A Multi-period Landscape at Wadlow Farm, West Wratting

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With contributions by Julie Franklin, Julie Lochrie, Jennifer Richards, Ian Rowlandson, Laura Bailey, Scott Timpany, Jane Young and illustrations by Ania Sztomwasser

Investigations undertaken by Headland Archaeology between 2009 and 2011 ahead of the construction of a thirteen-turbine windfarm at Wadlow Farm, West Wratting revealed evidence for Neolithic, later Prehistoric and Anglo-Saxon activity. The results indicated that the landscape was exploited for its flint during the Neolithic period and for its agricultural potential during the Late Bronze Age to Early Iron Age. Prehistoric features included Neolithic quarry pits and boundary ditches of Iron Age date. An isolated Anglo-Saxon feature was also revealed comprising a Sunken Featured Building (SFB) containing an assemblage of loom weights. The later prehistoric field system had been previously identified by cropmark evidence and the fieldwork confirmed associated agricultural activity. Notably, there is a paucity of known flint quarries in the area (although this is partly due to the difficulty in their recognition) and the results provide insight into Neolithic flint extraction.

Introduction

Investigations at Wadlow Farm, West Wratting (Figure 1) began with a desk-based study carried out for an Environmental Impact Assessment of the proposed wind farm. The most significant features identified were extensive cropmarks thought to relate to prehistoric or Romano-British field systems and settlement remains. Following aerial photograph plotting, a pre-determination archaeological evaluation by Headland Archaeology (Headland Archaeology 2009) comprised excavation of trial trenches within a 50m radius of each proposed turbine location. A group of Neolithic flint quarry pits was identified at Area A (Figure 2). Groups of features relating to late Bronze Age or early Iron Age settlement were identified at Area D (Figure 3) and ditches (parts of field systems) and pits were more widely distributed, occurring at Areas D, B and E (Figures 3, 4 and 5). An Anglo-Saxon sunken featured building was investigated at Area C.

Planning consent for the thirteen-turbine wind farm was granted, subject to a condition requiring a scheme of archaeological investigation to be undertaken at the site. A Written Scheme of Investigation (WSI) was prepared to meet the requirements for this work, which were set out in a brief issued by Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA). This comprised open area excavation in specific areas and archaeological monitoring and recording was conducted in areas of ground reduction. Monitoring was also required in other areas of groundworks not previously subject to evaluation, depending on location and depth of disturbance. The archaeological mitigation work took place between August 2010 and August 2011 (Dingwall 2010 and Headland Archaeology 2011).

Site location and description

The site is located approximately 15km south-east of Cambridge with the village of West Wratting immediately to the east and Balsham approximately 1.5km to the south (Figure 1). It lies at an average height of c. 74m OD and is centred on grid reference TL 5733 5307.

The site can be characterised as slightly rolling, open arable farmland. The geology comprises New Pit Chalk Formation and Holywell Nodular Chalk Formation which is represented by chalk directly below the topsoil across the majority of the site. To the north of the site, Alluvial Fan Deposits lie above the chalk formations and are represented by clay, silt, sand and gravel. These superficial deposits represent a local environment previously dominated by rivers (British Geological Survey Website). The chalk geology contains flint nodule inclusions and the site appears to have been exploited for this natural resource during the Neolithic period and Bronze Age.

Archaeological and historical background

Wadlow Farm is set in a multi-period archaeological landscape with activity in the surrounding area dating from the Palaeolithic through to the post-medieval period. The region contains a number of flint and lithic scatters, mainly on higher ground (Glazebrook 1997, 14). The earliest activity in the area is represented by the discovery of such flint scatters, along with hand axes, dating to the Palaeolithic at Little...
Figure 1. Site location and areas of excavation.
Wilbraham and Rookery Farm (Cambridgeshire Historic Environment Record (CHER) MCB16510, 11775, 06265) to the north-west of the site.

The CHER lists several prehistoric finds and sites within 1km of the site; many of which were identified by cropmarks. To the north-west of the site, at Great Wilbraham a probable Neolithic henge and a double-ditched causewayed enclosure (CHER 06468, 09292) have been recorded through aerial photography.

Other cropmarks have been characterised as Bronze Age round barrows and ring ditches (CHER 06172, 06241, 06246, 06250, 06288, 06487, 09275). These include cremation round barrows recorded at Great Wilbraham (CHER 06320), at Balsham (CHER 06334, 06338), and at Allington Hill, [located 4km to the north of the site] (CHER 06761, 09331, 09332). One of the barrows at Balsham (CHER 06334) was reused for burial in the Roman period.

Nearby Roman activity includes Romano-British occupation at Rookery Farm (CHER 17729) and the Roman road of Worststead Street (Scheduled Ancient Monument (SAM) 26 / CHER 07970). Worststead Street (the Roman Military way) runs from Worts Causeway in Cambridge to Horseheath near Haverhill and runs parallel to the site on an alignment of NW–SE, c. 4km to the south-west.

Located on the same alignment as Worststead Street is the Fleam Dyke (SAM 72 / CHER 07889) (c. 1km from the site); an earthwork of possible Anglo-Saxon date (Figure 6). The Dyke runs on the same alignment as the Devil’s Dyke a similar earthwork located 5km to the north-east of the site at Wadlow Farm (Malim 2003:19). There have been a number of excavations at sections of the Fleam Dyke in the last century (CHER 828, 1246, 11146). These have highlighted the original extent of the dyke as a large scale defensive earthwork that ran for 5km from Balsham to Fulbourn and had at least three phases of construction (Malim 2003:28). Its presence in the landscape marks a boundary or defensive barrier which was likely to have been used in conjunction with the Devil’s Dyke during the Anglo-Saxon period. In more recent times, the land at Wadlow Farm has been utilised for agriculture.

Results of the investigations

The text which follows is structured by Phase (Phases 1 to 5) which relate to the chronological periods represented. Features are generally identified by Group (G) numbers (as illustrated in, for example, Figures 2 and 3) assigned to linear features such as continuous ditches and large discrete features such as large pits. Group numbers were also assigned to groups of smaller discrete features such as a group of pits which formed a coherent spatial arrangement and were considered to be contemporary.

**Phase 1: Neolithic quarrying (3500 BC – 1500 BC)**

Within Area A, in the northern part of the site, (Figure 2), a concentration of features were recorded which comprised a group of pits cut into the natural chalk (G21). Although not all fully exposed within the investigation area, on average the pits measured 1.70m wide and 0.55m deep. They had an irregular shape in plan, vertical sides (which had been undercut from below the surface of the chalk) and a flat base. A section through one feature found two pits to be intercutting but no stratigraphic relationship was discernible as the backfill of both pits consisted of homogenous, compacted, re-deposited chalk packed tightly into the pits with no voids; homogenous filling of pits usually indicating a prompt backfilling (Thomas 1999, 64).

A large amount of flint, made up almost exclusively of primary testing and reduction waste, was recovered from the backfill; this is representative of the first steps of identification and preparation of flint as a raw material.

Nine small pits of a shallow nature and a tree bowl (G22) were recorded close to G21. These small pits were scattered across the area, forming no obvious structure. They had a maximum diameter of 0.8m and were filled with a greyish brown sandy loam or silty sand. Whilst there was no specific material within the features to suggest function, all the pits contained some worked flint. The presence of the flint, along with their proximity to the quarry pits of G21, may plausibly suggest a similar function (flint extraction).

The complete lithics assemblage recovered from the site numbered 3517 pieces, scattered widely across many context groups (Groups 1, 2, 3, 4, 6, 8, 12, 13, 14, 16, 18, 19, 20, 21, 22, 23, 24). The most significant part of this was the material from Area A which appears to represent the debris from Neolithic flint quarrying (Group 21) through the digging of small pits. The assemblage analysed from this group and nearby features (Groups 20 and 22) numbers 878 pieces and mostly consists of the initial stages of primary reduction.

Catalogue numbers are quoted, in the text and illustrations, in the format 'Cat.123' to identify individual pieces. Classification terminology is as follows; Debitage: pieces which have not undergone any secondary modification (retouch); Flakes: Detached piece with one identifiable ventral surface; Blades: A flake with 2:1 height to width ratio; Chunk: A large indeterminate piece with no clear ventral surface; Chip: Any flake or indeterminate piece <10mm; Core: Artefact with only dorsal surfaces, less than three removals is a split cobble; Tools: Any piece with secondary modification (retouch)

Refits were checked for in every context and noted in a few. Though in most instances only a few pieces conjoined, it should be born in mind that the assemblage represents only a small percentage of the quarry pit scatters and it is likely that many more were present. The presence of refits indicates that this material was in situ. The selected assemblage is summarised by feature in Table 1. All features are pits or hollows containing a single fill, except the Iron Age ditch [005] (Group 20).
Figure 2. Neolithic and Iron Age activity at Area A.
The features related to quarrying belong to Phase 1 and include pits [006/007] and [082] (both Group 21), and tree throw [016] (Group 22). The quarrying techniques, flint surface patina and what little could be gleaned from typological dating all point towards the Neolithic period for the exploitation of these resources. It is also clear that residual surface scatters associated with this activity account for much of the material found in other features. Furthermore there is evidence that the site was revisited during the Bronze Age during which time the flint from the surface scatters and the surface material of backfilled features was reused.

Flint is the only material used and is entirely sourced from the site. Small to large sub ovoid and irregularly shaped cobbles were present, as well as occasional angular shatter, of which only one example showed any attempt at reduction (in Pit 019). The average dimension of core material (including split cobbles) is 79 x 64 x 45mm with the two largest examples measuring 138 x 79 x 59mm and 117 x 116 x 99mm. The cortex is fairly thick and hard but with a soft chalky exterior and occurs on 83% of pieces. All the flint is patinated although fresh colour is visible on modern breaks and pieces with more recent retouch. When fresh in condition the flint is a dark, translucent black blue but from this site it mostly appears blue white or grey white from severe patination. The quality is fairly variable and can range from fine to coarse grained. Only 34 pieces were burnt, 24 of which were from Ditch [005].

### Pit Quarries and Surface Scatters

During evaluation at least 15 probable quarry pits were identified across Trenches 4 and 5. All pits were wider than the trench in which they were discovered so it was not possible to determine their overall shape or dimensions but the sections are strikingly

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**Table 1. Lithic Summary and Quantification.**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Phase 1</th>
<th>Phase 4</th>
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<tbody>
<tr>
<td><strong>Group</strong></td>
<td>Group 21</td>
<td>Group 22</td>
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<td>Pit 006/007</td>
<td>Pit 082</td>
</tr>
<tr>
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<tr>
<td>Multi-Platform Flake Core</td>
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<td>Irregular</td>
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<tr>
<td>Piercer</td>
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<td>Bifacial edge retouch</td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
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similar to the small ‘bell’ or ‘boot’ shaped quarry pits at Heathfield, Cambridgeshire (McFadden 1999, 8) and Blackpatch, Sussex (Russell 2001, 40). Most of the small quarry pits discovered range between 0.2–2m in depth. This is comparable to pits found at other flint quarrying sites such as Heathfield (0.22m McFaddyen 1999, 8), Blackpatch (1.8m, Russell 2001, 39–40), Churchill, Sussex (0.6m, Russell 2001, 124), Tolmere, Sussex (1.9m, Russell 2001, 161) and Myrtlecove, Sussex (0.6m, Russell 2001, 201).

Possible pick marks in the form of small circular depressions were noted on the base of pit [082] (Group 21).

Feature [016] (Group 22) has been interpreted as a tree throw, however it had an uneven base and contained large flint nodules similar to that of the quarry pits, suggesting comparable activity and dating. The flint in the assemblage included examples of partially patinated pieces that have been retouched. The retouched edges are fresh (Figure 7a) suggesting little subsequent use. Examples were found in all three of the quarry features (Pit Group 21 and tree throw Group 22; Figure 2).
Other Features
The other features discovered are all single fill, small, shallow pits of unclear purpose. They contained flint in lesser amounts and of slightly different character to the flint from the quarry pits, i.e. few cores or split pebbles, more flakes, chunks and shatter. Some similarities to the material from the quarry pits and similar patination indicate at least some of the material is contemporary; however they may have been re-deposited in backfill material at a later date. The level of abrasion to the edge of pieces from pit [021] certainly suggests some movement. In addition some of the flint from pits towards the east of the mitigation area, showed flakes scars with a fresh patination, indicating re-use.

Interpretation of flint assemblage
Most of the material relates to first stages in the sequence of reduction. The vast majority of pieces (83%) are cortical and all have been struck with a hard hammer. The flakes are typically large with simple platforms and pronounced bulbs. They far outnumber blades and indicate a flake based industry. Only 17 blades were found, some of which appear to be accidental and are certainly not well executed. This would suggest very little evidence for intentional blade production, as just one blade core was recovered. While flakes account for most of the debitage, there is also a large number of chunks. These are pieces with no identifiable ventral surface which cannot be characterised as cores. They were probably struck freehand from the nodules with little identifiable trace of pattern to the removals. It is likely that this represents initial testing and dressing of the nodules as so much of the assemblage derives from this. The severe patination and chalky concretions, at times, also made some pieces difficult to characterise.

Few small pieces were retrieved although all soil samples processed contained chips, it thus seems likely that chips were in fact far more numerous and widely spread but largely invisible in the heavy soil during hand excavation. The largest concentration was in Iron Age Ditch [005], probably eroding in from the surface. This gives credence to the theory that preparation was happening away from the coned space of the pits, but with so little in situ material recovered from the surfaces this can only be surmised. Many pieces from the ditch were burnt, probably during Iron Age activity, as this is not a feature of the rest of the assemblage.

The term “split cobbles” has been used to define nodules with three removals or less (e.g. Cat.553, Figure 7b) while minimally worked cores have more than three removals yet cannot be termed a formal core (e.g. Cat.326, Figure 7c, Cat.423, Figure 7d and Cat.574, Figure 8a). There are comparable levels of each in the assemblage and most were found in the three quarrying features with none found amongst the surface flint. It seems, then, that these represent pieces not selected for further preparation. It does not necessarily follow that these pieces were of poor quality. As has been shown at deep mine sites, the basis for the selection of raw material ‘was far greater than simple resource acquisition’ (Leivers 2004) possibly taking factors such as ritual or colour into account. Whilst the shallow quarrying at West Wratting is different in character to the deep mine sites many of the discarded pieces would have been of sufficient size and quality for most uses and cannot have been rejected on quality alone. Pit [006/007] (Group 21) stands out from the other two quarrying features in this aspect as it contained only seven tested cobbles and had the most formal cores and tools of the quarry pits. This pit also includes the only blade core found on site which may be of earlier Neolithic date. This may be evidence of slightly different activities or dating.

The split cobbles and minimally worked nodules generally follow the same confined pattern of reduction. Any angular or ‘knobbly’ pieces are flaked off to create a more regular sub-ovoid/rounded shape. After this stage the cobble is sometimes discarded but commonly one or both opposing ends are flaked off. The majority of split cobbles or minimally worked cores go no further than this stage (occasionally the ends are used as a platform for further knapping but this is rarely the case). It is assumed that after carrying out this preparation it would be clear to the knapper whether or not the material was what was required.

‘Wedge’ shaped pieces were also very common and these were seemingly produced by a similar method to that outlined above. The main difference is that the removals to the ends are positioned at oblique angles, meeting roughly in the centre. These pieces are generally smaller and may be a by-product; but it is also true that the removals have exposed as large an inner surface area as possible. If the original piece was also small this method maximises the workable length.

All the testing and preparation is fairly consistent in approach and thus is all likely to date to the Neolithic period. There are no examples of this happening in later periods. It seems that the Bronze Age exploitation of the flint resources did not involve quarrying fresh nodules.

Of all the cores, only one has been exhausted. The lighter patination on this would seem to suggest a later date for it. The only core used for the production of blades is Cat.323 (Pit [006/007], Figure 8b). It has been used to produce medium sized blades with a probable trapezoidal cross section. It is well established that blade production was common during the Mesolithic and earlier Neolithic, becoming significantly less common in the later Neolithic. Earlier blades from the Mesolithic and beginning of the Neolithic period are very small (Bishop 2007 28–29), while Neolithic blades are generally larger. The type of blades that would have been produced by core Cat.323 are typical of the Neolithic period. The debitage associated with it are mostly large flakes with simple platforms and pronounced bulbs with few blades. None of the other cores help point to a specific date and many of them could date from anywhere between the middle Neolithic to the middle Bronze Age. One of the platform cores from Pit [083] shows later use from the same platforms, the stark contrast between condi-
tions of the removals indicating a substantial period of time between the two phases of reduction.

There are also a few core curation flakes from the quarrying features and the surface scatter recovered during evaluation trenching of the site. These include platform trimming flakes (e.g. Cat.16, Figure 8c) and some thick overshot flakes (e.g. Cat.268, Figure 8d). These are not high in number. Their presence confirms core curation on site, the low number also supports the evidence that the site was mainly for testing and basic preparation.

**Phases 2–4: Late Bronze Age to Early Iron Age Activity (1000BC – 300BC)**

*An isolated multi-use pit*

Within Area B (Figure 4), in the central east of the site, a pit (G1) was recorded measuring 5.80m x 2.85m in plan and 0.49m deep. This isolated feature was on a NNW–SSE alignment and was backfilled by dark brown/grey loam clay; the result of one event (incorporating topsoil) as opposed to a silting up over time.

Small sherds of late Bronze Age to early Iron Age pot (Franklin *et al.* 2011) were recovered from the backfill along with a small quantity of charred cereal grain including naked barley and hulled barley, together

*Figure 4. Late Bronze Age/Iron Age activity at Area B.*
with indeterminate cereal grain; the presence of barley is indicative of a late Bronze Age date (Franklin et al. 2011). Other materials recovered from the pit included lithics and daub, as well as unburnt bone and marine shell (Franklin et al. 2011); suggesting the discard of food and domestic waste into the pit.

**Pits, ditches and gullies**

In the south of the site, in Area D (Figure 3), a concentration of shallow postholes and pits were recorded (G24). The pits, on average, measured 0.75m long and 0.60m wide, with a depth of 0.15m. Their backfill consisted of mid brown sand clay and contained fragments of late Bronze Age to early Iron Age pottery and burnt clay with charcoal. As little ceramic evidence was recovered from the site as a whole, and charcoal as a rule was rare, the presence of both materials in the pits are of note. Postholes discovered around the pits did not appear to form a specific structure although the features had been plough-truncated, reducing their original depth and possibly resulting in the loss of some related postholes. It could be that they would have supported some form of temporary shelter or formed part of a structure along with the pits.

To the east of the postholes and pits, a ditch was aligned NNE-SSW with a depth of up to 1m. A high concentration of flint pieces typical of the Neolithic period were recovered from the backfill deposit; a homogenous, sterile deposit through gradual silting. The flint assemblage included several blades and two scrapers. Several pieces of pottery datable to the Iron Age were also recovered. The Neolithic flints in the later contexts of the ditch suggest they are residual and given the quantity of Neolithic flint finds on the site, this is to be expected within many later deposits. The physical closeness of the ditch to the late Bronze Age/early Iron Age posthole and pit features, along with the recovery of pottery of a similar date would suggest they are related and form part of a contemporary landscape.

To the south of G24, a series of curvilinear features formed a sub-oval shape gully (G23) which was very shallow with a maximum depth of 0.13m. The features were backfilled by silty clay deposits with the only finds recovered being lithics, some of which showed signs of retouching and which included refitting pieces. Together, the features had the appearance of a drip gully or wear hollow and were considered broadly contemporary with G24.

Five other pits were scattered over the nearby landscape between G23 and G24. They were

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**Figure 5. Investigation at Area E.**
by a homogenous silty clay and produced no datable material. A sixth pit contained a sheep burial. Whilst there is no evidence to suggest a use or solid date for these features, their location and characteristics could suggest they are contemporary.

Study area D contained further evidence of a long lived landscape with ditch and pit features (G14, Figure 3). Ditches aligned NE–SW and NW–SE (similar to that in G24 but shallower, at a depth of 0.24m), along with small pits, are representative of settlement in the area. The pits contained flint-tempered pottery dating to the early Iron Age along with some animal bone and are most likely representative of pits for food waste.

Further evidence for settlement (G12) was recorded at the most south-easterly Area E. A ditch [087] running N–S was revealed (Figure 5) with a shallow depth (0.09m) and gently sloping sides. It was filled with mid brown sandy silt. Cut into the centre of this feature was a small pit [085]. 0.7m wide and 0.24m deep. It was filled with dark brown silty clay and contained burnt fragmentated pottery. Charred club/bread wheat was also present. This pit appeared to have been cut by a wide shallow pit [036] 1.2m wide and 0.24m deep, although the relationship was not clear. Interpretation of the ditch and pit features (G12) was limited as they were investigated only within the confines of an evaluation trench and subsequently preserved in situ. However, the abundance of pottery and burnt plant remains contained within them are consistent with settlement activity, of which they are thought to represent a small part.

Field systems
A number of ditch features were recorded across the site on various alignments, many forming T-Shapes, and were typical of Iron Age linear boundaries used to separate land into fields (Oosthuizen, 2006, 12). A small amount of pottery recovered from certain ditches dated to the early Iron Age and whilst there was no solid dating evidence from the majority of the ditches, they were presumed to be part of the same long lived field systems across the site. The paucity of datable artefacts is typical of field boundaries of this period. They are located away from settlement areas where datable artefacts become more commonly incorporated into cut features due to casual discard. In contrast, field boundaries gain artefactual material less often, in smaller quantities and an abraded state; generally as a result of manuring and subsequent ploughing.

Further ditch features were recorded within Area B (Figure 4) along with a large pit (G18) measuring 9.50m x 7.50m x 0.60m. The pit may have been a cistern for collecting rain water for cattle and suggests that the ditches were potential animal enclosures. Although these features had no solid dating evidence they are presumably a further example of field systems.

Pottery
The prehistoric pottery was spread between a number of pits and ditches, generally found in the final (disuse) fills of these features. These included features associated with Phase 2 activity (Groups 1, 24), the Phase 3 settlement (Groups 12, 14) and the Phase 4 field system (Groups 3, 16, 18), as well as a number of sherds found redeposited within the Saxon sunken-floored building (Group 2).

The similarity of the prehistoric pottery fabrics between these different areas suggests they are broadly contemporary but little of the pottery assemblage can provide good dating evidence. The pottery from the Group 12 pits (Phase 3) provide the only sizeable Group assemblage and the best of the dating evidence. On the basis of the diagnostic carinated forms from the final fills of the Group 12 pits (Contexts 035 and 084) consisting of at least five carinated jars, with diagnostic sherds from Contexts 035 and 084 one of which, (that from 084 – Figure 9), appears to have been burnt and reoxidised over the break) the pottery dates to the late Bronze Age or earlier Iron Age although close dating of pottery of this period is notoriously difficult (Knight 2002) and there are few diagnostic forms amongst this fragmentary group.

Other phases may be of similar dates, certainly there were no diagnostic features pointing to other periods, but the pottery cannot point towards any temporal progression or indicate the longevity of the activity there.

The pottery present is predominantly flint and quartz gritted with 17 sherds showing signs of sparse calcareous inclusions, which may be from the parent clay. Nine sherds of grog tempered pottery are also present. Flint is present in the majority of sherds in this assemblage. Some sherds also contain fossil shell. It is likely that the majority of the pottery was locally made (Webley 2005, 39) as pottery of this period in the region is commonly flint tempered (Glazebrook 1997, 22; Webley 2005) and fossil shell temper is also known amongst contemporary groups from elsewhere (Allen 2009; Jackson 2003).

The pottery firing colours range from completely ‘black’ or reduced and many vessels have an irregular patchy firing colour ranging from dark grey to a dark red.

The forms present in the Group 12 assemblage fit with those from Wandlebury (Webley 2005, Hill 2004). The carinated vessels are similar to Hill’s ‘Tripartite Jar’ (2004, figure 21, Type 8). The jars are also typical of other contemporary groups from the region including the flint gritted pottery from nearby excavations at Balsham (Ashworth and Kaye 2008 10–11, plates 4–8) and Iron Age ‘A’ pottery recorded from earlier field collections in the same parish (National Monuments Record (NMR) 374485). It appears likely that the rest of the assemblage is also contemporary with the finds from Group 12 although the fragmentary condition of many of the sherds makes this uncertain. A broader date range might be represented than the forms found in the Group 12 pits suggest.

A single abraded sherd from the final fill of the Group 3 ditch (Phase 4, Context 008) in an oxidised light firing sandy fabric, may conceivably date to the
early Roman or medieval periods. It is potentially intrusive.

Charred plant remains, charcoal and bone
The majority of the charred grain recovered from the site was from the upper fill (006) of late Bronze Age to early Iron Age pit [002] (Group 1) where small quantities of probable naked barely and emmer wheat were recovered together with barley sp. and indeterminate grain. A small quantity of cereal grain was also recovered from the fill (084) of pit [085] (Group 24) from this period. Charred grain of probable club/bread wheat and indeterminate grain was recovered from the pit (Table 2). Although only small, the assemblage of grain from these features does offer some evidence for cereal cultivation in the area. The presence of probable naked barley is of interest as hulled barley varieties are usually associated with this period (Hillman, 1984) and its presence within the assemblage may be as a relict crop or arable weed rather than an intentional cultivar. The presence of probable emmer wheat in the assemblage indicates the cultivation of wheat crops in the area. Charred grains of wheat have been found from similarly dated sites in the east of England (e.g. Fryer, 2005). Together with charred grain pit [002] also contained pottery sherds suggesting the pits were used for the deliberate discard of domestic waste.

The charcoal assemblage from pit [085] was dominated by oak with one fragment of blackthorn also recovered. The assemblage indicates that dryland woodland was resourced for fuel wood, with the presence of blackthorn, a shade-sensitive tree suggesting open canopied woodland existed, or collection from woodland margins (Orme and Coles, 1985). Pollen diagrams from the east of England show that oak woodland was still in existence during this period, however, oak pollen is seen to decline in diagrams at the same time as it rises in the microscopic charcoal curve (e.g. Bennett et al, 1990). This suggests the clearance of oak trees during the late Bronze Age/early Iron Age, which may also be linked to its use as a major fuel wood during this period.

Ring curvature of the charcoal fragments shows that branchwood was the main timber used for fuel and the dominance (albeit in a limited assemblage) of this timber size suggests deliberate selection of this sized timber. This dominance of branch wood indicates collection of wood fuel using methods such as pollarding (Rackham, 2003). Oak was a choice fuel in the Bronze and Iron Age’s (Kelley, 2002) due to its high burning temperatures and thus excellent fuel qualities (O’Donnell, 2007). The presence of fungal hyphae on one of the timbers suggests it was beginning to rot prior to burning (Schweingruber 1978 and 1990; Marguerie and Hunot, 2007). This suggests stored fuel wood may have been exposed to the elements thus becoming wet and prone to fungal attack or that dead wood, from the woodland floor was also opportunistically used for fuel.

The animal bone assemblage dating to the late Bronze Age – early Iron Age and the Iron Age contained highly fragmented and un-diagnostic burnt and unburned bone. The size and condition of the assemblage makes it of no interpretative value.

**Phase 5: Anglo-Saxon activity**

Area C (Figure 10), in the central south of the site, revealed an Anglo-Saxon sunken featured build-

### Table 2. Charred cereal grain.

<table>
<thead>
<tr>
<th>Cereals</th>
<th>Plant Part</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hordeum sp.</td>
<td>caryopsis</td>
<td>barley sp</td>
</tr>
<tr>
<td>Hordeum cf. H. vulgare</td>
<td>caryopsis</td>
<td>probable hulled barley</td>
</tr>
<tr>
<td>Hordeum cf. H. vulgare var nudum</td>
<td>caryopsis</td>
<td>probable naked barley</td>
</tr>
<tr>
<td>Triticum cf. T. aestivo-compactum</td>
<td>caryopsis</td>
<td>probable club/bread wheat</td>
</tr>
<tr>
<td>Triticum cf. T. dicoccum</td>
<td>caryopsis</td>
<td>probable emmer wheat</td>
</tr>
<tr>
<td>Cereal: indeterminate</td>
<td>caryopsis</td>
<td>cereal indet.</td>
</tr>
<tr>
<td>Wild taxa (%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cereals (%)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Wheat (%)</td>
<td>33</td>
<td>50</td>
</tr>
<tr>
<td>Barley (%)</td>
<td>33</td>
<td>0</td>
</tr>
<tr>
<td>Indet (%)</td>
<td>33</td>
<td>50</td>
</tr>
<tr>
<td>Total cereal grains per litre</td>
<td>0.15</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Late Bronze Age to Early Iron Age G1 and G24

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample No.</td>
<td>6</td>
<td>84</td>
<td>19</td>
</tr>
<tr>
<td>Original vol (litres)</td>
<td>40</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>% of sample analyzed</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
ing (SFB) which was aligned NE–SW and measured 3.24m x 2.40m in plan. Two post holes, both with a diameter of 0.35m, were associated with the SFB with one located on either end of the long axis of the feature (a typical feature of an SFB (Tipper, 2004, 1)).

Discovered within the fill of the SFB were loom weights. The largest group of weights were found in a single row about 85cm long, made up of approximately 18 weights, running close to and parallel to the long southern wall of the building. A group in the south-west corner may represent part of this line, disturbed by later activity, or may represent a separate dump of material, possibly some of both. Two further groups in the north-west and north-east corners probably represent separate dumps of weights (Figure 10).

**Ceramic loomweights**

The weights were contained in the uppermost (final) deposit [016] which consisted of light yellow brown silty sand and had a fairly shallow depth of 0.20m (Context 016, Group 2) (Figures 11a to 11c). Many of them were found in a single line along one wall of the building. The weights were in varying condition. Some were complete but for a little surface spalling, which probably happened during manufacture or use, or in a few cases surface damage incurred during excavation. The distribution of the weights was planned before excavation. Some were extremely fragmentary due to the crumbling and soft-fired nature of the ceramic. Each weight was given its own small find number, and recorded by number of sherds (pieces spanning whole ring thickness), number of fragments (smaller pieces), weight, percentage of complete find present, diameter, ring thickness, hole diameter.

The loomweight assemblage amounted to 79 large sherds, and a further 498 fragments, weighing a total of 12.742kg. These represented between 32 and 45 individual finds. The minimum number is based on the total weight of the assemblage divided by the average weight of a complete example, the maximum number, by the number of individual finds recovered from the site, after attempts were made to join together any smaller sherds from less complete examples.

The fabric is coarse and soft-fired. The clay typically fires to a pale yellowish buff, though the core is often a reduced grey. Angular stone inclusions are present up to 10mm across. The surface is typically rough, with finger marks sometimes visible in the surface. Spalling on the surface seems to have largely occurred during firing, as there is no difference in surface colouration, though it is possible that some damage also occurred during use. Each one appears to have been made from a roundel of clay with a central hole pushed through. A small ridge of clay around the central hole sometimes survives, though has more frequently been smoothed away into a doughnut shape. Sometimes finger marks on the interior of the hole show that this has been enlarged,
sometimes from both sides, sometimes predominantly from one, with a hole becoming distinctly wider on one side than the other. None display any impressed marks or decoration as can sometimes be found (e.g. Rogers 2009, 288–296).

Statistics on size and shape for the assemblage are shown in Table 3. The data for diameters is taken only from examples where this could be measured (26 examples), rather than estimated on a diameter chart. The weights are based on the estimated complete weights only of finds which were 90% or more complete (17 examples), keeping error margins to a minimum.

Table 3. Loomweight statistics

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Weight (g)</td>
<td>312</td>
<td>463</td>
<td>397</td>
</tr>
<tr>
<td>Diameter (mm)</td>
<td>98</td>
<td>127</td>
<td>113</td>
</tr>
<tr>
<td>Hole Diameter (mm)</td>
<td>33</td>
<td>45</td>
<td>39</td>
</tr>
<tr>
<td>Ring Thickness (mm)</td>
<td>31</td>
<td>48</td>
<td>37</td>
</tr>
<tr>
<td>Hole Diameter/ Ring Thickness</td>
<td>0.76</td>
<td>1.39</td>
<td>1.03</td>
</tr>
</tbody>
</table>

The typology of loomweights rests on the ratio of the diameter of the hole to the thickness of the ring. Early ‘annular’ weights have holes wider than the ring thickness, while later ‘bun-shaped’ weights have holes smaller than the thickness. In this assemblage the two are largely equal and thus they can be classed as ‘intermediate’ (Hurst 1959; Hedges 1980; Rogers 2007, 30).

In terms of weight they fall within the mid range of Saxon weights of 100 to 1460g (Hedges 1980; Hamerow 1993, 66–7; Rogers 1997, 1753) and thus would seem to have been involved in the production of ordinary types of cloth. No wear marks were found from where attached threads have rubbed against the clay. Possibly they were not in use for long.

Pottery

Sixteen sherds from eight different vessels of Anglo-Saxon date were found in, or in the vicinity of the Group 2 SFB. The pottery is in an abraded to fairly fresh condition. Sherd size entirely falls into the small to medium size range (between 1 and 20 grams). Two different pottery ware types were noted: Anglo-Saxon Erratic-Tempered (ERRA, 13 sherds, five vessels) and early to mid Saxon Sandstone-Tempered (SST, three sherds, three vessels). Three vessels are represented by more than one sherd but few vessel forms were identifiable.

The three sandstone tempered vessels included a probable jar along with other pieces from probable jars and bowls. The first of these was unstratified, an abraded sherd, probably from a jar and with a mixed fabric with sparse to moderate medium-sized aggregated quartz grains. A rim top from a small jar or bowl was recovered from the final fill of the SFB (Context 016, Group 2, Phase 5). This vessel is in a coarse sandstone-tempered fabric that also contains carbonised vegetable matter, sparse calcareous grains and a few fragments of grog. The other sherd was recovered from the final fill of a post-hole associated with the SFB (Context 023, Group 2, Phase 5) and is from either a jar or bowl. The fabric of this vessel mainly consists of fine quartz with moderate aggregated grains, but a few fragments of grog are present.

The sherds of the other five vessels were all found in the final fill of the SFB. These are in a very mixed fabric that has a fine quartz background with a variety of other inclusions in variable quantities. Amongst these inclusions are fragments of biotite granite, coarse angular quartz grains, flint and feldspars. Three sherds, probably from a single jar have an external burnished surface and the neck of another jar is slightly polished, otherwise the vessels are undecorated. Seven of the sherds are from a single vessel; a small necked-jar with a baggy profile and a simple rounded rim that has been slightly flattened on top. The vessel has external sooting and a partial internal carbonised deposit. The remaining sherds could come from jars or bowls.

A number of sites in the area have produced sherds of Anglo-Saxon type; however few reports contain detailed fabric descriptions with which to closely compare the group from this site. The fabric types found are typical of other ceramic assemblages from this part of Cambridgeshire seen by the writer (Woodley) and those described by Blinkhorn (forthcoming; 2008) and at the Criminology site in Cambridge (Dodwell, Lucy & Tipper 2004).

A settlement site of proposed 6th to 7th century date was revealed at the Criminology site at Cambridge (Dodwell, Lucy & Tipper 2004). An assemblage of 65 sherds of handmade early Anglo-Saxon pottery was recovered including organic-tempered sherds (c. 35%), sandstone-tempered sherd (c. 24%), erratic-tempered sherds (c. 23%), calcareous-tempered sherds (c. 15%) along with other pieces (c. 3%). The mixed nature of the sandstone and erratic-tempered fabrics accords well with the pottery from this site, however the most common fabric to be recovered there (organic-tempered) is entirely absent from the Wadlow group. Organic-tempered sherds are in use in the area throughout the Anglo-Saxon period but are most common in groups post-dating the late 6th century (Hamerow et al. 1994, 14–15). By the 8th century the area is receiving Ipswich and Maxey-type ware but still continues to use some handmade types (P Blinkhorn pers. comm.).

The small size of the assemblage and lack of chronologically diagnostic features within the small group from Wadlow prohibits close dating. Similarities with other Saxon pottery in the area suggest that the material is most likely to have come from a domestic assemblage of early Anglo-Saxon 5th to 7th century date. As almost all the finds were associated with the final fill of the sunken-floored building it seems like-
ly that the structure was abandoned between these dates.

Interestingly, the sunken featured building was discovered in isolation with no other remains dating to Anglo-Saxon period in the vicinity.

**Charred plant remains and bone**

A single grain of probable hulled barley was recovered from fill (019) (Group 2) of the SFB (Table 2). This grain, together with small quantities of small-sized charcoal fragments (<0.5cm) was the only Charred Plant Remains (CPR) recovered from the building. This could represent intrusive material as much as *in situ* material. Hullled barley within the Anglo-Saxon period would not be out of place as a cultivar (c.f. Murphy, 1994; Hall, 2003).

The animal bone assemblage dating from the Anglo-Saxon contexts is very small (100g) and in a fair/poor condition. However, it was possible to identify one bird and large and medium size mammals.

**Discussion**

**Neolithic quarrying**

The Neolithic remains at Wadlow represented a relatively unusual opportunity to investigate a flint-working site. Many of the known sites "comprise monuments, usually of a funerary and/or ceremonial nature, where the form of the site (ditches, mounds, banks) is of a kind that leaves visible traces, and the outline is characteristic of a particular class of Neolithic site. However, the substantial proportion of the archaeological record which is not readily identifiable from aerial photographs – flint working sites, agriculture, unenclosed settlement or pit groups – is under-represented…More work is needed to reduce or compensate for this bias" (Medlycott 2011, 14). Therefore, we have taken the opportunity to consider the evidence for Neolithic land-use at the site.

The site is located on a geological deposit rich in flint nodules. The concentration of quarry pits in the north of the site (in the south-western part of Area A) confirmed the presence of a flint rich landscape as they identified a clear seam of flint visible in the lower part of the quarry pits. Garrow (2007, 9) has written about the placement of pits in the Neolithic. In this case, the location of the pits at a relatively high point, with a panoramic view over the landscape would appear to be a good choice, not only for the raw material available, but for a prominent and perhaps ‘special’ site to be located.

At Kilverstone in Norfolk (where extensive spreads of Neolithic pits were recorded), the excavation of pits and burial of material within them played an important role in ‘marking’ the landscape both physically and metaphorically (Garrow, Lucy & Gibson 2006, 81). Similarly, at Wadlow, it is likely that the pits held some significance for the nearby community and the site would have been returned to on a seasonal or yearly basis.

Possible pick marks were identified at the base of pit [082] (Group 21) which provides an indication of possible quarrying technique and may also signify attempts to quarry deeper. A small quarry pit at Churchill, (Russell 2001, figure 67, 113) had similar pick marks, some were also noted at Blackpatch, (Russell 2001, 40) and on chalk boulders at Tolmere, (Russell 2001, 163). As antlers have been found at so many mining/quarrying sites (Russell 2001) it would seem they were the popular tool used to quarry out the flint. There is an absence of any evidence of domestic activity in the area surrounding the quarry pits, and so it is likely that the people utilising the resource did not need to camp at the site, but travelled back to their settlement after the extraction had taken place. Most of the flint material recovered from the site relates to the first stages in the sequence of reduction. It is likely the site was mainly for quarrying, testing and basic preparation of the flint; supplying partially prepared cores of a quality and size suitable for most purposes.

One of the largest (and most famous) examples of flint quarrying in Britain is seen at the site of Grimes Graves in Norfolk where shafts up to 12m deep were dug into the chalk to mine flint by exploiting the flint seam (English Heritage 2011). The flint quarrying observed at Wadlow was on a much shallower scale but revealed the same techniques seen at Grimes Graves; undercutting of the pit walls from below the surface of the chalk. This method of ‘chasing’ the flint seam from the pit wall is a feature common to most mining operations, whether in small pits or the ‘galleries’ of deep mines.

It does not follow that shallow quarrying displays a lack of technological ability or lack of quality in the resource, some deep mines have been shown to have been cut through shallow open cast quarries (Russell 2001, 2007).

Two pits excavated within Area A were interpreted positively as quarry pits, other nearby pits are highly likely to share this function supporting the idea of a prominent Neolithic quarrying site. Analysis of the feature tree bowl (Figure 2) strongly suggests comparable activity and date to the quarry pits; mainly due to the similarities in the flint it contained. A similar situation was noted at Heathfields (White 1997, 22) where a tree throw or hollow had been quarried, presumably, because it was an easily exploitable location. Bishop (2007, 27) references the unpublished site at Fordham (Mortimer and Connor, forthcoming) where, during the early Neolithic, an apparent solution hollow was used for the procurement and reduction of products which were then removed and taken elsewhere to be worked into tools. The small size of the pits and high levels of surface flint noted on site strongly point towards material being tested within the pits then removed for further preparation. To reduce the nodules with potential in the small quarry pit would have led to it quickly filling with a multitude of chunks, flakes and shatter which may have inhibited further quarrying. It is more likely that pieces
were tested and then those with potential removed. The surface flint collected from the topsoil of Trench 5 is most likely from knapping floors around the surface of the pits.

Throughout the flint assemblage recovered from Wadlow, there are examples of pieces with retouch of fresh condition. As most of the material in the quarry pit was sealed it seems that the likely explanation is ‘grubbing’ amongst the upper silty deposits of the quarry pits or surface scatters and dumps. Some of the tool types and the clear length of time between removals indicate the likelihood that there was a
phase of Bronze Age quarrying activity. Leivers mention a precedent for such activity in the later Neolithic and early Bronze Age for the Sussex mines (Leivers 2004). Some of the tool types and the retouch identified in the Wadlow assemblage are of a Bronze Age date. The material recovered from some of the pits in G22 showed flake scars which indicate re-use. In addition four pits ([004], [014], [019] and [027] recorded at the east of the mitigation area produced flint with a fresh patination indicating later re-use. Accordingly, this supports the suggestion that the site was revisited in the Bronze Age. This all points towards the site being revisited in the Bronze Age, with surface material and other easily accessed pieces being reused. It is not clear, however, how many times and at what intervals the site was revisited and exploited. Therefore, though the majority of the quarrying activity lies in the Neolithic period, it is likely that this site would have been utilised for a long period of time, continuing into the early Bronze Age.

**Late Bronze Age/Early Iron Age landscape**

Through combining the results of the investigation at Wadlow with a previous aerial photographic assessment (Palmer 2009), it is possible for us to visualise a landscape which, within the late Bronze Age/early Iron Age, begins to be utilised for farming, with ditch systems beginning to appear along with the associated digging of pits.

In Area B, the large pit and related ditches of G18 form part of a large complex of related remains. These

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**Figure 8.** a) Cat 574 minimally worked core, b) Cat 323 core used for blade production, c) Cat 16 platform trimming flake, d) Cat 268 overshot flake.
are visible as a series of cropmarks and shapes indicative of deeper soils in the area surrounding them (Figure 12). The cropmarks are indicative of a series of potential animal enclosures, whilst the deeper soil to the NW of these may be the result of (livestock) trampled ground and/or wallows (pigs). By connecting sections of recorded ditches with cropmarks and current field boundaries, a fuller picture of the landscape starts to emerge. This includes field systems, livestock enclosures, and even potential funnelled entrances which would have aided in cattle or sheep being guided between fields (Figures 3 and 12).

Similarly to Area B, Area D revealed large sections of boundary ditches (G14) as well as associated post holes, pits and gullies (G23 and G24) (Figure 3). Flint and pottery recovered from the discard fills of these features place their use within the late Bronze or early Iron Age. The placement of the gullies G23 and pits/post holes G24 within (what is presumably a field system) G14 would suggest that they formed part of either small scale settlement, or more plausibly, temporary shelters associated with the working of the land. Their presence is an indication that this relatively high ground may have been the focus for activity; perhaps exploited for its commanding views over the surrounding landscape.

Charcoal retrieved from pits G24 and G1 offers evidence for the cultivation of cereal, demonstrating that land was being used to grow crops from as early as the Bronze Age. Together with charred grain and the pottery from the pits, it suggests that whatever the initial purpose of the pits may have been, they were ultimately used for the deliberate discard of domestic waste.

The majority of the ditches excavated at Wadlow produced little in the way of artefactual or ecofactual material. As a whole, ditch boundaries tend to lack dating evidence and it may be reasonable to conclude that such boundaries (along with the pits, gullies and cropmark evidence) were part of a large-scale division of land that was probably initiated during the late Bronze or early Iron Age (Deegan, 2007, 89).

**An Anglo-Saxon sunken featured building**

Throughout the investigation, little physical evidence was revealed which would increase knowledge of how the land at Wadlow was used beyond the Iron Age up until its current use as arable, agricultural land. However, a significant example of how at least part of the land was utilised during the Anglo-Saxon period was uncovered in the western part of the site.

The Sunken Featured Building (SFB), or Grubenhäuser, is a distinctive building type that occurred in England and across north-west Europe from the fifth to late seventh centuries AD and is one of the defining features of early Anglo-Saxon settlements (Tipper, 2004, ix). They are typically sub-rectangular in shape often with two post holes along the shorter walls of the pit, which matches SFB G2 (Area C, Figure 10). Typically these structures do not have hearths, as is true at Wadlow.

Textile production has been the function most frequently attributed to SFBs, mainly due to the number of artefacts associated with this activity found within them and their arrangement on the base of the pit (Tipper, 2004, 64). At Mucking, for example, more than two loomweights were recovered from 21 of the 203 Grubenhäuser excavated (Hamerow 1993, 17–18). The evidence recovered from the Wadlow SFB continues this pattern with c. 45 individual ceramic weights from a warp-weighted loom found within the upper deposit (disuse) of the SFB.

Warp-weighted looms were in use in Britain from at least as early as the Iron Age, continuing as late as the 12th century AD, when the introduction of the horizontal loom made them obsolete (Rogers 1997: 1753; Hurst 1959:25). Clay loomweights are common finds on Anglo-Saxon sites, sometimes fired, sometimes in unfired clay (Rogers 2009, 288). Intermediate loomweights are known from as early as the 6th century, and are well established by the 7th century, continuing through the Middle Saxon period and later (Rogers 2007, 30; Rogers 2009, 288). The pottery associated with these weights is most likely to date to between the 5th and 7th century, possibly a little later. The finds must therefore date to between the 6th and 8th centuries, but are most likely to belong to the 7th century. This provides the best dating evidence for the abandonment of the building, though it is not clear for how long it was occupied before this.

The loomweights seem to have been left where they lay when the structure was abandoned, suggesting this building was used as a weaving shed. Weaving sheds do not generally exist in isolation and it is likely that this structure formed part of a larger settlement complex, as yet undiscovered. No other textile related finds, such as spindle whorls or pin beaters were recovered.
Comparison with other sites suggests the loom would have been of some value. When disassembled it would be easy to transport and thus it is unlikely that the loom would have been left to decay in an abandoned building. Evidence from Upton, Northamptonshire (Jackson et al. 1970, 210) suggests that weights, when not in use, were stored on wooden poles, possibly on racks (Hamerow 1993, 17; Rogers 2007, 32), near to where they were used. The arrangement of the weights against the south wall in a short closely spaced row (Figure 10) indicates that these were such a set, left in the building when it was abandoned. The outlying groups in the corners of the buildings probably represent dumps of broken weights that may have been discarded over the life of the building.

Although the SFB was a solitary discovery, and the site as a whole was devoid of any other features dating to the Anglo-Saxon period, its placement within the landscape in such close proximity to the Fleam Dyke (1km) is of particular note (Figure 6).

Figure 10. Anglo-Saxon Sunken Featured Building at Area C.

It can be postulated that any type of settlement that was situated between the Fleam Dyke and Devil’s Dyke would have been well defended. Both dykes are thought to have marked boundaries or defensive barriers which would have likely been used in conjunction with each other during the Anglo-Saxon period. The Anglo-Saxon Chronicle records the names of several small tribes which lived in the fens and in the region around Cambridge, suggesting that the area was not part of the major kingdoms. Instead, it was a frontier zone, and a buffer for the kingdom of East Anglia. Perhaps because of this, settlement evidence is less common than that from burials (Malim, 2003, 32). There are few known settlements located directly along the Dykes; some villages located along the routes may have origins in the Anglo-Saxon period but relatively little is known of these as the villages are still occupied today, sealing archaeological remains (Williamson, 2010, 30).

It is commonly accepted that early and middle Anglo-Saxon settlement was predominantly dispersed, taking the form of hamlets or farmsteads which shifted periodically within the territories in which they lay, as opposed to ‘nucleated’ settlement which was concentrated in just one place in a township (Oosthuizen, 2006, 145 & 2010, 107). Settlement was less widely dispersed across the landscape in this period and sites were restricted to areas of freely draining chalk, sand or gravel (Williamson, 2010, 30) like that of West Wratting.

The change from a dispersed to a nucleated pat-
tern of settlement generally occurred between the mid eight and late twelfth centuries (Oosthuizen, 2006, 145) after which settlements such as the villages located near the Fleam Dyke (a substantial defensive structure) became established. The SFB recorded as part of this project was part of this earlier, dispersed settlement pattern.

Conclusion

The archaeological investigations at Wadlow Farm revealed evidence that the landscape was exploited in the Neolithic, the late Bronze Age to Iron Age and the Anglo-Saxon periods. Despite the extensive mechanical ploughing regime which has taken place on the site over the previous half century, substantial remains still survive. Neolithic quarry pits demonstrate how communities took advantage of the raw materials available to them. From the late Bronze Age onwards, the land began to be demarcated and cultivated; an activity that continued into the Iron Age and beyond, when livestock were being kept. By the Anglo-Saxon period, textile manufacturing was taking place in at least one SFB located close to the Fleam Dyke.

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Figure 11. Ceramic loomweights a), b) and c).
Figure 12. Hypothetical field systems and livestock movement from cropmark evidence.
remains at Wadlow and other local sites, as did Andy Thomas who also monitored the work on behalf of CAPCA.

The trial trench evaluation was supervised by Elisabeth Jones, with excavation carried out under Kirsty Dingwall and Nuala C. Woodley. Excavation was carried out by Tegan Daly, Joe Doran, Katie Hutton, Paul Masser, John McCarthy, James McMeekin, James McNicoll-Norbury, Kevin Paton and Alistair Robertson. Processing and preliminary recording of the finds by Julie Franklin, while soil samples were processed by Steve Roe. Analysis was undertaken by the following specialists: pottery, Ian Rowlandson and Jane Young; Lithics and ceramic remains at Wadlow and other local sites, as did Andy Thomas who also monitored the work on behalf of CAPCA.

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Nuala Woodley was Project Officer for the works. The project was managed for Headland Archaeology originally by Mark Roberts (evaluation), and then by Joe Abrams (mitigation). Editing of this article for publication was carried out by Jen Richards.

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