An Iron Age and Romano-British Farmstead at Norse Road, Bedford

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SUMMARY

Archaeological investigations at Norse Road, Bedford, in advance of residential development, revealed a small-scale rural settlement/farmstead dating from the middle Iron Age to the Romano-British period. A densely interwoven pattern of enclosures, droveways and boundary ditches occupied a low promontory overlooking the floodplain of the River Great Ouse. No clear focus of settlement within the complex of cropmarks could be identified; rather all the enclosures are indications of compounds renewed successively within the same general area. Evidence suggests a primarily pastoral and mobile economy and a possible relationship with another site known from cropmarks nearby. Excavation of the large eastern enclosure, which represents an early phase of activity, was undertaken as part of a mitigation strategy. It was truncated on its western side by a boundary ditch which probably enclosed the Romano-British focus of settlement to the west. On the basis of the archaeological evaluation, this latter area was set aside as a designated public open space.

INTRODUCTION

The archaeological work at Norse Road was carried out in two broad, but distinct, stages by the Bedfordshire County Archaeology Service (BCAS). The first stage of evaluation consisted of a desktop study and topographical survey followed by field artefact collection, extensive geophysical survey and the excavation of a series of trial trenches across the field as a whole (BCAS 1993). This enabled a mitigation strategy to be devised (Cambridge Archaeological Unit 1996) whereby the greater extent of cropmarks could be protected from development. The second stage of work consisted of an excavation, carried out by BCAS in 1996, which focused on the large enclosure to the E of the main cluster of cropmarks. This report summarises the evidence from all stages of the archaeological investigations.

SITE LOCATION AND DESCRIPTION

The study area comprises a large field of 23 hectares bordered on the W by Norse Road and on the S by the A428, 4km to the E of the centre of Bedford (Fig 1). The complex of cropmarks occupies the top of a low hill (at up to 31m OD) which slopes away to the S, W and N. The site overlooks the valley of the River Great Ouse, the present course of which is only 1km to the S, while a small tributary, Renhold Brook, runs along the W side of the field. The solid geology of the site is Oxford Clay, overlaid in places by patches of glacial gravels. Deposits of alluvium and colluvium up to 2m thick were noted in the land adjacent to the brook. The crest of the hill provides a natural spur of higher ground on the edge of the flood plain, and this partly explains the suitability of the site to Iron Age and Romano-British farmers. The height of the hill was accentuated by a medieval headland running ENE-WSW across the middle of the field.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Evidence for activity in the Neolithic and Bronze Age is plentiful in the surrounding area. Recent work has identified a complex ritual landscape stretching from Cople and Willington in the S, right across the river to Goldington and Howbury in the N (Clark and Dawson 1995). Comprised of mortuary enclosures, a cursus, henge monuments and ring ditches, much of this landscape would have been visible from the hill at Norse Road, assuming that tree cover was not great. Recent excavations of Neolithic and Bronze Age enclosures and ring ditches have taken place at Willington (Pinder 1986, Dawson 1996) and Goldington (Mustoe 1988). Further sites of these periods have been located along the course of the Bedford Southern Bypass (Shepherd et al, forthcoming).

The Iron Age and Romano-British periods are also well represented in the landscape around Norse Road. The hillfort at Mowsbury Hill probably dates from the early Iron Age. In the middle to late Iron Age a transition from defended hilltop settlements to lowland enclosures seems to have occurred. Rural settlements and field systems, situated mainly on the edge of the gravel terraces just above the flood plain, have been investigated at Riverside Meadows (BCAS 1994), Willington (Pinder 1986, Dawson



Figure 1 Location of study area and nearby cropmarks

1996), Cople, Eastcotts, Octagon Farm, and Mill Farm (Shepherd *et al*, forthcoming), all within 3km of Norse Road. A late Iron Age settlement and Romano-British villa is known to have existed at Newnham. Taken together, these sites indicate a shift from a mainly ritual landscape in the preceding periods to much greater use of the river valley for settlement and agricultural purposes during the Iron Age, intensifying further in Roman times.

The landscape was altered significantly in the medieval period, when much of the surrounding land was divided into furlongs to be ploughed in strips. Even the very poorly drained soil of Norse Road was brought under cultivation. Norman activity nearby is indicated by the site of Risinghoe Castle, 0.5km to the S, thought to the remains of a Norman motte and bailey castle of the 11th-12th centuries. The first historical reference to the land at Norse Road is in the de Basco Roll, a document surviving from the 13th century. At this time the field formed part of a large common field, West Campus, in Renhold parish. Renhold Brook was called Athines Broc and

formed the parish boundary between Renhold and Goldington as well as the W boundary of the field.

By 1680 the field was reduced to its present shape and called Drinkwater Hill. It was part of the Manor of Howbury up until the 19th century, when the field was sold. The medieval headland was used as a trackway running ENE-WSW across the field. The course of Renhold Brook was straightened in 1858.

THE ARCHAEOLOGICAL INVESTIGATIONS

THE 1993 EVALUATION

Aerial Photography

Cropmarks photographed in October 1968 (HSL UK BED 68 806: 11/5982-3) and June 1970 (CUCAP BBW 17, 31-33: 5/6/1970) revealed the existence of archaeology at Norse Road on either side of Renhold Brook. The cropmarks visible to the W of the brook (Plate 1) were lost to development in the 1970s, but may well have been associated with the main site on the higher ground (Fig 1).



Plate1 Aerial photograph showing nearby cropmarks (BBW 17, 5/6/1970: Cambridge University Collection of Air Photographs, copyright reserved). East at top.

Field Artefact Collection

Two phases of fieldwalking were undertaken. The first phase, a coarse walkover, gave a 10% sample of the total survey area and enabled the targeting of artefact concentrations. The second phase was an intensive walkover which provided a 20% sample in those areas of artefact density.

Flint Artefacts

A total of 98 pieces of worked flint was found. Two concentrations, either side of the medieval headland, could be discerned in the pattern of flint distribution. Neither were related to the cropmarks. The concentration to the north of the headland appeared much denser and contained a wider range of artefacts, including blades, notched tools, piercers, knives and scrapers probably dating from the Neolithic and Bronze Age, as well as a small range of possibly Mesolithic artefacts.

Pottery

A total of 60 sherds of pottery have a date range which spans the Romano-British period. The earliest sherds are mainly greywares. A small quantity of shell tempered pottery could date from the 2nd-4th centuries. The presence of Nene Valley colour coat wares indicates activity into the 4th century. The greatest concentration of Romano-British pottery was found in the area of dense cropmarks, immediately below the highest point of the site. By way of contrast, very little pottery was recovered from the area of the large cropmark enclosure to the E. A few sherds of Romano-British and Iron Age pottery were recovered from ground downslope of the cropmarks.

Geophysical Survey

The survey covered a 9 hectare area centred on the cropmarks to the E of the brook. Detailed accounts of the survey are given elsewhere (Geophysical Surveys of Bradford 1993, Dawson and Gaffney 1995). Here it is sufficient to note that the survey succeeded in locating accurately the majority of features visible on the aerial photographs, as well as identifying many that were not previously known, including linear features on the downslope, away from the main cluster of cropmarks. For the purposes of this report the aerial photograph and geophysical evidence has been combined (Fig 2), and no further distinction is drawn between them on the plans of the site presented here.



Figure 2 The study area, showing enclosures and contours

Evaluation Trenches

Ten trial trenches, varying from 45 to 60m in length, were excavated by machine across the study area (BCAS 1993). The trench design was based upon the results of the desktop study, field artefact collection and geophysical survey. Trenches were located with the primary aims of both defining the extent of the main cropmark site and exploring areas for which no archaeological evidence existed but where significant deposits might be masked by alluvium or colluvium. Six of the trenches in outlying parts of the field produced no features of archaeological interest, although a depth of up to 2m of alluvium was found in the vicinity of Renhold Brook. The four trenches that did produce significant archaeological evidence were all located within the area of dense cropmarks on or around the crest of the hill. The results of these trenches have been incorporated into the analysis of the 1996 excavations below.

THE EXCAVATION RESULTS

EXCAVATION STRATEGY

In line with the mitigation strategy, which specified that the western part of the area of dense cropmarks was to be retained and preserved in the development plan, the 1996 excavation focused on the eastern enclosure. This meant that the evaluation trenches provided the only excavated evidence for the densest area of cropmarks to the W, while the relatively sparse interior of the eastern enclosure received much greater attention - an imbalance which is reflected in this report. A series of 18 trenches were positioned on the line of the eastern enclosure ditch, with a particular focus on possible ditch terminals and areas where entrance structures might exist. The interior of the enclosure was sampled by a 32m long trench and a series of 5m square test pits staggered axially across the interior, with the aim of determining the nature and density of any settlement evidence.

POST EXCAVATION METHODOLOGY

A structural hierarchy of subgroups, groups, landscapes and phases was applied to the results of both the 1993 and 1996 excavations, as a means of combining the two sets of data. This report is arranged in order of phase (P), landscape (L) and subgroup (S) as a direct result of the method of analysis employed. Subgroups represent the archaeological evidence for a distinct event or activity, and can be regarded as the basic unit of interpretation. Groups were used in analysis as a fluid means of organising data and are not reproduced here. Landscape numbers were accorded to boundaries and enclosures only if they had been sampled by excavation - i.e. if their existence (indicated by geophysical survey or aerial photography) had been confirmed by direct observation on the ground. Where stratigraphic evidence was lacking, phasing was done largely by dating of pottery and other finds from the fills of landscape features. While a few landscape features were grouped together into phases on the basis of spatial relationships (for example, the two 'droveway' ditches L8 and L9), this method was not greatly used because of the lack of corroborative evidence from excavated stratigraphy, and also because of the large number of phasing interpretations possible.

THE ARCHAEOLOGICAL SEQUENCE

PHASE 1: EARLY IRON AGE

Pits L16

The earliest activity is represented by three pits or post holes, spatially unrelated to each other but all situated roughly on or near the course of the later eastern enclosure ditch, L1. Two of the pits can be dated to the early Iron Age from pottery finds. The other is stratigraphically earlier than the enclosure.

Pit \$23 was sub oval in shape and measured 0.5-0.7m. Its fill was a dark grey brown silty clay with moderate small stones and occasional chalk and charcoal fragments, producing one sherd of early Iron Age pot. This feature was unexcavated.

Pit S31 was cut by enclosure ditch L1. What survived was sub-circular in shape, with vertical sides and flat base, filled by a firm mid grey brown silty clay. Its original diameter is estimated to be about 0.8m. It was 0.5m deep.

Pit S33 was sub-circular in shape and 1m in diameter. It was filled by a compact dark grey brown clay silt with charcoal flecks. Although unexcavated it produced several sherds of early Iron Age pottery.

PHASE 2: MIDDLE-LATE (PRE- 'BELGIC') IRON AGE

Boundary Ditch L14

This ditch is known from geophysical evidence to be about 70m long, curving slightly and oriented roughly NNE-SSW (Fig 3a). It appears to respect/be respected by enclosure ditch L1, although the pottery evidence suggests that L14 is earlier. Only one segment of the ditch was excavated.

Ditch segment S24 revealed a 2m wide ditch with sides gently sloping to a concave base 0.33m deep. It contained two fills. The primary fill was a yellow brown silty clay. The upper fill was a grey brown silty clay. Both fills contained sherds of pre-Belgic pottery. Another linear feature running E-W was also present in this segment, though its relationship with S24 was unclear.

Structure L10

This cluster of post holes and a possible hearth (Fig 3a) is situated inside the NW corner of eastern enclosure L1 and within the southern limits of droveway L8/L9, which may also form the SE corner of a large enclosure to the W. The possibility that a post-built structure was sited within the enclosure(s) has to be weighed against the alternative possibility that the enclosures were constructed around an already existing focus of settlement. The latter explanation is favoured here on the basis of pottery evidence which dates the post holes to the pre- 'Belgic' late Iron Age. The relative profusion of structural evidence from this small area stands in marked contrast to the lack of evidence for settlement from the rest of the interior of L1.

Post hole cluster S21 consisted of 12 post holes, circular or sub-circular in shape and 0.31- 0.75m in diameter. The three post holes excavated were shown to be very shallow, with a maximum depth of 0.22m and no evidence of post-pipes. Fills were a fairly uniform dark grey brown silty clay with moderate charcoal flecks and occasional burnt clay nodules and small burnt stones. There is no clear pattern to their distribution, but their fairly even spacing and close proximity to each other indicates contemporaneity. Almost certainly other structural features from this group survive either side of the evaluation trench.

Hearth S22 was situated within the cluster of post holes S21. It was circular in shape with a diameter of 0.35m and a depth of 0.15m. The sides sloped at an angle of 30 degrees to a flattish base, which was partly covered by a large burnt rounded pebble of sandstone measuring $0.15 \times 0.15m$. The fill consisted of a compact reddish grey silty clay with moderate burnt clay fragments.

PHASE 3: LATE ('BELGIC') IRON AGE

The eastern enclosure L1

This enclosure, with its elongated 'D'-shape, was the largest and the most extensively excavated of the cropmarks (Fig 3b). It measured 130 x 80m, with an entrance in the middle of its NE side. Another possible entrance on the SW side was suggested by geophysical evidence but was not tested by excavation. The enclosure was apparently constructed in three separate lengths, with S1 and S3 being constructed first, followed by S2. A large quantity of late Iron Age pottery and animal bone was found in the ditch fills. Vestiges of an internal bank were preserved in

places beneath the medieval headland L2. Inside the NW corner was Structure L10, which could have been standing when the enclosure was constructed. Other internal features were sparsely distributed throughout the interior - see L6 below. The relationship of L1 with ditches L8 and L9 is unclear, and it is possible that these represent a droveway leading into the enclosure from the N, or alternatively a quite separate landscape feature representing a different phase of activity.

The SE enclosure ditch S1 (cut and primary fill) was the best preserved part of the enclosure. Ten segments were excavated. The shape and proportions of the ditch were variable. Section 38 (Fig 4) shows the ditch to have survived to a width of 3.2m and a depth of up to 1.25m, with a distinctive step-like profile on the inside face and a central almost V-shaped slot. In other segments the profile was more rounded. Six of the segments had primary fills associated with the cut. These consisted of silty clays similar to the natural, varying from greenish grey to light blue grey in colour, and represent erosion of the ditch sides in the immediate aftermath of ditch construction. The ditch terminated to form an entrance at its NE end.

The NW enclosure ditch S3 (cut and primary fill) was not as well preserved as S1, but mirrored its shape and profile in many respects and can be regarded as part of the same phase of construction. Five segments were excavated. Section 23 (Fig 4) shows the ditch to be 2.4m wide and 1m deep, and to have the same stepped slope on the inside face and central Vshaped slot as noted in S1. To the NW, however, the profile changes to a more rounded concave base. Four of the segments had primary fills; these were greenish grey silty clays taken to represent primary erosion of the ditch sides. The terminal of the ditch to the E formed one side of the entrance to the enclosure.

The SW enclosure ditch S2 (cut and primary fill) was much shallower and narrower than S1 and S3. The three segments excavated showed the ditch to be up to 1.8m wide and 0.6 m deep with a rounded profile. Primary fills were identified in two of the segments. These were silty clays varying from light greenish grey to light orange grey. It was established by sectioning that the terminal of S1 was cut by S2, which represents the final phase of construction of the enclosure. The possibility that this occurred some time after the construction of the curvilinear ditches, and that the enclosure was originally open to the SW, must be considered. The northern part of S1 was not investigated by excavation.

Secondary fills of enclosure ditches S4, S5, S6. The pattern of stratigraphy within the ditches was for the most part fairly symmetrical and gave little indication either of deliberate tipping or of collapse of an internal or external bank. Fills consisted mainly of silty clays varying in colour from dark greenish grey to mid orange brown, containing moderate small-medium rounded stones and charcoal flecks. Where slippage of material did occur (Sect 38, Fig 4), this was probably due to animal activity or ploughing activity on the outside of the enclosure. Late Iron Age pottery sherds were fairly uniformly distributed throughout the enclosure ditch fills with concentrations near the SW corner and either side of the entrance.

AN IRON AGE AND ROMANO-BRITISH FARMSTEAD AT NORSE ROAD, BEDFORD



Figure 3 Phasing of enclosures

The entrance to the enclosure on the NE side was defined by the terminals of curvilinear ditches S1 and S3. It was 3.2m wide. The area around the entrance was devoid of post holes or other remains of entrance structures, even though this area was partially sealed and protected by the medieval headland L2. Sect 21 (Fig 4) shows the section through the terminal of ditch S1 on the S side of the entrance. A particularly large quantity of Late Iron Age pottery was found in the upper fills of this excavated segment.

Internal bank S11: Remains of the internal bank were located just to the S of the entrance, preserved at this point because sealed and protected by the medieval headland L2. It consisted of a layer of compact dark brown clay loam, with frequent small stones and occasional charcoal flecks, directly overlying the natural immediately adjacent to the enclosure ditch and partially overlaid by the top fill of the ditch. It was 2.3m wide and up to 0.2m deep (Sect 36, Fig 4). The bank was constructed out of the material excavated from the ditch, and therefore the two features can be regarded as components of the same landscape feature, constructed simultaneously.

Internal features L6

These five pits or post holes are spatially unrelated to each other apart from being situated within the interior of enclosure L1. The assumption is that these features are contemporary with the enclosure, and possibly represent the remains of settlement activity. One post hole produced pottery, which was similar in fabric and date to sherds from the surrounding enclosure ditch. The others, however, are undated

Pit S13 was sub-oval in shape and measured 1.6m x about 2m (only 1.4m visible in trench). It had near vertical sides and was 400mm deep. There were three fills. The lower layer was a plastic light yellow brown sandy clay, similar to natural and likely to have been formed by erosion of the sides. The middle fill was a mid blue brown sandy clay. The top fill was a dark brown silty clay with moderate small stones, slightly disturbed by ploughing. Both the lower and upper fills produced late Iron Age pottery.

Pit S14 was situated just inside the SW corner of the enclosure. It was oval in shape and measured $0.8 \times 0.4 \times 0.14$ m. Sides sloped down gently to a flat base. The only fill was a firm light grey green silty clay, with moderate small stones and charcoal flecks. The function of this shallow pit or scoop is unknown, and there were no finds.

Post hole 517 was sub-oval in shape and measured 0.5x 0.36 x 0.25m, with near vertical sides and concave base. The primary fill was a firm mid grey brown silty clay with moderate medium stones and charcoal flecks, 0.15m deep. The secondary fill consisted of a dark orange grey clay with frequent charcoal flecks and lumps, depth up to 0.17m. Charcoal staining was greatest at the top of the fill and decreased downwards, possibly indicating that the post was burnt *in situ*. No visible post-pipe.

Post hole S18 was situated near the centre of the enclosure. It was circular in shape, measuring $0.5 \ge 0.5 \ge 0.27$ m, with a concave profile. The only fill was a mid green brown silty clay with frequent small stones.

Post hole S32 was circular in shape and 0.5m in diameter, filled by an orange brown clay silt. It was unexcavated.

Ditch L8

This curvilinear ditch may form part of a droveway with L9, running for about 80m in a NNW-SSE direction, and/or the NE side of a large D-shaped enclosure measuring approximately 70 x 70m. Its relationship with L1 was not tested by excavation. In the absence of pottery dating evidence, L8 has been allocated to this phase on the assumption that it is contemporary with L9.

Ditch segment S19 was excavated at a point where ditches L8 and L7 crossed, but no clear stratigraphic relationship was established. L8 was between 1.8m and 3m wide, with the E side not conclusively located and the W side sloping in at 45 degrees. The top fill consisted of a firm dark grey silty clay. It was excavated only to a depth of 0.27m, so the lower fills were not encountered.

Ditch L9

This rectilinear ditch is oriented NNW-SSE for about 100m, turning to run in a ENE-WSW direction for a further 25m, with a possible extension of 75m to the W. In part it runs roughly parallel to the curvilinear ditch L8, and it is assumed that together these features comprise a droveway or double-ditched track, roughly 80m long and closed at its S end. L9 may also form the E side of a large square or rectangular enclosure. Either way L9 encloses post hole structure L10. Its relationship with L1 was not tested by excavation.

Ditch segment S20 was located close to the right-angled turn. The ditch was 3.4m wide and was only partially excavated to a depth of 0.5m. Two fills were encountered. The lower fill was a mid yellow brown clay silt with no finds. The upper fill was a mid grey brown clay silt with moderate small stones in bands. This produced fragments of bone and a single sherd of pottery.

PHASE 4: EARLY ROMANO-BRITISH (1ST -2ND CENTURY)

Boundary ditch L7

This shallow ditch, running NNW-SSE, was shown by excavation to truncate the eastern enclosure ditch L1 near its SE corner. Geophysical evidence showed the ditch to extend on the same alignment to a total length of at least 120m, with other ditches orientated perpendicular to it on the W side. L7 also runs parallel to the possible droveway formed by ditches L8 and L9, as well as the SE side of the enclosure L1, suggesting some continuity from Phase 3. Dated by pottery and other finds to the early Romano-British period, the



Figure 4 Sections from enclosure ditch L1

construction of this ditch marks the end of use of the enclosure L1, and a shift in the focus of activity towards the W. The mundane function of the ditch was probably to provide drainage, hence its alignment down the slope. But its more important function was to mark the boundary of the new area of use, which from then on occurred to the W of this line. As with all ditches on this site, the associated bank/hedge may have been more significant than the ditch itself, as well as a more enduring landscape feature.

Ditch segment \$15 was excavated at a point where L7 and L8 crossed, but as the features were only excavated to a depth of 0.27m, no conclusive stratigraphic relationship was established. The width of L7 was uncertain but can be estimated to be between 1 and 2m. The W side was not found. The E side sloped in gently, as if the base was 0.4-0.5m from the surface. There were two fills. The lower fill was a firm mid grey silty clay next to the side. The top fill was a firm dark grey silty clay with frequent charcoal flecks and occasional pieces of burnt clay up to 0.04m, and it was here that the multiple fragments of a bone comb, dating to the 1st-2nd centuries, were discovered.

Ditch segment S35 was excavated at the point where L7 and L1 crossed, and the section demonstrated that L7 clearly truncates L1. The ditch has a concave profile and measures 0.9m wide and 0.4m deep. There were two fills. The primary fill was a mid blue grey sandy clay with red brown mottling, with inclusions of moderate small to medium stones and charcoal flecks. The secondary fill was a mid grey brown sandy clay. A sherd of early Iron Age pottery was thought to be residual.

Ditch segment S36 revealed a similar concave profile. Here L7 was 0.6m wide and 0.4m deep, with two fills virtually the same as those described above. In this case the primary fill contained a grog and shell tempered sherd dated to the early Romano British period, which can be taken to date the cutting of the feature.

Circular Enclosure L13

The overall shape of this smaller enclosure, measuring approximately 25 x 22m, was mainly determined from geophysical data. A small gully-like feature appears to link L13 and L15. There are possible entrances to the W and N. There is no evidence to indicate which of the two circular enclosures, L11 and L13, cuts the other. L13 is also overlapped to the E by the corner of a sub-rectangular enclosure.

Ditch segment S28 was 0.5m deep. Only the E side of the cut was located. There were two fills. The lower fill was a compact grey brown silty clay with some sherds of early Romano-British pottery. The upper fill was a slightly lighter compact grey brown silty clay, which also produced early Romano-British pottery as well as a quern fragment.

Oval Enclosure L15

This enclosure measures approximately 40 x 20m and is situated at the very centre of the area of crop-

marks to the W of enclosure ditch L1. The prevalence of pottery and animal bone in the ditch fills indicate that this may have been the focus of settlement in the early Romano-British period. Two possible entrances to the S and E are indicated by the geophysical evidence. The spatial arrangement of enclosures suggests that L15 may be contemporary with L13. Relationships with overlapping linear features are not known.

Ditch segment S30 was excavated on the SE side of the enclosure. The ditch was 2.9m wide and well preserved at this point because partly sealed by the later medieval headland L2. It was only partially excavated to a depth of 0.6m. Two fills were encountered. The lower fill was a compact green grey silty clay. The upper fill was a dark grey brown silty clay with frequent charcoal flecks. Both fills produced much 2nd-century pottery and animal bones.

UNPHASED DITCHES AND ENCLOSURES

Geophysical survey of the area to the W of L7 revealed a number of linear features, including boundary ditches, enclosures and droveways, which (apart from L11) were not confirmed by excavation and accordingly have not been given landscape numbers. Analysis and phasing of these is problematic without the stratigraphic or pottery dating evidence which excavation might have provided. However, it seems likely from the field artefact collection data (see above) that many are of Romano-British date, with some perhaps dating to the later Romano-British period. Others probably date from the late Iron Age and were related to the large enclosure L1 and the droveway L8/L9. The use of some of these earlier landscape features may have continued into later phases. The overall pattern of interwoven ditches indicates a small farmstead successively renewed over time within the limits of space provided by the top of a small hill.

Circular Enclosure L11

Geophysical survey picked up this 30m wide circular enclosure, with a curving linear feature leading inwards from a possible entrance in the SW. In the absence of more detailed information these are treated here as a single landscape feature. Both were encountered in an evaluation trench but not excavated. L11 appears to respect/be respected by oval enclosure L15, which may well be contemporary. The relationship between L11 and L13 has not been established.

Gully S25 was 0.3m wide. The upper fill was a dark grey silty clay. It truncated a small pit, S26. Neither feature was excavated.

Ditch segment S27 was 1m wide. Its upper fill was a medium grey silty clay with occasional charcoal flecks and some fragmentary bone. The ditch was not excavated.

PHASE 5: MEDIEVAL

Headland L2

The headland was visible on aerial photographs as a straight linear band roughly 12m in width, running across the field in an ENE-WSW direction for a distance of 500m (Fig 2). It ran perpendicular to and was clearly associated with the medieval furrows L5. The headland was encountered in several trenches as a compact mid yellow brown silty clay, up to 0.33m thick, directly below the modern ploughsoil. In some cases the headland directly overlaid archaeological deposits from earlier phases.

In later medieval and post-medieval times, the headland was used as a trackway across the field, linking up with tracks and field boundaries to the W and E. At some time after the system of ridge and furrow had fallen into disuse, a shallow gully was cut running parallel to the headland on its N side. Two stretches of 12m and 8m were found, and S16 showed it to cut the furrows. Most of this feature has been ploughed out in recent times.

Furrows L5

Nine furrows were encountered. These were orientated NNW-SSE, generally spaced about 7m apart, and situated mainly to the N of the headland L2. The characteristic fill was a mid green brown silty clay, with moderate small stones and flecks of charcoal. The only find was a sherd of early medieval pottery.

THE POTTERY

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METHODOLOGY

A total of 284 vessels (542 sherds; 6.965kg) was recovered. An additional 60 sherds were found in the course of the fieldwalking survey. The fabric types were identified according to the Bedfordshire Ceramic Type Series and recorded by fabric type and form. The units of quantification are a minimum vessel count (by sherd families, as defined by Orton, Tyers and Vince (1993, 58), sherd count, estimated vessel equivalents (EVEs) and weight. Evidence of use (residues, sooting, wear, holes or other secondary alterations) manufacturing techniques, and decoration were recorded. Five fabrics were thin-sectioned by K Knowles and R Winterbottom, Southampton University. The full petrological report is in the archives.

FABRIC TYPE DESCRIPTIONS

All the fabric types found on the site have been fully described elsewhere; therefore, only brief descriptions and references are given below.

F0IA Coarse flint tempered (2.5% of the total assemblage) A single fragment of a possible carinated vessel was identified; all other sherds are undiagnostic.

(Dawson *et al* 1988, 10, with a fuller description in Slowikowski forthcoming).

F05 Grog and shell (12.1% of the total assemblage; thin-sectioned)

A single neck sherd from a cordoned jar was identified. (Dawson *et al* 1988, 11, with a fuller description in Slowikowski 2001)

F06 Grog tempered Fig 5, 2-3

F06A Fine grog (less than 1.1% of the total assemblage); F06B Medium grog (22.8% of the total assemblage); F06C Coarse grog (15.7% of the total assemblage).

Cordoned jar in fabric F06A and everted-rimmed jars and a possible butt beaker in fabric F06B, both fabrics wheelthrown; undiagnostic sherds in hand-made fabric F06C. (Thompson 1982)

F07 Shell (15.3% of the total assemblage) Fig 5, 4-5In addition to lid-seated jars, a rounded shallow bowl or platter was also recovered on the site.

(Dawson et al 1988, 11, with a fuller description in Slowikowski 2001)

F08 Shell and grog (3.9% of the total assemblage; thin sectioned)

Related to F05, differing only in the proportion of inclusions. Body sherds only were recovered on the site, although elsewhere forms similar to those in F07 are known. (Dawson *et al* 1988, 11)

F09 Sand and grog (11.4% of the total assemblage; thin sectioned)

A single jar was identified among the generally undiagnostic body sherds.

(Dawson et al 1988, 11)

F14 Fine mixed inclusions (39.5% of the total assemblage; thin sectioned) Fig 5, 1

Mainly undiagnostic body sherds, although some jar rims were found.

(Slowikowski 2001)

F15 Coarse mixed inclusions (3.9% of the total assemblage) Body sherds only. (Slowikowski 2001)

F16 coarse shell (4.3% of the total assemblage) Body sherds only. (Slowikowski 2001)

F19 Sand and organic (3.2% of the total assemblage; thin sectioned) Body sherds only. (Slowikowski 2001) F20 Limestone inclusions (less than 1% of the total assemblage) Fig 6, 6

A likely regional import, possibly from Cambridgeshire. A single vessel was found on the site. (BCAS 1999: Slowikowski 2001)

F24 Buff shelly (14.47% of the total assemblage) *Fig 6*, 8-11 Forms are comparable to early Romano-British types described by Brown (1994).

R0I Samian (3.2% of the total assemblage) Of the recognisable forms, only two bowls, Dr. 30 and Dr. 37, were identified. A base fragment from an indistinguishable vessel was stamped [NO-].

R03B Cream ware (3.6% of the total assemblage) Fig 6, 7 Forms are indistinguishable, although they may be flagons; Verulamium region.

R04B Fine white Gallo-Belgic import (less than 1% of the total assemblage) A single rim sherd from a butt beaker.

R06A Nene Valley greyware (11.0% of the total assemblage) *Fig 6, 12-14*

Forms in this type recognised on the site are large 'poppyhead' jars with dot decoration, everted-rimmed jars and narrow-necked jars.

(Howe, Perrin and Mackreth 1980, 7)

R06B Coarse greyware (7.8% of the total assemblage) Fig 6, 15-16

Identifiable forms are jars, lid-seated jars and a flat-topped bowl.

R06C Fine greyware (less than 1% of the total assemblage) Forms in this type include lid-seated jars and plain bowls.

R07B Sandy black ware (2.8% of the total assemblage) Fig 6, 17-18

The only identifiable form is a plain-rim bowl.

R12A Nene Valley mortarium (less than 1% of the total assemblage)

A single mortarium of this type was found. (Howe, Perrin and Mackreth 1980, 10)

C01 Early medieval sandy ware (less than 1% of the total assemblage) Described by Baker and Hassall (1979, 171)

PETROLOGICAL SUMMARY K Knowles and R Winterbottom

The five fabrics which were thin sectioned formed two distinct petrological groupings.

Group 1 Fabrics F14 and F19

This group bears a close petrological resemblance to the clay matrix of a pottery thin section from Wandlebury, South Cambridgeshire, excavated in 1995 (although there are perhaps more coccoliths in

the Wandlebury section). For this reason, examination of the geological outcrops around the site at Wandlebury was undertaken and it was found that the site is located on the border between the Upper Greensand and Gault and the Chalk. A precise provenance has not been pinpointed but it may have originated from a geological outcrop of the Upper Cretaceous Chalk Group. The larger aplastic inclusions in the fabric reveal very little since they are commonly found in both Bedfordshire and Cambridgeshire. The presence of calcareous and fossiliferous deposits in the local geological outcrops around Bedford (Cornbrash, Blisworth Clay and Oxford Clay) means that local origins for this fabric cannot be wholly excluded from consideration.

Description: a clay matrix containing tiny, abundant, fossiliferous, calcareous inclusions (0.1mm and smaller in size).

Group 2 Fabrics F05, F08 and F09

This group appears to be more certainly local to the area around Bedford. The aplastic inclusions commonly occur in this area in the local outcrops (Blisworth Clay, Cornbrash, Oxford Clay) and also in the glacial drift deposits. The Oxford Clay is the least likely origin, because it tends to feature ammonites, which are absent from the Norse Road sections. Although it cannot be proved, it is likely that the argillaceous inclusions in this fabric may well have been deliberately added.

Description: a cleaner, less calcareous clay matrix containing tiny occasional to moderate cryptocrystalline quartz grains and limestone (0.1mm and smaller).

DISCUSSION

The pottery assemblages of phases 1 and 2 are small and, although used to define these phases, are indicative only of peripheral activity in the early and middle Iron Age. Most of the pottery recovered from the site comes from phases 3 and 4.

Phase 3:

Pottery from the eastern enclosure ditch, L1, makes up 61% of the total site assemblage by sherd. It is of late Iron Age date with a mix of 'Belgic' wheel-made types (e.g. Fig 5, 2) and hand-made wares of native tradition (e.g. Fig 5, 1). Decoration is sparse, although a jar (Fig 5, 3) has a deeply combed body, a decorative motif whose ancestry lies in the scored ware tradition of the middle Iron Age. The fabrics are also mixed, with 'Belgic' grog (F06A-C) and grog and shell (F05) fabrics found with fine mixed (F14) type.

AN IRON AGE AND ROMANO-BRITISH FARMSTEAD AT NORSE ROAD, BEDFORD

Phases	1 L16	2		3			4			5
		L10	L14	L1	L6	L9	L7	L13	L15	L5
Ware										
F01A	2:3:11			3:4:20						
F14	2:2:8		2:2:93	31:91:532	1:3:76	1:1:2	3:8:73	1:1:5	1:1:2	
F15				1:8:40				1:1:3	2:2:19	
F16				5:7:53						-
F19				4:7:91					2:2:11	
F20									1:1:40	
F05				11:31:208				1:1:28		
F06A				2:2:26						
F06B				30:63:384		1:1:1		1:1:1		
F06C				11:42:692			1:1:12		1:1:12	
F07				6:42:324			2:2:32	3:4:75		
F08		5:8:64		1:4:50	2:3:2					
F09				18:32:270						
R04B								1:1:20		
F24									59:79:2090	
R01							1:1:1		6:8:238	
R03B									7:10:241	
R07B							1:1:6		3:7:88	
R06A								1:1:5	21:31:527	
R06B									18:22:276	
R12A									1:1:183	
C01										1:1:11

Table 1 Pottery fabric types by phase and landscape (vessel:sherd:weight g.)



Figure 5 Pottery from enclosure ditch L1 (scale 1:4)

13

F14 is generally found in middle Iron Age forms although here it clearly continues into the late Iron Age. The same situation pertains at Stagsden, north Bedfordshire, where hand-made copies of 'Belgic' forms are found with hand-made vessels of fabric F14, showing longevity of a middle Iron Age potting tradition (Slowikowski 2001).

The large percentage of F14 vessels precludes them from being residual in this ditch. In addition, the lack of any abrasion and the not infrequent presence of more than one sherd belonging to the same vessel suggests contemporaneity.

Forms are generally unrecognisable, but there is a wheel-thrown, shallow bowl or platter (Fig 5, 4), in a shelly fabric F07, whose closest parallel is Thompson's type G1-10. This type is a copy of Gallo-Belgic rounded bowls or platters, and can be dated to AD5-50 (Thompson 1982, 469, no.5).

There is a relatively high percentage, 54.96% by sherd, of shelly wares or fabrics with a shelly component. The site is some distance from the main shelly manufacturing area of north Bedfordshire, suggesting a preference for these vessels.

There is an element of residuality in the presence of early Iron Age sherds of F01A, flint-tempered type, and three abraded handle sherds of middle Iron Age date.

Phase 4:

The early Romano-British phase comprised three landscapes which produced finds. The primary fill of the linear ditch L7 produced a single sherd of F14 fabric, which is likely to be residual. The upper fills contained a bone comb and pottery dating the final disuse of this ditch to the 2nd century.



Figure 6 Pottery from enclosure ditch L15 scale (1:2)

The ditches of the oval enclosure L15 were filled with Romano-British pottery whose suggested date may be in the mid-2nd century. The pottery was unabraded with large fragments surviving (Fig 6, 6-18). Most of the pottery consisted of shell tempered pottery and greywares. A shelly ware industry was based at Harrold, North Bedfordshire, with production beginning in the early Romano-British period and flourishing particularly in the 4th century. A number of vessels are paralleled at Harrold in the second half of the 2nd century: lid-seated/channel rim jars, which have by now lost the deep groove in their rim so common in the 1st century, simple outcurved rimmed jars, and bowls (Brown 1994, 62). The giant storage jar (e.g. Fig 6, 8) is dated to the 3rd century at Harrold but its presence in the 1st century at, for example Stagsden, where it was manufactured, indicates that it is a long lived type (Slowikowski 2001). Individual examples of a number of forms were found in the upper fill: a mortarium from the Nene Valley, a flagon and a possible ring vase (Fig 6, 7) from the Verulamium region, and a small quantity of samian. Samian was recovered only from this upper fill. A single stamped fragment was found [NO-]. Evidence of samian use was seen in the external and internal burning on a single base sherd, clean on the breaks, and a post-firing drilled hole just under the rim of a plain bowl. These holes are common on samian and indicate attempts at repair. The lower fill contained fewer vessels but these were of the same date, and included a poppy head jar (Fig 6, 12).

The forms of both the grey wares and shelly wares are basic utilitarian types, possibly kitchen wares; no fine wares besides the samian were found. Exteriors of the shelly wares are sooted while the grey wares are clean indicating a difference in function, possibly the use of shelly pottery for cooking and greyware vessels for storage and tablewares.

A single identifiable open vessel in a middle Iron Age fabric, F20, was recovered (Fig 6, 6). It was residual in this ditch, but indicates the presence of earlier activity.

THE NON-CERAMIC FINDS

H Duncan

The non-ceramic assemblage derived from Phase 4 deposits. Of the four 'small finds' recovered from the trial trenches, two provide some evidence of date. The presence of a flat rotary quern from the enclosure ditch L13 indicates a post-Roman Conquest date, flat querns having superseded the beehive form early in the Romano-British period. Trade in mill-stone grit from the Derbyshire/Yorkshire area appears to have begun during the 2nd century AD (Buckley and Major 1990, 117) and continued throughout the Romano-British and later periods. It seems likely therefore that the quern fragment dates no earlier than the 2nd century AD.

The introduction of the construction technique of the composite bone comb from the enclosure ditch L7, several tooth-plates sandwiched between a pair of connecting plates, is thought to date towards the end of the 2nd century AD (MacGregor 1985, 83). The fragmentary nature of this comb (Fig 7) is unfortunate, making it impossible to be certain of its original form. If single-sided it could date from the 2nd/3rd centuries AD, while double-sided composite combs do not appear in the archaeological record until the 3rd century AD, continuing in use into the 12th century AD. The ceramic evidence from this ditch would seem to indicate an earlier rather than later date.



Figure 7 Bone comb from boundary ditch L7 (scale 1:1)

The condition of survival of the two iron 'rods' precludes certain identification. If they are nails, as tentatively identified, their size suggests they belong to Manning's Type 1A (1985, 134-7) possessing lengths of greater than 150mm.

Despite the limited nature of the assemblage, the presence of items associated with food processing and personal appearance is indicative of domestic occupation.

CATALOGUE

SF 1 Bone. Comb. Fragmentary remains (12 pieces plus 22 detached teeth) of a composite bone comb with evidence for at least four iron rivets (one in situ). Portion of only one side survives, plain straight-sided end-plate, teeth all relatively coarse. Connecting plate displays teeth cut-marks on one side, opposite unmarked. Phase 4; L7; Context 13.

SF 2 Iron. ?Nail shank. Rod, 177mm in length, rectangular in cross-section (1 1 x 7.6mm). Both ends incomplete. Phase 4; L15; Context 63.

SF 3 Iron. ?Nail shank. Rod, 136mm in length, square in cross-section (12.5 x 12.5mm), both ends incomplete. Phase 4; L15; Context 63.

SF 4 Millstone grit. Quern. Fragment of a flat rotary quern (upper stone?) of medium coarse millstone grit. Portion of grinding surface survives. Remains of rough outer edge too small to determine diameter. Greatest surviving thickness 33.5mm. Phase 4; L13; Context 59.

FAUNAL REMAINS

(Summary of report by A F Roberts)

Of the 37 contexts which contained animal bone, nearly half were contexts from the late Iron Age enclosure L1. These were in a very fragmentary condition. Five species were identified: horse, cattle, pig, sheep/goat and dog. Cattle bones were the most frequent, followed by sheep and horse. Pig bones were infrequent, while only two bones of dog were found. Faunal remains from later phases were well preserved and included two long bones as well as broken fragments. In particular, large quantities of bone were found in the early Romano-British boundary ditch L7 and oval enclosure L15. These assemblages showed roughly the same percentages of different species as L1, with cattle bones by far the most frequent in number and distribution. Two bones of deer were found in L15. Both were pieces of antler, one with evidence of working, and the other shed and probably collected.

ENVIRONMENTAL EVIDENCE

(Summary of reports on plant macrofossils by R Scaife and snails by M J Allen)

Soil samples were taken from a range of ditches, pits and other features; some of these produced charred plant remains and land snails for analysis. Both kinds of remains were extremely sparse. A single grain of wheat was identified from the fills of the late Iron Age enclosure L1. The assemblage of snail shells found in L1 is dominated by Trichia hispida, which indicates an open pastoral or possibly arable habitat. Moister conditions are suggested by the presence of a few shells of fresh-brackish water species Lymnaea truncatula. The early Romano-British oval enclosure L15 produced a number of wild grass seeds and a seed of Fallopia convulvus (black bindweed), a plant typical of arable habitats, disturbed and waste ground. However, the general absence of grain seeds from features of all phases is unusual and might suggest a primarily pastoral economy.

DISCUSSION

The results of the archaeological evaluation and subsequent excavation combine to give an understanding of the development of a small-scale rural settlement at Norse Road, dating from the Iron Age and Romano-British periods. While evidence of earlier activity is provided by the assemblage of worked flints of Neolithic or Bronze Age date found during field artefact collection survey, and by the few features which can be dated to the early Iron Age (as well as the background of residual early Iron Age pottery found in later features), the first substantial evidence for occupation/use of the high ground dates from the middle-late Iron Age. The construction of a large eastern enclosure and possible droveway towards the end of the Iron Age was followed in the early Romano-British period by a shift westwards in the use of the site and the construction of a series of smaller enclosures. Here limited evidence precludes a detailed discussion but the abundance of pottery from the few ditch segments excavated, together with fragments of a bone comb and quernstone, shows occupation may have become more permanent in this phase. That some of the unexcavated features in this area may be of late Romano-British date is indirectly suggested by the scatters of 4thcentury pottery found during fieldwalking. The absence of Saxon finds indicates that the farmstead was abandoned by the end of the Romano-British period, but some longevity of field boundaries and

continuity in agricultural practices is suggested by the fact that the medieval furrows share exactly the same orientation as the Romano-British ditch L7 and other landscape features from earlier phases. However, the excavated evidence is principally from the late Iron Age, and this will be discussed in detail below.

PHASE 3: LATE IRON AGE

Extensive excavation of the late Iron Age eastern enclosure L1 was successful in revealing the form of the enclosure ditch with its internal bank and entranceway, as well as the order of construction of its component ditches. Investigation of the interior, however, did not reveal the anticipated evidence of settlement structures (with the exception of the cluster of post holes L10, which may be earlier than the enclosure). Some domestic activity is indicated by the evidence of pottery in the ditch fills, but this does not specify whether such activity took place inside or outside the enclosure. The absence of settlement structures may be partly due to the destruction of features by deep ploughing in medieval times, but perhaps should be taken as evidence that the enclosure was constructed primarily for agricultural rather than settlement purposes - in which case huts might be expected to be found just outside the enclosure.

Indeed, looking at the complex of cropmarks as a whole, the existence of at least two droveways leading into and out of the enclosures (with droveway ditches forming integral parts of the enclosures themselves) is strongly suggestive of a system of ditches and banks for controlling and moving animals around. The sparse distribution of pottery outside the main cluster of cropmarks might be taken to indicate that the farmers who made use of the low hilltop were principally engaged in pastoral rather than arable farming (Hayes 1991, 83). No recognisable storage pits were found, and there was a marked absence of grain seeds. Faunal remains and other environmental evidence suggest that the agricultural economy centred around cattle, with some sheep and horse and a limited number of other animals. The predominance of cattle bones in ditch fills carried over into Romano-British times. This naturally leads to the question of whether the eastern enclosure in particular, and perhaps some of the associated enclosures immediately to the W, were stockyards or corrals for penning cattle (and/or sheep), and whether the site could perhaps best be conceived of as a kind of ranch.

Ranch is a term rarely used in the context of British Iron Age and Romano-British studies but it usefully conveys the idea of a farmstead with the principal function of cattle-rearing and husbandry. The small promontory of high ground at Norse Road is ideally situated in this respect because it overlooks and gives easy access to the lush pastureland of the floodplain of the River Great Ouse, which would have provided the optimum grazing for cattle in the summer, as well as meadows for the production of hay for winter fodder. The nearby brook would have met the constant watering needs. Most importantly, in view of the fact that the enclosures were obviously deliberately sited within the top contours, the site would have provided convenient refuge from floods which, in wet winters, would have half-encircled the low hill. As Cunliffe (1992, 381) points out, cattle were much more difficult to look after than sheep; from December to March they would have needed protection from the weather in corrals or other enclosures.

The situation of the complex of enclosures on the high ground in relation to other cropmarks nearby, and the character of pastoral economies in general, also leads to the question of whether the site was occupied on a seasonal basis. It is well known, for example, that the tradition of medieval cattle fairs, often held on hilltops, probably had origins in prehistory, with 'seasonal round-ups' sometimes being the occasion for social gatherings (Cunliffe 1995, 30). A possible scenario is that the enclosures were used principally in the winter or at times of flood. Alternatively, the site could have served as a semipermanent base from which herds were taken onto the floodplain in the summer, with some of the family or group staying behind. Either way, the undated cropmarks on low ground on the other side of the brook - including a droveway that if extended could have linked the two sites - may well have been part of the same complex, possibly used in the summer and abandoned during the winter floods for the higher ground (Fig 1 and Plate 1).

Consideration of former flooding conditions can be important for understanding river valley sites. Prior to the existence of flood banks and large scale artificial drainage systems, rivers were much more liable to flooding than today. Occasional severe floods can give some idea of what may have been an annual occurrence in Iron Age and Roman times. For example, when the River Great Ouse burst its banks in Cambridgeshire in March 1947 the floodwaters halted on a line which bounded the known distribution of Romano-British settlement sites (Wilson 1982, 37). Annual flooding probably imposed a mobile way of life on farmers seeking to exploit the rich grassland resources of the floodplain.

It is often assumed that mobile pastoral economies were largely confined to the N of the country. The model of sedentary cultivation or mixed farming usually applied to sites in the S is rarely challenged, even when evidence for arable crops is lacking. However, the middle Iron Age riverside enclosures at Farmoor in Oxfordshire provide a useful comparison. Here several groups of enclosures on the floodplain were interpreted as seasonal pastoral farm units, established for the prime purpose of tending the grazing herds. These were occupied in the summer in order to make use of the rich pasture, but were subject to flooding in the winter and abandoned for the higher ground. This implied the existence of a winter encampment and, although none was located. various hills overlooking the floodplain were thought to be likely candidates (Lambrick and Robinson 1979).

At Norse Road the opposite situation pertains. The group of enclosures on the high ground represents the winter encampment, or perhaps the base from which summer excursions with cattle were made (bearing in mind that severe flooding, and therefore the use of the upland site, would occasionally occur in summer too). Here the cluster of cropmarks is especially dense because successive encampments sometimes using existing enclosures and sometimes constructing new ones - were limited by topography to the same small area of ground on top of the hill. This presupposes the existence of summer steadings or pastoral camps on the floodplain of the kind found at Farmoor. Unrestricted by limitations of space, these would probably have shifted from one part of the floodplain to another, so several sites would be expected. The cropmarks formerly visible on the low ground on the other side of Renhold Brook may represent one such site.

NOTE

The Norse Road archive is deposited in Bedford Museum (Accession No 2000/29).

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