

AN IRON AGE ENCLOSURE
ON BOROUGH FEN,
NEWBOROUGH,
CAMBRIDGESHIRE

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THE IRON AGE ENCLOSURE AT BOROUGH FEN, CAMBRIDGESHIRE AN ARCHAEOLOGICAL SURVEY BY THE RCHME, DECEMBER 1993

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INTRODUCTION

In December 1993, an archaeological survey of the Iron Age enclosure located between Borough Fen and Peakirk Moor (NGR TF 191073)^{OS0729} was undertaken by the RCHME. The survey was requested by Alison Taylor, the Cambridgeshire County Archaeologist, and was intended to supplement recent excavations and geophysical survey of the site. The enclosure is sub-circular and bi-vallate, with a slightly in-turned entrance on its eastern side.

The site is bi-sected by Decoy Road and the Redcow Drain, which define the boundary between Peakirk Moor on the west and Borough Fen on the east, in the parish of Newborough. It is situated on an embayment of the western fen-edge at 3.5m - 4.0m OD, on a slight spur of Welland First Terrace gravels (Hall 1987, 21; French and Pryor 1993, 73). The surrounding peat developed throughout the later Iron Age, and possibly obscured the earthwork until the mid seventeenth century (PRO Chancery Lane 1637; French and Pryor 1993, 68). It is possible, however, that the underlying gravel spur may have kept the enclosure clear and prominently visible in the surrounding wetlands (Hall 1987, 28).

Approximately two-thirds of the west side of the enclosure has lain under pasture since the end of the Second World War, but was intensively ploughed before that date, probably during the War. In addition, the field was harrowed and re-seeded in 1993, which resulted in further damage to the ramparts. The eastern third of the enclosure remains under the plough, but will be returned to permanent pasture in 1994 as part of the management of the site. To the south of the enclosure, earthworks which were preserved in pasture until approximately 1979 have largely been ploughed away since that date, although they lie within the scheduled area. As a result of the past and present intensive agricultural regimes, the upstanding earthworks of the site as a whole are poorly preserved, though recent excavations indicate excellent sub-surface preservation.

The enclosure was first identified in 1951 from aerial photographs (aerial photographs a 1947; b 1953) and was recorded on the ground in 1968 (Ordnance Survey 1:2500, published 1974). The site has been the object of a number of archaeological

investigations over recent years. Originally thought to be of Dark Age date (DOE scheduling information 1977), field-walking by the Fenland Survey (Pryor 1984; Hall 1987; French 1988) reinterpreted the earthwork as prehistoric. A Middle Iron Age date was confirmed by limited excavation in 1983 (French 1988; French and Pryor 1993 and forthcoming). In 1987 an auger survey demonstrated the survival of a well-preserved buried soil and a major phase of occupation, sealed by alluvial deposits of probable Roman date. In 1991, the Ancient Monuments Laboratory carried out satellite photography and resistivity survey (Jordan forthcoming). In 1992-93, limited excavation was carried out along the sides of Redcow drain, and sections through both ramparts were exposed (Malim and McKenna in press 1993 and forthcoming). Organic material and Middle Iron Age pottery (third to second century BC) were recovered from the water-logged primary fills of the main ditch. Although the profile of the outer ditch was recorded, its fill was not sampled.

DESCRIPTION

The enclosure

The enclosure as a whole is bi-vallate and sub-circular, with slightly straighter sections along its northern and western sides. The circuit of the main inner rampart has a diameter of c. 220m, enclosing an area of 3.8ha, with a slightly in-turned entrance on its eastern side. The less massive outer rampart only survives as an earthwork along the northern and western sides of the enclosure, but has been traced elsewhere by aerial photographic plotting (Ordnance Survey 1:2500, published 1974) and geophysical survey (Jordan forthcoming). It follows the course of the inner rampart concentrically at an average distance of 28m. The interior of the enclosure stands c. 1m higher than the surrounding fields, but this does not reflect its original state, since shrinkage and wastage of the peat have taken place since the seventeenth century (Hall 1987, 21). All the earthwork features of the site are most clearly visible on aerial photographs of 1970 (aerial photographs c and d 1970).

The inner rampart

The bank and ditch of the inner rampart are best preserved on the northern side of the enclosure (see profile), where an almost straight stretch extends for some 130m west of Decoy Road. Excavation of the sections exposed by the Redcow Drain (Malim and McKenna in press 1993 and forthcoming) showed the bank to have an original basal width of 7.5m, with possible evidence for timber revetting. A berm 1.5m wide separated the bank from the ditch, which measured 2.3m deep and 10.5m wide across the top. Its sides shelved gently at first and then more steeply to a level base 4.4m wide. The surface remains of both features are abraded by ploughing. This section of the bank measures 11.5m wide across the base, between 2.0m and 6.0m across the top and has average heights of 0.7m and 1.2m on its interior and exterior respectively. A sharp step 0.1m high has been cut along its interior scarp by the most recent episode of harrowing; this marks the approximate limit of earlier ploughing. The bank is breached in three places. The first of these, which lies immediately to the west of the Decoy Road embankment, measures 9.0m wide and 0.3m deep. The second lies some 28m to the west, and measures 11.0m wide and 0.5m deep. The third lies 63m further west and measures 6.3m wide and 0.4m deep. Mid-way between these two breaches, an oval mound measuring 9.2m west to east and 0.3m higher than the rest of the bank represents a remnant of the original. The western terminal of this section of the bank has been cut away diagonally from south-west to north-east. The external ditch is shallow with very gently sloping sides. On average it measures 9.5m wide and 0.4m deep, though it broadens to 18.0m and becomes more abraded immediately to the north of the second breach in the bank. The western end of this section of ditch has been blocked at the same diagonal angle as the cut through the bank by a broad bank (a), described below.

At this point the rampart turns relatively sharply to the south-west. The interior scarp of the bank continues for a further 57.0m with a maximum height of 0.1m. The outer scarp remains stronger, with an overall height of 0.8m, of which the upper 0.2m has been degraded by ploughing to a very gently sloping scarp up to 9.0m wide, over a distance of approximately 115m. The broadest point of this wear corresponds to a 6.2m wide interruption in the external ditch. To the north-east of this interruption, a shallow and abraded section of the ditch curves gently as far as the bank (a). It extends for a total of 46m, and measures 9.0m wide on average with a maximum depth of 0.2m. To the south of the interruption, the ditch resumes after an area of modern disturbance, which is visible on an aerial photograph of 1947 (aerial photograph a 1947). This comprises the re-cutting of the terminal of the ditch to form an irregular depression with two associated spoil heaps. The depression measures 12.0m west to east by 11.0m transversely, and has a maximum depth of 0.4m. The spoil heaps lie immediately to the north and south of the depression. The northern one is roughly circular with a diameter of 6.0m and height of 0.3m, and the southern one is oval, measuring 8.5m north-west to south-east by 6.5m transversely, with a maximum height of 0.2m. Beyond this disturbance, the ditch continues to the southern boundary of the field, maintaining average dimensions of 0.3m deep and 6.2m wide. Its outer scarp, though slight, is strong and well-defined, and has clearly frequently been used as the limit of ploughing. To the south of the heavily abraded stretch of the bank, a number of irregular shallow scoops and slight spreads of gravelly subsoil lie along the line of the bank. All the scoops have a depth of less than 0.1m and all except one of the spreads survive only as soil marks; only the most substantial are shown on the plan. The largest two scoops both have an area of roughly 60m², and the largest spread has an area of roughly 70m² and a maximum height of 0.1m. To the south-east of this disturbance a minimal trace of the inner scarp of the bank survives over a distance of some 45m. As it approaches the southern edge of the field, the ditch has been re-cut on a more southerly alignment to join up with the field boundary ditch (see below). This re-cut extends for 16.0m and has a depth of 0.5m and a minimum width of 3.4m near its middle. The junction of the re-cut with the field boundary ditch has been enlarged to form a triangular pond. This has maximum dimensions of some 15m west to east by 11m transversely by 1.2m deep. To the south-east of the point at which the re-cut diverges, a 16m long section of the enclosure ditch survives before it is cut away completely by the straight field boundary ditch. This remnant has a width of 5.2m and a depth of 0.2m. The field boundary ditch follows the approximate line of the enclosure ditch for some 60m. The outer scarp of the bank is sharpened by the later feature and is disturbed in two places by trees, probably the remains of an earlier hedge along the field boundary, which have been cut down in recent years. The remains of the enclosure ditch curve away from the field boundary on a more north-easterly alignment for some 32m as far as the Decoy Road embankment. This section has a width of 4.6m and a maximum depth of 0.3m, with a

general fall towards the field boundary ditch. The outer scarp of the bank is strong and well-preserved at this point, standing to a maximum height of 1.0m. On the line of the bank, several more irregular spreads of gravelly subsoil are visible as soil marks; the most substantial is roughly oval with maximum dimensions of 9.0m north to south by 6.6m transversely and 0.1m high. Some 15m to the south west of this, a slight linear scoop extends for 17.5m west to east, with a width of 4.8m and a maximum depth of 0.1m at its eastern end.

The outer scarp of the enclosure survives as a minimal fall in the surface of Decoy Road. In the field to the east, the rampart has been heavily plough-damaged; the external ditch and most of the inner scarp of the bank have been lost since the Ordnance survey plan of 1968 (Ordnance Survey 1:2500, published 1974). During the RCHME survey, a total of nine sherds of Middle Iron Age pottery, mostly shell-gritted, were observed along the course of the rampart, but not collected. All were large (4cms to 8cms diameter) and unabraded, many with fresh breaks, indicating that the occupation layers of the site are also under threat. The rampart bank is best preserved at its southern end immediately to the east of Redcow Drain, where the outer scarp survives to a maximum height of 0.4m and width of 11.0m. A minimal trace of the inner scarp extends for a distance of some 18m. A second stretch some 14m long is visible 38m to the north-east. The outer scarp extends for a total of approximately 105m, decreasing in height as it bends gently to the north, and then turning to the north-west for its final 12m. This final section has an average width of 6.0m and height of 0.2m. After an interval of some 30m, the outer scarp resumes on the same alignment, with a much slighter scarp 0.1m high and 3.0m wide extending for 28m to the south-west. The bulk of the outer scarp fades away some 22m to the north-west, but a minimal scarp continues the alignment for 17m to the north and then increases to 0.2m high for a further 18m to the north-west before it is buried by the remains of a recent dump of topsoil. The scarp is visible as a slight dip in the verges on either side of Decoy Road, but not in the surface of Decoy Road itself.

The outer rampart

The ditch of the outer rampart survives as an earthwork, heavily abraded by ploughing, for a total of approximately 400m along the northern and western sides of the enclosure. Much of the remainder of the circuit has been traced by aerial photographic plotting (Ordnance survey 1:2500, published 1974) and by geophysical survey (Jordan forthcoming), with a gap on the eastern side corresponding to the opening in the inner earthwork. A section through the ditch on the southern side of the enclosure exposed in the Redcow Drain (Malim and McKenna in press 1993 and forthcoming) showed the original feature to be 1.3m deep and 3.5m wide across the top. Its inner scarp shelved gently and its outer much more steeply to a level base 1.2m wide.

The two sections of the ditch which survive on the surface extend almost precisely parallel to the inner rampart at a distance of between 25m and 30m, except at the north-west corner, where the distance broadens to 40m to create a more angular corner. The northern section, which extends for some 200m to the west of the Decoy Road embankment, is slightly better preserved (see profile). It varies in width between 5.8m and 8.0m and has an average depth of 0.3m. Its southern edge is overlain by the bank (a), which constricts its width to 5.8m. A scarp 1.8m wide with a maximum height of 0.1m, which extends for some 42m to the west of the Decoy Road embankment is slight evidence for a bank lying outside the ditch. The western end of the ditch curves slightly to the south-west for its final 25m, and then fades away without a definite terminal. After an interval of some 26m, the ditch resumes, again without a definite terminal. It continues straight to the south for 105m before bending gently to the south-east for a further 70m. This section varies in width between 6.0m and 8.5m and has an average depth of 0.2m. The ground between the outer edge of the ditch and the western edge of the field is generally 0.1m higher than the ground between the two ramparts and the adjacent field to the west. This difference in levels is most pronounced where the ditch comes closest to the edge of the field. At the southern end of this section the enclosure ditch is cut by a later slight bank and ditch (see below), and a 9.0m section to the south of this is preserved before the field boundary ditch cuts away the feature completely. This short section does not appear to have been ploughed and measures 5.4m wide and 0.3m deep. No trace of the outer ditch is visible on the surface either in the southern or eastern fields, but weather and light conditions at the time of the survey were poor.

Linear multiple ditch

To the south-west of the enclosure, some 90m from the outer ditch, four closely-spaced ditches extend for at least 230m approximately south-east to north-west. These are most clearly visible on the aerial photograph of 1953 (aerial photograph b 1953), but are not visible on the ground, and were in any case outside the survey area. The four ditches are separated from each other by approximately 2m and appear to run roughly parallel to the western edge of the enclosure. They may extend further in both directions; this too may be clarified by the results of geophysical survey (Jordan forthcoming). They were exposed in modern dyke sections in 1981 and were all found to be c.1.5m wide and deep (Hall 1987, 28).

Later features

A broad abraded bank (a) with a width of 22m and length of 40m crosses obliquely between the inner and outer ramparts. Its south-western end overlies the ditch of the inner rampart, and this alignment is continued by the angle of the terminal of the rampart bank. Its north-eastern end overlies the southern edge of the outer enclosure ditch and slightly constricts its width, but does not appear to continue to the north of the

ditch. Since the position of the feature coincides with the edge of the underlying natural gravel spur, the south-eastern scarp of the bank is 0.2m high and its north-western scarp accentuated to a height of 0.5m.

In the south-western corner of the western field, an embanked ditch which cuts the outer enclosure ditch survives relatively well in the strip of unploughed pasture at the edge of the field. This represents the remains of the northern end of a small rectangular enclosure which originally extended into the southern field and is clearly visible on aerial photographs taken before the area was ploughed (aerial photographs a 1947; d 1970; e 1979). The section of ditch which survives measures some 32m long west to east. It joins the inner ditch of the enclosure at its eastern end and begins to curve to the south at its western end. The ditch measures 4.4m wide on average, and a maximum of 0.5m deep at its eastern end; the slight embankments to its north and south both have maximum widths of 2.4m and heights of 0.2m.

At the northern end of the southern field, a roughly rectangular strip which decreases in width from 74m at its western end to 46m at its eastern end was scheduled to include earthworks surviving in the pasture. The southern edge of this strip was a field boundary which existed in 1979, but has since been removed and ploughed out; the enlarged field is now under an arable regime. The aerial photographs indicate that three ditches originally extended some 35m to 40m southwards into the southern field at right angles to the surviving ditch. The most easterly of the three met the field boundary ditch at the triangular pond, the most westerly some 18m east of the western edge of the field, and the other mid-way between the two. These all appear to have been 4m to 5m wide and at least 0.3m deep. A scarp or possible fourth ditch lies along the western edge of the southern field. These features enclosed three narrow rectangular depressions, all 18m to 22m wide, and possibly c.0.3m deep, which appear to have extended as far as the former field boundary at their southern ends. Another ditch on the same alignment lay some 50m west of the eastern field boundary. Its southern end continued to the edge of the scheduled area but no further and its northern end 'dog-legged' through a right angle some 12m south of the surviving field boundary ditch, respecting the terminal of a well defined bank. This bank extended to the east for some 60m as far as the eastern edge of the field, and is most clearly visible on the aerial photograph of 1970 (aerial photograph d 1970). The same photograph suggests that this area was also depressed in relation to the ploughed field to the south.

Although within the scheduled area, the remains of all these earthworks are now slight and irregular, due to the intensive ploughing which has taken place since c. 1979. Slight abraded scarps exist, but most bear only a vague relation to the original features as visible on the aerial photographs. A shallow linear depression extends for some 53m

parallel to the western boundary of the field at a distance of roughly 12m; however, this does not correspond precisely to the position of the ditch visible on the aerial photographs. The feature has an average depth of 0.1m and ranges from 8.0m to 10.0m wide. A scarp suggests a slight embankment on the west of the southern end of the depression. This has a maximum height of 0.1m and extends for some 15m. Some 30m east of this, a broad irregular bank extends for a total of 37m north to south; it has a maximum width of 17.5m and height of 0.2m. At the southern end of this feature lies a sub-rectangular depression aligned west to east. This measures 39m long by a maximum of 23m wide; its southern scarp, which corresponds approximately to the former field boundary, is relatively strong and reaches a depth of 0.3m. The scarp which forms the eastern side of the feature tails out some 10m to the north-east. Some 60m to the east of this feature lies another abraded depression, roughly 40m square. The southern scarp, which again corresponds approximately to the former field boundary, reaches a maximum height of 0.4m. A spur projects away from this side at right angles to the north for some 20m. This has maximum dimensions of 0.2m high and 7.5m wide at its southern end. The eastern side of the depression, which corresponds approximately to the easternmost of the ditches visible on aerial photographs, also has a maximum height of 0.4m. The northern side of the depression, which extends for only 20.0m west of the corner and has a maximum depth of 0.2m, may represent the remains of the 'dog-leg' in the original feature. The scarp forms the back of an abraded bank, which extends parallel to the northern boundary of the field at a distance of some 12m from it, for a total of 66m to the east as far as the eastern boundary of the field. The bank has an average width of 11.0m and height of 0.2m, but increases to 0.3m for 16.0m at its eastern end. This feature represents the remains of the well-defined bank visible most clearly on the aerial photograph of 1970 (aerial photograph d 1970). A low semi-circular mound lies against the northern boundary of the field some 90m from its eastern end. This has a diameter of 23.0m and a maximum height of 0.3m at its western side.

In the course of the RCHME survey, a total of thirteen sherds of Middle Iron Age pottery, and two sherds of probable late Medieval or Post-Medieval coarse wares were observed on the surface of this area but not collected. All were small (2cms-3cms diameter) and abraded; the Iron Age fabrics were mostly shell-gritted.

The boundary ditch which divides the northern and southern fields extends for a total of 169m west-north-west to east-south-east, and its western end cuts through all the ditches visible on the aerial photographs. A section 111m long at its western end has been re-cut to a depth of 1.1m and consequently usually contains water. This section ranges from 6.0m to 8.0m wide. The eastern section, which has not been re-cut, measures 58m long, ranges between 3.0m and 4.0m wide and between 0.2m and 0.5m deep.

Stratigraphically, the latest features on the site are the embankment on the west of Redcow Drain, along the top of which runs Decoy Road, and Redcow Drain itself, which was re-cut in December 1992, giving rise to the most recent excavations. The embankment stands 0.5m high and measures between 13.0m and 16.0m wide. A discontinuous but extremely regular scarp extends parallel to the embankment for a total of 176m some 8m west of the eastern boundary of the field. This is probably contemporary with the embankment and associated with a track along the edge of the field; it is not archaeologically significant. Redcow Drain is a major drainage ditch, and is fed by two less substantial ditches which extend roughly at right angles to the east. It has a machine-cut very steep V-shaped profile, measures 7.5m wide across the top and 0.5m across the base, and has a depth of 2.7m.

INTERPRETATION AND DISCUSSION

The enclosure

Successive archaeological investigations have provided a firm Middle Iron Age date for the Borough Fen enclosure. The results of most of these projects are already in print and have been briefly summarised above. In size and form, the site is comparable to other Iron Age circular enclosures on the fen-edge and in the rest of lowland East Anglia: Arbury (Evans unpublished 1990; 1992), which is univallate and c.300m in diameter, Sawston (Oswald, Taylor and Topping 1993; Topping 1993), which is possibly bi-vallate and c.280m in diameter, Belsar's Hill (Kenney in press 1994a and unpublished 1994b), which is univallate and c.200m in diameter and War Ditches (Lethbridge 1949), now destroyed, but probably univallate and c.170m in diameter.

The location of the Borough Fen enclosure close to the fen-edge is closely comparable to that of Belsar's Hill, and the formally more complex Late Iron Age enclosures at Stonea Camp (Malim unpublished 1992a and 1992b) and Coveney (Evans 1992). The inappropriateness of the term 'hillfort' in a lowland context has forced a general re-examination of the purpose of such monumental circular enclosures (Hall 1987; Evans unpublished 1990 and 1992). This has led to a range of terms being used to describe them, including 'lowland fort' by those who favour the defensive argument and 'ring-work' by those who argue a less dogmatic approach to the typology. However, this term is also loaded with connotations of Medieval defensive works, and the term 'enclosure' is preferred here to avoid implying any exclusive function.

The functions of these enclosures appear to be diverse, though their forms and areas are similar. Arbury (Evans unpublished 1990 and 1992) had little evidence for occupation and was argued to be a seasonally occupied site associated most obviously with the corraling of cattle, although Evans stressed the symbolic power of these massive monuments. Likewise, Sawston has little surface evidence for occupation, either in the form of soil-marks or artefact scatters (Topping unpublished 1993 and Bray & Leith 1993). Both Evans and Topping suggested possible links between the lowland enclosures and the 'conventional hillfort' site at Wandlebury (Hartley 1957), which is strikingly similar in size and plan (a perfect circle c.290m in diameter). Wandlebury has also been linked with the now destroyed site at War Ditches (Lethbridge 1949). Belsar's Hill (Kenney in press 1994a and unpublished 1994b) has not been excavated and as yet has provided no evidence for its function. The Late Iron Age enclosure at Stonea Camp (Malim unpublished 1992a and 1992b) is probably unique, and its purpose remains uncertain, but is possibly ritual. Coveney (Evans 1992) appears to be a high status site occupied by a small elite group. Borough Fen appears to differ in some respect from all these, with evidence for relatively dense occupation throughout. We should therefore

perhaps avoid the tendency to 'over-categorize' sites, as Martin suggests (Martin 1991, 51). Indeed, Evans has questioned the value of comparing Iron Age sites based on their formal attributes alone (Evans unpublished 1990, 33).

There are a number of specific points which emerge from the survey. The larger than average distance between the two ramparts is unusual, although the much smaller Late Iron Age enclosure at Coveney has a comparable design. Although the fill of the outer ditch at Borough Fen has never been sampled, its lay-out precisely parallel to the inner earthwork suggests that the two are closely contemporary. This may imply some degree of zoning in the functional or social arrangement of the enclosure; at Coveney, for example, phosphate levels and artefact densities were far higher in the central part of the enclosure around the structures, while the outer zone was comparatively 'empty' (Evans 1992, 21). The large number of sherds found in the southern field suggests that occupation, or at least the management of occupation debris, extended into the outer part of the enclosure.

Only Hall (1987, 28) has raised the possibility of an exterior bank around the outer ditch. Some evidence was found by the RCHME survey to support this possibility, on the north and south-west sides of the enclosure. Although the section exposed by Malim's recent excavations (Malim and McKenna in press 1993, Figure 2) shows no sign of such a feature other than the comparative steepness of the outer scarp of the ditch, this might be expected since this area has been more severely degraded by ploughing. If Hall is correct, this is another unusual feature of the outer earthwork, and supports the argument that ramparts may not be such straightforward functional or defensive barriers as they at first appear (Bowden and McOmish 1987). Alternatively it is possible, though less likely, that the slight bank on the northern side represents a headland caused by ploughing up to the edge of the ditch. The fact that the raised ground between the ditch and the edge of the field on the south-west of the enclosure is most pronounced at its narrowest point certainly suggests that distortion by the plough may be an influence.

The survey confirms the position of the entrance on the east side of the enclosure. The slight curve of both terminals of the remnant rampart bank suggests an in-turned gateway. The scarp which extends westwards from the northern terminal may result from distortion by the plough, since the Ordnance Survey depiction of 1968 (Ordnance Survey 1:2500, published 1974) records the southern terminal as being more prominent. The distance of some 30m between the two terminals may suggest an unusually broad entrance, comparable to that at Arbury (Evans unpublished 1990, 31). The east facing gateway is a feature of the enclosures at Arbury and possibly Sawston, and exemplifies a general trend in Iron Age monuments throughout the country. The reasons for this are clearly not accidental, and cannot adequately be attributed to purely functional

factors, but have not otherwise been satisfactorily explained.

The postulated second gateway in the north-west side of the enclosure (French and Pryor 1993, 68) is not as certain, though the surface remains of both ditches are interrupted at this point. The more angular form of this section of the circuit and the wider distance between the two ramparts may support the theory, but the interruption of the ditches is perhaps more likely to represent later blocking. Aerial photographs are ambiguous (contra the Ordnance Survey 1:2500 plan, published 1974) but the question may be answered by the results of multi-spectral scanning (Jordan forthcoming). The main outer scarp of the rampart bank cuts deeper into the interior of the enclosure at this point, indicating increased wear, but slight traces of the inner scarp suggest that the rampart bank continued without interruption. It is possible that the remains represent an entrance blocked during the Iron Age, or more probably an entrance associated with later re-use of the site.

All the minor breaches on the north side of the enclosure appear to result from vehicular erosion. The easternmost is clearly associated with the minor track which extends along the eastern edge of the field, parallel to Decoy Road. The remainder of the rampart has also been partially levelled, perhaps by ploughing when the site was largely buried beneath the peat; the mound mid-way along this section represents the best-preserved remnant.

The irregular shallow scoops and low mounds which cut into the remnant of the inner rampart bank along the south and south-west sides of the enclosure correspond to the positions of building foundations portrayed on the Ordnance Survey 1:2500 depiction of 1968 (published 1974). This interpretation is presumably derived from aerial photographic interpretation, but there is no convincing evidence on the ground to support the theory. However, the features probably do result from some form of later disturbance.

The 'borough' element of Borough Fen is highly unlikely to refer to the enclosure, since the site is on the extreme edge of the fen and may not even have been visible as an earthwork until the mid seventeenth century (PRO Chancery Lane 1637; French and Pryor 1993, 68). It may refer to the Abbey of Burgh which held considerable areas of land in the surrounding area.

The linear multiple ditch

The date and purpose of this feature are uncertain. The alignment of the ditches lies approximately parallel to the south-west section of the enclosure, but this is not conclusive. Their form is broadly comparable to prehistoric linear multiple ditches interpreted as territorial boundaries, such as the Late Iron Age 'Mile Ditches' (TL 34 SW 10) near Royston, Hertfordshire. Since it is possible that the area to the south-west of the enclosure was inundated during the Late Bronze Age and Iron Age, this interpretation must remain speculative.

Later Features

Bank (a) appears to represent re-deposited spoil deliberately removed from the rampart bank, possibly to facilitate ploughing, since the angle of bank (a) corresponds to the angle of the western terminal of the surviving section of rampart bank. This suggests that bank (a) is a relatively modern feature, perhaps contemporary with the first machine ploughing of the field.

All available evidence strongly suggests that a pastoral agricultural regime existed prior to the Second World War. The land to the west of Decoy Road (within Peakirk Moor) belonged to the Crown in the early nineteenth century (Northamptonshire CRO 1823 Enclosure Map), but it is probable that prior to enclosure, the whole area was part of Borough Fen. The Fen was extra-parochial on account of its wetness; as part of the Hundred of Nassburgh it came under the Lordship of the Abbey of Peterborough and as such was common to all the tenants of the Soke of Peterborough (VCH 1930, 2, 272; Bridges 1791, 2, 513). Accordingly, complex arable land-use and tenure appear not to have developed; no tithe map of the parish of Newborough was ever made. Unlike Belsar's Hill, there is no evidence either on the ground or from documentary sources for ridge and furrow cultivation, but it would seem likely that some degree of degradation occurred before the shrinkage of the surrounding peat, which perhaps obscured the site until the mid-seventeenth century (PRO Chancery Lane 1637; French and Pryor 1993, 68). Much of the northern side of the rampart bank has been only partially levelled, perhaps in order to create a cultivation ridge, as at Belsar's Hill, but it would be isolated as such, and is therefore unlikely. There is no evidence for the terminals of furrows cutting into either the inner scarp of the rampart bank or the outer scarp of the inner ditch, nor that ridges overlay the outer ditch at any point. Hall suggests that the whole extent of Borough Fen with the exception of the enclosure itself would have been inundated throughout the Medieval period (Hall 1987, 28), though it is debatable whether this would have made ploughing impossible or increased the value of the relatively dry land for arable agriculture. The map of 1637 suggests that the area was under pasture at this period (PRO Chancery Lane 1637).

It is not clear whether the small rectangular depressed enclosures which formerly existed in the southern field are the product of one or more phase of activity. Hall (1987, 28) has interpreted the earthworks as shallow quarrying, which is plausible given the depth of the features and the underlying gravels. It is possible that the enclosing ditches acted as drains while the quarrying was taking place; if so they seem extremely regular and indicate a degree of planning more consistent with later Post-Medieval schemes than small scale work by individuals. In this light they may well be contemporary with the construction of the embankments for roads such as Decoy Road itself as part of the nineteenth century enclosure and drainage schemes. Alternatively, the ditches may result from a later attempt to drain and enclose the quarried area to form small paddocks of pasture. The features stratigraphically pre-date the field boundary ditch which dates from the nineteenth century but certainly post-date the main Iron Age enclosure; more accurate dating is not possible.

The field boundary ditch was part of the Moor Drain, which extended to the south on the western side of Decoy Road and followed the present field boundary to the north-west from its western end. This drain was part of the nineteenth century enclosure and drainage scheme and is shown on the enclosure map of 1823 (Northamptonshire CRO 1823 enclosure map). The re-cutting of its western end occurred at some point before 1947 (aerial photograph a).

Decoy Road and the Redcow Drain are portrayed on the Ordnance Survey First Edition 25-inch map (surveyed 1885, published 1887) and the road, then called the Werrington Bridge Road, on the enclosure map of 1823 (Northamptonshire CRO 1823 enclosure map). The Redcow Drain was therefore built between 1823 and 1885, and presumably made the Moor Drain on the west side of the embankment redundant. Decoy Road took its later name from a decoy pond to the north built in the mid nineteenth century, and it is probable that the construction of Redcow Drain is contemporary with that of the pond. It is worth noting how closely the actual width of the embankment (between 13m and 16m) compares with the enclosure award (Northamptonshire CRO 1822 enclosure award), which specifies a width of forty feet (13.1m).

METHOD

The survey was carried out by Alastair Oswald and Jane Kenney of the RCHME. The hard detail, earthworks and profile were surveyed at 1:1000 scale using a Wild TC 1610 electronic theodolite with integral distance measurement. Data was captured on a Wild GRM 10 Rec Module and plotted via computer on a Calcomp 3024 plotter. The report was researched by Alastair Oswald and edited by Peter Topping. The site archive has been deposited in the National Monuments Record in Swindon, TF 10 NE 17. Crown Copyright: Royal Commission on the Historical Monuments of England.

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