Methwold Warren, Feltwell, Norfolk

An Archaeological Rapid Identification Survey



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Introduction

This archaeological rapid identification assessment was commissioned by Clover Planning on the behalf of Frimstone Limited to assess the potential impact of a 21.5 hectare extension to the existing quarry (TL 7420 9265). The site is located approximately 1km south of Methwold and 2km east of Feltwell. The project brief was provided by Norfolk Landscape Archaeology; the archaeological desk top assessment for this project previously having been carried out by the Cambridge Archaeological Unit (Anderson 2007).

The main objective of this rapid identification survey was to evaluate and assess the potential for archaeology within the proposed development area (PDA) based on surface artefact finds and any topographical features encountered.

Geology, Topography, Flora and Fauna

The PDA is located above the Middle Chalk (solid geology), most of which is covered by a thin layer of Glacial Sand and Gravel. This thins considerably towards the south-eastern corner of the PDA close to the boundary with the quarry, within which area the soils appear to be mixed chalky-sandy in nature. To the west of the PDA the land slopes away to the chalk edge of the peaty Fenland basin (Methwold and Feltwell Fens). This falls just outside of the Wissey Embayment on the uplands of the eastern Fen Edge, approximately 2km to the west of the site (Healy 1996). In fact, the Glacial Sand and Gravel deposit (Geological Survey Cambridge map sheet 12 & 16 (1938)) may include part of the pre-Anglian Bytham Sands and Gravels derived from the Middle-Lower Pleistocene Bytham River system which has brought down rock types from the Western Midlands and Southern Pennines as well as contributing palaeoliths (Rose et al 2001).

Methwold Warren is situated on an area of upland, although here there is variation in the topography of the PDA (between 25 and 29.5m OD). The site has two slopes: one in the south-east corner heading in a easterly direction, the other in the western edge of the site heading west towards the Fen Edge. At its north-west end the site reaches a height of almost 30m OD, before dropping off gradually towards the Fen Edge. The lowest part of the site is to be found in its south-eastern corner. The ground surface of the area of cleared plantation/ heathland consists of a rolling, undulating topography made up of natural east-west ridges formed from small sub-glacial eskers or glacial outwash gravels. However, much of the natural and/or pre-modern earthwork topography of the site seems to have been modified by deep ploughing for tree planting, and subsequent to this its felling and extraction (including the removal of roots).

The sandy soils give rise to a locally acid heathland vegetation which supports a coniferous woodland plantation of Corsican / Scots Pine. Within the area of felled plantation lay an area of dry-damp sandy heath including patches of moss, tussock



Figure 1. Location map

grass, some bracken and willow-herb there was extensive evidence for rabbit burrowing, fox holes, and also the nesting and roosting sites for ground birds and skylarks. Several adders and a grass snake were noted during the fieldwalking of this area. Roe deer were also present, a number of individuals seen passing through the area of mature plantation.

Historical Background

Feltwell quarry is located between the villages of Feltwell, approximately 2km to the south west, and Methwold, approximately 2km to the north. The earliest factor which may have affected the PDA was the building of The Devil's Dyke to the south and east of the site, by the Anglian king during the late 6th or early 7th centuries. This may have later been used as a defensive barrier against a threat from the Anglian kingdom of Mercia. It is possible, also that the monument may have been built over an earlier prehistoric dyke on a similar alignment. During the Middle Ages the dyke was known as 'St Edmunds Dyke' because it marked the limit of the jurisdiction of the abbots of Bury St. Edmunds. There are also Middle Ages references to the 'Great Ditch'. During the 11th century siege of Ely by William the Conqueror, it is referred to as 'Reach Dyke'. Devil's Dyke or Ditch is a post-medieval name. (http://www.devilsdykeproject.org.uk/histarch. html).

Methwold is recorded in the Domesday book and as with Feltwell it passed to Earl Warren sometime after 1070 AD. Most of the early history of the village is linked to the Methwold estate, which was noted as having an 'excellent location' and thus became the site of one of three fortified houses built on the edge of the Fens in 1070 (http://www.btinternet.com/~methwold.homepag/PAGE3VILLAGEHISTORY). In 1347 the Manor of Methwold passed to Thomas Earl of Lancaster and ultimately, by virtue of the Duchy of Lancaster, to the crown, although some land within the parish belongs to Christ's College, Cambridge. During the 14th-15th century AD St. Georges church was constructed. This became the nucleus of the village on the higher ground, which continued to expand.

The PDA itself falls within an area known as Methwold Warren between the villages of Feltwell and Methwold. As the name suggests, this area was used in the medieval and post-medieval rabbit trade, and was described as being 'substantial' in size (Bailey 1988: 6). Records from 1350-90 note that land at Methwold was used for rabbit warrens. Furthermore, there is also evidence that between 1413-15 two colonies near Methwold Warren were leased seperately for the purposes of being used as rabbit warrens (Bailey 1988: 6). By the 16th century these had grown in size, as demonstrated on a 16th century map which showed a warren of 607 hectares to the south east of the village of Methwold, on the site of Methwold Warren (Norfolk Record Office Record No. MC 556/1). It is stated that "Methwold became famous for its abundance and excellence of it's rabbits which were sold as Muel Rabbits" (www.btinterntet.com/~methwold.homepage/PAGE3VILLAGEHISTORY.html).

During the mid 15th century it was a regular supplier to the London market (Bailey 1988:15), and it is believed that Charles I granted the village a charter for a market to be held every Tuesday.

As a result of the growing significance and wealth of Methwold Warren in the late medieval period, two buildings were constructed. The earliest was Warren Lodge, located just over 2km north of the PDA. This was built in the early 1400s by the Prior of Thetford and used to protect gamekeepers and hunting parties against armed poachers (http://www.english-heritage.org.uk). Subsequently, the building was used by the local 'warreners' who harvested rabbits here. The second building was located approximately 500m north east of the PDA and was formally known as The Rabbit House. The exact date of this building is unknown, but there are records dating it at least to the 17th century (Norfolk HER no.22008). The structure was a two-storey, fortified lodge occupied by the warrener. There is some debate over the description building, with some suggestion it was defensive of this (http://www.channel4.com/history/microsites/B/bigdig/diary/wednesday25.htm). This may be a reflection of the value of rabbits at the time and indicated the threat posed However, a description of the building held in the Norfolk HER describes the building somewhat differently. Here it is described as a 'Medieval house with a 16th/17th century rear wing', with no mention of any defensive element. This building was knocked down and replaced by Warren House in 1890, which still stands today. Cartographic and historical records suggest there were few changes to the PDA until the 19th century, although it is unclear when the land ceased to be used as a warren.

The most recent large-scale development in the wider landscape was the construction of RAF Methwold, shortly before the Second World War. This site operated as a satellite airfield to RAF Feltwell and was located 250m north-west of the western edge of the PDA. The airfield was used until April 1946, after which the airfield and its runways continued to be maintained for 12 years. The airfield was released for agricultural use in the 1960s, which saw much of the concrete runway broken up. Part of one of the runways is still used for poultry housing. However much of the north-west-south-east runway survives (http://www.raf.mod.uk/ bombercommand/s43.html).

This historical background to the PDA was researched for the desk top assessment for the planned quarry extension (Anderson 2007), the relevant parts of which have been incorporated above.

Archaeological Background

Prehistoric artefact finds represent the vast majority of the known archaeology within the area of Methwold and Feltwell. However, virtually all of these finds lie outside of the area of the PDA (see Anderson *ibid*.). The earliest evidence comprises Palaeolithic flints, including a surface find of an axehead from Methwold airfield, and 15 handaxes along with two flakes from a former gravel pit located within the area of the present quarry some 500m to the south of the PDA.

A Neolithic presence in the area is indicated by a relatively large number of worked flints. Whilst none have been found within the area of fieldwalking, the closest recorded findspot lies just tens of metres from the north-western corner of the fieldwalking area, whilst others lie within 300m to the east and south of this upon the

same area of sandy ridge. The densest cluster of worked flint flakes clusters to the south of the existing quarry and Lodge Road (B1386), whilst immediately to the north of the road were found two polished flint axeheads. The relative proximity of these find spots suggests they may be part of a extensive flint scatter. There were also more isolated finds comprising a late Neolithic/early Bronze Age knife, with traces of cereal straw gloss, as well as a flint arrowhead recovered from the airfield. A Neolithic jadeite (chloromelanite) axe was recovered from Feltwell Fen (Jones *et al.* 1977 – Axe 102). Important as it is, this lies several kilometres to the east of the site. This Fen Edge margin must however have been an important place for settlement during the Neolithic/ Early Bronze Age (Healey ibid.), as attested by the number of Early Neolithic – Late Neolithic/Early Bronze Age flint scatters and other sites (Hall 1987); amongst these being a number of burnt flint mounds, a notable example being the burnt mound excavated at Feltwell Anchor which also contained an Early Bronze Age inhumation within a log coffin (Bates & Wiltshire 1992).

Evidence for activity during the Bronze Age is indicated by a range of finds of both flint and copper alloy, as well as possible monuments. There are several records of Bronze Age tools recovered, such as the flint barb and tang arrowheads recovered from the south side of Lodge Road, less than a kilometre south of the PDA. An early Bronze Age copper alloy flat axehead was recovered from the north-western corner of the PDA (or just beyond it at approx TL 74 93), with a second one found beneath a Bronze Age barrow, along with a skeleton, flint knife and Neolithic flints. The location of this barrow which lies just 250m to the east of the PDA may be significant, in that it lies on the same topographic high at the eastern end of the Warren, implying that there may once have been others along the same ridge. The distribution of these finds show no apparent clusters of Bronze Age material; rather the evidence appears to be small, isolated scatters dispersed throughout the landscape. There is evidence of five Bronze Age monuments within the 1km zone, although none have been confirmed and/or excavated. These include three possible barrows noted on various maps. The first on a 1580 map just over 1km to the north east of the PDA, one on a 1607 map, approximately 500m to the south east of the PDA, and one on maps dated 1607 and 1699, located approximately 300m south west of the PDA (Anderson ibid.). Two probable Bronze Age ring ditches are noted as cropmarks on aerial photographs; one of these lying just to the south of Lodge Road, the other to the east of the Brandon Road (B1106) close to the site of the barrow shown on the 1580 map.

More substantial prehistoric remains were excavated during a 'strip map and sample' excavation carried out by the Cambridge Archaeological Unit in 2006 (Beadsmoore 2007). This was undertaken in a section of the present quarry immediately to the south of the PDA at The Oakery. The latter revealed a series of discrete Late Neolithic/early Bronze Age pits with associated flint and pottery.

There is no evidence of later prehistoric activity within a zone approx. 1km wide surrounding the fieldwalking area, though Hall (*ibid.*) notes an association of Iron Age sites located on the chalk upland to the east of Feltwell and Methwold. To the west of here a Late Bronze Age copper-alloy cauldron and an Iron Age jar were found at Feltwell, finds which were interpreted as providing evidence for a 'progression of

settlement' in the area (www.west-norfolk.gov.uk/pdf/2.0 The Shaping of the Landscape).

Evidence of Roman activity in the vicinity is limited to a single find of a spoon, which was found alongside prehistoric burnt flint and Medieval pottery during a watching brief on a pipeline to the north-west of the PDA, the latter located within the area of the airfield.

A silver penny of Richard II found approximately 100m to the north of the PDA, whilst some sherds of pottery recovered from a watching brief on the airfield are the only other Medieval finds found within the locality of the PDA. This is perhaps surprising, given the economic importance of the rabbit warren during the Medieval period.

Several records exist for Post-medieval activity close to the area of investigation. For instance, a gibbet appears on Faden's 1797 map of Norfolk (NRO ref no. MC 556/1), and seems to be on the site of a possible Bronze Age barrow located on the staggered cross-roads junction in between Lodge Road and Brandon Road (B1106). The site of the Rabbit House upon that of the present building (i.e. Warren House which was built in the late 1800s) appears on plan as a "Medieval house like Warren Lodge, with 16th/17th century rear wing" (E. Rose 1985), although it is unclear when it was built. Warren House was investigated as part of Channel 4's Time Team Big Dig in 2003. Some of the finds recovered included a pre-Victorian roof tile, possibly part of the Rabbit House building. There were also finds of rabbits teeth and a dogs skull (Anderson *ibid*.). The Rabbit House formed part of the warren enclosure, which the PDA falls into. Although there are no HER details for the rabbit industry itself, there are other sources which point to the warren having been some 1500 acres in size (http://www.btinternet.com/~methwold.homepag/PAGE3VILLAGEHISTORY).

Denton Lodge, a late 18th century two storey house, lies approximately 300m south east of the PDA.

Modern archaeology of the area is dominated by the airfield, located immediately to the west of the PDA. It was built in 1939 as a satellite airfield for RAF Feltwell. The concrete runways for this were built in 1944. The airbase was closed in 1946, although there are still some associated buildings left standing (Smith 1994:173). Aerial photographs taken in 1946 show anti-glider ditches to the east of the airfield. Directly related to this was an anti-aircraft gun base built in 1940 and described as being 'rare' (D Walker NLA 1996). Analysis of further aerial photographs taken in 1946 show no apparent impact of this airbase on the PDA itself (see aerial photographic assessment carried out by R.Palmer in Aderson 2007).

Method

Survey was undertaken through walking along 50m wide parallel transects back and forth in an east-west direction across the survey area. Where possible these transects were defined by range poles at the ends and beginning of each line, the distances at these points measured out using a 50m tape. Where the transects crossed areas of still standing plantation at the western end (and along the southern edge) it was not always possible to keep to these routes due to the density of bramble undergrowth and fallen

trees. However, within these areas the percentage of exposed soil and ground surface was inevitably small.

Towards the edges of the 21.5 hectare PDA, where landmarks and the positions of mapped boundaries could be determined, features or finds could be plotted directly onto a section of 1:5000 scale OS map, but for the most part a hand-held GPS (a Garmin GPS60 personal navigator) was used for locating point data as 10-figure grid references, these being recorded within a field survey notebook as numbered points (nos. 1-86), whilst the relevant finds taken from these transects were recorded using the same numbers.

Particular attention was paid to the upcast from recent rabbit burrows or other animal holes, whilst in the plantation, the holes from upturned (windblown) trees provided the only exposure of the soil and sub-soil layers. Burnt stone and flint was collected as possible indicators of past human activity. In addition, information on soil colour/textural changes alongside those indications of change in the underlying geology (in terms of flint, chalk or stone clasts) were recorded.

Photographs were taken (mostly of the general landscape and topography).

Results

Out of the 86 points of data recorded, some 63 referred to textural and colour changes within the underlying sand, many of these associated with patches of slightly hummocky ground and clean non-humic sand devoid of flint or stone pebbles.

These areas were speculated to be possible examples of earlier rabbit warrens, perhaps heaps of intentionally mounded sand, effectively used as pillow mounds. In some cases it was possible to recognize some small E-W aligned mounds amongst these; for instance sites nos.8, 9, 10, 13, 14 and 36, all of which varied from between 2m x 4m to around 10m across, and barely more than 0.3m high. Clearly though all of these had suffered heavy disturbance, and appeared to have been truncated by the deep ploughing associated with the tree planting, and subsequently by the passage of machines involved with their felling and extraction. The plotting of these soil patches shows a fairly even, and generally widely spaced scatter of sites, each of which lay between 20m to 100m apart, and many of which formed denser clusters concentrating on the slightly higher ground towards the east end of the site (though this might be biased by the lack of discernable ground cover within the wooded areas to the west and south-west. Today many of these patches are deeply rabbit burrowed, although the soil accumulation in these areas clearly pre-dates modern activity. By comparison, the intermound areas contain burrow systems mined through a much thicker greybrown humic soil, often with a much paler grey-white gravely sub-soil beneath. If such soils really do represent the sites of Medieval – Post-medieval warrens, then they do not seem to produce any contemporary finds (at surface), nor any trace of stone structures or of surrounding embankments. Occasional areas of 'hummocky ground' (nos. 4, 6 and 84) recognisable as irregular to sub-circular hollows might also represent the sites of former warrens or mounds, these perhaps being small collapses into shallow chambers or old burrows.

FIGURE 2

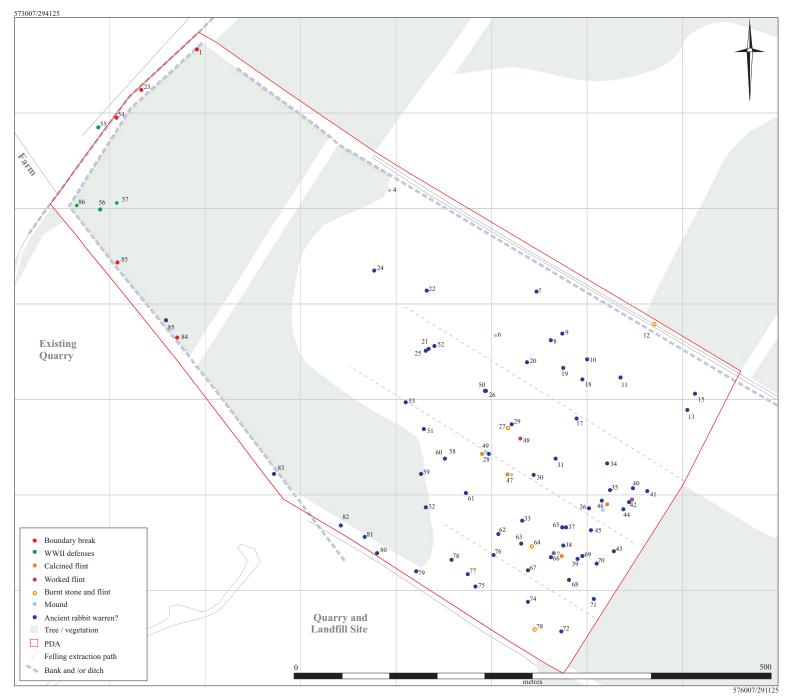


Figure 2. Fieldwalking finds distribution plot (with gazetteer finds numbers (see appendix)).

Evidence for old boundary banks and shallow accompanying ditches surrounding two, and possibly two and a half sides of this block of Methwold Warrren may relate to its former use for rabbit rearing, and thus could be Post-medieval (17th-18th century), or still earlier in date. Following the west side of the track forming the north-western woodland-field margin of the PDA, a quite substantial, but very shallow NE-SW earthen bank with eroded sloping sides (between 1.5m and 3m+ wide and 0.2- 0.50m high) is marked by a line of old trees, most of these being oaks which appear to be at least a hundred years old (and perhaps developed from older roots), and which seem to have grown out of an old hedge line, rather than as plantings for trees. Meanwhile, another smaller, and slightly better defined bank (2m wide and 0.2-0.3m high) marks the eastern edge of this old woodland track. This latter one may be a much younger woodland boundary bank, the oldest trees growing out of this being little more than 50-60yrs old. However, this would appear to pre-date the now mature plantation. The northern edge of the PDA (along the south side of a major firebreak/ woodland track) yet another old boundary bank was plotted (identified in Figure 2 as site no. 3). This was 3-3.5m wide and in places up to 0.3m high, with a 2-2.5m wide ditch along its inner face. The level of erosion and flattened slope of this gravel and humic sand bank would seem to imply considerable age, whilst the presence of a ditch on the inside of the bank would fit with its construction as a boundary bank for the rabbit warren. However, no pre-modern artefacts were found along its exposed section, the only flint being frost-shattered material linked to a surface periglacial effect. A fourth bank (see Figure 2 no. 86) was identifiable at the south-west corner of the PDA, and this forms the edge of the present plantation area (and possibly the parcel of warren land before it). This can be followed along its southern side until it is lost in the change of angle of the path where the quarry extends up to the edge of the plantation. The bank here is much less well defined, though it also seems to be associated with a ditch on the inside of the path, thus quite possibly is another warrenrelated feature. The fact that the 'warren sand' appears to cross the line of the path where this bank disappears into the quarry suggests that it may be enclosing part of this former area.

The evidence for *prehistoric archaeology* is slight, but again this may just relate to the much reduced area of soil cover within the cleared area of former plantation. No features such as possible barrow sites were identified on any of the ridges, though sparse surface scatters of *burnt flint* were encountered which may or may not have been anthropogenic in origin. More obviously archaeological were the small amounts of *calcined flint* and *cracked and burnt stone* which probably originated from hearths or burnt stone mounds within the vicinity, plus a few pieces of *worked flint*. All of the latter appeared to be of waste flakes resulting from simple hard hammer flaking techniques, and were most probably of Late Neolithic-Early Bronze Age date (Lawrence Billington (CAU) *pers.com.*). All these examples of worked flint came from the upcast of rabbit burrows examined within the south-eastern corner of the surveyed area, and thus were probably finds disturbed and removed from the shallow sub-soil layers rather than from the level of the current ground surface. The flint came from find site nos. 42, 48, and 66 (Figure 2), the flakes being accompanied by small amounts of calcined flint.

A number of probable 2nd World War defences in the form of unspecified hollows and prominent upcast banks (site nos. 56, 57 and 86: one of which (no.56) had an iron girder in its base) were located within the extreme south-western corner of the

plantation, whilst another defence, a circular concrete-lined shaft some 3m in diameter and up to 2m deep (no.55) was located just to the west of the SW-NE woodland track at a point where this was aligned with the western margin of the wood. Much more obviously this was part of the known wartime defences dotted around the perimeter of the adjacent airfield. However, one 8m to the south of this feature along the same field edge lay a brick and concrete pill box, suggesting that the original shaft could have been part of an *anti-aircraft gun emplacement*, an associated *ammunition store* or else part of a communal *air-raid shelter*. The presence of a flat wide bank or platform (site no.54) which abuts the old woodland boundary bank at this point may thus be part of the earthworks associated with this wartime feature.

Extensive evidence of *modern deep plough furrows* associated with the original forest plantation plantings (of Corsican/ Scots Pine) were visible underfoot throughout the whole of the cleared area. These furrows were orientated north-south and between 0.5-0.8m apart. They appear to have extensively truncated the surface topography, in particular any traces of the upstanding ?ancient rabbit warrens referred to above. Three grassed over E-W *timber extraction routes* into the area of former plantation both cross and cut these furrows from the east side of the felled block, each road at least 200m long and approx 2.5m wide.

Discussion

Medieval- Post-medieval rabbit warren

At the level of this rapid identification survey it was not really possible to do more than just speculate as to the nature of the Medieval – Post-medieval rabbit warrens. However, the patches of lighter coloured gravel-free sand did appear to occur in clusters, and sometimes within general areas of slightly embanked and hummocky topography, suggesting perhaps that these were originally part of much larger gathered-up heaps, perhaps taking the form of pillow mounds (perhaps 50m+ across?) simply composed of loose and simply turfed-over sand. The form these pillow mounds took on the Breckland is not known for certain, although there is reference in Williamson (2006) to the ease of keeping rabbits here in mounds largely composed of heaped-up sand, whilst an examination of the admittedly highly stylised 1580 Duchy of Lancaster map of Methwold Warren (see cover and Figure 3) supports the idea of there having been large and possibly round pillow mounds on the warren which almost certainly consisted of sand hills, and within these, smaller mounds, perhaps representing individual warrens. The larger sandhills are shown in profile (such as at High Dole) or in plan view, thus one of the circular areas of pillow mound can be seen just to the south of the 'Thetford to Methwold Road' (the current B1112 Brandon Road), perhaps coinciding therefore with at least part of the cleared area of plantation which forms the current PDA. However, Anderson (2007) suggests that the original pillow mounds on the warren would have consisted of 'low stone mounds covered with earth...surrounded by a shallow ditch'. Whilst it is true that in many areas of the UK the use of stone foundations would have been the norm, particularly within upland areas, where warrens were situated on hillsides possessing ample loose rock cover yet devoid of an appreciable thickness of soil (an example being the pillow mounds excavated at Llanfair Clydogau in Ceredigion, Wales (Austin 1988)), there would not be any particular advantage to building such structures here on the

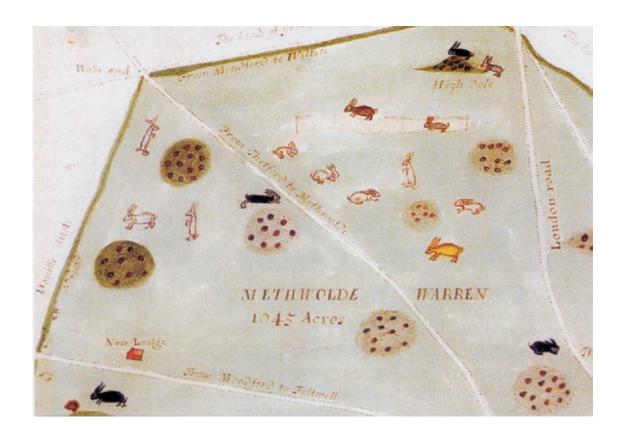




Figure 3. Detail from map of Methwold Warren dating from 1580 (Duchy of Lancaster: National ArchiveRef. MPC 1/75), (top) and Photograph of fieldwalking area (bottom).

Brecklands. Even if a segmented pillow mounds with internal compartments (such as the 25m long elongate pillow mounds excavated on Minchinhampton Common, Glos. shown in Williamson (*ibid*.)) were constructed here, it seems much more likely here that the artificial burrow tunnels would instead have been made of wood. Within sandy soils there would seem to be little problem in encouraging the rabbits to burrow, one of the very reasons perhaps why the Breckland, and in particular the Lakenheath-Methwold area was selected during the Medieval period as a centre for rabbit farming. Nevertheless, management of the warren would almost certainly have involved the creation of pillow mounds, and it would seem therefore, the digging or scraping-up of sand as well as the coarse sieving of this to remove the larger flint cobbles and gravel.

The occurrence of smaller sub-mounds (4m – 10m across) within these pillow mound areas was suggested by the field walking evidence, though the lack of clarity of definition of these former structures due to the high level of disturbance and truncation caused by the forestry planting, makes any description or interpretation of the structures without recourse to archaeological excavation tenuous in the extreme. Anderson (2007) speculates on whether the existence of pillow mounds in this area might have helped to destroy all traces of pre-existing archaeology through the original excavation/scraping up of sand and gravel, or alternatively have helped to preserve this through the sealing of this below the pre-pillow mound ground surface. The recent evidence from field walking would seem to suggest that both processes have been taking place here, though evidently there has been considerably more disturbance to the shallow sub-surface from deep ploughing associated with the plantings, from the effects of tree root penetration, the pulling up of stumps, and possibly also, from the passage of heavy machinery across the site. However, it would seem that enough relict traces of the former warren exists to postulate a significant presence of this, perhaps in the location of a pillow mound(s) somewhere towards the south-eastern end of the site, and certainly within 200 -250m of the present quarry boundary.

The existence of boundary banks around this area of the warren which may date from its period of its use is conjectural, and must therefore await further archaeological determination. However, the degree of erosion and shape of the profile of those banks on the north, south and west sides suggests some antiquity, whilst the presence of a ditch on the inside of the northernmost bank (facing into the warren) implies that we are not here looking at a structure associated with the path or track, but one which instead forms a boundary, or perhaps a former barrier, to activity going on inside of it. It is interesting therefore that the documentary accounts of warrening during the Medieval and early Postmedieval periods within the Breckland emphasizes the high value and relative rarity of the rabbit stock, the problems of poaching, and also the need to restrict natural rabbit migration out of the warrens (Bailey 1988). Although it seems very unlikely that this sort of bank and ditch could have provided any form of effective defence, such an earthwork topped by a fence might have helped to contain the populations of individual warrens, in particular groups of breeding does and young which were often separated and enclosed off from the adult males (Williamson ibid.). It is interesting therefore to note the stylised elongate enclosure drawn on the 1580 map of Methwold Warren (Figure 3) within which is depicted a possible female? and a young rabbit. Nevertheless, an alternative explanation for these banks could be that they were created later to demarcate areas of grazing, perhaps on already

partly enclosed common land; therefore post-dating the use of this land as a warren, but pre-dating the first proper 19th century mapping of this shown on the earliest Ordnance Survey maps. No such boundaries, for example, can be seen on the 1884-5 1st edition. Moreover, it is difficult to conceive that any of these banks (except perhaps that along the eastern side of the woodland track at the west end of the plantation) relate to the planting of the forestry.

Prehistoric archaeology

The thin scatter of worked Late Neolithic/ Early Bronze Age flint, burnt stone and flint, and calcined flint recovered from rabbit and tree disturbance across the easternmost third of the fieldwalked area accords with suggestion that an unquantified amount of prehistoric archaeology is present and still survives within the sub-soil layers at this end of the site. Given an equivalent degree of soil disturbance from rabbit burrowing just to the west of this area within the same patch of cleared plantation, it would seem that we are dealing with a real, though probably quite diffuse concentration of buried archaeological features or area of archaeological activity. However, the number of actual finds may imply that here we are dealing with a tail-off effect from the much more significant concentration of flint, flintworking and occupation evidence associated with the Beaker site excavated immediately to the south of the existing PDA in July/August 2006 (Beadsmoore 2007). Here the relative position of the flint concentrations recovered from the buried ground surface as well as from pits and postholes associated with hearths and Beaker pottery excavated during this strip, map and sample excavation also seems to confirm a tail-off in the occupation density towards this eastern end of the quarry. Alternatively, the density of occupation evident in what was probably only a diffuse area of seasonally but regularly re-visited settlement on these Breckland sands may have been restricted to the slightly higher and drier sandy ridges. If this were the case, then we might be seeing a continuation of this settlement northwards on the ridges. In fact, on this basis it may be possible to recognize three other concentrations of diffuse activity represented by a combination of worked flint, calcined flint and burnt stone inside of the Methwold Warren PDA; for instance around TL 743925 (sites 47-49), TL 744924 (sites 42 and 46), and TL743924 (sites 64-66). Most of these sites appear to be associated with the slightly higher ground, and if projected southwards, probably meet with those areas in the quarry where similar flint assemblages (most of which were pieces of burnt and calcined flint rather than worked flint) were recovered in 2006. However, there seems to be little evidence for the continuation of this pattern more than 300m north of the existing quarry boundary or to the west, though the presence of archaeology beneath the still forested area of plantation towards this end of the site remains an unknown.

2nd. World War defences

The presence of previously unrecorded Second World War defences within the area of forest fringing the eastern limits of the wartime Methwold airfield perimeter zone was not totally unexpected given those that were already evident along the field boundary here. Nevertheless, the function of the three aligned pits, one of which (no.86) represented a fairly substantial digging, could not be deduced. To the north of the track, though strictly on the edge, or just outside of the boundary of the PDA, a more

readily identifiable concrete-lined cylindrical shaft seems likely to be part of the antiaircraft defence of the airfield, or perhaps a shelter or ammunition store.

Conclusion

Apart from the evidence for upstanding boundary banks and some additional 2nd. World War defences, no indications of archaeology were recovered during fieldwalking through the still forested area (some 40%) of the Methwold Warren PDA, whilst only a limited amount of evidence was obtained from walking along the perimeter rides. However, suggestions of earlier rabbit warrening activities in the form of patches of light coloured sand, and on occasion very low mounds or areas of hummocky ground, could be seen across some 14 hectares of the now felled plantation where ground visibility was good, and soil/sub-soil exposure in the form of rabbit burrows and tree bole disturbance reasonable. This suggested a fairly even distribution of old warrens across the eastern half of the PDA, perhaps present as low-lying sandhill pillow mounds, the upstanding evidence for which has largely been destroyed by tree planting.

At least three areas were identified within the easternmost third of the PDA where the very sparse distribution of cracked and burnt stone, burnt flint, calcined flint, and even more rarely worked flint (struck waste flakes rather than blades or scrapers) suggested the presence of underlying sites with evidence for prehistoric (almost certainly Late Neolithic/ Early Bronze Age) occupation. These concentrations may follow the topography of the slightly elevated areas of sand ridge, and thus parallel the distribution of pits and other features found associated with the Beaker site excavated just to the south of here within the area now occupied by the northern limit of the quarry and landfill site. Given the indications of burning within the flint and stone disturbed and cast up in rabbit burrow spoil, it seems likely that the features here will be quite similar to those identified within the quarry, though quite possibly on a much reduced scale given the tail-off in finds distribution both to the north and west.

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References

Anderson, K. 2007 Feltwell Quarry, Feltwell, Norfolk. An Archaeological Desk Top Assessment. Cambridge Archaeological Unit Report No.774. University of Cambridge.

Austin, D. 1988 Excavations and Survey at Bryn Cysegrfan, Llanfair Clydogau, Dyfed 1979, *Medieval Archaeology* Volume 32, 130-165

Bailey, M. 1988. The Rabbit and the Medieval East Anglian Economy. *The Agricultural History Review* Volume 36, Part 1. The British Agricultural History Society, 1-20

Bates, S. & Wiltshire, P. 2001 Excavation of a burnt mound at Feltwell Anchor, Norfolk in 1992, *Norfolk Archaeology* 153, 389-414

Beadsmoore. E. 2007. Feltwell Quarry, Feltwell, Norfolk: A 'Strip, Map and Sample' Excavation. Cambridge Archaeological Unit. Report No. 797. University of Cambridge.

Geological Survey 1938 Map sheets 12 & 16(Cambridge)

Hall, D. 1987. Fenland Project 2. Fenland Landscapes and Settlement between Peterborough and March. East Anglian Archaeology 35.

Healy. F. 1996. The Fenland Project, Number 11: The Wissey Embayment: Evidence for Pre-Iron Age Occupation Accumulated Prior to the Fenland Project. East Anglian Archaeology Report No. 78.

Jones, V., Bishop, A.C. & Woolley, A.P. 1972 Third Supplement of the catalogue of jade axes from sites in the British Isles, *Proceedings of the Prehistoric Society* 43, 287-293

Rose, J., Moorlock, B.S.P. & Hamblin, R.J.O. 2001 Pre-Anglian fluvial and coastal deposits in Eastern England: lithostratigraphy and palaeoenvironments, *Quaternary International* Volume 79, 1,5-22

Smith. G. 1994. Norfolk Airfields in the Second World War. Countryside Books.

Williamson, T. 2006. *The Archaeology of Rabbit Warrens*. Shire Archaeology Series. Shire Publications LTD.

Williamson, T. 2007. Rabbits and Archaeology. NPI Media Group

APPENDIX
Fieldwalking gazetteer with site numbers and finds:

site				
no	category	dimensions	Northing	Easting
7	old rabbit warren		TL74347	92713
8	old rabbit warren	3-4m	74362	92662
9	old rabbit warren	2m x 4m, 0.2m high	74374	92669
10	old rabbit warren	3-4m	74400	92642
11	old rabbit warren	3-4m?	74435	92623
13	old rabbit warren	3-4m	74505	92589
15	old rabbit warren		74513	92606
17	old rabbit warren		74389	92580
18	old rabbit warren		74395	92621
19	old rabbit warren		74375	92633
20	old rabbit warren		74337	92639
21	old rabbit warren		74234	92653
22	old rabbit warren		74232	92714
24	old rabbit warren		74177	92735
25	old rabbit warren		74231	92651
26	old rabbit warren	5m x 3m	74294	92609
28	old rabbit warren		74297	92543
29	old rabbit warren		74321	92574
30	old rabbit warren		74344	92521
31	old rabbit warren		74367	92538
32	old rabbit warren		74231	92487
33	old rabbit warren		74332	92473
34	old rabbit warren		74421	92533
35	old rabbit warren		74424	92505
36	old rabbit warren		74402	92486
37	old rabbit warren		74378	92466
38	old rabbit warren		74375	92447
39	old rabbit warren		74390	92433
40	old rabbit warren		74448	92507
41	old rabbit warren		74463	92504
42	old rabbit warren		74441	92489
43	old rabbit warren		74428	92441
44	old rabbit warren		74438	92485
45	old rabbit warren		74404	92463
46	old rabbit warren		74408	92487
50	old rabbit warren		74293	92609
51 50	old rabbit warren	For diam	74229	92569
52	old rabbit warren	5m diam	74240	92656
53	old rabbit warren		74210	92597
58	old rabbit warren		74251	92538
59	old rabbit warren		74226	92522
61	old rabbit warren		74273	92502
62	old rabbit warren		74307	92459

63 65 66 67 68 69 70 71 72 74 75 76 77 78 79 80 81 82 83 85	old rabbit warren	>10m diam 10 diam	74331 74374 74365 74338 74381 74395 74410 74407 74373 74338 74302 74275 74258 74275 74258 74221 74180 74167 74142 74072 73958	92449 92466 92439 92421 92411 92436 92428 92391 92357 92388 92404 92437 92432 92432 92439 92456 92468 92522 92669
1	woodland boundary bank	c.270m long, 2-3m wide, 0.25m high		
3	boundary bank and internal ditch (of warren?)	min. 500m long, 3m wide bank, 2m ditch		
	old boundary bank (warren	c.270m+ long, 1.5-2m wide,		
23	or woodland?) old boundary bank (warren	0.2m high		
87	or woodland?)	300m+ long		
14	extraction route(s) assoc with plantation (x3 E-W tracks in clearing) N-S deep ploughing furrows assoc. with original tree planting	c.200m long + ubiquitous		
4	hummocky ground		74193	92819
6	hummocky ground		74304	92667
54	large flat mound (poss assoc with 55)		73913	92880
84	hummocky ground		73977	92631
55 56	2nd WW gun emplacement? hollow 2nd WW hollow with iron girder 2nd WW hollow (6m to	3m diam 2m diam	73888 73890	92885 92799
57	NE)	2m diam		
86	2nd WW large hollow with spoil mound 6-7m diam (holow 3m)			
13	burnt flint	x5	74505	92589

27	burnt stone		74317	92570
60	burnt flint		74243	92536
64	burnt stone		74342	92446
65	burnt stone		74374	92466
78	burnt stone		74345	92359
46	calcined flint		74408	92487
47	calcined flint		74321	92521
49	calcined flint		74294	92545
66	calcined flint		74365	92439
42	worked flint		74441	92489
48	worked flint	x2	74330	92559
66	worked flint	x 3	74365	92439