

Archaeological Field Unit

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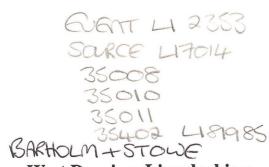
Prehistoric Landscapes at Stowe Farm, West Deeping, Lincolnshire: An Archaeological Excavation

> Steve Kemp 1997

**Cambridgeshire County Council** 

Report No. N 04

Commissioned By Phoenix Consulting on behalf of Redland Aggregates Limited



# Prehistoric Landscapes at Stowe Farm, West Deeping, Lincolnshire: An Archaeological Excavation

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1997

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Report No N 04

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# Summary

An enhanced archaeological recording brief was carried out in area 2B of Redland Aggregates quarry at Stowe Farm, West Deeping, Lincolnshire (NGR TF100111), by the Archaeological Field Unit of Cambridgeshire County Council. The work took place between 17th June and 5th August 1997, and was undertaken in accordance with the Design Brief prepared by Phoenix Consulting and approved by the curatorial authority of Lincolnshire County Council. It was designed to continue the enhanced recording brief previously undertaken by Tempus Reparatum. This phase of work undertook excavation within 2.06 ha of the total area of 17.5 ha outlined for extraction.

Results indicate that the remnants of a Bronze Age agricultural system were preserved within the excavation area. The Bronze Age landscape appeared dynamic, consisting over time of a series boundaries defined by posts, within or on the edges of which lay pits and structures. The latter were either circular in form or a more complex series of interlinked semi-circular structures. The pottery and lithics were so sparse that it is unlikely that these are the remains of settlement, but are rather a series of small agricultural structures within field systems.

During the later prehistoric and historic periods ditches appear to be the main method by which boundaries were formalised. Romano-British activity in the area consisted of a pair of parallel interrupted ditches set at 62m apart. These ditches may represent boundaries to long or narrow fields which lay on the southern side of the Romano-British trackway which was identified by Tempus Reparatum in Area 2A.

Northwest-southeast orientated furrows crossing the site represent the remnants of a medieval field system. Traces of an earlier system which consisted of narrower cultivation strips were present. The alignment of the furrows appears to duplicate that of the Romano-British field system, possibly indicating some continuity in the landscape structure from Roman times until enclosure.

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# Prehistoric Landscapes at Stowe Farm, West Deeping, Lincolnshire: An Archaeological Excavation. TF 100/111.

#### 1 INTRODUCTION

Archaeological excavations at Redland Aggregates quarry of Stowe Farm, West Deeping, Lincolnshire were undertaken by the Archaeological Field Unit of Cambridgeshire County Council (CCC AFU) in 1997. Excavations were commissioned by Redland Aggregates Limited and were monitored by their archaeological consultant Dr C.E. Howlett of Phoenix Consulting. The excavations were also monitored by J. Bonner on behalf of Lincolnshire County Council.

Prior to 1997 Tempus Reparatum undertook the archaeological work including a desk-top assessment, non-intrusive survey and field evaluation at Stowe Farm. In 1995 Tempus Reparatum undertook excavations in advance of Phases 1A and 1B extraction, this was followed in 1996 by excavations in advance of Phase 2A. In 1997 the CCC AFU were commissioned to undertake an enhanced recording brief within Phase 2B.

The site lies to the north-west of the existing Redland Aggregate's West Deeping quarry and offices, to the south and west of the Barholm and Greatford Roads and immediately to the west of the Greatford Cut. To the east of the site lies King Street, a former Roman Road. The site is located at TF 100111 and consists of a 17.5 ha extension to the existing quarry (Figure 1).

This document reports on the excavations undertaken by the CCC AFU in advance of Phase 2B extraction. Phase 2B was located to the west of Phase 1 and south of Phase 2A and consists of an area of 2.06 ha (Figure 1).

Although the CCC AFU is a county based unit which prides itself on the quality of archaeological work it undertakes within the County of Cambridgeshire, on occasions the Unit works outside the County in areas where the Unit has specialist knowledge. Such work is undertaken in cooperation with existing local archaeologists. In addition to undertaking archaeological evaluations, excavations and surveys the CCC AFU offers an extensive programme of monument management and education services (including adult education) within the County of Cambridgeshire.

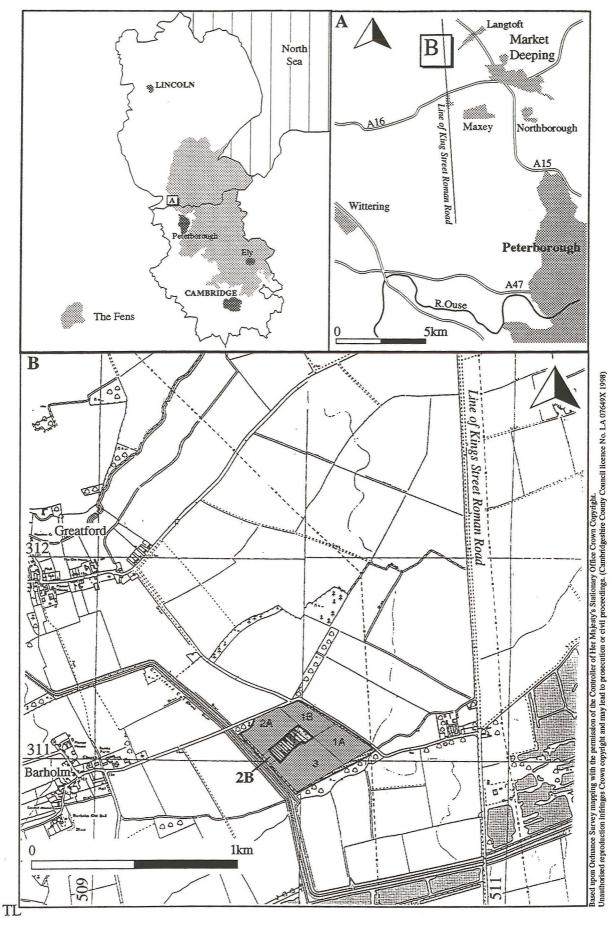


Figure 1 Site location

#### 2 GEOLOGY AND TOPOGRAPHY

The site lies to the north of the Welland River and immediately to the west of the Greatford Cut. The surrounding area lies at about 10m OD. Within the excavation area lie terrace gravels which are in the process of being extracted. Prior to the extraction the land-use for this area was arable. Pasture lies on the eastern side of the Greatford Cut.

#### 3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Archaeological investigations into the development of the local landscape within the extraction area began in 1989 with a review of the archaeological potential of the proposed quarry. Since then non-intrusive and intrusive methods of investigation were used to evaluate the area. In 1995 the first phase of excavations were undertaken and followed in 1996 with Phase 2 A.

The terrace gravels of the Lower Welland valley are rich in archaeological remains and particularly of those dating to the prehistoric period as shown by excavations at Bainton, Barnack and Maxey (Pryor et al 1985, Reynolds 1992).

Sites known to surround the extraction area of prehistoric date include ringditches and barrows which are visible as cropmarks. One of these lies within the extraction area. Iron Age and Roman remains include an agricultural settlement at Greatford (Scheduled Ancient Monument 327), and SAM 160 another Roman settlement which lies about 300m to the northwest of the extraction area. Cropmarks extend throughout the parishes of Barholm and Greatford indicating the archaeological importance of this area and its wider importance as part of the prehistoric and historic landscapes of the Welland valley (RCHM 1960).

Surveys specific to the extraction area include an aerial photographic assessment which identified the presence of two ring ditches, several large pits and a number of ditches within the site. Fieldwalking failed to locate any dense artefact scatters with only 1 artefact occurring every 9 ha; this was used to suggest the absence of prehistoric settlement (Howlett 1994). The geophysical survey proved to be inconclusive due to the low magnetic variability. The cartographic survey was used to indicate that the area has been under continuous plough during the historic period (Howlett 1994). However, further investigations by Tempus Reparatum suggest a period of tree cover during the Anglo-Saxon period which they related to a great forest which lay between Peterborough and Stamford (Kiberd 1996a; 32).

Trial trenching was undertaken to verify the results of the non-intrusive survey techniques. A complex of prehistoric ditches and pits were identified. The evaluation highlighted the potential of the area and therefore Tempus Reparatum designed a strategy to recover the archaeology. A complex multiperiod site emerged from the 1995 excavations (Kiberd 1996a). The

archaeology consisted of features which have been interpreted as houses, agricultural structures, animal pens, stys and pits of Bronze Age and/or Iron Age date

The evidence for intense prehistoric occupation continued into Phase 2A with an increase in the number of pits and structural elements as opposed to boundary features. There is also an increase in animal bone and pottery which may be associated with domestic activities. Whilst pits and post-holes are present throughout the excavation areas Tempus Reparatum suggest that the apparent increase in structural elements to the north-east of the site indicates that the main settlement lay in this position however, the report also suggests that the settlement evidence is concentrated in the west whilst the field systems lie to the east (Kiberd 1996, 21). Larger pits which were found to contain waterlogged remains have been interpreted as wells. Radiocarbon dates of between 1600 and 1200BP were provided by these remains (Kiberd 1996b).

# 4 PREDICTED ARCHAEOLOGICAL REMAINS

A number of features or landscape units identified by Tempus Reparatum as lying adjacent to Phase 2B are likely to impact on this Phase of work. However, a number of factors hinder the analysis of features lying on the fringe of Phase 2B:

In the case of Phase 1 the report is rather interpretative and provides little detail about feature morphology. It is therefore difficult to know the specific nature of the remains extending in to Phase 2B.

In previous seasons of archaeological excavation, a number of different survey points and grids were used. This, and the lack of an easily accessible plan, has hindered the integration of spatial data. The 1997 excavations used yet another grid; secure survey markers however, have now been placed around the quarry so that subsequent plans can be accurately integrated.

The Phase 2A report is selective about the features it describes and illustrates. It is therefore not possible to assess the density and complexity of the archaeology present within this area. The nature of the archaeology which fringes Phase 2B cannot be assessed without accessing the archive.

Due to the requirements of our archaeological specification, which was to recover, record and report on the archaeology in Phase 2B prior to the formulation of a comprehensive post-excavation strategy this report is an interim statement. As an interim report the earlier archives have not been accessed to facilitate the integration of the site results; the specification (para. 6.2.1) indicates that this will occur at a later date.

#### Phase 1 features

A Medieval northwest-southeast orientated furrow (H195) divides the Phase 1 excavations from Phase 2B. To the north of the furrow lie a complex of

farmsteads (A183, E178, E156) marked by round houses and outhouses. E156 is bounded to the south by a trackway, whilst A183 is bounded by ditch Y217 (marked as Y213 in Phase 1B Figure 5). Unspecified agricultural workings have been identified (A158 and A173). Ditch Y163 is part of the Celtic field system and lies beneath the medieval headland which runs northeast-southwest into Phase 2B. Ditch Y183 runs into Phase 2B, however, in the Appendix only an A183 is listed (Kiberd 1996 a).

The Phase 2A report, fortunately, provides a few additional details about the archaeology which extends from Phase 1 into Phase 2B. Y217 is described as a large prehistoric ditch of probable Neolithic origin which runs for about 450m across the entire site (feature 1; Kiberd 1996 b). Other ditches of prehistoric and/or Roman date are shown on the aerial photographs as running across Phase 2B, one of these is presumed to be Y183.

#### Phase 2 features

The published site plans only show medieval furrows (H248-256 and H273-279) crossing into Phase 2B. However, the aerial photographs show that two ditches (8 and 10) of possible human construction also cross both Phases (Kiberd 1996 b).

A large pit similar to the wells identified in 1996 was also identified on aerial photographs. The extent of Phase 2B was restricted by the reduced extraction requirements of the quarry and this feature will therefore need to be tackled during Phase 3.

# 5 AIMS AND OBJECTIVES

The CCC AFU was commissioned to undertake an enhanced recording programme within the Phase 2B extraction area. This phase of work would entail excavation of selected archaeological features and environmental sampling which would continue the recovery of the archaeology and enhance the results of the work undertaken by Tempus Reparatum.

The aim of the project has been to reconstruct the components of the prehistoric and historic landscapes surviving within the extraction area. These landscape components will be integrated with settlement evidence, field systems and ceremonial monuments and built into the broader landscape models of the Welland Valley. However, the intention has been that this landscape research would only progress once the excavation phase has been completed. The aim of this report is therefore to describe the archaeology and provide a provisional interpretation of the remains recovered during the Phase 2B excavations.

#### 6 METHODOLOGY

Overburden which consisted of topsoil and subsoil were removed to a level where the archaeology was clearly visible. In all cases this proved to be at the junction between the topsoil/subsoil and the terrace gravels. Machining was undertaken with a 360° tracked excavator equipped with a toothless ditching bucket which was supplied Redland Aggregates. Spoil was removed from the excavation area using a pair of six wheel 20 tonne dumper trucks.

The area for analysis during Phase 2B was reduced to 2.06 ha on account of the reduced sand and gravel requirements of Redland Aggregates.

All stripping of the overburden was regularly supervised in order to maintain a suitable depth of machining, whilst also monitoring for the presence of fragile archaeological remains.

Hand excavation of features was undertaken within the excavation area. Segments between 1m and 2m in length were hand dug through ditches, whilst pits and post-holes were half sectioned. A sample of exposed features were excavated in order to characterise features in terms of form, fills, and date. Where structural remains were identified these and associated features were targeted for a higher level of excavation in order to define the nature of the archaeology and recover additional dating evidence.

All potential archaeological features were then planned using a total station to a level of accuracy equivalent to a 1:100 hand drawn plan. Site plans were generated on computer at our Fulbourn offices and verified on-site.

Field records were made for excavated and unexcavated features of probable archaeological origin. Where features were excavated 1:10 sections were drawn in order to record the depositional sequence. A photographic record of all excavated archaeological features was completed.

Environmental samples were recovered from the features during excavation following advice from Dr James Rackham of Environmental Archaeology Consultancy. The decision to sample was markedly affected by the surviving depth of feature, fill type and the presumed date of these features. Sampling therefore tended to concentrate on the deeper prehistoric pits where environmental remains were most likely to survive. The results from this work are detailed in Appendix B.

Finds analysis was undertaken by members of the CCC AFU. A detailed pottery report can be found in Appendix A, whilst due to the sparsity of the lithics recovered they are briefly described in the main text.

#### 7 RESULTS

Twenty-one percent of the 410 potential archaeological features identified in the excavation area were excavated. Additional features were excavated but, are not described below as they were of natural origin.

On account of the small amount of dating evidence retrieved from the excavated features it is difficult to continue exactly with the methodology of spatial analysis and phasing employed in previous reports by Tempus Reparatum.

Instead it is proposed initially to describe the spatially restricted landscape units where they exist i.e. sets of post-holes, this will then be followed by the more dispersed elements of post-holes and pits which do not form particular groupings. Artefactual, dating and environmental evidence will be summarised within the text section of the appropriate feature. Further details can be found in the appendices.

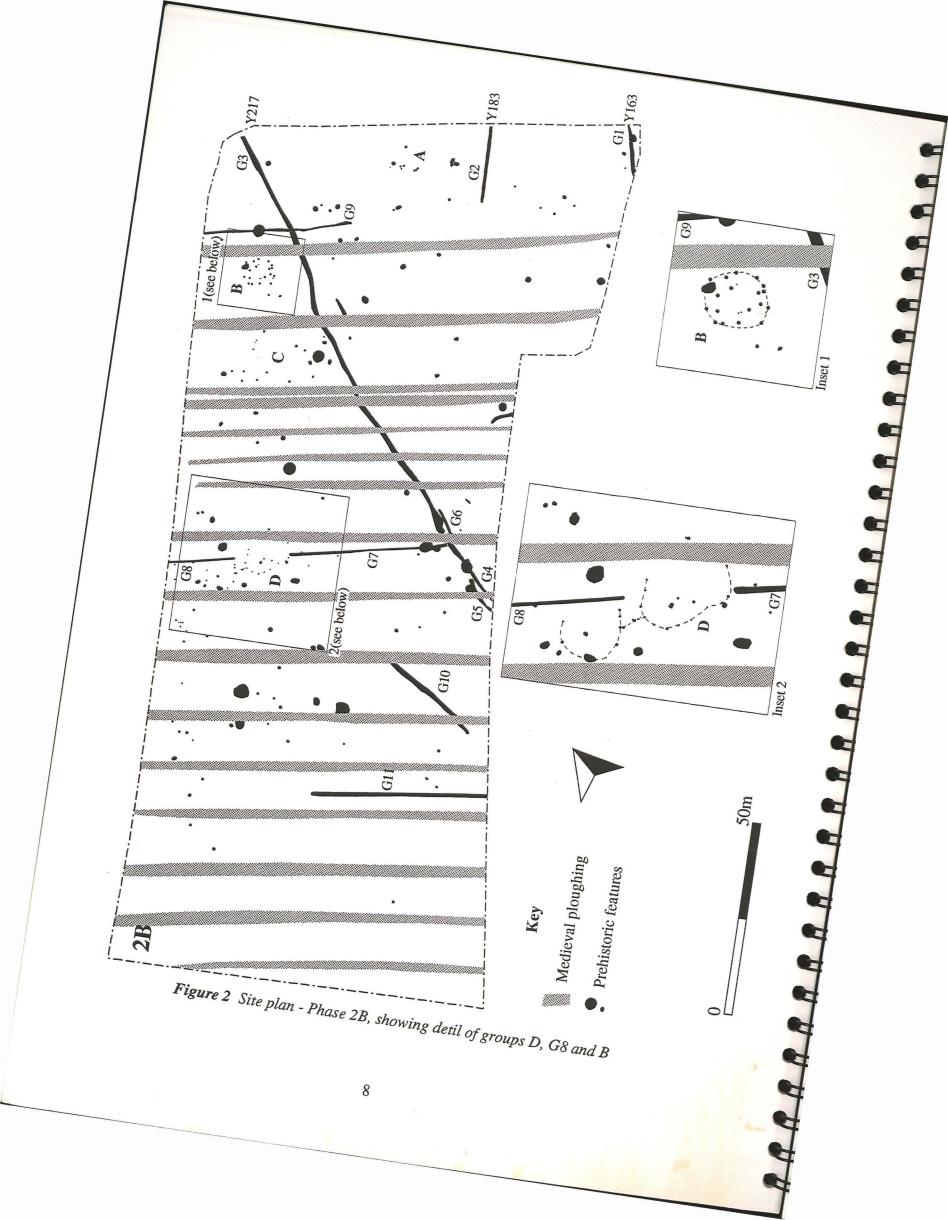
Because of the limits of the dating evidence subsequent work may prove that the spatial groupings highlighted for discussion are not a group of contemporary features, which they are presently assumed to be. In addition, the archaeological evidence for certain periods will prove to be more dispersed than at others, as seen in a similar landscape study at Wicken, Cambridgeshire which lies along the southern edge of the Fens. At Wicken the Neolithic features tend to be dispersed whilst the Bronze Age elements congregrate (Kemp forthcoming). Therefore, it is probable that due to the different forms occupation and activity areas can take, compounded by our existing lack of temporal control in this case, landscape groups can not solely be based on spatial association.

As a result, temporal phasing of the archaeological remains will remain at a very broad level. It is hoped that further analysis, following the completion of all archaeological excavations within the extraction zone, will target areas which require a refinement of the phasing in order fully to understand the complexity of the site. Such analysis should probably include radiocarbon dating from charcoal samples. Appropriate samples have been collected in anticipation of a targeted strategy. The paucity of suitable material for radiocarbon dating, however, may suggest that other scientific dating methods (thermoluminescent dating, for example) are worth considering as an alternative.

The archaeological remains and natural features consist of:

#### Natural

In the main the natural features could be distinguished on the basis of a higher sand component and morphology, although this method was not fool-proof as these features were highly variable. The sediment descriptions made of all features which had a possibility of being archaeological has so far proved of little value in defining the feature components which indicate whether a feature is natural or not. The initial field observations and judgements have been used to separate the archaeological from the natural features, although it



is possible, given the similarity between the infill sediments, that some of the natural features have been introduced into the archaeological record. It is unlikely that archaeological features have been misinterpreted as natural because the unexcavated appearance, with the natural features being the most irregular, has for the present proven to be the most successful approach.

In addition, in a similar way to which the archaeological features were found in groups within the excavation area, natural features tended to have a similar association, particularly those associated with tree root activity which occured in discrete groups.

Natural features within the excavation area consisted of tree root activity and periglacial features such as ice wedges and frost heave structures. No tree throw structures were observed and although there was plenty of evidence for tree root activity all of these features predated the archaeology. There was no evidence within Phase 2B for the extensive medieval forest postulated by Tempus Reparatum (Kiberd 1996a)

# Archaeology

Post-hole groups

Three concentrations of post-holes were defined and partially excavated during the course of the Phase 2B excavations. A fourth more disparate group was also recognised.

A. North-eastern group

Fills # and Cuts [#]: 7, [8]; 13, [14]; 15, [16]; 19, [20]; 21, [22], 23, [24], 25, [26], 27, 37, [28]

Association: 3, [4] pit

This group consists of a series of shallow features up to 0.16m in depth interpreted as post-holes. They are largely circular in shape ranging in diameter from 0.25 to 0.47m in diameter. [14] and [20] are ovate and have maximum dimensions of 0.25 and 0.38m respectively.

These features are filled with yellow brown or dark grey brown clayey silts with a small sand component. The gravel component was generally less than 5%, however, this increases towards the base of [28] and in cut [8] was as high as 15%. All of the fills contained a small amount of charcoal with higher percentages visible in fills (25) and (27). A fragment of burnt sandstone was found in feature [24].

The close proximity of these features and the discrete group which they form may suggest that they are contemporary and that the variation in diameter may results from the size of posts inserted in to these features or from the extraction of these posts. The fills of these features, which are associated with a disuse phase, are also very similar with all features containing varying amounts of charcoal. Although, these fills are dependent on how the function of this area varied over time and therefore the types of material available for deposition within these features the similarity could indicate that they are contemporary. The presence of burnt sandstone within one of the post-holes,

which due to its highly burnt condition is unlikely to have been the remains of the post-packing, may indicate that these features were intentionally backfilled.

Providing these are the remains of a single phase which is suggested by the infill sequence it is likely that on the basis of the surviving evidence the structure was a maximum of 7m across. Group A is a similar size to Group B, although, it does not display the circular form visible in the latter group. Given the shallow condition of some of these post-holes ([14] is only 0.08m in depth) it is possible the full ground plan of this structure did not survive and what remains are posts-holes representative of a combination of exterior and interior posts.

Floatation samples produced animal bone and cereal grains from post-holes [24] and [8] respectively.

Pit [4] lies within a couple of metres of post-holes [22] and [26], and may have lain within the proposed structure. The pit is 0.13m in depth and is circular with a diameter of 0.70m. The pits is filled with greyish brown clayey silts with <5% gravels. The presence of charcoal within the fill could indicate that it was open at the same time as the structure was in use and/or infilled during the same phase of abandonment. Flotation recovered cereal grain from the pit fill.

B. Northern group 51, [52], 53, [54], 55, [56], 57, [58], 59, [60], 61, [62], 63, [64], 65, [66], 67, [68], 91, [92]

11 other post-holes were not excavated

Association: 89, [90]? pit 67, [68], 69, [70] stake holes

Group B consists of a series of shallow features up to 0.20m in depth interpreted as post-holes. They are all circular in shape and range in diameter from 0.25 to 0.40m. [68] is only 0.15m in diameter, it is also the shallowest of these features.

These features are filled with yellow brown or dark grey brown clayey silts with a small sand component. The gravel component was generally between 5 and 10%. Only post-holes [54] and [58] were observed to contain charcoal during excavation and could therefore belong to a separate structure. Alternatively, given their proximity to each other these fills could also indicate that the infill regime and source of sediment which infilled the post-holes varied across the structure.

The close proximity of these features, the discrete group which they form and the double concentric ring in which they are laid out may suggest that all of these post-holes are contemporary. If so a structure of 7m in diameter with an internal ring of posts which was 4m across was present in this area. The fills of these features which are associated with a disuse phase are also very similar possibly indicative of single phase of infilling which may or may not have been by human processes, whether intentional or unintentional.

The circular post-hole in plan is suggestive of the survival of the majority of the ground plan of a single structure of 7m in diameter.

As with Group A a single pit [90] lies within a couple of metres of post structure. In this case the pit lies on the eastern bounds of the ring of postholes and would have cut across the external boundary of the structure. This shallow pit also cuts post-hole [92]. It is therefore unlikely that the pit is contemporary with the post structure and indicates a later phase of activity in the immediate area.

Pit [90] is 0.10m in depth and is oval in shape with dimensions of 1.85m x 1.25m. The pit is filled with dark greyish brown clayey silts with <5% gravels. The presence of charcoal within the fill may suggest an association with post-holes [54] and [58] and therefore possibly with one phase of the structure if more than one phase exists. Flotation recovered cereal grains and animal bone.

# C Northern fragmented group

71, [72], 73, [74], 75, [76], 77, [78], 83, [84], 85, [86], 87, [88], 93, [94], 95, [96], 101, [102], 103, [104], 105, [106], 107, [108], 109, [110]

1 post-hole was not excavated

Associations: [123] pit.

4 pits were not excavated

A dispersed group of post-holes lies directly to the south of Group B indicating another area of discrete prehistoric activity.

Fifteen post-holes are spatially associated with five pits, however, individual structures are not distinguishable within the mêlee of features. Further indepth analysis may aid the definition of direct association. In the meantime it would appear that the post-holes can be roughly divided into three groups:

- 1. [102], [104], [108], [110] which are between 0.18 and 0.30m in maximum dimension and are circular to ovate in shape. Depths are between 0.09m and 0.24m.
- 2. [72], [74], [76], [78], [84], [86], [94], [96] and [106] are between 0.35m and 0.60m in maximum dimension. They are largely ovate in plan. Depths vary from between 0.08m to 0.30m.
- 3. [88] is 0.95 by 0.70 in size and an elongate ovate shape. The feature is 0.17m in depth. This occurs as one of three similar sized post-holes around pit [123]. [88] and the associated post-holes may provide the only clearly identifiable structure in this area.

All of these features are filled with a single fill of sandy, silty clays with a gravel component which varies between 1% and 10%. Sediment colour varies

between a brownish yellow and a dark yellow brown. Neither soil colour or sediment description correspond with the above groups.

Given that there is little difference between the infill sediments and that morphology will be dependent on such variables as surviving depth, post size/shape and the function of individual posts within the structure, it is presently difficult conclusively to separate the sub-groups into phases. It is possible that they are the remains of one large structure, however, as [88] has clear spatial and morphological associations with three other pits surrounding [123] it is more than likely that a number of smaller structures lay to the south of Group B.

Flotation recovered cereal remains from post-hole [102].

D. Western group
134, [135], 144, [145], 146, [147], 148, [149], 150, [151], 152, [153], 154, [155], 156, [157], 158, [159], 160, [161]

Unexcavated: 25 post-holes

Associations: 5 pits unexcavated

A group consisting of a series of curvilinear arrangements of post-holes extending over an area of 26m in length and 10m in width. Nine of the 10 post-holes excavated were between 0.16 and 0.31m in diameter and were circular in plan. Depth varied between 0.06 and 0.15m in depth. They were filled with brownish yellow to dark grey brown sandy or clayey silts. Up to 10% gravels were present within these sediments.

A single larger post-hole [135] was excavated. This post-hole was 0.49m in diameter and 0.30m in depth. This is one of three similar sized post-holes which lie within the area defined as Group D. Two of these lie central to semi-circular areas defined by groups of smaller post-holes. Presuming that the sets of post-holes are contemporary, which is supported by the similarities in size, spatial association and abandonment sediments, the remains indicate a complex structure. The sets of post-holes define three enclosures each about 7m in diameter. Two sets are joined by a group of four linear closely set post-holes whilst the eastern group conjoins to the central group. The larger pot-holes may indicate the presence of a larger post supporting the central structure of a roof. Two entranceways lie to the north of the structure.

The fill of posthole [135] which lies central to one of the structures contained numerous sherds of Bronze Age pottery (Appendix A). This suggests that the structure was possibly abandoned during the late Bronze Age. A single flint flake of indeterminate date was also found within this feature.

Six pits lie external to the main structure and could be contemporary, however, none were excavated.

Flotation recovered animal bone and cereal remains from post-hole [135].

E. Dispersed post-holes and pits (<2m Ø) 35, 34, 36, [33], 40, 41, 42, 43, [44], 48, 79, 81, 82, [47], 100, [99], 173, 143, [142], 170, 169, [168], 188, [189], 192, [193], 194, [195], 196, [197]

Sixty-two small pits or post-holes were identified beyond the bounds of the main feature concentrations, of which eight were excavated. A further five which were initially thought to have been archaeological were found to be natural.

Of those that were excavated [168], [193] and [195] were interpreted as post-holes during excavation, the others as small pits. The post-holes had diameters between 0.77m and 0.96m and depths of between 0.18 and 0.50m. These were filled with dark yellow brown sandy silty clays or silty sands with about 5% gravels.

Those that were interpreted as pits are between 0.75 and 1.75m in diameter with a depth of between 0.20 and 1.02m. [197] is the deepest of these pits and is filled with yellow brown to light olive brown silty sandy clays with varying amounts of sands and gravels. [99] is a shallow pit cutting 0.20m into the natural and filled with organic sandy silts with a high percentage of gravels. A fragment of burnt sandstone was recovered from the fill of [99].

These results suggest that there is considerable variation within the pits and post-holes found dispersed around the site and there is some overlap between the two types of features which will require further investigation.

A number of alignments were observed within the field, however, on analysis of the survey drawings these are less obvious. Rarely can three or more postholes be said to form a line, and again this may be fortuitous as different sets of post-holes lie adjacent to each other. For example post-hole [168] forms a line with pit [142] with an unexcavated pit lying between. However, the unexcavated pit may form a sub-group of three features which lie between [142] and [168]. If this alignment was intentional posts would have been set at between 8.5 and 10m apart. A distance of 10m lies between post-holes [193] and [195]. Within the Phase 2A post-hole alignment posts were set at about 1m apart. Therefore, alignments may be occurring in a different order of scale from those observed in previous years and possibly at a different date although this will require further clarification.

Flotation recovered cereal remains from pits [47], [99], [142], [189], [195] and [197]. Over 36 grains were found in fill 100 of pit [99]. Animal bones were recovered from pit [99] and [189].

Pits [33], [44], [47] and [99] contained pottery which are likely to have been of Bronze Age date.

F. Large Pits (> 2m Ø) 97, 111, 112, 113, 116, 115, 114, [98], 124, 125, 126, 127, [123], 133, 132, [131], 174, 162, 175, [163]

Four of the eight pits which were over 2m in diameter were excavated. These were all relatively shallow ranging between 0.35m and 0.88m in depth

compared with about 3 to 5m in diameter and up to 1.50m in depth in Phase 2A.

These pits occurred dispersed throughout the Phase 2B area. Except for a group of three located on the western margin adjacent to Group D.

Pit [98] is 2.66m by 2.40m with a depth of 0.88m and is the smallest and deepest of these pits. The three other pits are about 3.20m in diameter being circular or sub-ovate in shape. [98] is also distinguishable on the basis of fill type as whilst in general the clay component increases with depth in [123], [131] and [163], within [98] the sand and gravel component increases.

The edges of these features are slightly concave suggesting a period of weathering whilst the pits were left open. The absence of sands and gravels in the base of the three larger pits also suggests that these were probably cleaned out from time to time. The presence of silty clay layers at the base of these pit may indicate that they were left open for some time and held water prior to or during abandonment into which the fine sediments settled.

Flotation recovered cereal grains from pits [98], [123] and [131]. Animal bone from pits [98], [123] and [131].

[98] is the only large pit which contained any pottery. The ten fragments are likely to be of Bronze Age date. The upper fill to this pit contained two flint flakes of indeterminate date.

# G. Linears

12, 11, [10], 17, [18], 30, [29] 31, [32], 38, [39], 46, [45], 49, [50], 119, 130 [120], 121, [122], 129, [128], 138, [139] 164, [165], 166, [167], 178, [177], 181, [182]

G1 [45]: East-west orientated ditch of 0.85m in width and 0.22m in depth. The ditch is filled with dark yellowish brown sandy silty clays with about 5% gravels. This is the only ditch in Phase 2B to be cut by a pit ([33]).

Flotation recovered cereal grains.

Ditch [45] extends from phase 1B (Y163) where it is interpreted as of Bronze Age date although surviving into the Roman period.

G2 [18], [32]: East-west orientated ditch of between 0.51 and 0.76m in width and 0.07 to 0.16m in depth. The ditch is filled with yellowish brown sandy silty clays with between 1 and 5% gravels.

This ditch continues into the excavation area from Phase 1B and terminates 20m into the area. This ditch is equivalent to Y183 recognised by Tempus Reparatum.

G3 [10], [29]: Northeast-southwest orientated ditch which terminates 110m into the area. The alignment is then continued by G4 indicating an interruption in the ditch and presumably the presence of an entranceway.

Two phases of ditches were identified; [29] was about 1.4m wide and 0.22m in depth and filled with silty sandy clays. This was re-cut by a ditch of 0.98m in width and 0.19m in depth and was filled with olive brown silty clays with charcoal. A late Iron Age/Roman loom weight was recovered from the infill deposits of [10] suggesting that this ditch may have been recut and infilled about this time.

These phases were recognised during excavations in extraction phase 1B and given a Neolithic date with the ditch surviving into the Iron Age. The infill sediments of [10] were cut by G9.

G4 [165]: Northeast-southwest orientated ditch which continues the boundary demarcated by G3. This ditch begins 2m south of G3 and continues into Phase 3.

The ditch is 1.40m in width and 0.26 m in depth and is filled with olive brown silty clays with 5% gravels. No associated features were found at the northern termination of this feature, however, it did cut G7.

Flotation recovered cereal grains.

G5 [128]: Northeast-southwest curvilinear ditch adjacent to G4.

The ditch is 1.22m wide and 0.25m in depth and filled with brown clayey sandy silts with between 1 and 5% gravels. This ditch cuts pit [163].

Flotation recovered animal bone.

A single sherd of Bronze Age pottery was recovered from the fill to this ditch.

- G6 [177]: Northeast -southwest gully of 9m in length which lies about 1m to the east of G4 and G5. This feature is 0.50m wide and 0.17m in depth. It is filled with yellowish brown sandy silty clays with about 5% gravels.
- G7 [120], [167]: East-west orientated ditch contained within Phase 2B; the alignment, however, extends into Phase 2A as G8.

The ditch is 40m long, 0.73m wide and 0.33m in depth. The eastern end is cut by G3 [179]. The fill consists of dark yellow brown clayey silts with up to 5% gravels.

G8 [122]: East-west orientated ditch which extends into Phase 2A. The alignment is continued 14m to the east by G7. This ditch was not mentioned in the Phase 2A report.

The ditch is 0.35m wide and 0.07m in depth. The fill consists of yellow brown clayer silts with < 5% gravels.

The western terminus of G7 occurs 1m east of post-hole Group C suggesting that the structure was either placed within the interruption between G7 and G8 ditches or these ditches respected an existing structure and thus terminated at these points.

A number of widely dispersed post-holes lie along this alignment set at about 20m intervals. One of these ([137]) is cut by ditch G8. This suggests that some of the individual posts described as dispersed throughout the excavation area may have acted as markers indicative of boundaries prior to the landscape being demarcated by ditches.

G9 [39], [49]: East-west orientated ditch which extends 37m into Phase 2B from Phase 2A. This ditch was not mentioned in the Phase 2A report. It cuts across G3 which in its final stages is likely to be of late Iron Age or Roman date. G9 is therefore more recent than G3.

The ditch is between 0.43 and 0.47m wide and up to 0.60m in depth. It is filled with yellow brown sandy or clayey silts with up to 15% gravels.

- G10 [181]: North-south orientated ditch of 27m in length which lies solely within Phase 2B. The ditch is 1.40m in width and 0.30m in depth. it is filled with olive yellow sandy silty clays with up to 5% gravels.
- G11 [139]: East-west orientated ditch which extends eastwards into Phase 3. The ditch is over 45m long, 1.13m in width and 0.26m in depth. It is filled with light olive brown silty clays with about 5% gravels.

A single post-hole was found at the western termination of this ditch. The post would appear either to have been erected whilst the ditch was still open and removed prior to the infilling of the feature. Alternatively given the presence of another post-hole on this same alignment it is possible that a series of posts demarcated the area prior to the phase of ditch excavation.

H Ridge and Furrow.

A large number of shallow northwest-southeast orientated furrows cross the area cutting through the earlier archaeology. In general these furrows are set at 12m apart, however, in areas traces of furrows occur at intervals of 7m apart and indicate that the layout of cultivation strips within the medieval system changed over time (Figure 2).

In the eastern corner of the site lay the remnants of a headland which continued through from Phase 1A.

#### 8 CONCLUSIONS

The Phase 2B excavations would appear to indicate that Bronze Age activity was widely spread throughout the area and probably consisted of the large pits and at least one of the structures (Group D). The quantity of pottery recovered from the central post-hole of the Group D structure suggests that abandonment occurred during the late Bronze Age.

The evidence suggests that during the Bronze Age the area was demarcated by widely spaced posts, which are discussed under Group E. Three of the eastwest ditches (G7, G8 and G11) were shown to lie on the course of former post

demarcated boundaries, whilst G7 and G8 respect Structure Group D and may therefore have been contemporary. These results suggest that during the late Bronze Age a change occurred in the way that boundaries were written on to the landscape.

It would appear that the Bronze Age landscape was dynamic consisting over time of a series boundaries defined by posts, within or on the edges of which lay pits and structures. The structures are either circular in form as in the case of Group B or a more complex series of interlinked semi-circular structures as in the case of Group D. The pottery and lithics are so sparse that it is unlikely that these are the remains of settlement. Instead the Bronze Age landscape in this area is likely to have consisted of a series of small agricultural structures within field systems which appear at some point in the Bronze Age to have been bounded by posts and later by ditches.

During the later prehistoric and historic periods ditches appear to be the main method by which boundaries were formalised, although post alignments, probably of Iron Age date were identified in Phase 2A. During this phase of excavation results suggest that G3 went out of use during the late Iron Age or Roman period. Tempus Reparatum suggest that this ditch was initiated in the late Neolithic to early Bronze Age as an interrupted ditch system and then recut as a single linear ditch later in the Bronze Age. This is not supported by the stratagraphic evidence found during the course of these excavations. If our understanding of the evidence from Phase 2B is correct then G3 is unlikely to predate the very late Bronze Age as the alignment cuts the probable late Bronze Age ditch G7. It is more likely that within Phase 2B that G3 is of Iron Age date, possibly early Iron Age.

The other ditch boundaries are undated, however, the introduction of ditch boundaries continued after the infilling of G3 in the late Iron Age or Roman periods.

Although specific areas of single period activity can be defined a large number of features have been shown to lie external to these areas. For example in the main the larger pits are cut by the ditches and are probably of Bronze Age date. Pit [33], however, clearly cuts through one of the ditches assumed to be associated with one of the later phases of boundary construction. It is probably reasonable to assume that no individual period has a monopoly on a particular type of feature.

Phasing of the site is severely restricted as many of the features contain no finds and that features are dispersed and therefore have few if any stratigraphic relationships. As many of the features contain suitable quantities of charcoal for dating a targeted dating strategy should be defined on the basis of all phases of excavation (including Phase 3) when the exact dating requirements are known. During Phase 2B suitable quantities of charcoal for radiocarbon dating were recovered from pits and post-holes [8], [10], [24], [47], [90], [99], [135], [189] and [197].

This poor temporal control within Phase 2B has resulted in a loosely defined series of prehistoric landscapes in which it is difficult to be specific about any particular phase of the site. However, the methodology has allowed us to define the main elements of each of the prehistoric landscapes. Furthermore

although specific activities and the way boundaries were formalised over time has changed it is likely that this area has been a focus for agricultural production by Bronze Age, Iron Age, Romano-British, Anglo-Saxon and medieval people for at least the last three thousand years.

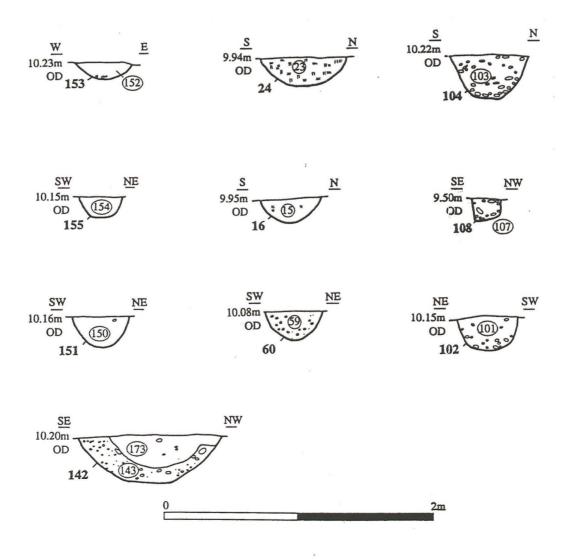
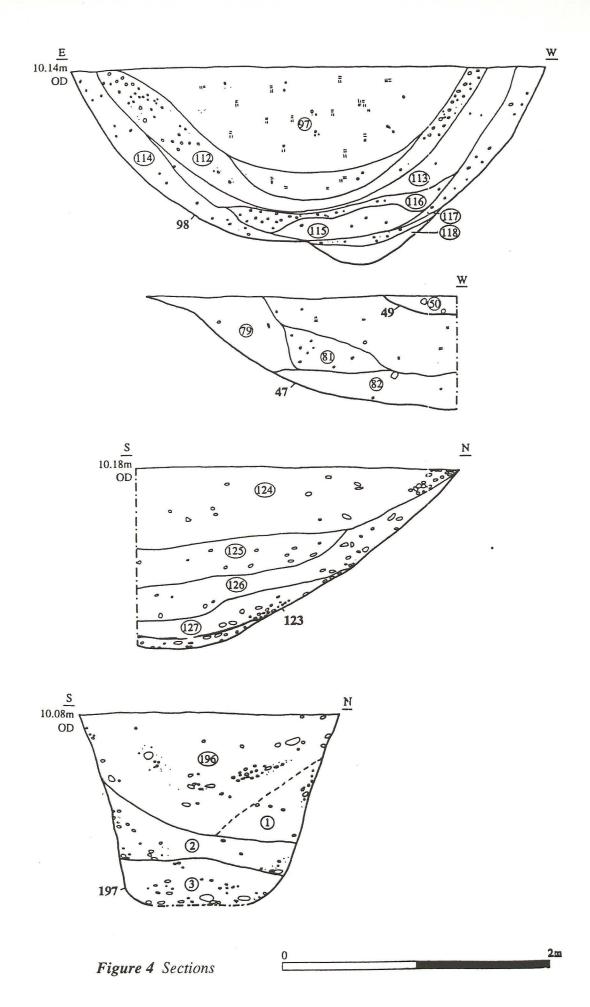


Figure 3 Sections



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# Appendix 1

Pottery from Stow Farm by Dr Jonathan Last

# Introduction

Pottery from Stow Farm came from just seven features across a large site, which is a very low density. Many of the pieces showed fresh breaks so the number of sherds represented is less than the actual number of fragments. In addition some old breaks could be refitted. The sherds generally seem relatively small and worn, but the presence of joins suggests these are not entirely residual assemblages. The high abrasion could be primarily an effect of the soil conditions, which have dissolved out much of the shell within the fabrics.

The majority of the sherds are characterised by oxidised exteriors and unoxidised interiors and cores. The fabrics include plentiful poorly sorted fine to very coarse fossil shell, much of it dissolved and represented by voids. Despite the uniformity of fabrics and general lack of decoration, however, components of different periods can probably be recognised.

# Description

Fill 34 of pit 33, which cuts a linear feature in the north-east of the site, contained fragments of a rim sherd, perhaps of everted form. Some irregularities on the top of the rim could be the remains of faint finger impressions though an insufficient length is preserved to be certain.

Fill 40 of isolated pit 44 contained seven fragments originally of three sherds. Two are in shelly fabrics with oxidised exteriors, while one contains coarse grog. This piece has an uneven exterior, which could represent the abraded remains of some rusticated decoration. One or two other sherds from across the site have similarly rough surfaces, though formal decoration is hard to recognize.

Fill 48 of pit 47 within a small group of features in the north of the site contained twelve fragments, possibly of five sherds - some of which refit across old breaks into parts of one or two vessels. There are no diagnostic or decorated elements present.

Fill 97 of pit 98 in the centre of the site contained ten fragments of perhaps five sherds, two of which join across an old break. One angular sherd with the interior surface missing may be part of a base. The rest are plain body sherds.

Fill 129 of ditch 128 may be related to a major linear boundary feature running north-south across the site. It produced one oxidised sherd which is part of the slightly everted and thickened flat rim of an undecorated vessel.

Fill 100 of pit 99 contained a relatively large assemblage, including five plain upright rims and five flat bases, generally with slack, rather rounded junctions (five). The majority of pieces are plain body sherds (about 33), some of which join. All are in shelly fabrics and a number of these sherds are oxidised throughout. In addition a few rather small and abraded fragments are decorated with comb impressions and, in

one case, finger-pinched rustication. One of the plain rims apparently has smoothed or slipped surfaces.

Fill 134 of post-hole **135** contained numerous fragments of perhaps ten sherds. Fabrics are again predominantly shelly but occasionally contain a little grog. The small number of diagnostic elements include everted rims, one weakly shouldered form, a footed base and a strongly curved body sherd.

#### Discussion

The small size of the assemblage and the lack of many diagnostic elements make conclusions rather tentative. Shelly fabrics per se can date to any period from the Neolithic onwards, but grog is most characteristic of Bronze Age fabrics. Probably Stow Farm is exclusively a Bronze Age assemblage. At Deeping St Nicholas the shelly and grogged Bronze Age fabrics appear comparable although 34% of the assemblage there was decorated (Gdaniec in French 1994). The absence of decoration and a Collared vessel component suggests Stow Farm is primarily later in date (middle to later Bronze Age).

However, the earliest material represented appears to be the few decorated sherds from 100, which are of Beaker and Rusticated Beaker type. They are part of a larger assemblage of predominantly undecorated vessels, which is not typical for the Beaker phase when plain pots were rare (e.g. at Hockwold Site 93, there was "no certain evidence for vessels without any decoration" (Bamford 1982: 21)). These decorated pieces are probably therefore residual within a later feature. The remaining sherds are hard to identify positively, but the simple forms and upright rims might indicate a (non-Collared) Urn assemblage, perhaps of the middle Bronze Age.

Fill 134, with more angular forms and complex profiles, might then represent a later Bronze Age (post-Deverel Rimbury) assemblage. The presence of some grog as a filler suggests this group is earlier than the Iron Age. The possibly decorated rim in 34 might be contemporary, and also that in 129. The other features with body sherds only (40, 48 and 97) are of indeterminate Bronze Age date, though the grogged sherd from the first of these may be relatively early.

The pottery from the earlier phase of work by Tempus Reparatum is also sparse and of little diagnostic value. Shelly body sherds came from 0272, 1258, 1259, 1768, 2085 and 2212. Unoxidised grog-tempered pieces came from 1147 and 1354, while a tiny unoxidised fragment came from 1262. All these are consistent with a Bronze Age date.

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# Appendix 2

# Environmental Archaeology Assessment by Dr James Rackham

#### Introduction

The fieldwork for this project was carried out by the Cambridgeshire Archaeological Field Unit (CCC AFU) under the supervision of Steve Kemp. The Environmental Archaeology Consultancy was commissioned to carry out the environmental work in conjunction with the CCC AFU and a programme of sampling was instituted that concentrated upon dated features, or groups of features, and samples from the fills of linear features where these were sectioned (see Fig. 2 - site plan). The site yielded features of Bronze Age and Iron Age date and a total of 68 samples were collected (Table 1). Although animal bone was collected during the excavation the burial environment was poor and little identifiable material was recovered (see below and Appendix 1).

Of the sixty eight samples collected sixty were for flotation and the extraction of plant and animal macrofossils. The remaining eight were collected for potential pollen analysis. In the event no preserved organic remains were identified from any of the flotation samples from the site and it was therefore considered unlikely that the pollen samples would yield pollen sufficiently well preserved to justify study. No further attention was given to these samples.

The samples collected during the fieldwork are listed in Table 1.

#### Methods

The animal bone collected during excavation was catalogued using the Environmental Archaeology Consultancy recording procedures (see Appendix 1), but no analysis has been carried out owing to the small size of the sample. Identifications were made by comparison to modern reference skeletons in the author's collection.

The soil samples were processed in the following manner. Sample volume and weight was measured prior to processing. The samples were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Both residue and float were dried, and the residue subsequently re-floated to ensure the efficient recovery of charred material. The dry volume of the combined 1st and 2nd flots was measured, and the volume and weight of the residue recorded. A total of 938 litres of soil was processed in this way.

The residue was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. A magnet was run through each residue in order to recover magnetised material such as hammerscale and prill. The residue was then discarded. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species

diversity recorded on the assessment sheet. The float was then bagged. The float and finds from the sorted residue constitute the material archive of the samples.

The individual components of the samples were then preliminarily identified and the results are detailed below in Tables 2 and 3.

Table 1: List of soil samples collected

| sample   | context | cut | vol in l. | weight in kg. | description            | date    | sample type |
|----------|---------|-----|-----------|---------------|------------------------|---------|-------------|
| 1        | 3       | 4   | 20        | 20            | pit fill               | IA      | flotation   |
| 2        | 17      | 18  | 30        | 33            | ditch fill?            | ?       | flotation   |
| 3        | 7       | 8   | 10        | 10            | post hole fill         | IA      | flotation   |
| 4        | 13      | 14  | 0.6       | 0.65          | post hole fill         | IA      | flotation   |
| 5        | 15      | 16  | 2         | 2             | post hole fill         | IA      | flotation   |
| 6        | 11      | 10  | 30        | 30            | ditch fill             | LBA-EIA | flotation   |
| 7        | 19      | 20  | 0.8       | 0.85          | post hole fill         | BA?     | flotation   |
| 8        | 21      | 22  | 0.7       | 0.03          | post hole fill         | IA      | flotation   |
| 9        | 23      | 24  | 6         | 7             | post hole fill         | IA      | flotation   |
| 10       | 25      | 26  | 0.8       | 1.2           | post hole fill         | IA      | flotation   |
| 11       | 34      | 33  | 30        | 28            | pit fill               | IA      | flotation   |
| 12       | 38      | 39  | 28        | 35            | ditch fill             | ?       | flotation   |
| 13       | 40      | 44  | 27        | 30            | pit fill               | IA      | flotation   |
| 14       | 46      | 45  | 27        | 31            | ditch fill             | IA      | flotation   |
| 15       | 48      | 47  | 28        | 31            |                        | BA      |             |
| 16       | 50      | 49  | 8         | 9             | pit fill<br>ditch fill |         | flotation   |
| 17       |         | 52  |           |               |                        | EIA     | flotation   |
|          | 51      |     | 1.1       | 1.3           | post hole fill         | BA/IA   | flotation   |
| 18       | 53      | 54  | 7         | 8             | post hole fill         | BA/IA   | flotation   |
| 19       | 55      | 56  | 2.5       | 2.5           | post hole fill         | BA/IA   | flotation   |
| 20       | 73      | 74  | 6         | 8             | post hole fill         | ?       | flotation   |
| 21       | 75      | 76  | 3         | 3.5           | post hole fill         | ?       | flotation   |
| 22       | 77      | 78  | 8         | 10            | post hole fill         | ?       | flotation   |
| 23       | 57      | 58  | 5         | 6             | post hole fill         | ВАЛА    | flotation   |
| 24       | 63      | 64  | 3.5       | 4             | post hole fill         | BA/IA   | flotation   |
| 25       | 61      | 62  | 2.5       | 2.5           | post hole fill         | BA/IA   | flotation   |
| 26       | 65      | 66  | 3.5       | 4             | post hole fill         | BA/IA   | flotation   |
| 27       | 83      | 84  | 10        | 12            | post hole fill         | ?       | flotation   |
| 28       | 85      | 86  | 5         | 6             | post hole fill         | ?       | flotation   |
| 29       | 87      | 88  | 30        | 34            | pit fill               | ?       | flotation   |
| 30       | 89      | 90  | 25        | 28            | pit fill               | ?BA/IA  | flotation   |
| 31       | 93      | 94  | 4         | 5             | post hole fill         | ?       | flotation   |
| 32       | 95      | 96  | 4         | 5             | post hole fill         | ?       | flotation   |
| 33       | 97      | 98  | 20        | 21            | pit fill (upper fill)  | BA      | flotation   |
| 34       | 100     | 99  | 45        | 48            | pit fill               | BA      | flotation   |
| 35       | 101     | 102 | 5         | 6             | post hole fill         | ?       | flotation   |
| 36       | 119     | 120 | 26        | 30            | ditch fill             | BA      | flotation   |
| 37       | 121     | 122 | 29        | 32.5          | ditch fill             | BA/IA   | flotation   |
| 38       | 124     | 123 | 28        | 28            | pit fill               | ?       | flotation   |
| 39       | 126/127 | 123 | 26        | 28            | pit fill               | ?       | flotation   |
| 40       | 129     | 128 | 27        | 31            | ditch fill             | BA      | flotation   |
| 41       | 133     | 131 | 28        | 33            | pit fill               | BA      | flotation   |
| 42       | 134     | 135 | 43        | 47            | pit fill               | BA      | flotation   |
| 43       | 138     | 129 | 30        | 33            | ditch?fill             | ?       | flotation   |
| 44       | 132     | 131 | 27        | 29            | pit fill               | BA      | flotation   |
| 45       | 173     | 142 | 8         | 9.5           | post hole fill         | LBA/EIA | flotation   |
| 46       | 144     | 145 | 1.2       | 1.4           | post hole fill         | BA/IA   | flotation   |
| 47       | 146     | 147 | 1         | 1.2           | post hole fill         | BA/IA   | flotation   |
| 48       | 148     | 149 | 2.5       | 2.5           | post hole fill         | BA/IA   | flotation   |
| 49       | 150     | 151 | 5         | 5.5           | post hole fill         | BA/IA   | flotation   |
| 50       | 164     | 165 | 30        | 34            | ditch fill             | ?       | flotation   |
| 51       | 169     | 168 | 9         | 11            | post hole fill         | BA      | flotation   |
| 52       | 170     | 168 | 10        | 11            | post hole fill         | BA      | flotation   |
|          | 162     |     |           | 32            |                        |         |             |
| 53<br>54 | 181     | 163 | 27<br>28  | 33            | pit fill               | BA      | flotation   |
|          |         | 182 |           |               | ditch fill             | ?       | flotation   |
| 55       | 115     | 92  | 8         | 9             | pit fill               | BA      | flotation   |
| 56       | 188     | 189 | 28        | 32            | pit fill               | BA/IA   | flotation   |
| 57       | 192     | 193 | 10        | 10.5          | post hole fill         | ?       | flotation   |
| 58       | 194     | 195 | 10        | 10.5          | post hole fill         | ?       | flotation   |

| 59 | 196 | 197 | 30 | 33 | post hole fill | ?  | flotation |
|----|-----|-----|----|----|----------------|----|-----------|
| 60 | 36  | 33  |    |    | pit fill       | IA | pollen    |
| 61 | 115 | 98  |    |    | pit fill       | BA | pollen    |
| 62 | 127 | 123 |    |    | pit fill       | ?  | pollen    |
| 63 | 132 | 131 |    |    | pit fill       | BA | pollen    |
| 64 | 34  | 33  |    |    | pit fill       | IA | pollen    |
| 65 | 48  | 47  |    |    | pit fill       | BA | pollen    |
| 66 | 97  | 98  |    |    | pit fill       | BA | pollen    |
| 67 | 202 | 197 |    |    | post hole fill | ?  | pollen    |
| 68 | 202 | 197 | 27 | 30 | post hole fill | ?  | flotation |

#### Results

The results have been summarised within groups of spatially distinct contexts of similar date (Table 2 and 3) and isolated features. The phasing utilised in this draft is preliminary only and may be expected to change with subsequent work and analysis. Modern or recent plant rootlets, uncarbonised seeds (most commonly *Chenopodium* sp) and shells of the burrowing snail *Cecilioides acicula* occur in most of the samples. These clearly could be or are of recent origin and indicate that there is some movement of material down through the soil. These elements have been ignored in the discussions below and indicate that one or two of the smaller finds may not be secure.

# Bronze Age

Contexts that have been assigned to the Bronze Age are distributed disparately across the site with no focus (Fig. 2: site plan). Four pits, 47, 99, 131 and 135 produced fragments of pottery and also included evidence of burning in the form of burnt gravel/flint or fired 'earth', the latter also occurring in a fifth pit, 163. The upper fill of pit 98 contained three small flakes of hammerscale, derived from iron smithing. These were sufficiently small to have travelled through the soil but the upper fill of this pit may be contemporary with later Iron Age activity on the site. At best in such small quantities this evidence is of dubious significance. This pit is technically undated, although presumed to be Bronze Age.

The environmental finds, although limited, are richer in the Bronze Age contexts than in later deposits. In fact animal bone was only recovered during excavation from contexts dated or presumed to be Bronze Age. The pits yielding pottery also produced quantities of charcoal (see Table 3) with pits 99 and 135 particularly rich. These four pits also produced most of the charred cereal remains recovered from the site, with pit 99 being particularly rich by the standards of the other samples from the site. No chaff was identified from any of the samples and other charred material was limited with a nutshell fragment from 99 and a possible legume seed from 131. The samples from these Bronze Age pits also included small quantities of bone although little was identifiable and some was calcined (burnt). Two incisors of the wood mouse were recovered from pit 98 and ditch 128 but these may be intrusive into the deposits.

The most frequent environmental remains are the molluscs. The burrowing snail Cecilioides acicula is abundant throughout the deposits, occurring in all the samples, often in considerable numbers. Although some of these specimens may have been contemporary with the formation of the sediments it is assumed that many derive from later intrusion into the deposits. The other elements of the molluscan fauna are

more secure. The ditch fills characteristically include freshwater species and semi-aquatic taxa, the Planorbids and Succinidae, but all deposits produced specimens of the genus Vallonia, and a suite including Carychium tridentatum, Pupilla muscorum, Cochlicopa sp., Hygromia hispida, Helicella sp. with less frequent occurrence of Clausilia sp., Retinella sp. and Discus rotundatus. The largest component of these fauna are species of open country, and apart from Carychium only the less frequent species are shade-loving or typical of woodland habitats (Evans 1972; Cameron and Redfern 1976). Even Carychium can occur commonly at the base of long grass (op cit.).

The excavated animal bone was mainly unidentifiable material (Appendix 1), partly due to its poor condition, although a few fragments of cattle were identified. In addition the samples produced tooth fragments of sheep and pig. Apart from the deep waterlogged contexts from previous seasons at the site the animal bone will contribute no more information than species occurrence at the site.

Table 2: List of material from the flotation samples

Undated groups

Post and pit group

| samp. | context | vol.<br>in 1. | description    | date | pottery<br>in g. | small<br>finds | burnt<br>stone/<br>gravel | fired<br>earth in g. | hammer-<br>scale |
|-------|---------|---------------|----------------|------|------------------|----------------|---------------------------|----------------------|------------------|
| 20    | 73      | 6             | post hole fill | ?    |                  |                |                           |                      |                  |
| 21    | 75      | 3             | post hole fill | ?    |                  |                |                           |                      |                  |
| 22    | 77      | 8             | post hole fill | ?    |                  | T              |                           |                      |                  |
| 27    | 83      | 10            | post hole fill | ?    |                  |                |                           |                      |                  |
| 28    | 85      | 5             | post hole fill | ?    |                  |                |                           |                      |                  |
| 29    | 87      | 30            | pit fill       | ?    |                  |                |                           |                      |                  |
| 31    | 93      | 4             | post hole fill | ?    |                  | T              | T                         |                      |                  |
| 32    | 95      | 4             | post hole fill | ?    |                  |                |                           |                      |                  |
| 35    | 101     | 5             | post hole fill | ?    |                  | object?        |                           |                      |                  |
| 38    | 124     | 28            | pit fill       | ?    |                  |                | У                         |                      |                  |
| 39    | 126/127 | 26            | pit fill       | ?    |                  |                |                           |                      |                  |

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| _ ,,, | Pres |    |                |   |  |  |           |
|-------|------|----|----------------|---|--|--|-----------|
| 57    | 192  | 10 | post hole fill | ? |  |  | one flake |
| 58    | 194  | 10 | nost hale fill | 2 |  |  |           |

Isolated ditches and a post hole

| 2  | 17  | 30 | ditch fill?    | ? | glass |   |        |  |
|----|-----|----|----------------|---|-------|---|--------|--|
| 12 | 38  | 28 | ditch fill     | ? |       |   |        |  |
| 43 | 138 | 30 | ditch?fill     | ? |       | у |        |  |
| 50 | 164 | 30 | ditch fill     | ? |       |   |        |  |
| 54 | 181 | 28 | ditch fill     | ? |       |   |        |  |
| 59 | 196 | 30 | post hole fill | ? |       | У |        |  |
| 68 | 202 | 27 | post hole fill | ? |       |   | $\top$ |  |

# Bronze Age groups

Isolated pits and ditches

| 7  | 19  | 0.8 | post hole fill        | BA? |    |    |   |          |
|----|-----|-----|-----------------------|-----|----|----|---|----------|
| 15 | 48  | 28  | pit fill              | BA  | 2  | y? |   |          |
| 33 | 97  | 20  | pit fill (upper fill) | BA  |    |    |   | 3 flakes |
| 34 | 100 | 45  | pit fill              | BA  | 63 | у  |   | f*       |
| 55 | 115 | 8   | pit fill              | BA  |    |    |   |          |
| 36 | 119 | 26  | ditch fill            | BA  |    |    |   |          |
| 42 | 134 | 43  | pit fill              | BA  | 14 | у  |   | f*       |
| 40 | 129 | 27  | ditch fill            | BA  |    |    |   |          |
| 53 | 162 | 27  | pit fill              | BA  |    | y  | 9 | f*       |

Pit and posthole group

| 41 | 133 | 28 | pit fill       | BA | 11 | Тy | Ty |  |
|----|-----|----|----------------|----|----|----|----|--|
| 44 | 132 | 27 | pit fill       | BA |    |    |    |  |
| 51 | 169 | 9  | post hole fill | BA |    |    |    |  |
| 52 | 170 | 10 | post hole fill | BA |    |    |    |  |

# Late Bronze Age/Early Iron Age

# **Isolated features**

| 6  | 11  | 30 | ditch fill     | LBA-EIA |  | у | 41 |  |
|----|-----|----|----------------|---------|--|---|----|--|
| 45 | 173 | 8  | post hole fill | LBA/EIA |  |   |    |  |
| 16 | 50  | 8  | ditch fill     | EIA     |  |   |    |  |

# Bronze Age/ Iron Age?

Post and pit group

| 17 | 51 | 1.1 | post hole fill | BA/IA  |   |    |
|----|----|-----|----------------|--------|---|----|
| 18 | 53 | 7   | post hole fill | ВАЛА   |   |    |
| 19 | 55 | 2.5 | post hole fill | BA/IA  |   |    |
| 23 | 57 | 5   | post hole fill | BA/IA  |   |    |
| 24 | 63 | 3.5 | post hole fill | BA/IA  |   |    |
| 25 | 61 | 2.5 | post hole fill | BA/IA  |   |    |
| 26 | 65 | 3.5 | post hole fill | BA/IA  |   | f* |
| 30 | 89 | 25  | pit fill       | ?BA/IA | 6 | f* |

Posthole group and adjacent ditch

| samp. | context | vol.<br>in l. | description    | date  | pot<br>in g. | small<br>finds | burnt<br>stone/<br>gravel | fired<br>earth in g. | hammer-<br>scale |
|-------|---------|---------------|----------------|-------|--------------|----------------|---------------------------|----------------------|------------------|
| 37    | 121     | 29            | ditch fill     | ВАЛА  |              |                |                           |                      | one flake        |
| 46    | 144     | 1.2           | post hole fill | BA/IA |              |                |                           |                      |                  |
| 47    | 146     | 1             | post hole fill | ВАЛА  |              |                |                           | 1                    |                  |
| 48    | 148     | 2.5           | post hole fill | BA/IA |              |                | 1                         |                      |                  |
| 49    | 150     | 5             | post hole fill | BA/IA |              |                | 1                         |                      |                  |

# Isolated pit

10

1

3

| Ibolated bit |     |    |          |       |   |           |  |  |  |
|--------------|-----|----|----------|-------|---|-----------|--|--|--|
| 56           | 188 | 28 | pit fill | BA/IA | у | one flake |  |  |  |

# Iron Age

Pit and posthole group

| 1  | 3  | 20  | pit fill       | IA |    |  |  |
|----|----|-----|----------------|----|----|--|--|
| 3  | 7  | 10  | post hole fill | IA | <1 |  |  |
| 4  | 13 | 0.6 | post hole fill | IA |    |  |  |
| 5  | 15 | 2   | post hole fill | IA | T  |  |  |
| 8  | 21 | 0.7 | post hole fill | IA |    |  |  |
| 9  | 23 | 6   | post hole fill | IA |    |  |  |
| 10 | 25 | 0.8 | post hole fill | IA |    |  |  |

#### Isolated features

| 11 | 34 | 30 | pit fill   | IA |  |  |  |
|----|----|----|------------|----|--|--|--|
| 14 | 46 | 27 | ditch fill | IA |  |  |  |
| 13 | 40 | 27 | pit fill   | IA |  |  |  |

f\*- magnetised fired earth picked up by the magnet.

# Late Bronze Age/Early Iron Age

Three features have been assigned to the later Bronze Age or Early Iron Age. The fill of ditch 10 produced evidence of burning in the form of burnt gravel and fired earth as well as 13 grammes of charcoal but no other finds. This sample was taken near the extreme south western end of this long linear feature that runs across the site and

suggests that there may have been some activity adjacent to the ditch in this area, no longer discernible on the ground.

The environmental remains from these samples are limited. A single cereal grain was identified from post-hole 142, and shells of *Vallonia* sp are common, with less frequent examples of *Helicella* sp.

# Bronze Age/Iron Age

The features assigned to the Bronze Age/Iron Age occur in two groups. A group of postholes and a pit in the south-east part of the site, and a second more disparate group of features across the centre of the site. Archaeological finds are infrequent in these contexts, although because most of the features are postholes relatively little sediment was sampled. A few fragments of fired earth were recovered from pit 90 in the south-eastern group, a single fragment of calcined bone, a few grammes of charcoal and a single cereal grain. The post hole fills also included small quantities of charcoal. The shells of *Vallonia* were again the most frequent terrestrial snails after *Cecilioides acicula*.

The small group of contexts in the middle of the site included little evidence of occupation, although a single flake of hammerscale was recovered from the fill of ditch 122.

An isolated pit, 189, included some burnt gravel, a single flake of hammerscale, a few grammes of charcoal, three cereal grains and a degraded and fragmented tooth.

# Iron Age

The Iron Age features are concentrated in the south-west corner of the site (Fig.2 - site plan). These comprise a group of postholes and associated pit, two isolated pits and a ditch. The only archaeological find from any of these Iron Age samples was a single tiny sherd of pottery from posthole 8. A fragment of calcined bone was recovered from posthole 24 and seven cereal grains and a few other charred seeds from all the samples. Charcoal was abundant in posthole 24 and a few grammes were also recovered from posthole 8. Other samples had only very small quantities of charcoal.

The mollusc remains indicate a local environment similar to that suggested by the evidence from the Bronze Age contexts. Shells of the genus *Vallonia* are the most common, with *Pupilla muscorum*, *Carychium tridentatum*, *Hygromia hispida*, *Cochlicopa* sp., *Helicella* sp., *Arianta*, *Helix*, *Oxychilus* and *Discus* occurring. This suite includes species of open country, more catholic habit and shade loving, including taxa typically associated with woodland (Evans 1972). Species of open country and catholic habit appear to dominate the fauna but no quantification was made for this assessment.

# Unphased deposits

A number of features were unphased at the time of reporting. This includes a collection of postholes and a large pit towards the south-eastern part of the site. Finds were absent from the samples from this group of features although a small shaped object, probably a piece of natural ironstone, was recovered from posthole 102. Very small quantities of charcoal are present throughout the features with a few grammes from one posthole, 84, and the pit, 123, which also included a few grammes of bone. Only two carbonised cereal grains were present in the flots from these samples.

Other unphased features produced a few cereal grains, some charcoal and evidence of burning (Table 3.) A very small fragment of blue and white glass was found in the residue of sample 2 from ditch 18. This is small enough to have moved down through the soil and may not be *in situ* in the feature.

#### Discussion

1

The Bronze Age features have yielded the most evidence of human activity at the site. The concentrations of charcoal, pottery, bone and cereals within these contexts indicates occupation activity at the site. Most of the environmental evidence can be associated with food debris and fires. There is no evidence for crop processing acitivities with charred seeds rare across the whole site and chaff non-existent.

In contrast the later and unphased features have yielded little evidence of occupation activity. Small quantities of charcoal and occasional charred cereal grains and evidence of burning are the limits of the evidence from the soil samples.

A very few flakes of hammerscale in a number of samples indicate that iron smithing was taking place somewhere on the site, but their low density indicates that it was not associated with any of the excavated features. Even the contexts cannot be viewed as secure since small flakes could easily move down through the soil as a result of natural soil processes, and the high incidence of recent uncarbonised seeds and recent plant rootlets illustrate that this movement has occurred.

The snail shells are the most abundant environmental remains from the samples. The shell assemblages indicate that the ditches on the sites carried water and contained an aquatic and semi-aquatic fauna. The terrestrial fauna are dominated by taxa of open country, although catholic species are also common and those typical of shade or woodland habitats are common in one or two samples, but otherwise rarely represented by more than one or two shells. Although there is no clear change in the species between the Bronze Age and Iron Age fauna there may be quantitative changes among the taxa that indicate some change in the environment at the site. This can only be established by a more detailed study of the evidence.

# Potential of the samples

The potential for further work on these samples is limited. The condition of the excavated animal bone is very poor and no more work is justified on the excavated material or that from the samples.

There is sufficient charcoal in a number of the samples to produce a radiocarbon date and a more precise chronology for the site may be possible with radiometric dating. Bronze Age contexts that have produced samples adequate for standard radiometric analysis are 48, 100, 134 and both contexts (132 and 133) in pit 131. Late Bronze Age/early Iron Age context 11, Bronze Age/Iron Age contexts 89 and 188 and Iron Age contexts 7 and 23 have also produced sufficient, while undated contexts 196 and pit 123 could also be dated. Other contexts have produced small quantities of charcoal (<5 grammes-Table 3) which could be dated but would require extended counting or even AMS analysis.

Most of this charcoal is very fragmented but in a few of the contexts larger identifiable fragments are present. Since the archaeological contexts for much of this material are not readily interpretable analysis of this material is probably not warranted, but the large groups of charcoal from the Bronze Age pits where the charcoal is also associated with burnt gravel or fired earth and probably reflects waste from occupation fires may justify identification to indicate the fuel resource of the occupation at this time. This is of particular interest since the snail evidence appears to suggest an open landscape and the wood species may reflect or contradict this picture.

The charred seed evidence is extremely limited and the only further work that can be recommended is the identification, where possible of the cereal type/taxa present in the dated contexts. The condition of many of the grains is very poor and only a very few are likely to permit species identification. This is of interest only in so far as it adds to the database for the chronology and geographical use of individual cereal varieties during the prehistoric period.

The molluscan assemblages afford the only significant environmental potential. Apart from the ubiquitous occurrence of the snail *Cecilioides acicula* a number of the samples include reasonably large groups of shells with a number of individual taxa. This category of the data may give us both some indication of the local environment on the site and evidence for any change through time. The preliminary indications are that the fauna was dominated by open country taxa throughout the period represented by the sampled features, but no quantification of individual taxa was made during the assessment and not all species were identified. A detailed analysis of the larger assemblages from the well dated contexts would permit these questions to be addressed with confidence.

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