A Late Iron Age settlement at Manor Farm, Newton Bromswold, Northamptonshire

by

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with contributions by Andy Chapman and Karen Deighton

ABSTRACT

An archaeological evaluation comprising geophysical survey, fieldwalking, watching brief and excavation was carried out by Northamptonshire Archaeology during preliminary groundworks ahead of the Raunds to Newton Bromswold Anglian Water pipeline. This report covers the southern end of the pipeline from Chelveston to Newton Bromswold, where an excavation was carried out at Manor Farm on part of an Iron Age enclosure system previously identified through aerial photography and geophysical survey. The enclosures may be characterised as a farmstead that originated in the late Iron Age, the 1st century BC, and fell out of use in the early Roman period, the middle decades of the 1st century AD. The enclosure ditches and other features produced a small assemblage of late Iron Age and early Roman pottery and a single copper alloy brooch is dated to the first half of the 1st century AD. This enclosure provides an example of the early settlement of the boulder clay covered uplands. During the medieval period the site was under cultivation and truncated furrows of a field system overlay the earlier archaeology.

INTRODUCTION

Northamptonshire Archaeology was commissioned by Anglian Water Services to carry out an archaeological evaluation comprising geophysical survey, fieldwalking, watching brief and excavation in advance of the Raunds to Newton Bromswold Anglian Water pipeline during April to July 2006. This report covers the evaluation of the southern end of the pipeline from Chelveston to Newton Bromswold, and the excavation at Manor Farm, Newton Bromswold (NGR SP 9939 6563: Figs 1 & 2).

ACKNOWLEDGEMENTS

The project was managed by Anthony Maull, and the fieldwork was directed by Tim Upson-Smith, assisted by Ian Fisher, Maria Gale, Wallis Lord, Mark Patenall and Myk Riley. The text was prepared by Tim Upson-Smith, and has been edited for publication by Andy Chapman. The pottery and other finds have been analysed by Andy Chapman and the animal bone and environmental evidence by Karen Deighton. The illustrations are by Jacqueline Harding and Andy Chapman. The full report (Upson-Smith 2007) will be available in the Northamptonshire Sites and Monuments Record and will also be available online through the Archaeology Data Service (ADS) library of Unpublished Fieldwork Reports (grey literature).

TOPOGRAPHY AND GEOLOGY

The southern end of the pipeline is located within an area of undulating upland topography situated at a height of between c70m aOD to c90m aOD. The valley of the River Nene lies to the north-west. The underlying geology is variable, consisting of Great Oolite, Upper Lias, Oxford Clay and Kellaways Beds. The land use of the fields along the pipeline varied between permanent pasture and arable, and the field containing the Iron Age settlement was under pasture.

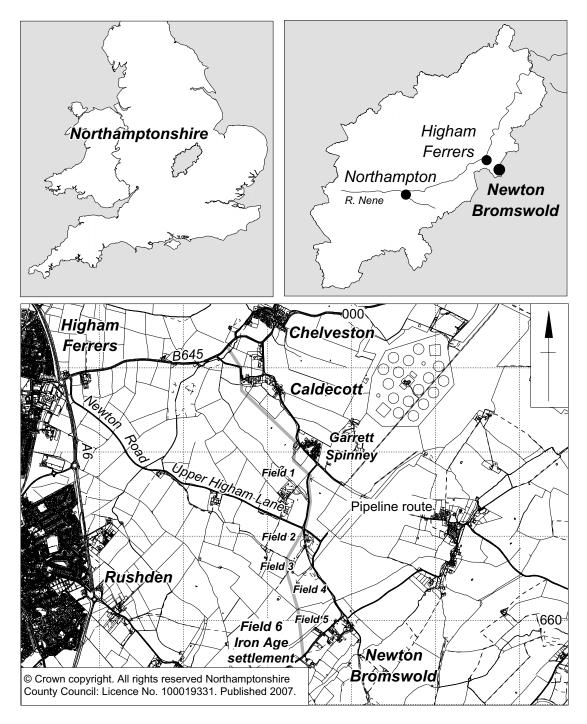


Fig 1 The Chelveston to Newton Bromswold pipeline

The area of the excavation lay immediately to the west of the village of Newton Bromswold and was situated on fairly level ground at *c*90m AOD (Fig 2). There is a gentle slope down to the north, to *c*88m aOD, into a shallow valley along the line of Field 5a, with a stream flowing towards the north-east, and joining the River Till at Yeldon. The underlying geology of the site consists of Oxford Clay and Kellaways Beds.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

A search of the Northamptonshire Historic Environment Record (HER) was undertaken to encompass a kilometre wide corridor along the proposed pipeline route. The search revealed a number of possible prehistoric and Romano British enclosures, and a number of fields with surviving ridge and furrow earthworks.

Up to 1975, when the Royal Commission volume was produced for this part of Northamptonshire (RCHME 1975), only one Iron Age site had been recorded in the parish of Newton Bromswold, and this was located to the south-east of the village. Cropmarks identified on more recent aerial photographs has increased the number of known sites, which would suggest that the heavier clay soils on the higher ground of Northamptonshire were being utilised for settlement and farming from the Iron Age and into the Roman period more intensively than was previously appreciated. This pattern of land use has also been explored in detail in the account of the fieldwork survey carried out in the later 1980s in nearby parishes to the immediate north and northwest as part of the Raunds Area Project (Parry 2006).

GEOPHYSICAL SURVEY

In April and May 2006 six fields were examined by detailed geophysical survey along the proposed route of the water main (Fig 1, Fields 1-6; NA 2006). All areas were surveyed using Bartington Grad 601-2 fluxgate gradiometer. In Field 6 two anomalies of archaeological origin occurred at the centre of the surveyed area with a further two linear features to the south. All of these features extended beyond the survey area and broadly coincided with a cropmark site previously identified by aerial photography (Fig 2).

THE IRON AGE ENCLOSURES

EXCAVATION METHODOLOGY

The proposed line of the pipeline cut across the identified Iron Age enclosure system in a trench that was c10.5m wide (Fig 3). The topsoil was removed by mechanical excavator, fitted with a toothless ditching bucket and, where necessary, the surface was cleaned by hand to enhance feature definition (Plate 1). The features were planned at a scale of 1:50 and sections were drawn at a scale of 1:10. Levels were related to Ordnance Datum. Soil samples were taken from significant deposits for the retrieval of environmental and economic data.

THE ENCLOSURE SYSTEM

The aerial photographic evidence indicated that the settlement comprised four co-joined enclosures (Fig 3). The central enclosure (Enclosure 1) evidently contained multiple internal ditch systems, while there was a single sub-circular feature in Enclosure 3. Enclosures 2 and 4 apparently contained no internal features. The stripped area intersected the central area of Enclosure 1 and the south western end of Enclosure 2.

The general plan form suggests that there was a single period of occupation, and the recovered pottery indicates that Enclosure 1 was late Iron Age in origin, with occupation probably beginning in the 1st century BC and continuing through the first half of the 1st century AD. A small amount of Roman material dating to the mid-1st century AD indicates the date of abandonment, with the latest occupation focussed on the southernmost part of the excavated area, perhaps suggesting a short-term relocation to a small open settlement south of Enclosure 2.

ENCLOSURE 1

Enclosure 1 was an irregular oval in plan, measuring c73m south-west to north-east by c50m north-west to south-east, and enclosing an area of c0.24ha (Fig 3). The location of an entrance was not established.

The southern arm of the enclosure, ditch 07, was 2.46m wide by 1.1m deep with steep sides and a broad base (Fig 4, Section 2). It had a complex history of silting. There was a steeply-tipped clayey primary silt, 26, from the weathering of the ditch edges, and the more mixed primary silting, 13, contained a complete pottery jar (Plate 3) and a chalk spindle whorl (Plate 7).

A steeply inclined edge against the secondary fill, 12, on the northern, inner, side of the ditch suggests that there was a shallow recut, 0.60m deep. The fills of the recut, 09 and 08, contained pottery dated to the early 1st century AD. The northern arm of the

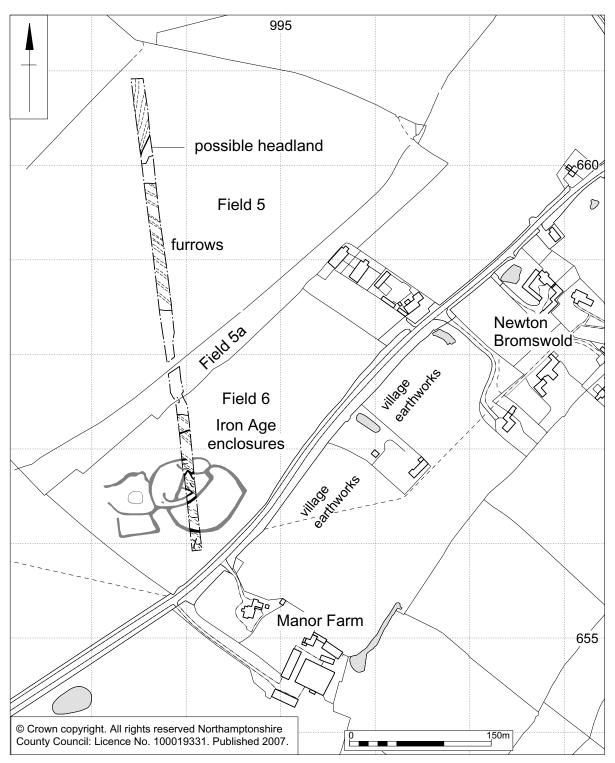


Fig 2 The excavated pipeline route near Newton Bromswold

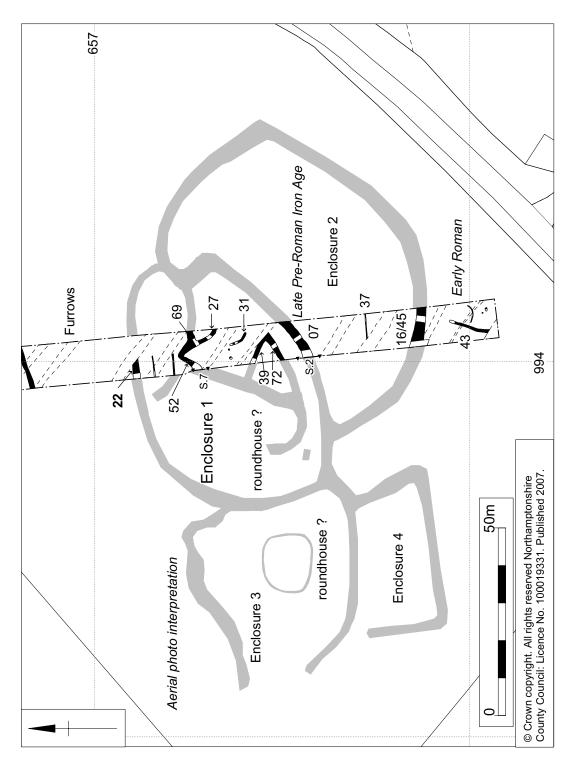


Fig 3 The Iron Age enclosures near Manor Farm

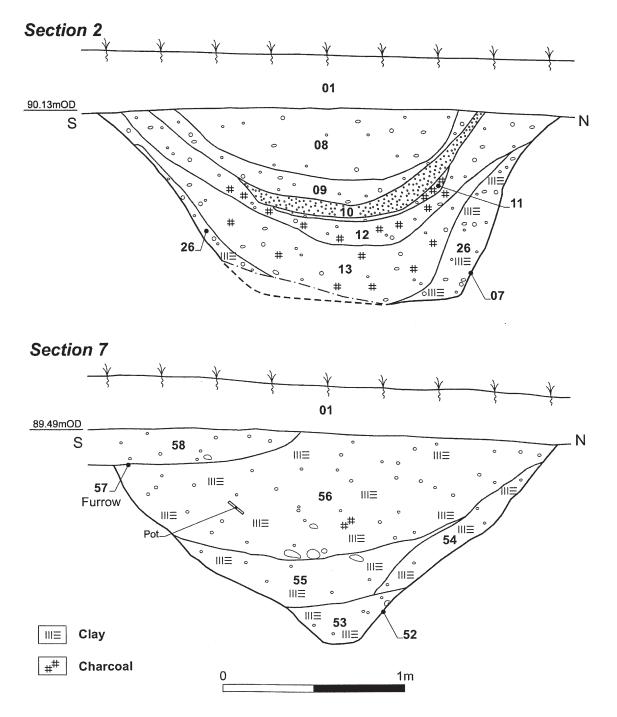


Fig 4 Sections of enclosure ditch and an internal ditch

A LATE IRON AGE SETTLEMENT AT MANOR FARM, NEWTON BROMSWOLD, NORTHAMPTONSHIRE



Plate 1 General view of site during excavation

enclosure ditch (Fig 3, 22), contained no evidence for recutting and no domestic debris was present.

Within the interior of the enclosure there were a number of ditch systems that appeared on the aerial photographs, as well as a small gully and two pits which had not appeared. These features all contained pottery of late Iron Age date, indicating that the intensive usage of the interior occurred in the 1st century BC, although one or two features contained material possibly dating to the early 1st century AD. Even with the evidence from aerial photography, it is not possible to provide any account of the overall form and function of this irregular collection of features, although they presumably provided partial sub-divisions of the internal space. A curving arc of ditch to the south-west of the excavated area might be part of a roundhouse ring ditch.

To the north there was a group of interlinked ditches; 52, 69 and 27. Ditch 52 was 1.7m wide by 1.2m deep, with a V-shaped profile, and the clayey fills produced 47% of all of the pottery from the site (Fig 4, Section 7). In contrast, ditch 27 was 0.8m wide by 0.65m deep, with a U-shaped profile.

To the south, two ditches, 39 and 72, together with a ditch to the west, beyond the excavated area, appeared to enclose a small triangular area measuring c20m by c15m. Ditch 39 was 1.36m wide by 0.57m deep, with steep sides.

Between the two ditch systems there was a length of curving gully, 31, 5.5m long by 0.64m wide by 0.2m deep, with a U-shaped profile. It contained a fill of firm dark grey-brown silty clay. Next to the northern end of the gully were two pits, both oval in plan, 0.42-0.80m in diameter by 0.21-0.45m deep, with fills of dark grey-brown silty clay.

ENCLOSURE 2

This enclosure probably formed a southern annex to Enclosure 1, and measured c77m south-west to north-east by c40m north-west to south-east; enclosing an area of c0.22ha, closely similar in size to Enclosure 1. The lack of any internal features within the excavated part of Enclosure 2, suggest that it may have served an agricultural function, perhaps as a paddock or stock corral.

The enclosure ditch, 16/45, was 2.7m wide by 0.87m deep. The uppers fills contained a mixed assemblage of late Pre-Roman Iron Age pottery together with a small quantity of early Roman pottery and a brooch (Plate 7) dating to the mid-1st century AD. This material may relate to a late phase of occupation in the area south of Enclosure 2, see below.

ENCLOSURES 3 & 4

The two western enclosures lay outside of the pipeline corridor, and were therefore not subject to excavation.

Enclosure 3 was roughly D-shaped, measuring c50m east-west by c45m north-south; enclosing an area of c0.15ha. This appears to be a second abutting annexe to Enclosure 1, with a 15m wide opening on the western side. In the centre of the enclosure there appears to be a sub-circular ditch, 12-15m in diameter, which might be a ring ditch surrounding a substantial roundhouse, perhaps the principal house of the settlement.

Abutting the southern side of Enclosure 3 was a smaller subrectangular enclosure, Enclosure 4, which measured 44m east-west by 25m north-south, an area of c0.06ha, with a 5m wide entrance at the north-west corner and no substantial internal features.



Plate 2 Looking north to Field 5, showing the parallel pattern of the medieval furrows

EXTERNAL FEATURES

To the south of Enclosure 2 there was a north-south aligned ditch, 43, a curvilinear gulley and two small pits, with the latter containing late Pre-Roman Iron Age pottery. This, along with the 1st century AD pottery in the enclosure ditch to the north, 16/45, suggests that in the 1st century AD the main focus of occupation may have moved away from the enclosure system, and the external features may have been part of a late southern area of open settlement.

THE MEDIEVAL FIELD SYSTEMS

There were surviving furrows of a truncated ridge and furrow field system overlying the Iron Age features in Field 6 (Figs 2 & 3; Plate 2). The furrows were aligned north-west to south-east at 8m to 10m centre-to-centre. Two furrows excavated where they overlay earlier ditches, were up to 3.2m wide and 0.2m deep (Fig 4, Section 7).

To the north, in Field 5, the furrows changed alignment to north-east to south-west at a headland located on the crest of the hill (Fig 2). A silver penny of Edward I (1272-1307) was recovered from the fill of a furrow in Field 5. It is complete but folded in half; so the reverse is not visible.

The ridge and furrow cultivation in Fields 5 and 6 is likely to be part of the field system attached to the shrunken medieval village of Newton Bromswold, where extensive earthworks still survive immediately to the east of the road between Manor Farm and the present village (Fig 2).

THE IRON AGE POTTERY by Andy Chapman

A total of 293 sherds of pottery weighing 11.97kg was recovered. The average sherd weight of 40.9g reflects the primary nature of much of the material, which typically comprises large and often joining sherds from a limited number of vessels.

The vast majority of the material is in fabrics containing crushed shell. These vary from dense large platelets of shell, sometimes 5-10mm across, down to sparser inclusions of more finely crushed shell no more than 1mm across. The coarseness and density of the shell inclusions is closely related to vessel form, with thick-walled sherds from storage jars containing the larger and denser inclusions while the fine and sparse shell occurs in smaller and better-finished jars and bowls. The small quantities of wheel-finished material dating to the late Pre-Roman Iron Age contains only small quantities of finely crushed shell, while one of the two early Roman sherds contains grog.

All of the vessels have grey-black cores and typically greyblack to dark brown interior surfaces, although a few are partially orange-brown, particularly immediately inside the rim. The outer surfaces are more variable, ranging from bright oxidised orange or orange-brown to dark browns and greys, often mottled and patchy, and reflecting the erratic nature of surface colour resulting from bonfire firing. The larger jar forms tend to be extensively oxidised, while the smaller jars and bowls more often have darker external surfaces. The wheel-finished vessels of the late Pre-Roman Iron Age are invariably grey-black throughout, indicating that they were kiln fired.

There are three distinct chronological groups: late Iron Age, late Pre-Roman Iron Age and early Roman, which are considered separately below.

LATE IRON AGE (1ST CENTURY BC)

The bulk of the material comprises a range of hand-built, larger jars and smaller bowls and jars that would fall within the broad ceramic traditional of the middle to late Iron Age. These include scored ware vessels, both storage jars and smaller bowl and jar forms, and a range of plain jar and bowl forms, such as the complete vessel recovered from the primary fill of the southern arm of Enclosure 1, ditch 07, (Plate 3). This vessel stands 130mm high, with a simply-fashioned upright rounded rim. Other vessels have similarly simple rims, while flat-topped rims, sometimes slightly expanded either just externally or both internally and externally to form T-shaped rims, are also



Plate 3 Complete plain Iron Age jar from enclosure ditch (Scale 10mm)

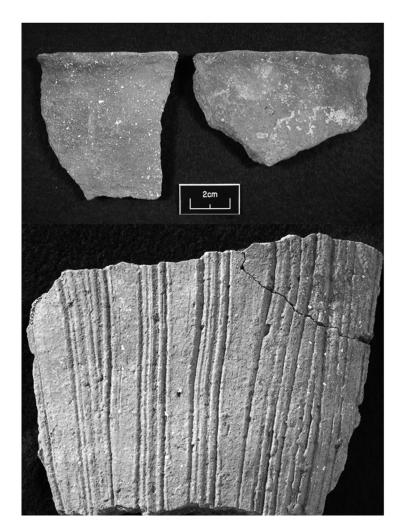


Plate 4 Flat-topped and rounded rims (top) and scored ware body sherd (bottom)

common (Plate 4, top). A single rim, from a small closed jar, has been decorated along the top with quite widely-spaced fingernail impressions.

However, there are a number of specific characteristics within this material that suggest that it belongs to the later Iron Age, perhaps specifically the 1st century BC. Much of the scored ware is quite regular and comb formed, rather than the more haphazard scoring characteristic of middle Iron Age assemblages. A single large body sherd has been decorated with vertical scoring that is evidently combed, perhaps using a four-pronged bone comb (Plate 4, bottom), while the lower body of another vessel, with a flat-base, has more crudely incised scoring but set obliquely so that the lines spiral around the vessel in a distinct decorative pattern (Plate 5, top). The presence of a globular jar with a wellsmoothed, near burnished, outer surface may also suggest a late date. The material dated to the 1st century BC is particularly related to ditch systems lying within Enclosure 1. The upper fills of ditch 52 produced a total of 5.7kg of pottery (47% of the total from the site) and further similar material came from ditch 27 (Fig 3). The lower fills of the enclosure ditch, 07, to the south, were also probably contemporary. Several minor features in this area also produced small groups of purely Iron Age material, ditches 39 & 72, gully 31 and a nearby pit.

LATE PRE-ROMAN IRON AGE (1ST CENTURY AD)

The continuation of activity into the first half of the 1st century AD is indicated by a number of mixed deposits that contained both hand-built shelly vessels and sherds from wheel-finished and kiln-fired vessels. An upper secondary fill, 9 of the re-cut enclosure ditch, 07, contained such a mixed assemblage, with the

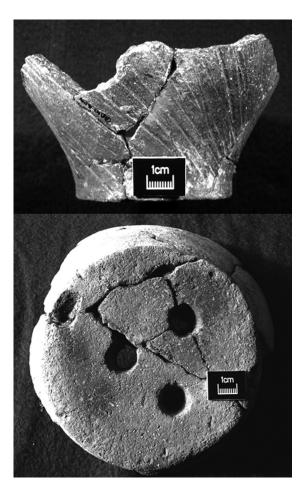


Plate 5 Scored ware base (top) and perforated base (bottom)

wheel-finished vessels comprising rim sherds from several necked jars in black fabrics with smoothed and burnished surfaces. Body sherds from cordoned and corrugated vessels in the same fabrics were also present (Plate 6). In addition, there is a thick, rolled rim that is evidently from a large storage jar dating to the 1st century AD, being larger and thicker-walled than Iron Age storage jars. A separate context contained a base sherd, 21mm thick and c200mm in diameter, probably from a similar large storage jar. Further south, there were similar assemblages from ditch 16/45, although in this instance coming from the lower fills, and a small group from a pit south of Enclosure 2.

To the north, in a pit near gully 31, there was a base from a large thick-walled shelly jar, 120m in diameter and 21mm thick, which had three neatly bored perforations, indicating that it was used as a strainer (Plate 5, bottom). The three perforations form the apexes of a near equilateral triangle roughly in the centre of the base. They have been bored from the outside, where they are smooth and 17mm in diameter, and taper to 10mm in diameter

on the interior, where they are more ragged. The vessel itself is of Iron Age form, but perforated strainers are quite common in Roman contexts; so this example seems most likely to date to the 1st century AD.

EARLY ROMAN (MID 1ST CENTURY AD)

To the south, the upper fills of ditch system 16/45, the southern arm of Enclosure 2, contained two sherds of early Roman pottery, suggesting that activity continued into the second half of the 1st century AD. In both instances the vessels are wheel-turned forms in fabrics containing grog, with pale brown oxidised surfaces. One has a flat-topped, square-sectioned rim and the other is a plain body sherd. Both are within groups of early 1st century AD pottery.

OTHER IRON AGE FINDS by Andy Chapman

A perforated chalk disk came from the primary fill, 13, of the enclosure ditch, 07 (Fig 4, Section 2). It may have been an irregular spindle whorl (Plate 7, top). It is roughly oval in shape, up to 61mm long by 41mm wide and 5-8mm thick, although one end had been truncated in antiquity. The edges have been smoothed, but the truncated end is more irregular. The perforation has a double conical profile, indicating that it was bored from both faces; and is 10mm in diameter at the surfaces tapering to 7mm. One surface of the disk has been roughly smoothed, but is still covered with fine irregular scratch marks. The other surface is uneven, although there are similar scratch marks on the more raised portions.

A water-worn erratic boulder (not illustrated), from the upper fill of ditch 52, has been used as a rubbing stone. The stone is roughly oval, 240mm long by 185mm wide, and is up to 80mm thick. The underside is convex, but a small area had been roughly pecked to form a flat base upon which the stone can rest. The upper surface has been smoothed through use and forms a slightly domed, convex surface, most heavily worn across the central area, and less heavily towards the edges.

A copper alloy brooch (Plate 7, bottom) came from the fill of ditch 16/45, the southern arm of Enclosure 2. It is part of a Birdliptype brooch, the precursor of the trumpet brooch (Ian Meadows and Don Mackreth pers comm). It displays a beak under a triple moulded knop with the beginning of the trumpet head. It has a recurved foot and a double pierced catchplate with fretted cross bar. It is dated to the period 30-55 AD, which is consistent with the pottery assemblage.

THE ANIMAL BONE by Karen Deighton

A total of 5kg of animal bone was collected by hand from a range of contexts. The material was examined using standard zooarchaeological methods.

The incidence of canid gnawing was fairly low at 16.6% (Binford 1981) and this, together with a low level of surface abrasion could suggest rapid burial of material after disposal. The frequency of evidence for butchery and burning was low at 3% and 1.5% respectively. Fragmentation was high with 93% of long bones broken; largely the result of old breaks at least partly due to compaction within the soil.

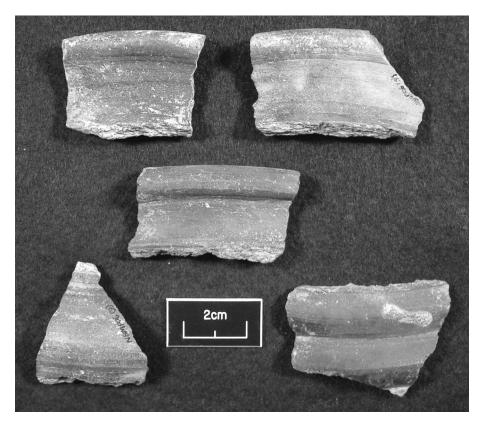


Plate 6 Late pre-Roman Iron Age necked jars, and cordoned and corrugated vessels

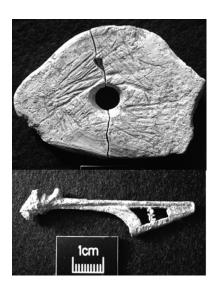


Plate 7 Perforated chalk disk (top) and copper alloy brooch

SPECIES PRESENT

The assemblage was dominated by sheep/goat, followed by cattle with smaller numbers of pigs and a few horses (Table 1). The small number of pig bones could be due to preservation bias (Stallibras 1985).

BODY PART REPRESENTATION

Unfortunately, the assemblage was too small to attempt body part analysis in order to establish if the material resulted from primary or secondary butchery. However, no particular body part concentrations were observed.

SEXING

From the analysis of pig canines (Schmid 1972) and cattle and sheep/goat pelves (Grigson 1982), two pigs were sexed as male and one female, while cattle pelves suggested two possible males and one possible female. For sheep only one possible female could be identified with any certainty. Although the results are too small to be considered reliable, they would suggest a ratio of 2:1 slaughter of males for cattle and pigs.

AGEING

The analysis of tooth eruption and wear patterns was undertaken

Species	Horse	Cattle	Sheep/goat	Pig	Small hoofed	Large hoofed
Number	5	62	91	17	11	17
Percentage	2.4	30.5	44.8	8.3	5.4	8.3

Table 1: The animal species present

to attempt to define an age at death model (Payne 1985 for sheep, Halstead 1985 for cattle and Grant 1982 for pigs). Five cattle mandibles suggested of 8-18 months, 18-30 months (2 examples), 30-36 months (2 examples). This could imply cattle were generally slaughtered as young adults, but any conclusions are tentative due to the small amount of suitable material.

Four pig mandibles were from animals of over 22 months, which suggests that they were slaughtered as they reached adulthood; the time when meat yield is in equilibrium with nutritional input. Five sheep mandibles gave ages of 2-3 years (2 examples) 1-2 years+ (2 examples) and 8-10 years, which suggests no particular pattern. No neonatal material was observed for any species, which might suggest that rearing was not taking place on site, however, the affects of preservation and recovery bias should not be ruled out (Payne 1975, Payne and Munson 1985).

CONCLUSION

A range of common domesticates were kept but the exact nature of the husbandry practiced is unclear due to the small size of the assemblage. However, it seems that surplus stock (young males) was slaughtered for consumption, and the range of both species and bone types deposited in the ditch fills would suggest that this was all general waste. A greater amount of bone was present within Enclosure 1, as was also true for the pottery.

ENVIRONMENTAL EVIDENCE by Karen Deighton

Four bulk soil samples were collected by hand during the course of excavation. These were processed using a siraf tank fitted with a 500 micron mesh and flot sieve. The resulting flots were dried and examined with a microscope (at 10x magnification).

However, as a result of the paucity of ecofacts within these samples little can be said about the economy or environment of the site. Wheat-type cereal grain (Triticum sp) was present, but the small quantities prevent an informed interpretation of the nature of that presence. Although mollusca are reasonably well represented in two samples, these were predominantly C.asicula which is a late introduction and a burrowing species, so they must be considered intrusive.

OVERVIEW

The excavation of the late Iron Age farmstead at Manor Farm, Newton Bromswold in advance of the Anglian Water Services pipeline afforded the opportunity to excavate a strip through a site which had previously been identified through aerial photography. In the mid-1970s, at the time of the Royal Commission survey for this part of Northamptonshire (RCHME 1975), Iron Age sites had only been identified in the river valleys and on the lighter soils. However, since that time aerial photography and other recording methods have identified that the heavy clay soils were utilised for settlement. The Historic Environment Record search identified a further seven possible prehistoric enclosures within a one kilometre wide strip along the route of the pipeline, which would suggest that the higher clay soils of Northamptonshire were being utilised during the Iron Age and Roman periods.

The results of the Raunds Area Survey (Parry 2006), which looked at the parishes to the north of Chelveston, suggest a density of 0.57 Iron Age sites per square kilometre, with increased use and occupation of the clay plateau occurring towards the end of the Iron Age into the Early Roman period.

The site at Manor Farm was located in a pasture field and was therefore relatively well-preserved although it had been truncated by medieval arable cultivation under the ridge and furrow system.

The location of this Iron Age farmstead on a slight slope afforded easy access to a local water source c100m to the north on a small tributary stream to the River Till. Although no evidence for roundhouses was found during the excavation, it is likely that the enclosures defined a small farmstead, probably occupied by a single extended family group. It is also likely that the Enclosures 1 and 3 formed the domestic focus, as evidenced by the primary pottery deposits and other artefacts within this part of the site. The settlement was probably established in the 1st century BC with about a century of use up to abandonment in the middle decades of the 1st century AD.

The evidence from the Raunds Area Survey (Parry 2006) suggests that during the early to middle Saxon period there was a retraction of settlement from the clay plateau. It was not until the late Saxon/ medieval period that settlement became nucleated

in villages, with the land intensively utilised for arable cultivation, as evidenced by the survival of the ridge and furrow of the medieval field system, which would have formed part of the open fields of the medieval village of Newton Bromswold, which is now a shrunken village.

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