grassland environment: the large regular enclosures are the paddocks of a pastoral community. At Old Covert, on the other hand, the multifarious size and shape of the fields suggests a variety of uses; some may, indeed be paddocks and stockyards, but others, equally, may have been small arable fields.

It is not clear what kind of agriculture was being pursued outside these small enclosures. Both an open field system and an infield/outfield system have been suggested as models. The Northamptonshire and Cambridgeshire evidence for the transformation of Roman field boundaries into medieval headlands might tip the scales in favour of the former. There is no evidence of any such continuity at Old Covert, however, which stands in a landscape derived from eighteenth century enclosure.

The pennanular gully, interpreted as belonging to a circular structure and associated with a rectangular enclosure, resembles those gullies and enclosures dated to the Middle Iron Age at Farmoor, but there is no dating evidence to substantiate this. No pottery came from section 3, and the surface scatter in the area of the hut, though apparently hand-made, is considered to be late Roman rather than Iron Age. In view of the continuation into the fourth century of circular buildings in local contexts, as at Wood Corner, Bradwell, it is therefore more likely that the hut belongs to the same period of occupation as the rest of the site. Its small size suggests a shelter or hut rather than living accommodation.

The present model of Iron Age and Roman settlement in the Ouse and Ouzel valleys in North Buckinghamshire is that settlement exploited all the resources of the area, both valley floor and sides, and clay plateau. The larger settlements, as in the medieval period, lay in the valley and on the gravels, but other settlements occupied the clay plateau, relying perhaps more on pastoralism. The Old Covert field system fits neatly into this model, ideally placed as it was for exploiting a range of soil types.

#### The Finds

Pottery forms the main body of finds from the site: the residue is a very small number of unidentifiable bones.

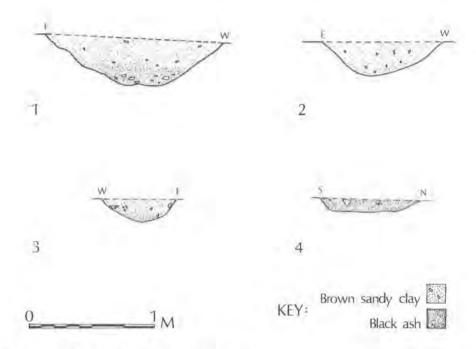


Fig. 3. Broughton, Old Covert: Excavated sections.

The Pottery, by Charmian Woodfield.

Rather fewer than a hundred sherds were recovered from the site, only a quarter stratified or related to features, so that any conclusions reached here must be understood against that background.

The date range indicated by the sample appears to run from the late second century to the late fourth, or even early fifth, century.

## (i) Pottery from features

#### Section 2:

Fig. 4, 1: A shoulder sherd from a narrow-necked jar with rouletting above two grooves in a grey, sandy fabric with quartz inclusions, and black external surface. For the general type see Woods, 1970, no. 143, there dated A.D. 130-200.

Unillustrated sherds from this section include the major part of a medium-mouthed bowl (neck diameter 80 mm) of globular form, with a cordon at the junction of neck and shoulder. Originally slipped externally to appear blue-grey, the fabric is grey-brown and sandy. This form is in use until the end of the fourth century, but the blue-grey slip may indicate a date of A.D. 150–250.

From the cleared surface of a stretch of ditch close to this section came a small sherd of rouletted Oxfordshire red colour-coated ware. This decorative technique is

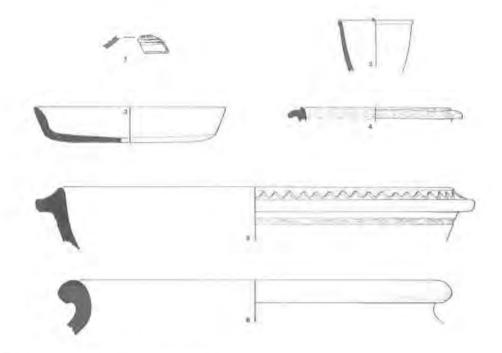


Fig. 4. Broughton, Old Covert: Pottery (Sc. 1/4).

used on most vessel types by the Oxford potters from circa A.D. 240 on (Young, 1977, 131). but there are indications that it may not be reaching North Buckinghamshire until the second half of the fourth century.

#### Section 3:

No finds came from the section itself, but a group of fragmentary and undiagnostic sherds including fragments of hand-made vessels in shelly and quartz-gritted wares were collected from the surface of the pennanular gully and its environs. Although it is extremely difficult to date material of this nature with any certainty, it seems to be late Roman in character rather than Iron Age.

## Section 4:

From this section came three sherds from a grey indented self-coloured beaker, dating probably from A.D. 150-250; also a sherd from a black shelly ribbed vessel with a 'soapy' surface, apparently a cooking pot. The latter has a distinctly fourth-century look.

# (ii) Unstratified pottery

Fig. 4, 2: Neck of self-coloured red beaker, with a small bead rim, in a fine, dense, hard, light-red fabric. (The odd speck of mica towards the base of the sherd may indicate that the vessel was originally mica-dusted). For the general type see Woods, 1970, nos. 148–50, there dated A.D. 130–240.

- Fig. 4, 3: Straight-sided dish with chamfered base in light grey sandy ware with dark grey surfaces. The pointed rim, the chamfer, the thickening of the wall towards the bottom and the platter-like shallowness of the dish may indicate a date of circa A.D. 130-200 by comparison with Woods, 1970, no. 14. The vessel is, in any case, unlikely to be later than circa A.D. 225.
- Fig. 4, 4: Flanged bowl in light grey sandy fabric with quartz inclusions. The vessel appears to have had a black slip internally and over the top of the flange, which was burnished, the rest of the vessel, unusually, left a rough light grey.

This type with the downward sloping flange and the angle with the wall curved is dated A.D. 200-300 in Leicester (Kenyon, 1948, Fig. 19, No. 28).

Fig. 4, 5: Rim of heavy flanged bowl in black shelly ware: the surfaces, fired black to brown and soapy in feel, are partly burnished. A wavy line decorates the top of the flange.

Flanged bowls in calcite-gritted wares appear in the late third century at Shakenoak, Oxon, but are more numerous there after *circa* A.D. 350. The bowls with decoration over rims and flanges do not appear to be made until the fourth century at the Harrold kilns. This type was found in deposits of Period A 3b (*circa* 350 to ?*circa* 420) at Shakenoak, and may therefore continue to be made into the fifth century (Brodribb, Hands and Walker, 1971, p. 92).

Fig. 4, 6: Rim of storage jar in dark grey shelly fabric, with buff to browny-red surfaces. This was the common form of storage jar at Walton (Mynard & Woodfield, forthcoming, No. 85), and probably therefore of comparable date, circa A.D. 200-300.

Sherds occurred of some three other storage jars, one with a native-derived decoration, that is a diagonal wiping over a rilled surface, presumably the last kick of the tradition of vigorously decorated Belgic storage jars. At Walton, the death of this tradition was thought to have occurred in the Antonine period (Mynard & Woodfield, Recs. of Bucks, XX, Part 3, 1977, Fig. 5).

Unstratified material not illustrated included sherds of grey jars, decorated only with grooves and cordons, a ring-footed dish in a Nene valley colour-coated ware and various pots and storage jars in calcite-gritted wares. Some of the latter appear to be hand-made and may be of the fifth century. The unillustrated and unstratified material is not at variance with the general date range of pottery as suggested above.

The finds from Old Covert, Broughton, are in the collection of the Bradwell Abbey Field Centre, Acc. No. 1978/259.

# Acknowledgements

I would like to thank ARC for permission to undertake the work herein described. My colleagues at Bradwell Abbey Field Centre provided useful criticism at every stage. Fig. 4 is the work of June Burbidge.

#### NOTES

- 1. Institute of Geological Sciences, 1974.
- 2. Ministry of Agriculture, 1968.
- 3. Miles, 1978, 84.
- 4. Ufton Nervet; Manning, 1973-4; Abingdon; Miles, 1978, fig. 10:3, 85; Odell; Dix, 1978.
- 5. Anon, 1978, 111-2; Lambrick, 1975, fig. 14, 38.
- 6. Open fields: Miles, 1978, 84; Infield/Outfield: Dix, 1978.
- 7. Taylor and Fowler, 1978.
- 8. Anon, 1978, 111.
- 9. Adkins, 1978.
- 10. Information from the excavator, A. E. Brown, Esq.

#### BIBLIOGRAPHY

- Adkins, R. A., 1978. 'Wood Corner, Bradwell, Roman occupation site', CBA Group 9 Newsletter 8, 46-49.
- Anon, 1978. 'After Little Woodbury: Village and Farm in Iron Age Oxfordshire', Current Archaeol. VI No. 4 (No. 63) September 1978, 106-113.
- Bowen, H. C. & Fowler, P. J. eds., 1978. Early Land Allotment in the British Isles (Brit. Archaeol. Rep. 48) Oxford.
- Brodribb, A. C. C., Hands, A. R. & Walker, D. R., 1971. Excavations at Shakenoak Farm, near Wilcote, Oxfordshire, Vol. II, Oxford.
- Dix, B., 1978. 'Odell: The Late Iron Age and Roman Farms: an Interpretation', CBA Group 9 Newsletter 8, 9.
- Institute of Geological Sciences, 1974. 1:25,000 Special Geological Sheet SP83 with parts of SP73, 74, 84, 93 and 94, London.
- Kenyon, K. M., 1948. Excavations at the Jewry Wall Site, Leicester (Soc. of Antiquaries Research Report No. 15), London.
- Lambrick, G., 1975, 'Farmoor', CBA Group 9 Newsletter 5, 38-9.
- Manning, W. H., 1973-4. 'Excavations on Late Iron Age, Roman and Saxon sites at Ufton Nervet, Berkshire, in 1961-1963'. Berkshire Archaeol. J. LXVII, 1-63.
- Miles, D., 1978. 'The Upper Thames Valley' in Bowen & Fowler, 1978, 81-88.
- Ministry of Agriculture, 1968. Ministry of Agriculture, Fisheries and Food, Agricultural Land Classification Map of England and Wales, Sheet 146 provisional, London.
- Mynard, D. C. & Woodfield, C., 1977. 'A Roman site at Walton, Milton Keynes', Recs of Bucks., XX, 351 - 383.
- Taylor, C. C. & Fowler, P. J., 1978. 'Roman fields into medieval furlongs?' in Bowen & Fowler, 1978, 159-162.
- Woods, P. J., 1970. 'Excavations at Brixworth, Northants, 1965-70, The Romano-British Villa, part
   1: The Roman Coarse Pottery and Decorated Samian Ware', J. Northampton Mus. Art, Gallery
   8, December 1970, 3 102.
- Young, C. J., 1977. The Roman pottery industry of the Oxford Region, (Brit. Archaeol. Rep. 43) Oxford.