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WEST STOW
The Anglo-Saxon Village
Volume 1: Text

East Anglian Archaeology 24
Suffolk County Planning Department 1985

EAST ANGLIAN ARCHAEOLOGY

West Stow
The
Anglo-Saxon
Village
Volume 1: Text

by Stanley West

with contributions from
Valerie Cooper, Pamela Crabtree,
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Theya Molleson, Peter Murphy,
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John Price, the late Stuart Rigold,
Andrew Russel and Michael Walker.

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Preface

The multi-period site on the north bank of the River Lark at West Stow (County Number WSW 002, at TM 7970 7135) was excavated by the author for the Department of the Environment from 1965 to 1972. This report is concerned with the Anglo-Saxon settlement.

A second part will cover the Mesolithic flint industry, the late Neolithic cemetery, the Iron Age settlement and the Romano-British pottery industry.

The first volume of the report is divided into five main parts. As this volume is concerned with the Anglo-Saxon settlement, the first, introductory part includes brief summaries of the prehistoric and Romano-British background to the site and the Lark valley and includes only the major references to relevant published material. In the second part of the volume, the archaeological evidence from both the settlement excavations and the 19th-century cemetery investigations are presented together with the detailed specialist reports. In the third part the entire archaeological evidence is discussed and the analysis of the settlement, as a whole, presented. The fourth part examines the Anglo-Saxon settlement pattern of the Lark valley and its relationships to the wider area. The fifth part draws the discussions into conclusions.

The site was discovered by Basil Brown, who excavated two Roman pottery kilns there; the first large scale excavations were undertaken by Miss V. I. Evison, using a grid of fifteen-foot squares. The base-line for this excavation was utilised for a larger grid of fifty-foot squares by the author for the excavations from 1965 to 72. In order to distinguish the two grid systems, the second used a 'W' prefix before the alphabetical letter, as seen on the site plans. During the excavation all features were given consecutive numbers within classes; i.e. sunken-featured buildings, pits, ditches, post-holes, etc. Small finds were listed consecutively as found; pottery and bones similarly but on a separate list.

The site was excavated in Imperial measurements, the metric equivalents are given throughout the report to the nearest 10cm for those over 1m and to the nearest cm between 10cm and 1m.

The presentation of the evidence is unusual and requires some explanation; each Sunken-Featured Building is presented individually, with plans, sections and material culture, as one would with grave groups, as it is considered important that these structures are seen as entities. Because these buildings are so numerous, halls, pits, ditches and hollows are treated in the same way. Although this means it is more difficult to see specific groups of objects together, the association of material is felt to be more important. Readers will be able to refer back to particular objects from the tabulations of material in the discussion chapters and the overall concordance of objects at the end.

The small finds and pottery are presented under the general heading 'Material culture'. In the discussion chapters, references back to sunken-featured buildings are by number and they appear in the descriptive part of the text in numerical and not chronological sequence.

It should be noted that in the descriptive part of the test references to pottery stamp groups or types and rustication types on pottery refer to the West Stow typologies set out in the discussion chapters along with those for combs and wrist-clasps. The Roman coins in the descriptive part are referred to only as Roman bronze coin plus a simple quotation of the date, the complete descriptions can be drawn from the specialist's commentary on the coins.

The report on the faunal remains by Pamela Crabtree is an interim statement, it is intended that a much fuller, detailed study will appear as a subsequent volume.

Throughout the report SFB (Sunken-Featured Building) will be used rather than **Grubenhaus** and SF for Small Finds. For reasons explained in the discussion chapters the term 'Hall' is used for the larger, post-built structures.

The KEY to plans and sections will be found at the beginning of Volume 2.

PART 1: INTRODUCTION

PART 1: INTRODUCTION

THE GEOLOGY AND TOPOGRAPHY OF THE LARK VALLEY

The solid geology of the Lark Valley area is chalk, the surface of which is undulating, rising close to the surface at Icklingham and Cavenham. The overlying drift consists of a heavy blanket of boulder clay to the south of Bury St Edmunds and remains in quite extensive patches on both flanks of the river, forming a high, dry plateau in West Stow and Icklingham, which is in turn capped with sands and gravels. The glacial sands and gravels with occasional patches of brickearth, are exposed in the valley itself. The valley bottom has a covering of alluvium and peat along the flood-plain, leading directly to the fens at Mildenhall (Fig.1).

The River Lark rises in Whepstead on the high Suffolk boulder clay plateau south of Bury St Edmunds and is joined by other, smaller, streams flowing north from the watershed. At Sicklesmere, two and a half miles south of Bury St Edmunds, where the stream leaves the clay plateau, the Valley of the Lark begins to assume the form that characterises it for much of its length; that of an easy flowing river meandering through a gentle landscape of water meadows (Fig.2).

From Sicklesmere the drift geology to either side of the Lark valley is sands and gravels with the river flanked by gravel terraces which gradually give way to a flatter landscape of lighter sands and gravels typical of the 'Breckland'. A noticeable feature of the valley is the width of the flood plain; over much of its length, from Fornham St Martin to Mildenhall, it is as much as 500 yards wide. Before the watercourse was embanked and canalised early in the eighteenth century the river clearly meandered over the valley bottom to provide a broad swathe of water meadows. An interesting example of the changing river pattern can be seen on the south side of Lackford Bridge where the parish boundary of Icklingham follows a distinct bank south of the present river and again along a 1500 yard stretch either side of Farthing Lock at Icklingham where the parish boundary is not now the main course of the river but clearly is an older course, now reduced to a small ditch. From West Stow downstream to Mildenhall there is extensive evidence of the sand blows which are such a common phenomenon in this region even today. The resultant dunes are now best seen on Icklingham Plains where some areas are still uncultivated. Although largely covered with re-generated vegetation they are still subject to wind erosion, often exposing the old ground surface beneath. West Stow Heath is part of a larger area affected in this way, although in recent years afforestation has masked considerable areas of dune sand. The region between the old sewerage farm and the crossing of the Icknield Way is entirely covered with blown sand, in places 3-4 feet thick. The regenerating vegetation of sedge, grasses and lately of silver birch and oak present a primeval atmosphere which is, as it happens, entirely false, for beneath the sand are extensive traces of a medieval open field system and beyond that of earlier prehistoric and Romano-British cultivations. Twenty-two miles north-west of Bury St Edmunds, the river joins the Ouse between Prickwillow and Littleport; the last eight miles being through Mildenhall Fen. To either side few streams flow down from the Breckland to the valley and it is noticeable that the parishes on the north side are long and narrow, running back into the dry Breckland. From the earliest times down to the mid-20th century the topography has influenced the pattern of settlement, with centres of population strung out along the valley bottom bordering the Lark with its water meadows, and utilising the back country for sheep walks and scattered farms.

There are two main lines of communication: along the valley itself (the present A1101); and the prehistoric Icknield Way, which runs from the south-west along the chalk escarpment and the edge of the Breckland to cross the Lark at Lackford Bridge before heading north across the Breckland proper towards Thetford. The importance of the Icknield Way approach is demonstrated by the earthwork known as the Black Ditches which bars the approaches to Icklingham from south of the river (Fig.4). The ditch runs in two sections from the edge of the flood plain on the south side of the river opposite the western end of Icklingham to the Icknield Way, and then almost due south across Cavenham Heath to the higher, heavier gravels of Risby Poor's Heath, utilising a deep, marshy valley and stream in the intervening section (Fig.2). By the beginning of the fifth century AD. much, if not most, of the valley must have been open arable farmland with grassland behind. Trees were not absent to judge from the West Stow settlement; willow, hazel, alder, ash and hawthorn were all in evidence; oak was used as the primary building material and oak scrub or forest must have been within reach of the settlement. From West Stow on, the heavier gravels of the upper Lark Valley still support oak in quantity and light oak scrub is beginning to colonise the heath itself.

THE PREHISTORIC SETTLEMENT PATTERN

From Mildenhall to Bury St Edmunds, the Lark valley has the greatest known concentration of prehistoric settlements in East Anglia. From the close of the last glaciation successive cultures have hunted and farmed the region, leaving traces of settlement at a whole series of major and minor sites. The West Stow site itself has produced evidence of Mesolithic hunter-fisher groups of the late Sauveterian type, camping on the knoll, with five or six dense concentrations of waste flakes, blades, cores and

implements marking the sites of their temporary encampments. Scatters of Mesolithic material occur widely over the whole area, with concentrations at the east end of West Stow parish, Culford, Cavenham Heath, Icklingham and Mildenhall and particularly at West Row, on the fen edge around the twenty-five foot contour. Late Sauveterian/ Tardenoisian industries with rods, trapezoids and micro-burins (West Stow, Site 1) of the Star Carr/Peacock's Farm type (Clark *et al* 1935) occur, as well as numerous transverse sharpened axes of Maglemosian type (West Stow, Site 2). Axes tend to predominate in the records of stray finds as they are so easily recognised and therefore may not reflect the true nature of the Mesolithic occupation of the area.

Evidence of the earliest agricultural communities in the region is best known from the site at Hurst Fen, Mildenhall, (Clark *et al* 1960), which, although it is on a tributary of the Little Ouse, is the only 'Neolithic' site to have been examined in detail and must reflect the nature of many other sites which were clearly established in the area in the third and fourth millenia BC. Large numbers of artefacts attributable to this period have come from the parishes bordering the Lark, indicating an important concentration of early farming communities, which is amplified by the remarkable series of air photographs by Dr St Joseph, which has revealed a cursus and interrupted ditch systems at Fornham All Saints, upstream from West Stow. Grooved ware and 'petit tranchet' arrowheads were recovered from black patches on the field immediately north of the West Stow site (Grid Ref. TL 796718) after deep ploughing, which may well be associated with the obliterated burial mound with one inhumation and forty-nine cremations, found during the excavation at the western end of the site (Fig. 6, WF 11).

Beaker and full Bronze Age cultures are attested by numerous burials, rare settlements, wide-spread, scattered finds and occasional metal hoards, all along the valley, with a particularly dense concentration on the Fen edge around West Row, Mildenhall. The Isleham Hoard of 84 kg of scrap bronze, belonging to the period of the inception of the 'Iron Age', contained fragments of harness and vehicle fittings with a decidedly central European flavour, (Britten 1960). A scatter of barrows, some known to be of Beaker and Early Bronze Age date, flank the valley on the higher land. At Fornham All Saints crop marks show an important group at the southern end of the cursus in the valley bottom. Settlement, or penetration of some kind, occurs as far up the river as the southern limits of Bury St Edmunds where a recent discovery (1971) of two gold bracelets of the late Bronze Age came from a presumed burial discovered by chance (Longworth 1972, 271-2). The Bronze Age settlement pattern is distinctively associated with the Fen edge and the chalk escarpment, clearly linked with settlements along the Icknield Way and the Upper Thames.

Within the Iron Age the pattern of actual settlement is better known. Settlements of considerable size are indicated at Hengrave, at the northern end of the Fornham cursus site; at West Stow, Lackford, Icklingham, Mildenhall and Eriswell. The Icklingham-Mildenhall-Brandon region was clearly one of several centres of the Iceni tribe, as is evidenced by the density of the coin scatter, the Elvedon bronze-bound tankard (Clarke 1940, 107), and the Brandon (unpublished) and Santon Downham metal work hoards (Clarke 1940, 63 ff). Only one settlement is known in detail from extensive excavation; that underlying the Anglo-Saxon settlement at West Stow which covered the entire five acre knoll; providing the most completely known settlement site for the region (Fig. 3). A wide range of the East Anglian Iron Age pottery, from high shouldered, squared rims (Cunliffe 1974, 29-48), to the double-cordoned bowls and tazzas of the late Iron Age were found. The latter, usually described as 'Belgic' are not 'Belgic' in the strictly political sense, but overlap with the Roman conquest and so on into the second half of the first century AD., later emerging as a primary influence on the products of the West Stow Romano-British kilns, in operation from *c.*80-140 AD. The Iron Age settlement consisted of a number of circular huts, storage or rubbish pits, and enclosure systems, covering the whole of the knoll. A notable feature was two parallel ditch systems, recut many times, which transversed the site from east to west, providing, on a modest scale, protection for the site on the landward sides during the last stages of the Iron Age occupation. The Iron Age 'settlement', however when broken down into phases, was really a farmstead rather than a village. The extensive gravel quarry to the north of Lackford Bridge has revealed part of a further occupation of a similar kind on the West Stow side of the river and another in Lackford. It would appear that the settlement pattern during the Iron Age was, therefore, diffuse, with a series of small farmsteads strung out along the valley bottom; the evidence from West Stow parish, where there were at least three, is beginning to suggest these at roughly half a mile intervals, unlike the communal settlements of the Anglo-Saxon type.

There are no known Iron Age forts in the Lark valley, the nearest being Wandlebury to the south west; Thetford and Barnham to the north east. Important hoards of coins, invariably of ICENI origin, are known from Lakenheath and Mildenhall; the most recent from Lord's Walk Eriswell, (1972, unpublished) containing Roman *denarii* down to NERO. These, taken with the metal hoards from Santon Downham and Brandon and the evidence for the abandonment of the West Stow settlement, all suggest considerable upheaval at that time, presumably as a result of the Boudican rebellion. The succeeding Romano-British settlement pattern was different.

THE ROMANO-BRITISH SETTLEMENT PATTERN

The whole of the Lark valley was densely settled in the Romano-British period. Large, sprawling complexes are known to have existed at Mildenhall and Icklingham (Fig.4) and, to a lesser extent, at Sicklesmere, in Gt Whelnetham, with many smaller sites strung out between these. The Roman road system is barely known at all, although it must be supposed that there were connections between the settlements of the Lark valley; to the vast Hockwold complex on the Ouse to the north, and to Cambridge to the west. A clear link with the major settlement at Pakenham/Ixworth to the east is, however, known. A road on Puttocks Hill, Pakenham and passing the villa at Redcastle Farm, has now been traced westward to Livermere and Culford, and has recently been confirmed at Icklingham by aerial photography and excavation (1977, unpublished, Suffolk Archaeological Unit records).

The importance of the Icknield Way in Roman times is difficult to assess; the lack of sites along its length in our area would suggest that it had declined, although it clearly persisted to become a boundary, in Saxon times, to a number of parishes.

Both Mildenhall and Icklingham have 'villa' sites recorded, as mortared flint foundations and hypocausts have been found, but, as at Ixworth and Sicklesmere, there are extensive areas of settlement beyond these building complexes, so that the term 'villa' is not an accurate description of these sites.

Sicklesmere is the least known of these settlements but sporadic discoveries there over the years do suggest a large settlement area, apparently of the kind better known elsewhere in Suffolk.

Pakenham/Ixworth had important road links to Caistor-by-Norwich and Chelmsford and, at one period, a military fort. An extensive settlement area on both sides of the river crossing and three surrounding villas at Stanton, Redcastle Farm, Pakenham and Dover Farm, Ixworth emphasise the importance of this site. Mildenhall is more difficult to understand owing to the uncertainty surrounding the discovery and origin of the Mildenhall treasure, apparently found close to a small 'villa' in a complex area of Romano-British settlement which may well contain more important buildings than at present known. The whole Mildenhall area can be considered to be an extension of the Hockwold Fen Edge settlements, whose status is not yet understood.

Icklingham, by its size and the richness of the finds associated with it, was clearly a major settlement, particularly in the later Roman period. It compares well with other large, open sites in the county, notably Pakenham, Long Melford, Coddenham, Hacheston, Capel St Mary and Wenhaston. The nature of these settlements show a remarkable similarity; they were large, sprawling sites apparently expanding and contracting throughout the period, without defences of any kind. Where excavations have been conducted, most of the buildings are found to be difficult to define and are likely to have been timber framed, with slight foundations. Occasionally, as at Icklingham, structures with mortared foundations occur.

These large, open rural sites with obvious levels of social order, together with minor industries such as metal working and pottery manufacture, dominate blocks of territory and often form the centres for road systems. There are no 'towns' in the strict sense in Roman Suffolk; the southern part of the county would have been presumably controlled from Colchester, the north from Caistor-by-Norwich.

The distribution and relationships of these 'open' sites are much in the same manner as those of the medieval market towns, with which they are best paralleled and, in most cases, of which they were probably the precursors.

A distinction between Icklingham and some, at least, of the other sites, that seems to be emerging, is the importance of the site in the later Roman period as opposed to the apparent decline of others at that time, notably Scole (Rogerson 1977, 222), Hacheston and Coddenham. A building with a hypocaust was partially excavated in 1877 (Prigg 1901, 72-75) and a freestanding Christian church within a cemetery, associated with lead tanks bearing the Christian monogram, was postulated following the excavations in 1974 on an older, possibly pagan, ritual site. Four metal hoards, with a total of thirty-seven pewter vessels and a one-piece bronze cauldron are recorded from Icklingham, together with up to five third-century pottery kilns discovered in the 1930s (West and Plouviez 1976).

The coin list for Icklingham is impressive and important and includes two major hoards containing Honorian issues, found in 1877 and 1903. Three smaller hoards are recorded from the area of the site, suggesting an occupation down to the early years of the fifth century. The discovery, *c.*1925, of pagan ritual regalia from Lackford (the 'Cavenham' Crowns) on the terrace on the opposite side of the valley, must be associated in some way with the settlement at Icklingham and may well be the *raison d'etre* for the siting there of the great pagan Saxon cremation cemetery.

The Problem of Romano-British Survival:

The distribution of early Anglo-Saxon sites is markedly connected with the gravel terraces along the river valleys; there are no sites on the chalk escarpment or on the central clay belt. Beyond the Lark valley there are apparent exceptions to this rule; at Gt Thurlow (Fox 1923, 265) an inhumation, with an iron buckle, a knife and bronze tweezers, found in 1891 (Mus. of Arch. & Anth. Cambs.) is, so far, in a totally isolated position on a narrow gravel terrace well into the clay belt. The site is on a major tributary which joins the Stour at Sturmer, near Haverhill. The mixed cemetery at Finningham, in north Suffolk, looks at first sight like a penetration into the clay area, but there also the site is on a gravel terrace above a small water course which eventually connects with the Waveney through Eye. (Rev. Creed 1849,60, 1859,118; Page 1911;I,335).

The distribution of Romano-British material of the fourth century, which is relevant to this discussion, is not easy to assess. There are few late coins on the clay

belt and sites that produce identifiably late pottery are not common. The lack of pottery imported from outside the area and the small size of the known sites, suggests that the occupation on the clay belt was impoverished, and, if not sparse, mainly in the form of homesteads or small communities. The problem would be better understood if late sites had been investigated, but, apart from surface collections made by field-walking, no work on the late Romano-British clay belt sites has yet been attempted, so that basic data, such as the identification of late, local coarseware is still largely impossible. Elsewhere of course, there is considerable evidence of prosperity in the late period and in some cases, real wealth, as at Mildenhall.

Whatever the causes, the decay of the Romano-British culture is evidenced in our area by six unreclaimed coin hoards, the Mildenhall treasure, the deliberate dismantling of the Icklingham church and the desertion of villas and the subsequent squatting in them by Anglo-Saxons, as evidenced, but not dated, at Stanton, Ixworth and Redcastle Farm, Pakenham. There is, however, nothing to suggest a wholesale slaughter of the local inhabitants as the Anglo-Saxons took over; it is more likely that the lower levels at least of the Romano-British population were subsumed into the Anglo-Saxon culture; they are of course identifiable at a later date in Saxon codes of law, occasional place names and historical accounts. If, in the known areas of Anglo-Saxon settlement, such as the Lark valley, they are not recognisable as a surviving population with their own settlements, is it possible to see them in the Anglo-Saxon cemeteries? Anglo-Saxon cemeteries in this area all produce graves with little or nothing as grave goods.

At Westgarth Gardens nine out of forty-five adult graves were in this category; at Holywell Row, thirty-three out of the total number of 100 excavated by Lethbridge, but the graves are not sexed or age-related (Lethbridge 1931). It cannot be certain, however, that these in any way reflect the number of slaves in the community, for three reasons. Firstly they might be chronologically late, possibly even of Christian date; secondly slaves could well have had possessions, especially if female, and thirdly slaves might not always be buried in the usual cemetery. Two unaccompanied inhumations were found in the settlement at West Stow and others are known from elsewhere. In the Lark valley, there is a further complication that, whereas inhumation is the predominant rite, cremation also occurs; as occasional burials in the inhumation cemeteries, and also apparently as the sole rite in the large Lackford cemetery, totally isolated among the inhumation cemeteries in the area, on a site of religious significance within the Roman era. The size of the Lackford cemetery, on a par with Spong Hill in Norfolk, (Hills 1977, 1981) suggests a wider catchment area than the adjacent settlement, acting as the primary burial place for cremations in the area. To what extent does this reflect the racial origin of those buried there, at least in the earlier phases of its history? In many ways the cemetery differs from those in Norfolk, lacking the Anglian-type pottery, the sets of miniature toilet implements and with few early cruciform brooches, although five miniature bone combs occur. In respect of the latter, it is worth recalling that one miniature comb was found in SFB 39 in the West Stow settlement, suggesting an everyday use, even if ornamental, rather than a purely symbolic one for burial purposes. The problems posed by the Lackford cemetery are therefore formidable: if the cemetery draws on settlements over a considerable area, what was the status of the people represented? Is it possible that they represent in any way the remnants of the Romano-British population, and, if so, why was cremation used when inhumation was the usual late Roman practice? Does the use of grave goods in some of the burials, all female, indicate slaves with some property, or Anglo-Saxons cremating with or without perishable grave goods?

The question of the survival of elements of the Romano British population, both in the areas of Saxon settlement and those where there is no evidence of early settlement, still remains unanswered, although it is unreasonable to suppose large areas of totally unpopulated land, even if much of it was intractable.

PART 2: THE ANGLO-SAXON SETTLEMENT AND CEMETERY

PART 2: THE ANGLO-SAXON SETTLEMENT AND CEMETERY

INTRODUCTION

THE DISCOVERY OF THE SITE AND ITS ARCHAEOLOGICAL HISTORY

West Stow Heath has attracted the attention of antiquarians and archaeologists since 1849, when an Anglo-Saxon cemetery was discovered accidentally and 'skeletons and numerous urns' were found. (Tymms 1853, 315-328). Between 1849 and 1852 a number of local people made collections of material from this site, notably John Gwilt of Icklingham, the Rev. S. Banks, of Dullingham, Cambs, and the Rev. E.R. Benyon of Culford, who was at that time the proprietor of the heath. The existence of a settlement nearby seems never to have been considered, although there is reason of believe that some material was found on the settlement site by Prigg of Icklingham.

In 1879 and the 1890s Roman pottery kilns were excavated on the heath by Henry Prigg of Icklingham (Prigg 1881, 1890). Although no accurate records of his work are extant, two of these sites were identified by the author in 1951 and 1969 between the settlement site and the Icknield Way (Fig.4). Prigg's map of Icklingham district (Prigg 1901) is the only remaining accurate indication of the site of the West Stow Anglo-Saxon cemetery being beside Wideham Cottages, to the north of the settlement itself.

Two further Romano-British pottery kilns were found in 1940 by Basil Brown, actually on the site of the settlement and re-excavated in 1947 with the author, at which time the Anglo-Saxon settlement was recognised by Brown from discoveries of potsherds in the small sandpit being exploited in the north-east corner of the knoll. In 1951 the author, while examining Prigg's kiln sites on the heath, collected further Anglo-Saxon sherds from the pit (West 1952, 35-52). The two Romano-British pottery kilns excavated in 1940 and 1947 were sampled for archaeo-magnetic dating purposes by Dr John Belshé of the Department of Geodesy and Geophysics, Cambridge (Cook and Belshé 1958). The author reported the threats to this site to Miss V.I. Evison of Birkbeck College, London, who subsequently excavated there for five seasons from 1957-61 under the auspices of the then Ministry of Works (Evison 1958-61). Miss Evison relinquished the site to the author in 1965, who completed the excavation of the knoll in the following eight seasons from 1965-72, for the Department of the Environment (West 1969, 1-20).

This site is of great interest to the study of the Iron Age, Romano-British and early Anglo-Saxon periods as it has been, apart from the belt of trees, totally excavated, so that the grouping of structures and the pattern of settlement at different phases can be clearly understood.

After the end of the excavations the St Edmundsbury District Council established the 'West Stow Saxon Village Trust' to elucidate some of the problems raised by the excavation by practical experiment, including the reconstruction of buildings.

The work of reconstruction was begun by a group of Cambridge under-graduates (the West Stow Environmental Archaeology Group) and has continued with the help of many volunteers, all of whom have given freely of their time and interest to a project whose worth is shown by the continuous stream of visitors and school parties, not only from Suffolk, but from all over Britain and the Continent.

The author is thus in the unique situation of pursuing the archaeological process to the ultimate end of testing new concepts of Anglo-Saxon buildings by practical demonstration.

THE EXCAVATION SITE

The site is a low knoll of sand, some 4.5 acres (1.8 hectares) in extent, rising steeply from the flood plain of the Lark on the south and sloping gently away to the north. The general aspect then, is of a small hill, only fifteen feet in height, but noticeably apart from the surrounding landscape. As has already been mentioned, the site lies on the edge of a sand-blown area along the Lark valley, which extends to the west as far as Barton Mills. The hill formed an ideal 'core' for the development of a sand dune with a long slope facing the prevailing wind and a sharp drop on the sheltered side. The sand-blow, which took place in the early fourteenth century, completely covered the site with up to three feet of blown sand on the south side, tailing off on the north slope. This protected the site from later agriculture and from discovery until 1940 when the site was found by Basil Brown. The steep slope along the south side is accentuated by the ditch at its base, marking the edge of the flood plain. Close examination of this slope suggested that there had not been much erosion of the site since the Iron Age, as the general occupation layer (Layer 2) trailed down over it and some of the ditches ending at the top edge of the slope were not truncated. The land to the north and east had been previously extensively modified by the construction of the filter beds for the Bury sewerage farms. However, it has been possible to ascertain that the hill had preserved its original contours on those sides from sections taken down the slopes and from subsequent discoveries in the floor of the filter beds. The north-east corner had however, been partially destroyed by a small gravel pit during the 1950s, where the first observations of Anglo-Saxon huts were made. Today the site and the surrounding heath is a regenerating landscape of sedge, grass and birch, with some oak in places. The sewerage farm to the north and east and the subsequent town rubbish dump has now been reconstituted and landscaped to become part of a country park.

It should be borne in mind that the Romano-

British and Anglo-Saxon landscape of the valley was very different, as there is reason to believe that there were considerable areas of ploughed land on the lower slopes close to the river as well as open grazing on the higher, dryer areas (see Murphy below).

Apart from the belt of pines planted in the nineteenth century crossing the excavation site from north to south, the entire knoll was stripped and examined; with up to three feet of blown sand being removed from the south side of the hill. Beneath the blown sand, a medieval field system of ridge and furrow was preserved in the top of a layer of black soil up to fourteen inches thick (Layer 2). Selected areas of this were trowelled down in an attempt to distinguish features within this layer; which, in the event, proved to be fruitless. This 'general cultural layer' covered the entire area of occupation and considerable quantities of pottery, food bones and artefacts were recovered from it, in spite of the practical necessity to remove most of it by machine. Machining was followed by the careful removal of the final few inches by controlled shovelling to reveal the features in the top of the natural sand. Fortunately the subsoil carried few pockets of gravel, making the identification of post-holes and smaller features easier.

Although considerably complicated by the traces of prehistoric and Romano-British occupations (Fig.6) the pattern of the Anglo-Saxon settlement is quite clear. The main area of occupation was on the central crest and the south side, immediately above the flood-plain of the river. The north-east corner of the site was also occupied, but not so densely. The sand pit in this corner certainly destroyed some evidence; three sunken-featured buildings were noted by Basil Brown and the author in 1947-49 in the initial exploitation in WC 2. The later development of the pit appears to have destroyed less; no sunken-featured buildings were observed and a relatively small amount of pottery recovered. All excavated features were totally examined. The north-west quarter was free of structures but crossed by a series of ditches or boundaries, recut many times. In common with most Anglo-Saxon settlements in Britain, of this period, the most striking element was the large number of sunken-featured buildings *(Grubenhäuser)*, of which sixty-seven were recorded from the hill itself. Less obvious were the post-hole buildings, which in some cases, as in the south-west quarter, were much confused by earlier features. Over two-thousand post-holes were found, many of which could not be dated and most of which made no intelligible patterns; the temptation to relate them has been largely resisted. Only in one area, WH 4-5, could there be a reasonable degree of certainty that most of them were of Anglo-Saxon date and these have been included. Only eighty-seven pits could be attributed to the Anglo-Saxon settlement on the strength of the pottery contained in them, but there were other groups, particularly in WD 3, which may also be associated, although there was little dating evidence. Four large, amorphous 'hollows' were found, which contained Anglo-Saxon pottery, the limits of these were plotted as first determined, no other structural evidence was found. Two sunken-featured buildings were found in 1977 on the lower ground to the east of the hill. These are included in the description of the site and are important in demonstrating that the hill was not modified by the construction of the sewerage farm, and that apart from these 'strays' the main occupation was confined to the hill. (Fig. 7.)

THE SETTLEMENT FEATURES

A. THE LARGER POST-BUILT STRUCTURES

An important aspect of the West Stow excavation was the identification of post-built structures, some complete, some fragmentary. Seven of these, of which six are small by continental standards, but nevertheless substantial, have been isolated from the surrounding mass of settlement features. Five of them were strung out along the central spine of the hillock; and one each on the north and south slopes. Broadly speaking all were orientated east to west; that on the north slope more NW to SE. For interpretive reasons, these are referred to on the plans and in the text as 'halls'. Four are simple, rectangular areas defined by a single row of post-holes; one, No. 2, is more complex, with an internal division and double post-holes along the long sides; No. 5 could not be clearly defined as it lay in an area of considerable rebuilding and No. 7, on the north slope, consisted of sleeper beam and large post-hole construction.

The small finds listed for each 'hall' cannot be positively associated with the structure in the way that objects from sealed deposits can from pits or SFBs, as they were in 'Layer 2', but it is worthwhile to emphasise the relative paucity of finds from these structures.

Building 1: Hall 1. (WD3/WE3). Fig.8.

Situated at the east end of the site, and unencumbered by other features, this building was the most clearly defined of the post-built structures. Using the mean of post-hole centres, the overall measurements were: length: 26ft (7.9m), breadth: 13ft 6in (4.1m). A little to the east of the centre of the south side a gap of 3ft (0.9m), between post-hole centres and a doubling of post-holes, suggests a doorway. Another gap, of 3ft 6in (1.07m), in the middle of the east end, with no corresponding space at the west, suggests a second doorway. The plan shows that three corners were without large post-holes, indicating strength in the long walls and a gable end construction. The post-holes ranged from 1ft to 1ft 9in (0.3 to 0.5m) in diameter and could have held substantial posts. The spacing was not regular, tending to be wider on the north and west. A patch of burnt sand, 2ft (0.6m) across, occurred in the centre of the hall, opposite the south door. No hearth remained. No objects were found within the Hall, but four were recovered from between the post-holes.

Material culture:

SF 104. Roman **bronze coin.** Valens, 364-378.

Fig.9,1. SF 7. Flat **iron strip,** rectangular section; to bind a rectangular shaft.

Fig.9,2. SF 385. Flat **'palette',** with three bevelled edges. Probably Roman in origin. Metamorphosed mudstone.

Fig.9,3. SF 386. Fragment of **pottery spindle-whorl** in hard sandy fabric. Core grey, with oxidised outer layer.

Building 2: Hall 2. (WF6-7). Fig.10.

Apart from some of the interpretations of Hall 7, this is the largest of the post-built structures and situated on the crest of the hill among a large group of the earliest SFBs, some 50yd (45m) west of Hall 1, this hall was 32ft (9.75m) long and 14ft (4.27m) wide, to post-hole centres, with a partition at the east end providing a chamber 8ft (2.44m) wide. A patch of burnt sand, just east of the centre of the hall, marked the site of a hearth. The position of the doorway is a little uncertain, but a wide space occurred in the south side, close to the partition wall. Unfortunately this coincided with an Iron Age pit (P.73), so that although one post-hole was found cutting the fill of the pit, it cannot be certain that this was the only one.

The east and west ends of the building related closely to one another; the east end having five posts with one central to the line, which matched very well with five posts of similar depth, 10in to 1ft 2in (25.4cm to 35.56cm) in the west wall, which also had three extra, rather shallower posts. These, with the three posts beyond the line of the wall, may have been repairs and buttressing. The long walls show two basic lines of posts; the inner line had more numerous posts clearly spaced at the east and west ends; the outer widely spaced at the west end. The two lines were immediately adjacent to one another, as double post-holes, with no space between. Three groups of posts were discernable in the long walls. From west to east, the first group had three sets of double posts in both the north and south walls; the first and third formed satisfactory pairs, the middle pair rather angled to one another. The outer line of posts was therefore widely spaced at this end; the inner line, formed of seven posts in each wall, were closely spaced and accurately paired. The middle group of post-holes were on the same, outer, line as those in the first group. These were closely spaced and encompassed the area of the central hearth. Beyond this, the final group of post-holes, from the line of the partition wall to the east end of the hall, consisted of four double posts in the south wall and two in the north, the inner and outer posts continuing the same alignments of the other groups.

The inner posts on both the north and south walls were consistently the deepest; from 10in to 1ft 3in (0.25 to 0.38m), those on the outer line were shallower, from 6 to 10in (15.24 to 25.4cm) in depth. Fifteen small finds were recovered from the area of the hall.

Material culture:

SF 1097. **Roman bronze coin.** Victorinus, 268-270. From post-hole 'A' on plan.
SF 472. **Bronze strip.** Not illustrated.
SF 502. **Bronze and iron strip fragment.** Not illustrated.
SF 544. Fragments of **bronze sheet,** 3 x 2cm. Not illustrated.
Fig.11,1. SF 494. **Iron knife.** Symetrical blade, flat tang.
SF 533. **Iron nail.** Length 6cm. Not illustrated.
Fig.11,2. SF 539. **Iron object.** Half-round section, curved and pierced with rivet hole.
Fig.11,3. SF 541. **Iron plate.** Thin, with small hole.
Fig.11,4. SF 546. **Iron key.**
Fig.11,5. SF 522. **Hone.**
Fig.11,6. SF 720. **Glass** fragment; neck, light green. Roman.
SF 467. Small fragment of **loomweight.** Not illustrated.
Fig.11,7. SF 538. **Bone pin.** Spherical head, swollen lower part to shaft. cf. Little Wilbraham, Grave 5. (Lethbridge 1931, fig.38,2).
Fig.11,8. SF 540. Shaft of **bone point** or pin.

Building 3: Hall 3. (WF8-9). Fig.12.

On the same axis as Halls 1 and 2, this building, although incomplete, belongs to the same class as Hall 1, being a simple rectangular area, with weak corners, and having an area of burnt clay at the east end. Only part of the south side could be satisfactorily established, possibly because the overlying occupation level was particularly deep at this point. A patch of collapsed, partially burnt clay overlapped the central part of the west end and contained a fragment of plain Anglo-Saxon pottery. Apart from this, no evidence was found to suggest the use of clay or wattle and daub with any of the post-built structures.

Fifteen objects were recovered from within the area of the Hall.

Material culture:

SF 810. Roman **bronze coin.** Constantine 1,320-1.
Fig.13,1. SF 844. Roman **bronze ligula.** Octagonal shaft.
Fig.13,2. SF 849. Roman **bronze 'dolphin'** brooch.
SF 805. **Bronze sheet** fragment, 1.5cm across. Not illustrated.
SF 837. Fragment melted **lead,** length 5cm. Not illustrated.
Fig.13,3. SF 807. **Iron knife.**
Fig.13,4. SF 808. **Iron object.** Possibly small cutting hook.
SF 809. **Iron nail,** length 4cm. Not illustrated.
Fig.13,5. SF 846. **Iron knife,** well defined; straight back, long rectangular tang.
SF 951. **Iron nail** or **spike.** *c.*8cm long, fragmented. Not illustrated.
Fig.13,6. SF 850. **Stone spindle-whorl.** Turned.
SF 824. Fragment **window glass.** Roman. Not illustrated.
SF 842. **Glass** fragment, light green. Roman. Not illustrated.
Fig.13,7. SF 1131. Small blue **glass bead,** tiny hole.
Fig.13,8. SF 841. Triangular **bone comb.** Seven tooth segments remaining, probably originally nine. Iron rivets, heavily worn teeth. Compass-scribed circles; the differing sizes and complexity of the larger ones suggest the tool was adjustable.

Building 4: Hall 4. (WG 11). Fig.14.

This building was situated at the west side of the site, on the same line as the previous three. Little can be said about it as it was not possible to define the east and west ends at all, as the area had been heavily disturbed and the filling of post-holes could not be distinguished from the earlier pit and ditch fills. However, there were two parallel lines of post-holes enclosing an area at least 22ft (6.7m) long by 16ft (4.9m) wide. As these post-holes continued the alignment of the other 'Halls' across the settlement and delimited an area of approximately the same size, there are grounds for suggesting a hall on this site. There is a suggestion of paired, double posts, but these were not closely linked as in Hall 2, making a positive association questionable, but still a possibility.

Three objects were recovered from within the area of the Hall.

Material culture.

SF 1581. Roman **bronze coin.** Crispus, 321-3.
SF 1519. **Glass** fragment of handle. Roman. 1st-3rd century. Not illustrated.
Fig.15,1. SF 1700. Triangular **bone comb.** Four tooth segments remaining, with long, fine, rounded teeth. Iron rivets. Compass drawn pattern duplicated on reverse. The inner border has one fine line between two deeper ones.

Building 5: Hall 5. (WH 5). Fig.16.

This building was situated in the south-east corner of the site on the lowest slope of the hillock as it approached the flood plain of the river. The plan of this building was by no means clear, as other buildings were obviously involved as well, on the same spot. The large number of post-holes, and three hearths, (Fig.16, Area Plan) are capable of various interpretations, of which two possible sequences are advanced here.

The post-holes fall into two main groups and it is apparent that there is more than one building in the eastern group. The first interpretation suggests an almost square building to the west of the main group (Building 11) and a Hall-type building to the east, 26ft (7.9m) long by 13ft (4m) wide, with a central hearth (Building 5A, Hearth A). The posts were widely spaced and the corners unmarked. A fragment of Illington/Lackford stamped ware was incorporated in the make-up of the hearth. The central post-hole in the south side cut a post-hole of another structure, of indeterminate length, but at least 14ft (4.3m) long by 9ft (2.7m) wide, with much closer set posts, Building 14.

The second possibility is that the main building in the eastern group of post-holes was much larger; 36ft (11m) long by 13ft (4m) wide (Building 5B), consisting of paired sets of posts, 5 to 7ft (1.5 to 2.1m) apart, representing the positions of tie beams. The hearth would be then included in a central, but rather westerly position.

Two posts, on the south side, were missing but could have been obscured by the earlier site. This building would not use all the posts incorporated by the first interpretation and would represent a very different form of construction.

The westerly group of post-holes could also be argued to contain two buildings, but without conclusive result. They are here considered as one.

Both interpretations leave a number of post-holes unaccounted for, and in particular, no building can be satisfactorily advanced to incorporate the tiled hearth, as it is felt that only straight settings of post-holes would avoid the pitfalls of the 'post-hole game'.

Material culture

Interpretation 1. Hall 5.

Fig.17,1. SF 908. **Bronze suspension loop,** fragment.
Fig.17,2. SF 1199. **Iron sheet,** apparently folded over.
Fig.17,3. SF 1202. **Iron object,** splayed at one end.
Fig.17,4. SF 1208. **Iron object.**
Fig.17,5. SF 1209. **Iron ring,** circular section.
Fig.17,6. SF 1203. Rough-out for **bone pin,** rectangular section.
Fig.17,7. SF 1204. **Bone pin** with triangular head.
Fig.17,8. SF 1206. **Bone disc or bead.** Highly polished with much wear.
Fig.17,9. SFs 1207 + 1211. Triangular **bone comb.** Seven surviving tooth segments, originally eight. Iron rivets. Compass-scribed patterns, duplicated on each side, but carelessly done.
Fig.17,10. SF 1249. Fragment of **antler,** sawn and snapped, sides trimmed with blade rather than a saw.

Interpretation 2. Hall 5.

Fig.17,11. SF 1301. Flat **bronze strip,** partly folded over.
Fig.17,12. SF 1382. **Bronze strip** with nicked end and two holes. Broken at plain end.
Fig.17,13. SF 1256. Fragment **iron knife.**
SF 1322. **Iron fragment.** Not illustrated.
SF 1385. **Iron nail.** Length 3cm. Not illustrated.
Fig.17,14. SF 1451. Pierced **sheep metacarpel.** Large, rather irregular hole.
Fig.17,15. SF 1248. Fragment worked **antler tine.**
Fig.17,16. SF 1193. Fragment, double sided, composite **bone comb.** Connecting plate plain.

Building 6: Hall 6. (WG 12). Fig.18.

A series of post-holes, representing a rectangular building, at least 25ft (7.6m) long by 12ft (3.7m) wide was situated at the far west end of the hillock, continuing the east to west line of halls. Only two posts were found to represent the south wall of the building as this area was obscured by the dense black spread from the Roman pottery kiln (Kiln 4) immediately to the south. Little can be said concerning the structural details of this hall except that the corners, where they exist, appeared to be weak and that the outline was of single posts. The case for this hall as a structure is not strong when seen in isolation, but the overall size, orientation and alignment with the others must be taken into account.

Material culture:

Fig.19,1. SF 1883. Handle of small, tinned, **bronze spoon,** Roman. Lower part faceted on upper surface.
Fig.19,2. SF 1838. **Iron** object, triangular plate with upturned ends. ?Fishing hook
Fig.19,3. SF 1841. Iron object, possibly small **chisel,** thickened shaft and flattened end.

Building 7: Hall 7. (WB 5). Fig.20.

This building was excavated by Professor V.I. Evison on the north slope of the site, whose description is quoted in full:

> From the edge of the quarry a flat-bottomed trench 6-10in deep, 1ft 3in wide at the bottom and about 2ft 6in at the top, ran south-westwards for a distance of 20ft, ending in a round post-hole 2ft 2in wide and 1ft 3in deep, i.e. about 6in deeper than the beam, the diameter of the post being 1ft 3in. Near the middle of this sill beam (with a distance of 12ft 9in between the centre points) was another post-hole, 2ft 6in wide, with an inner black circle 1ft 9in wide, presumably marking the outer surface of a post which had been charred at the end for preservation purposes and which had rotted *in situ.*
>
> There was no other sign of a beam in the area, but at right angles to it were three other post-holes of similar size and the discoloured traces of the base of another, with a distance of about 12ft 9in between the centre points. Parallel to the beam, and at a distance of about 18ft 9in from it, was a row of three post-holes, the middle one and another further west forming a line with the post-hole in the middle of the beam.
>
> The reason why these foundations are only partially preserved is clearly the level of the knoll (Fig.299) which here has its highest point at the south-east corner of the hall, sloping away to the north-west. It is probable that there was no sill along the south-west side for the two post-holes there are just as deep as those in the sill.
>
> The occupation layer in the area of the hall was dark with burnt material. For a few feet adjoining the quarry edge it contained stones, bones and sherds, including one patch of large flints and much burnt daub, also some unburnt clay and chalk mixed. The flints were overlying half a Saxon pot SF 27, a comb-plate SF 26 and two oyster shells. A patch of tile, daub and sherds was between two of the wall posts. Just outside the beam was a patch of large flints with burning traces, two late Roman bases, an Ipswich ware sherd, and slight patches of unburnt clay and chalk mix. Near the inner side of the beam was a small oval clay pit 1ft 6in x 1ft 3in.

Interpretation

The sill and post-holes at right angles must represent the corner of a building, the wall of which consisted of stout, circular posts at intervals of about 12ft 9in. The intervening spaces were presumably filled by planks, set, at least along one side, on the basis of a sill. The size of the complete building is not clear, and five interpretations are suggested, (Fig.20).

1. If the row of four post-holes is taken to represent the long side of a rectangular structure, a third post-hole at the other end of the beam would complete a rectangle of normal proportions for an Anglo-Saxon hall, and the row of three post-holes in the middle would then form a partition nearly across the middle of the structure. A small post-hole, diameter 11in, then occupies a wall position opposite the wall post-hole nearest to the beam. The structure would be 37ft 6in x 25ft 9in, some 5ft longer than Hall 2, but the orientation would be completely different from that of all the other halls.
2. If the 4-post side were extended to a fifth post in line, the opposing corner would coincide with a post-hole, diameter 1ft 9in, and the dimensions would be 50ft x 25ft 9in, with the same orientation.
3. The posts and their settings are of larger proportions, and it must therefore be considered whether the four post-holes could represent a gable end of the house. The beam line would have to be extended for a minimum of four more post-holes into the quarry area, i.e. a length of *c.*62ft. The three post-holes would then form a row nearly along the middle axis of the hall, but the wall would impinge on the site of SFB 31. The orientation would be nearer to that of the other halls.
4. If a fifth post-hole is added to the gable end row, the length would also have to be extended at least another post to a size of 77ft 6in x 50ft, and it would cover the sites of SFB 30 and 31. However, the row of three posts parallel to the beam, and two other posts further west would occupy positions suitable for the inner posts of an aisled hall.
5. The post-holes could be the aisle-posts supporting the roof of an aisled hall, and the outer walls, being of lighter construction, might have left no trace.

In view of the large size of the posts compared with the posts of other structures on the site and the more sophisticated method of building, it is evident that, whichever interpretation is accepted, it was by far the largest structure of the settlement, and represents a considerable change and advance in technique.

All the plans of the various interpretations coincide with Building 13, and some of the interpretations coincide with SFB 30 and 31. The finds within the post-holes of Building 13 or immediately outside are listed with that building, and those within and immediately outside SFB 30 and 31 are listed with them, but some may belong to the hall.

In the area of Hall 7, Building 13 and SFB 30 and 31 the small finds cluster inside SFB 30 and 31, and also within, and just outside the area covered by the hall and Building 13, leaving sterile spaces outside this area. This concentration applies to the small finds in the occupation level, but also to the small finds in the sand layer above, and the topsoil above that. It seems, therefore, that the finds in the upper levels are most likely to have been brought up from the occupation level by the burrowing action of rabbits and moles, and that the positions of all the finds are therefore equally significant. Objects are frequently lost by the walls of a building, and it may be seen that a number of small finds follow the line of the wall of the hall, both inside and out.

The positions of the post-holes and of the find spots confirm a habitation area conforming mainly to version 2, but with a few find spots extending into the area of version 3. There are no further find spots in the area which marks the difference between version 3 and version 4, but the full width of five post-holes is certain, and this findless area is both lower-lying and partly destroyed. The largest version 4, is therefore the most likely. The absence of finds outside the line of five post-holes, an area on the highest part of the knoll, makes version 5 extremely improbable. Further, it may be seen from Fig.299 that version 4 lies more or less straight along the slope of the knoll in a position which would naturally be selected for such a large building, as opposed to versions 1, 2 and 5 which would have been situated with the long axis running up the slope.

Material culture:

Version 1.

SF 3023. Roman **bronze coin.**
SF 3024. Roman **bronze coin.**
SF 3025. Roman **bronze coin.**
SF 3060. Roman **bronze coin.**
SF 3061. Roman **bronze coin.**
SF 3067. Roman **bronze coin.**
SF 3072. Roman **bronze coin.**
SF 3074. Roman **bronze coin.**
SF 3080. Roman **bronze coin.**
SF 3083. Roman **bronze coin.**
SF 3090. Roman **bronze coin.**
SF 3091. Roman **bronze coin.**
SF 3114. Roman **bronze coin.**
SF 3132. Roman **bronze coin.**

Fig.21,A,1. SF 3032. Flat **bronze strip,** ? decorative nicks at one end.
Fig.21,A,2. SF 3042. Hollow-cast **bronze tube;** fragment, curved on one side, flat on other side, with dotted border decoration and lobed end. ? Whistle.
Fig.21,A,3. SF 3046. **Bronze spangle.** Perforated, rounded at one end, straight at the other.
Fig.21,A,4. SF 3071. **Bronze object,** with straight, round-sectioned shaft; other end flattened and twisted.
Fig.21,A,5. SF 3075. Small **bronze ferrule,** ? from cosmetic brush.
Fig.21,A,6. SF 3111. **Bronze clasp.** Rectangular middle-piece decorated with row of 'S' stamps on two narrower sides, a perforated disc at one end and a hook at the other.
Fig.21,A,7. SF 3115. **Bronze ring,** oval section.
Fig.21,A,8. SF 3033. **Iron pin** with spherical head.
Fig.21,A,9. SF 3035. Tapering **iron shaft,** round section.
Fig.21,A,10. SF 3047. **Iron knife** with angled back.
Fig.21,A,11. SF 3050. **Iron buckle plate;** double, rectangular.
SF 3055. **Iron nail,** round section, disc head, ? modern. Not illustrated.
Fig.21,A,12. SF 3057. Tip of **iron knife.**
Fig.21,A,13. SF 3068. **Iron weaving batten.** (See page 139).
Fig.21,A,14. SF 3070. **Iron spike,** possibly tool or heckle. (See Fig.242,34).
Fig.21,A,15. SF 3073. **Iron knife-shaped object,** but with no cutting edge and rounded end.
Fig.21,A,16. SF 3078. **Iron fragment,** rectangular sectioned shaft with spatulate end.
Fig.21,A,17. SF 3088. Small **iron knife,** both edges curving to a point.
Fig.21,A,18. SF 3101. **Iron buckle** plate.
Fig.21,A,19. SF 3122. Shaft of **iron pin.**
Fig.21,A,20. SF 3130. Fragment flat **iron strip,** 2cm long, 0.5cm wide.
Fig.1,A,21. SF 3151. **Iron ring.**
Fig.21,A,22. SF 3049. **Whetstone,** sandy, rectangular section, both ends broken, one rubbed to a point. All surfaces smoothed.
Fig.21,A,23. **Whetstone fragment,** rectangular section, sandy surface, smoothed in parts.
Fig.21,A,24. SF 3077. **Whetstone fragment,** rectangular section, much worn.
Fig.21,A.25. SF 3062. Light green **glass rim** fragment, slightly thickened and out-turned.
Fig.21,A,26. SF 3063. Light green **glass rim** fragment, thickened and everted.
Fig.21,A.27. SF 3064. Annular, dark blue, translucent **glass bead.**
Fig.21,A,28. SF 3066. Annular, dark blue, translucent **glass bead.**
Fig.21,A,29. SF 3085. Small blue **glass disc bead.**
Fig.21,A.30. SF 3086. Cylindrical, yellow-green **glass bead.**
Fig.21,A.31. SF 3087. Black **glass disc bead.**
SF 3099. Small fragment cylindrical red **glass bead** with a decomposed paste inlaid in the middle. Not illustrated.
Fig.21,A,32. SF 3038. Red **pottery** disc **spindle-whorl.**
Fig.21,A,33. SF 3026. Triangular **bone comb** plate, fragments decorated with triple ring-and-dot ornament; parallel-line borders; rivet holes along each edge.
Fig.21,B,1. SF 3048. **Antler pottery stamp.** Tine sawn off straight, with a double 'V' at the tip. (Evison 1979,46; fig.34a).
Fig.21,B,2. SF 3150. **Bone pin** with knob head and slightly swollen shaft.

Possibly associated with Version 1:

SF 3071 , SF 3072 , (see above).
Fig.21,B,3. SF 3081. Dark blue, annular **glass bead.**
Fig.21,B.4. SF 3082. **Bronze strip** fragment, with cable effect stamped decoration. ? Part of Romano-British bracelet.
SF 3100. Fragment Roman **bronze coin.**
Fig.21,B,5. SF 3153. **Bronze wire** fragment.

Version 2.

As for Version 1 with the following additions:
SF 3102. Roman **bronze coin.**
Fig.21,B,6. SF 3129. **Bronze ring** fragment, plano-convex section, diagonal moulding.
Fig.21,B,7. SF 3135. **Bronze bracelet** fragment; two strands, twisted.
Fig.21,B,8. SF 3103. Small penannular **iron fragment.**
Fig.21,B,9. SF 3112. **Iron pin** with looped head.
Fig.21,B,10. SF 3131. Small **iron ring** clasping larger one.
Fig.21,B,11. SF 3134. Small **iron fragment,** rivetted.
Fig.21,B,12. SF 3154. **Flint scraper** of prehistoric type.
Fig.21,B,13. SF 3105. Brown **glass disc bead.**
Fig.21,B,14. SF 3106. Light green twisted **glass rod,** broken at each end.
Fig.21,B,15. SF 3128. Light green **glass handle** fragment. Roman.

Possibly Version 2:

SF 3105 , SF 3106 (see above).
SF 3157. Small reetangular **iron fragment.** 4.3 x 2cm. Not illustrated.

Version 3.

As for Version 1, with the following additions:
SF 3044. Roman **bronze coin** fragment.
Fig.21,B,16. SF 3123. Fragment **bronze sheet.** Rivet hole at one side; other side rolled over.
Fig.21,B,17. SF 3043. **Iron fragment,** square section with slot or rivet-hole.
Fig.21,B,18. SF 3133. Annular, blue **glass bead.**
Fig.21,B,19. SF 3155. Annular, blue **glass bead.**

Version 4.

As for Versions 1, 2 and 3.

Version 5.

As for Versions 1 and 2.

B. OTHER POST-BUILT STRUCTURES

Post-built structures of lesser importance than the 'Halls' were difficult to discern among the mass of settlement features on the site. Occasionally, it was possible to distinguish parts of minor buildings and often to suspect their presence amongst a group of post-holes and pits. The post-holes tended to be in clusters, suggesting the repair or rebuilding of small structures; there was no suggestion of fences. Such a cluster is well seen in WE 3-4 where no acceptable structures can be proposed but where clearly some form of building had been placed and possibly rebuilt several times.

The following groups of post-holes made reasonable outlines:

Building 8, (WD 6). Fig.22.

A group of post-holes aligned east to west, with six posts in the north side, and four in the south, outlined an area 14ft (4.27m) by 6ft (1.83m). The posts were irregular in size and spacing.

Building 9, (WD 6). Fig.23.

A structure similar to No. 8 above, with irregularly spaced posts outlining an area 14ft (4.3m) by 10ft (3.1m), apparently aligned north to south; no post-holes were found in the south side.

Building 10, (WH 5). Fig. 24.

A rectangular structure, 19ft (5.8m) by 8ft (2.4m), aligned east to west, could be construed from the mass of post-holes to the south of SFB 19. The posts on the south side were more closely spaced than those on the north. There was no clear evidence for a doorway.

Building 11, (WH 5). Fig.25.

A square setting of post-holes at the west end of Hall 5 was the best evidence for a post-hole structure other than the halls. The close association with Hall 5 in alignment has already been noticed and there is a possibility of a physical connection between the two structures. The building measured 16ft (4.9m) east to west by 14ft (4.3m) north to south. The south-east corner did not survive, possibly due to the depth of the occupation layer at this point.

Two objects were found within the structure.

SF 919. **Bronze** pellet. Rubbed down Roman coin. Not illustrated.

SF 940. **Iron nail.** Length 4.5cm. Not illustrated.

Building 12, (WE 11). Fig.26.

A possible building, 21ft (6.4m) long by 9ft (2.7m) wide (average) and orientated east to west was situated on the northern edge of the most westerly group of SFBs. The evidence consisted of two lines of post-holes, not quite parallel, and one post at the east end suggesting the end wall. The west end was obscured by earlier pits. The case for a structure here was strengthened by the fact that the late boundary (D.197) respected the structure, swinging to the north to avoid it. A small patch of unfired clay 9in x 9in (22.9 x 22.9cm) occurred in a central position at the west end of the structure.

Only one object was found within the area of the post-holes:

SF 1592. Roman **bronze coin.** Constantius II, 353.

Building 13, (WB 5). Fig.27.

Excavated by Professor V.I. Evison, who writes:

Two parallel rows W to E of three closely-set post-holes, four of them diam. 10in — 1ft 3in, but of the two corner posts one is larger, 1ft 9in diam. and the opposite corner is a triple post, presumably replacements. Between these two posts are two post-holes *c.*1ft diam. in each of which there were clear traces of a stake diam. 4in. The post-holes are interrupted by the S to N ditch in which they were not visible, but two post-holes were visible on the western side, so giving the house the outside dimensions 11ft x 17ft.

Building 14, (WE/8/9). Fig.28.

A small group of post-holes, defining a rectangular area 12ft x 6ft (3.7m x 1.8m) to the south of SFB 48 can be included as a possible structure. Other suggestive groups of post-holes in WB 6, WG 8, WG 9 and WD 5-6 had short lines and angles but could not satisfactorily be made into structures. The group in WD 5-6 (Fig.7) included a number of large, square post-holes with charcoal. The overall size and nature of these post-holes suggest they were contemporary. There appeared to be two groups; an inner and outer, possibly representing a structure within a compound. The burning suggested by the charcoal recalls the destruction of the two nearby SFBs, nos 3 and 15.

Other post-built structures:

The fragmentary and often doubtful nature of some of the smaller post-hole buildings leaves little that can be usefully said concerning the details of these as structures. From the surviving evidence from here and other sites, such as Catholme, New Wintles Farm and Chalton there were clearly many minor buildings whose traces are often obscured and incomplete. One building, No.11 in WH 5, (Fig.16, part) however, has clear parallels. This square structure is almost identical to No.130 at New Wintles Farm (5m square) apart from the central post in the latter, and recalls some of the 'sheds' at Wijster. (Van Es 1967, figs 44,45).

C. THE SUNKEN-FEATURED BUILDINGS (SFBs)

A total of seventy huts of the type generally known as *Grubenhäuser* have been recorded on the site. *Grubenhäuser,* or 'sunken huts' are recognised as having a flat-bottomed pit or hollow, usually rectangular, or rectangular with rounded corners. Normally there are post-holes in the short sides, either one in the middle at each end or three at each end. Many other modifications of this arrangement also appear, including some with no post-holes at all, as well as those with additional post-holes in various settings.

There have been three major discussions of the *Grubenhaus.* Von Guyan in 1952 attempted a geographical distribution based on post-hole arrangements. Ahrens in 1966, with a different nomenclature, used possible interpretations of the superstructure: i.e. 'gable-post'; 'wall-posted' and 'sleeper beam' houses. The third, (Rahtz 1976), adopted the term 'sunken-featured buildings' in an attempt to accommodate various interpretations. The neutrality of this term is attractive and has been used here, normally abbreviated to SFB.

At West Stow both the major types (six-post and two-post) occur, as well as other varieties. Of the seventy features on the site which fall into this class, three were destroyed by the small sand-pit in the north-east corner of the site in the late 1940s — early 1950s but were observed by both Mr. Basil Brown and the author and gave the real clue to the importance of the site. Three more were excavated by V.I. Evison during the period 1957-1961 and are recorded as numbers 30, 31 and 43 below. A further sixty-two were excavated by the author from 1965-1972 which includes SFB 45B which was rebuilt over the site of 45A and SFBs 7 and 10, neither of which had post-holes, but contained fill of the same

distinctive nature as the other SFBs and unlike that of any other feature. Two more SFBs, Nos. 10 and 14, were found in 1977 just off the edge of the hill.

Although two other SFBs, numbers 8 and 26, do not conform to the usual types, they nevertheless combine both factors of post-holes and pits and are included in this class of building.

Four dimensions are given for each SFB:

A: Length A, the overall length of the pit at the level at which it was first defined; this, in almost all cases, being at the junction of level 2 and the natural sand/gravel.

B: Length B, the distance between the centres of the post-holes marking the positions of the ridge-posts.

C: Width C, the mean width of the pit at the same level as A.

D: The depth, taken from the top of the natural gravel. The thickness of the original humus layer has to be added to give the real depth of the floor of the hole in Anglo-Saxon times. This has to be calculated in each case owing to the disturbance of layer 2 by the medieval ridge and furrow. An approximation of the true depth has been given in most cases as an average of the rise and fall shown in the ridge and furrow, and shown as D, 'reconstructed'.

Each SFB is treated as a grave group, all small finds and significant pottery shown as a group, with the plan and section for each SFB. In view of the fresh interpretation of these SFBs, some small finds found in close proximity to the SFBs (not more than 2ft (60cm) away and at the base of layer 2) may be considered as part of the contents of the SFB in question. In each case this is made clear in the text.

Four main types and two sub-types of SFB are recognised and discussed in Part C. In the following descriptions the central post at each end is referred to as the 'ridge-post', those in the corners of the pits of the six-post types are called 'purlin-posts', anticipating the interpretative section. In the descriptions of the material culture, the term **'bronze'** is used for copper alloy objects.

Late Roman pottery in huts:

Descriptions of fabric types and illustrations of the main forms referred to in the hut groups, and discussion of the pottery in general is on p. 128 ff, except for those sherds which have been pierced for use as spindle-whorls, which are illustrated in the relevant hut groups.

Sunken-Featured Building No.1. (WC/5).

Type A, two-post, orientation E to W (Fig.29).

Measurements: A: 17ft (5.18m); B: 14ft (4.27m); C: 12ft (3.6m).

This SFB lay on the upper portion of the north slope some 100 feet (30.48m) north of Hall 1. It was a fairly typical 'two-post' type, roughly rectangular, with rounded corners but irregular in outline, particularly at the west end where the ridge-post hole lay almost outside the pit, whereas that at the eastern end was in the more normal position at the foot of the slope. The pit was shallow, being only 9in (23cm) below the surface of the natural, *c.*1ft 9in (53cm) from the reconstructed old ground surface and having sloping sides.

The east post-hole was only 1ft (31cm) deep and showed a faint, rectangular outline, in plan 9 x 7in (23 x 18cm), which may represent the decayed post. The west post-hole was larger, 1ft 6in (45cm) deep, but with no traces of the post.

The fill of the pit was of an homogenous dark grey sand, fine in texture and with no internal stratigraphy.

Stratigraphy: SFB1 overlay Ditch 1 and Pit 1, both of the late Iron Age.

Material culture:

Twelve objects were positively associated with the SFB; two more, close to the western edge of the pit, but outside it at the base of layer 2, may, on account of the irregular shape of the pit, be considered as belonging to the SFB. (Nos 18 and 33). Another, (No. 22) a bronze Roman coin of Theodosius, came from the junction of Layer 2 and the fill of the SFB itself but may be considered a dubious association.

SF 22. Roman **bronze coin.** Theodora, 337-41.

Fig.30,1. SF 49. **Bronze needle.**

Fig.30,2. SF 50. **Bronze binding, semi-circular section.**

Fig.30,3. SF 23. Lead, ? **plumb-bob** with iron projections.

SF 29. Fragment of **lead waste.** Not illustrated.

Fig.30,4. SF 12. Small curved **iron knife** or **reaping hook** with tang right-angled to the blade.

Fig.30,5. SF 17. **Iron ring,** circular cross section.

Fig.30,6. SF 18. Small **hone,** found 3in outside the north-west corner of the SFB, low down in layer 2, possibly from the SFB. Broken.

Fig.30,7. SF 48. **Chalk spindle-whorl,** turned.

Fig.30,8. SF 31. **Spindle-whorl** made from reused late Roman red ware body sherd.

Fig.30,9. SF 33. **Spindle-whorl,** fired clay, irregular biconical shape. Hard, grey-buff ware. 9in (23cm) outside SW corner of SFB.

Fig.30,10. SF 35. **Spindle-whorl,** fired clay, smooth ovoid shape.

Fig.30,11. SF 40. **Bead** or small **spindle-whorl** in hard light grey pottery, possibly a rubbed down sherd although no structure is apparent. Plano-convex shape.

Fig.30,12. SF 19. **Bone needle** with triangular head, pierced, with flattened point. Pig fibula.

Fig.30,13. SF 21. Double-sided, composite **bone comb,** with coarse and fine teeth. End segments both missing, teeth much worn. Five iron rivets. Connecting plates undecorated except for saw cuts for teeth.

Fig.30,14. SF 34. **Bone awl** made from unpierced splint bone of pig.

Fig.30,15. SF 36. Double-sided, composite **bone comb.** End tooth segment and one other with portion of central ribs. One iron rivet and broken hole for another. Coarse and fine teeth, connecting plates plain except for saw cuts; end tooth segment straight without decoration.

Late Roman pottery:

Shell-gritted base.

Early Anglo-Saxon pottery:

Fig.31,1. Large open bowl. Hard coarse open fabric with white grits, surfaces reddish brown, core black.

Fig.31,2. Fairly hard, fine sandy fabric. Interior surface and core dark grey, exterior surface red-brown.

Fig.31,3. Bowl. Hard, fine fabric, black. Surfaces burnished.

Fig.31,4. Bowl. Hard, coarse fabric with quartz grits, black surfaces burnished.

Fig.31,5. Bowl. Fairly hard, sandy fabric, black. Surfaces smoothed. Traces of rustication on edge of sherd.

Fig.31,6. Hard fine fabric, black.

Fig.31,7. Rusticated sherd, Type I.

Sunken-Featured Building No. 2. (WD/5).

Type A1, two-post derivative, orientation E to W (Fig.32). Measurements: A: 17ft (5.2m); B: 13ft 3in (4.1m); C: 16ft (4.9m) maximum, 13ft (4m) minimum.

SFB 2 lay on the crest of the north slope, in the area of SFBs 1, 3 and 15. The pit was trapeze-shaped, wider at the west end than the

east, with rounded corners. The floor of the pit was uneven, averaging 2ft (0.6m) from the top of the natural, *c.*2ft 9in to 3ft (*c.*0.9m) reconstructed, with sloping sides. No traces of retaining walls for the pit were found. The fill was of an undifferentiated dark grey/brown soil with charcoal flecks.

The two ridge-posts were positively identified, that at the east end situated at the front of the slope and 1ft (0.3m) deep; that at the west end dug through the slope and 1ft 6in (0.46m) deep. A post-hole 1ft 6in deep, at the upper edge of the slope in the south-west corner may be associated with the SFB, but there were a number of other posts in the area around the SFB to which this may really belong. The posts in the centre of the south side and at the foot of the slope in the north-east corner, 1ft and 9in (0.48m) deep, respectively, were more likely to be concerned with the SFB. It would appear therefore that SFB 2 represents a two-post type.

The base of a rounded rectangular pit, 5ft (1.5m) long, occurred in the centre of the SFB and probably belonged to the group of similar pits immediately to the south-west in WD/6. A group of three post-holes at the north-east corner all contained a dense black fill; two were cut by the corner of the SFB and may be related to the burning in this area that destroyed SFBs 3 and 15 and other structures to the south of SFB 2.

Material culture:

Ten objects came from the contemporary fill of the SFB.

SF 194. Roman **bronze coin.** Constantine II, 320-1.

Fig.33,1. SF 191. Small, thin **silver disc.** Central boss ringed with repoussé dots and cross pattern extending to edge, also outlined in dots. No means of attachment visible, although these are usually with loops for suspension.

Fig.33,2. SF 37. Small pair of **iron shears.** From upper part of the SFB fill, but belonging to it.

Fig.33,3. SF 131. Triangular **iron lug** made of sheet metal folded over. If this is in fact some form of horizontal suspension lug it would appear to have fitted a rim with a diameter of approximately 15cm, although it is not known of what material. Lower part of SFB fill.

Fig.33,4. SF 188. Small circular **iron disc** with central knob.

Fig.33,5. SF 25. Upper portion of tiny **bone pin** with flattened triangular head, decorated on both sides with incised lattice pattern. Shaft circular, junction with head defined by groove.

Fig.33,6. SF 178. **Bone needle** with triangular head, pig fibula, pierced, point lost.

Fig.33,7. SF 185. Fragment of double-sided, composite **bone comb.** Three iron rivets and a hole for another. Surviving end tooth segment and both connecting plates plain, apart from saw cuts along the edges. Coarse and fine teeth, much worn. 6in (15cm) above the base of the pit.

Fig.33,8. SF 190. Double-sided, composite **bone comb,** complete. Five iron rivets. End tooth segments and connecting plates plain, apart from saw cuts along edges. Coarse and fine teeth, much worn. 2in (5cm) above base of pit.

Fig.33,9. SF 317. Double-sided composite **bone comb,** complete. Six iron rivets. End tooth segments plain; connecting plates decorated with a panel of lattice pattern at each end, on both sides. Centre of connecting plates plain, apart from saw cuts along the edges. Coarse and fine teeth, heavily worn. From lower level of SFB fill, *c.*6in (15cm) from bottom.

Early Anglo-Saxon pottery:

Fig.34,1. Open bowl. Hard, close fabric with occasional rounded grits. Surfaces grey-brown, core black. Outer surface smoother. Rim shows pinch marks internally.

Fig.34,2. Straight-sided bowl. Hard fabric with much crushed chalk. Light brown-grey surface and core, smooth.

Fig.34,3. Simple, inturned rim. Hard, close fabric, black core and surfaces. Burnished.

Fig.34,4. Rusticated bowl, Type I. Hard fabric with quartz grains and red grog. Black surfaces and core. Rim, neck and part of top line of rustication burnished.

Fig.34,5. Flanged rim in soft open fabric with rounded quartz grits. Brown surfaces, black core. Finger-tip impressions on upper surface of flange. Not wheel thrown; possible intrusive.

Sunken-Featured Building No. 3. (WC/6).

Type A1, two-post derivative, orientation E to W (Fig.35). Measurements: A: 17ft (5.2m); B: 15ft 9in (4.9m); C: 13ft 6in (4.1m); and D: 1ft 3in or 2ft (0.38m or 0.61m), reconstructed.

SFB 3 was situated close to SFB 1 on the crest of the northern slope and apparently associated with SFBs 2 and 15. The pit was rectangular and relatively regular, with two corners sharply cut. The floor of the pit was even and the sides sloped away at *c.*50 degrees. No traces of retaining walls were found. Two large post-holes for the ridge piece measured: West 2ft (0.61m) diameter x 1ft 8in (0.51m) deep, and East 2ft 6in (0.76m) diameter x 1ft 9in (0.53m) deep, both with slightly rounded bases, cut into the sloping wall of the pit and protruding slightly beyond it. A large post-hole immediately to the west is not considered to be associated with the SFB.

Although basically a shallow, two-post example, this SFB exhibited a most unusual arrangement of secondary post-holes irregularly spaced around the perimeter of the pit. Although there were post-holes in the corners which could suggest that this was a variety of the six-post arrangement, these were much smaller than normal in relation to the ridge-posts and are really of the same general character as the rest of the post-holes around the pit.

The hut had been burnt and a large amount of charcoal, representing parts of the structure, remained. The SFB had obviously contained a loom as a number of weights were found in the eastern half, resting on the remains of planks which must have been part of a wooden floor. Remains of four of these planks were found, two of which were 3ft 6in (1.1m) long, ranging from 8 to 11in (20 to 28cm) in width and between 1½ to 2in (3.8 to 5cm) thick, lying north to south across the width of the SFB. Fragments of hazel sticks, apparently interlaced, were found all over the SFB, lying on the loom weights and associated with occasional patches of carbonised thatch. The sticks, clearly the supports for the thatch, were in the round and up to 1½in (3.8cm) thick. These, and the loom weights, were overlaid by the carbonised remains of other planks and timbers, particularly at the east end. Three of these represented small split logs 8in (20cm) across and between 3 to 4in (c.10cm) thick. Other fragments were smaller and may represent purlins or rafters, *c.* 2 x 4in (5 x 10cm). The split logs and other less well preserved planks appear to have come from the walls, being the final parts of the burnt SFB to collapse over the remains of the roof, furniture and floor. It is not clear what the relationship was between the remains of these wall planks and the peripheral post-holes round the pit. The arrangement of post-holes is similar to the type defined by Ahrens as *'Wandpostenhaus'* (Ahrens 1966, 216).

Material culture:

Fifteen objects were recovered from the fill of the SFB and can be positively associated with it.

SF 338. Roman **bronze coin.** Constantius II, 330-5.

SF 347. Roman **bronze coin.** Constantine I, 321-3.

Fig.36,1. SF 333. Small **bronze 'cheese headed' pin.** Three grooves round body and three more under head. cf SF 58, but plain, from Layer 2 in WD/3. (Fig.246,3).

SF 331. **Bronze fragment.** Not illustrated.

Fig.36,2. SF 88. Fragment **bronze bracelet.** Roman.

Fig.36,3. SF 80. Solid **iron bar,** square section. From south-east corner of SFB.

Fig.36,4. SF 108. Small **iron knife,** short tang and thin triangular section, 'humped' back.

Fig.36,5. SF 334. **Iron drill.** Square sectioned shank, one end flattened.

Fig.36,6. SF 346. Fragment of small **iron knife,** point and tang broken.

Fig.36,7. SF 335. **Iron fragment,** possible knife.

Fig.36,8. SF 77. Small **bone gaming** counter, turned.

Fig.36,9. SF 325. Short **bone pin** with spherical head. Two lines of dots ring the shaft and others on the head, apparently filled with red paint.

Fig.36,10. SF 353. Fragment of double-sided composite **bone comb,** portion of plain connecting plate, with three iron rivets. Coarse and fine teeth.

Fig.36,11. SF 70. **Spindle-whorl** in hard grey/brown fired clay. Flattened oval section, small central hole. Decorated with random, deep impressions made with a pointed object.

Fig.36,12. SF 109. Small **gaming counter** made of re-used fragment of grey Romano-British ware, rubbed down to size.

Late Roman pottery:

Oxford base, body sherd.

Early Anglo-Saxon pottery:

Fig.37,1. Upright rim and high shoulder in fairly hard coarse fabric with angular grit. Black outer surface, brown inner, and black-brown core.

Fig.37,2. Shallow, wide-mouthed bowl in hard fabric with grits. Black surfaces and core. Outer surface roughly burnished.

Fig.37,3. Simple, out-turned rim in hard fabric with some chalk. Pierced with small hole below rim.

Fig.37,4. Sherd in hard, close fabric with sparse, angular grits. Brown-black outer surface, black core and inner surface. Square stamp of Type 8.1 and part of groove.

Not illustrated: One rusticated sherd of Type 2 and four sherds with lines, one with six lines and fragments of cross-hatched stamps.

Sunken-Featured Building No. 4. (WC/2).

Type ?, orientation E to W. No illustration.

This hut was observed by Basil Brown in 1947 and destroyed by the gravel pit in the north-east corner of the site. One of three recorded by Brown, and seen by the author. No finds can now be related to it. A section of one of the huts (unspecified) appears in Brown's notebook, clearly from north to south as the pit face dictated, as follows. A shallow pit 7ft (2.1m) wide with sloping sides dropping to the base 5ft 7in (1.7m) across. The depth from the surface is given as 27in (68.6cm). Burnt sand is shown on the south slope. The whole is described as filled with black soil and animal bones, no small finds are recorded. A further sketch section shows three huts and an area of black earth and bones in the west face of the pit. The second and third huts are included in this series as numbers 32 and 33.

Sunken-Featured Building No. 5. (WE/6).

Type B1, six-post derivative, orientation E to W (Fig.38).
Measurements: A: 12ft 3in (3.7m); B: 10ft 6in (3.2m); C: 9ft (2.7m); and D: maximum depth 1ft 9in (0.53m); reconstructed depth 3ft (0.9m).

SFB 5 was the most northerly of the group associated with Hall 2, close to the area of rectangular pits in WD/6, and immediately north of the superimposed group of SFBs 6, 7 and 8. The pit was small, sub-rectangular with very rounded corners and irregular sides. The floor of the pit was uneven, rising by a foot (30cm) in the centre; the sides having an unusually long slope, giving a maximum floor area to the base of the pit of 8 x 5ft (2.4 x 1.5m).

The SFB was basically a six-post type with one extra post in the centre of the south side. The three posts at each end were markedly staggered; the ridge-posts deeper than the purlin-posts. All the post-holes were cut through the upper part of the slope of the sides, in some cases on the edge of the pit, as it was first seen. The fill was the typical tough, grey/brown material in the lower levels which filled half the hollow area, the upper fill being consistant with the general cultural Layer 2 on the site.

The SFB overlay an Iron Age gulley, and cut Pit 28, of uncertain, but probably Iron Age date, and destroyed another probable Iron Age pit in the north-west corner.

Material culture:

Only one object was recovered. Pottery and bone were similarly not common, there being thirty-three Anglo-Saxon sherds.

Fig.39,1. SF 52A. Large hand-made pottery sherd, pierced. Roughout for **spindle-whorl.**

Early Anglo-Saxon pottery:

Fig.40,1. Globular, wide-mouthed bowl in hard, close fabric with small, rounded quartz grits. Black surfaces and core. Outer surface 'scribble'-burnished.

Fig.40,2. Upright rim squared above. Very hard, close fabric with sparse, rounded quartz grits. Red-brown outer surface, black inner surface and core. Coarse outer burnishing. Three lines on shoulder.

Fig.40,3. Miniature vessel in hard grey fabric; grey surfaces and core. Solid applied lug.

Fig.40,4. Fragments from body of *Buckelurne,* probably Type I or II, in hard, close fabric with some angular grits. Part vertical boss with three-line chevrons. Boss pushed out before inside smoothed. Exterior closely burnished.

Fig.40,5. Thickened rim in fairly hard fabric. Both surfaces and core black. Traces of burnishing on neck and part of upper row of Type I rustication.

Sunken-Featured Building No. 6. (WE/6).

Type B1, six-post derivative, orientation E to W (Fig.41).
Measurements: A: 16ft 6in (5m); B: 14ft 6in (4.4m); C: 11ft 6in (3.5m) and D: 2ft 6in (0.76m). Reconstructed; 3ft 6in (1.07m).

SFB was situated immediately north-east of Hall 2 in a complex of rebuilt SFBs, Nos. 7 and 8. The pit was large; rectangular with rounded corners and only irregular in the south-east corner. The sides sloped steeply to the floor of the pit on the north, east and west sides, but more gently on the south to give a rounded profile in the north to south section. The post-holes indicated a basic six-post construction but three extra posts occurred along the north side and one on the south side. There were two posts in the ridge-post position at the east end, both of which appeared to belong to the SFB, one cut into the lower slope of the side and the other overlapping the upper edge of the pit. The purlin-posts at the corners of the east end formed a straight line with one ridge-post site; at the west end the alignment was not straight, the ridge-post staggered to give a bowed appearance to the positioning of the posts. The west ridge-post and the north-west purlin-post were set at the base of the slope; the south-west purlin-post in the slope itself. There were four intermediary posts along the north side, 6 to 8in (15 to 20cm) deep, irregularly spaced, and three along the south side, one being very close to the south-east purlin-post. Of those on the north side, three were set at the base of the slope and one in the floor of the pit. Those on the south ran from the upper slope in the south-west to the floor of the pit in the south-east corner.

The fill exhibited two layers, the lower being a dark grey-brown with specks of charcoal; the upper a light sandy deposit with fragments of burnt clay from the hearth on the south side at the junction of the two layers. The upper layer of sandy material was thickest in the west half of the SFB and was not the general cultural Layer 2 but could have come from the construction of SFB 8 to the south-west. The deposition of this material would indicate that SFB 8 was built immediately after SFB 6 went out of use.

The remains of a hearth of reddened, burnt clay occurred in the south-west quadrant, 9in (23cm) from the edge of the pit, measuring 5ft x 1ft 3in x 3in (1.5 x 0.38 x 0.1m) thick, extending along the south side of the pit, resting on the top of the lower fill and falling down the slope of the fill. The posts in the long sides seem to indicate a lining to the pit and in this respect it is important to note that the N to S section shows clearly an infilling of sand and gravel behind the line of the posts on the north side and to some extent on the E to W section, suggesting back-filling behind a lining of the pit.

SFB 6 destroyed the north-east corner of SFB 9 and was, in turn, superseded by SFB 8, some of the upcast from which formed the sandy layer sealing the primary fill, noted above.

Material culture:

Fourteen objects could be associated with the primary fill of the SFB, together with 183 fragments of pottery.

SF 126. Roman **bronze coin.** Uncertain.

SF 146. Roman **bronze coin,** pierced with two holes. Valentinian I, 367-78.

SF 164. Roman **bronze coin.** Urbs Roma, 330-5.

SF 184. Roman **bronze coin.** Constantine II, 323-4.

Fig.42,1. SF 152. Fragment of **bronze decorated strip,** rectangular in section. Longitudinal lines along the edges; diagonal, punched strokes between, probably fragment Roman bracelet.

Fig.42,2. SF 153. **Bronze cruciform brooch,** side knobs missing, surviving knob full round. The brooch is well worn and was, presumably, in circulation for a long time.

SF 143. **Iron nail,** not illustrated.

SF 144. **Glass** fragment, light green window edge. Roman. Not illustrated.

Fig.42,3. SF 155. **Pottery spindle-whorl;** hard, dark red ware. Cylindrical hole, rectangular section.

Fig.42,4. SF 122. Tooth segment from a double-sided composite **bone comb,** with fine and coarse teeth.

Fig.42,5. SF 151. Double-sided composite **bone comb,** complete. Connecting plates with simple longitudinal lines, six iron rivets. Coarse and fine teeth, heavily worn.

Fig.42,6. SF 154. Double-sided composite **bone comb,** complete. Connecting plates with simple longitudinal lines; seven rivets. Coarse and fine teeth, heavily worn.

Fig.42,7. SF 158. **Bone spindle-whorl,** with decorative grooves.

Fig.42,8. SF 183. Part of **bone needle,** rectangular hole.

Late Roman pottery:

Oxford flange (C51), body sherd.

Oxidised ware flange (form OR 2), two body sherds.

Early Anglo-Saxon pottery:

Fig.43,1. Small, open bowl in hard, close fabric with small, sparse, rounded, quartz grains. Black surfaces and core, outer surface crudely burnished under rim. Poorly made.

Fig.43,2. Small open bowl in fairly hard, but crumbly, fabric. Unusually large amount of rounded grits and yellow mica. Black surfaces and core. Poorly made.

Fig.43,3. Very hard, close fabric with some 'chaff' showing in break. Dark grey surfaces and core, close-burnished externally.

Fig.43,4. Hard close fabric with some chaff in break. Grey-brown surfaces, black core; close-burnished outer surface and upper part of inner surface.

Fig.43,5. Hard, close fabric with sparse, tiny specks of white mica and few grits. Black surfaces and core; smoothed externally and internally.

Fig.43,6. Small bowl in fairly hard fabric with some chaff in break. Grey-brown outer surface, grey-black inner surface and core. Probably originally burnished but with a well-worn appearance.

Fig.43,7. Fragment of small 'cup' or 'crucible' in fine, fairly hard fabric. Grey-black surfaces; core pink outer — grey inner. Crudely applied, pierced lug.

Fig.43,8. Very hard, close fabric with rare grits up to 2mm. Three lines on neck with simple line chevrons with Group 3.3 stamps; cf Myres 1977, 51, early 6th century.

Fig.43,9. Stamped sherd in hard fabric; black surfaces and cores. Small divided stamps of Group 9.1.

Fig.43,10. Rim sherd in hard fabric with white, angular grits. Black surfaces and core, both surfaces burnished. Two unenclosed rows of Group 3B.2 stamps. Same vessel as fragment from SFB 8 (Fig.50,12).

Fig.43,11. Straight sided bowl in hard fabric with chaff. Outer surface brown to black, inner surface and core black. Inner surface and outer rim burnished. Type 2 rustication.

Not illustrated: Four Type I rusticated sherds; seven sherds and three rims of Type 2 rusticated ware.

Sunken-Featured Building No. 7. (WE/6)

Type D, no posts, orientation E to W (Fig.44).

Measurements: N to S: 14ft (4.3m), E to W: 13ft (4m), and 6in (15cm) deep, or 1ft 6in (46cm) reconstructed.

SFB 7 formed part of the over-built group of SFBs 6, 8 and 9 lying to the north-east of Hall 2. The nature of the fill was the same fine grey-brown material as the primary filling in the SFBs generally. This feature is classed as a 'no-post' SFB on the grounds of general size, and shape and nature of the fill. The feature was shallow, with a long slope to the sides, overlaid by SFB 8 on the east side. The floor of the pit was uneven, with a fragment of Roman tile in the centre. A few fragments of unfired clay occurred in the south-east quadrant together with a quarter of the nether-stone of fine mill-stone grit quern.

Material culture:

Only three objects came from the fill, other than the quern fragment, and twelve sherds of Anglo-Saxon pottery.

SF 116. **Iron nail,** not illustrated.

Fig.45,1. SF 132. **Bone needle** with triangular head, broken. Made from pig fibula.

Fig.45,2. SF 94. **Chalk spindle-whorl,** badly chipped but originally rounded above, flattened beneath. Cylindrical hole.

Early Anglo-Saxon pottery:

Fig.46,1. Large shouldered urn in hard, gritty fabric with small white mica. Red brown to grey surfaces and core. Surfaces roughly smoothed. Vertical fingering visible on neck.

Fig.46,2. Bowl in very hard, close, gritty fabric with tiny white mica flecks. Black surfaces and core, both surfaces close-burnished. Outer surfaces with traces of smeared, unfired clay.

Fig.46,3. Open, straight-sided bowl in hard, sandy fabric with some angular grit. Buff-grey surfaces and core. Surfaces smoothed.

Fig.46,4. Very hard fabric with much chalk, some burnt out leaving pitted areas on surfaces. Reddish-brown surfaces and core; both surfaces smoothed, outer coarsely burnished.

Fig.46,5. Very hard fabric with much chalk, very like 4 above. Reddish-brown surfaces, grey core, both surfaces smoothed, outer surface and inner rim, coarse burnished.

Fig.46,6. Very hard fabric with sub-angular grits. Both surfaces black and finely burnished. Outer half of core red-brown, inner black. Thin walled vessel with flattened, slashed cordon and lines.

Not illustrated: Rounded, added boss with small horizontal piercing.

Sunken-Featured Building No. 8. (WE/6).

Type A1, two-post derivative, orientation E to W (Fig.47).

Measurements: A: 17ft (5.2m); B: 15ft 9in (4.8m); C: 16ft (4.9m); D: 6in (15cm); 1ft 6in (46cm) reconstructed.

The measurements between the north and south post centres was: 14ft 6in (4.4m). The shallow trench varied in width from 3ft (0.9m) to 1ft 4in (0.4m) at the north-east corner, averaging 2ft 6in (0.76m). The base of the pit was 6in (15cm) below the top of the natural sand and 1ft 6in (46cm) below the reconstructed Anglo-Saxon level. The trench was a further 6in (15cm) in depth.

SFB 8 was another of the group of rebuilt SFBs to the north-east of Hall 2. The form of this SFB was most unusual, being a shallow, irregular square; the outer limits defined by a flat-bottomed trench, and with one large post-hole in the middle of each side. The post-holes lay on the outer slope of the trench and were large in terms of post-holes in the normal SFB types, and measured: west:— 1ft 7in (48cm); south:— 1ft 7in (48cm); east:— 1ft 8in (51cm) in diameter. That in the north side could not be defined until the lower levels as it cut through the deposits of SFB 9. The depths of the post-holes from the surface of the natural were: west:— 2ft 6in (76cm); south:— 2ft 3in (68.5cm); east:— 2ft 3in (68.5cm); north:— *c.*2ft 3in (68.5cm). In the south-east corner a number of possible stake holes were found at the base of the sloping sides of the trench, but the evidence was not positive.

The fill of both trench and pit was of the uniform grey, standard to all the SFBs. An area of ash extended over the northern half of the SFB but no hearth or other traces of fire were found.

SFB 8 overlay SFB 7 to the west and SFB 9 to the north. Some of the finds from the north side of SFB 8 could in fact be derived from SFB 9 which must be very early in the sequence. An area of fragments of Roman tiles, 3ft (1m) from the south-west corner, may be an external or earlier hearth and along the south side two shallow depressions were cut by this structure. The form of this SFB was unique and maybe closest to the two-post type. The use of a trench, but with two posts only, was repeated in SFB 26 in WF/7, which was, significantly, also associated with Hall 2.

Material culture:

Eighteen objects came from the SFB fill although some of these could have been derived from SFBs 7 or 9. Pottery was plentiful; 319 early Anglo-Saxon and 16 Romano-British sherds were recovered.

SF 111. Roman **bronze coin.** Claudius II, 268-70.
SF 137. Roman **bronze coin.**
SF 139. **Bronze fragment.** Not illustrated.
Fig.48,1. SF 93. Small curved **iron 'reed' cutter** or **reaping hook,** with right-angled tang.
SF 113. **Iron nail.** Not illustrated.
Fig.48,2. SF 114. **Iron nail,** square shank, square head.
Fig.48,3. SF 147. Small **iron knife,** triangular section, pointed tang.
SF 145. Fragment light blue-green **glass handle** Roman. Not illustrated.
Fig.48,4. SF 59. **Bone needle** with triangular head, pig fibula.
Fig.48,5. SF 119. **Bone needle** with triangular head, pig fibula.
Fig.48,6. SF 121. Fragment of **pointed bone,** oval section, probably a pin-beater.
Fig.48,7. SF 123. Fragment of **pointed bone,** oval section, probably a pin-beater.
Fig.48,8. SF 112. Small **fired clay spindle-whorl.** From junction of fills of SFB 8 and 9.
Fig.49,1. SF 120. Fragments of composite, double-sided **bone comb** with fine and coarse teeth. Connecting plates plain except for saw marks along edges. End plates square, six iron rivets.
Fig.49,2. SF 134. Composite, double-sided **bone comb,** with coarse and fine teeth. Seven iron rivets, narrow plain ends. Connecting plates with saw marks on edges and central lines, three on one side, four on the other.
Fig.49,3. SF 138. Fragment of composite, double-sided **bone comb.** One rivet hole and coarse and fine teeth.
Fig.49,4. SF 140. Large composite, double-sided **bone comb,** coarse teeth on both sides, seven iron rivets, irregularly spaced. Connecting plates plain, with saw marks only on one side. End plates narrow with irregular scratch marks.
SF 167. Red deer **Antler tine,** length 46cm, with sawn end. Not illustrated.

Late Roman pottery:

Nene Valley base (Fig.260, NV 10.3), large ? jar base.
Oxford rim (? C51), body sherd.
Oxidised flat base.
Shell gritted two plain jar bases.

Early Anglo-Saxon pottery:

Fig.50,1. Shouldered bowl in hard fabric with rounded grit. Outer surface brown and black, inner surface and core black. Outer surface burnished.
Fig.50,2. Upright rim in hard, close fabric. Black surfaces and core, burnished outer surface.
Fig.50,3. Hollowed rim in hard fabric. Black surfaces and core. Outer surface burnished.
Fig.50,4. Shouldered vessel in hard fine fabric. Black surfaces and core. Both surfaces burnished.
Fig.50,5. Open shouldered bowl in hard fabric with some angular grits. Black surfaces and core. Burnished inside and out.
Fig.50,6. Hollowed rim in hard fabric with sparse rounded grit. Black surfaces and core. Three lines on shoulder, incomplete.
Fig.50,7. Shallow open bowl in hard gritty fabric. Dark grey surfaces and core. Smoothed internally, external surface rather 'pimply' with underlying grit.
Fig.50,8. Hollowed base in fairly soft fabric with rounded quartz grits. Red-brown to black outer surface, black inner surface and red-brown core. Burnished inner surface, smoothed outer.
Fig.50,9. Rusticated bowl in hard close fabric with sparse white mica. Smoothed surfaces, Type I rustication.
Fig.50,10. Pottery 'plug' in hard fabric. Light brown outer surface black inner.
Fig.50,11. Hard fabric, with white, angular grits. Random Group 3B.2 stamps. Same vessel as SFB 6, Fig.43,10.
Not illustrated: Solid, rounded boss; fragment of similar boss with small, horizontal hole.

Sunken-Featured Building No. 9. (WE/6)

Type B, six-post, orientation E to W (Fig.51).
Measurements: A: 11ft (3.4m); B: 10ft 3in (3.1m); C: 9ft (2.7m) west end, and 10ft (3m) east end; D: 2ft (0.6m).

SFB 9 was the fourth SFB of the group north-east of Hall 2. Although overlaid by both SFBs 6 and 8, enough survived to show that the form was of the normal six-post type. In plan the pit was roughly rectangular, wider at the east end and with steep sides. The post-holes at each end were slightly staggered, so that the central ridge-post was just outside the alignment of the purlin-posts. The posts lay at the base of the slope, the purlin-posts well into the corners, but that at the north-east corner was much closer to the ridge-post and 2ft (0.61m) away from the corner. The ridge-posts were markedly larger than the purlin-posts, measuring 10 to 11in (25 to 28cm) in diameter as opposed to 6 to 7in (15 to 18cm) for the latter. The ridge-posts were cut 1ft 3in (38cm) into the natural from the base of the pit, the purlin-posts 1ft (31cm).

The fill of the pit was typically grey-brown without any internal stratigraphy. SFB 9 was overlaid in the north-east quadrant by SFB 6 and in the southern half of SFB 8.

Material culture:

Only nine fragments of pottery could be positively associated with this SFB, together with six objects.

Fig.52,1. SF 115. **Bronze pin** with simple knobbed head, Roman.
SF 117. Head of **iron nail.** Not illustrated.
Fig.52,2. SF 125. Tip of **antler tine,** cut.
Fig.52,3. SF 136. Fragment of connecting plate from composite double-sided **bone comb.** Plain, with fine and coarse saw marks on edges and two holes for iron rivets.
Fig.52,4. SF 157. Small composite **bone comb** of triangular form with rounded profile. Teeth well worn, end tooth plates missing. Ten iron rivets. Simple line ornament round edges of connecting plates, and saw marks.
Fig.52,5. SF 124. **Base** of late Roman pedestalled urn in hard red ware. Broken edges rubbed down. Burnt.
SF 112. Fired clay spindle-whorl, illustrated under SFB 8, Fig.48,8; could be from SFB 8 or 9.

Early Anglo-Saxon pottery:

Fig.53,1. Globular, wide-mouthed bowl in fairly hard, sandy fabric. Brown outer surface, black inner surface and core. Surfaces smoothed. Rounded base. Outer surface smeared with unfired clay. Stratigraphically 5th century.

Sunken-Featured Building No. 10.

Type A, two-post, orientation E to W (Fig.54).
Measurements: A: 11ft (3.4m); B: 12ft 9in (3.9m); C: 11ft 6in (3.5m); D: 1ft 2in (0.36m). Measurements A and D may not be complete.

This, together with SFB 14, was situated a short distance to the east of the knoll, isolated and low lying. It is important to note that both survived the levelling of the area for the sewerage filter beds, implying little real change of the landscape in that direction, and that the eastern edge of the knoll was not modified by the construction of the filter beds.

The SFB was sub-rectangular in form; the sides of the pit met the floor with a rounded profile, the floor flat. The post-holes were slightly to the north of the centre line; the east-post was in the floor of the pit, and the west-post cut into the wall. The filling of the pit was a uniform grey with no stratigraphy.

Material culture:

Nine objects were recovered from the SFB fill, and only ten plain body sherds of pottery (not illustrated).

SF 2232. Roman **bronze coin.** Valentinian I, 364-78.

Fig.55,1. SF 2236. **Iron knife blade,** with angled back.

Fig.55,2. SF 2231. Tooth segment from double-sided composite **bone comb,** with fine and coarse teeth. Little sign of wear.

Fig.55,3. SF 2232. **Bone pin** with rounded head.

Fig.55,4. **Bone Pin** with triangular head, pig fibula.

Fig.55,5. Small, double-ended **bone pin beater.**

Fig.55,6. SF 2228. Very small **bone pin,** head lost. The thickened centre of the shaft is four-sided, each with a line of three dots.

Fig.55,7. SF 2234. Large **bone awl** made from trimmed fragment.

Fig.55,8. SF 2229. **Chalk spindle-whorl,** flattened underneath, upper surface damaged.

Sunken-Featured Building No. 11. (WE/5).

Type — miscellaneous, orientation NE to SW (Fig.56).
Measurements: A: 14ft (4.3m) x C: 11ft (3.4m) overall and is 1ft 6in (0.46m) deep, or 2ft 6in (0.76m) reconstructed.

SFB 11 lay to the east of Hall 2 on the south side of one of the 'hollow' areas and close to SFB 12. The overall plan was sub-rectangular but the positioning of the posts, which only survive at the west end, make it possible to classify into either of the normal two- or six-post types. From east to west the sides dropped steeply into the bottom of the pit, but from the north to south the slope was more gradual. The post-holes at the west end were grouped in two pairs, the outermost of each pair in the position of the purlin-posts of the six-post type. No trace of a ridge-post was found. No post-holes were found at the east end which overlaid SFB 13 to the east and was partly obscured by Ditch 43. The pit was filled with the normal grey-brown SFB fill.

Material culture:

Only one object was recovered from the SFB, but there were 161 fragments of early Anglo-Saxon pottery and three Romano-British potsherds.

Fig.57,1. SF 172. Upper portion of **bone pin** with round shaft and slightly larger, cylindrical head.

Late Roman pottery:

Oxford base.

Early Anglo-Saxon pottery:

Fig.58,1. Ill-made vessel in soft fabric with some quartz grits. Buff outer surface, black core and inner surface. Irregular rim and rather 'bumpy' surface.

Fig.58,2. Hard fabric with rare quartz grit. Dark brown to black surfaces, black core. Simple, inclined rim. Outer surface burnished.

Fig.58,3. Open bowl in hard fabric with chalk grains. Brown to black surfaces, black core. Outer surface burnished, inner surface worn.

Fig.58,4. Flaring rim in fairly hard fabric with rare mica specks and some rounded quartz grit. Outer surface reddish-brown, close burnished; inner surface and core black.

Fig.58,5. Small, everted rim in soft fabric with chalk grains. Reddish-brown outer surface and core, inner surface black. Possibly Iron Age stray.

Fig.58,6. Upright rim with inner chamfer in hard fabric. Black surfaces and core, outer surface smooth, probably burnished. Traces of rustication.

Fig.58,7. Carinated vessel in hard, fine fabric with few grits. Both surfaces and core black, both surfaces burnished. Horizontal line of Group 8.5 stamps between lines above carination. Traces of vertical bosses from carination with same stamp repeated between. Same stamp from WE 4, L2.

Fig.58,8. Stamped sherd in hard fine ware with occasional grit. Black surfaces and core, outer surface burnished. Two horizontal lines of stamps between lines; Group 7B (damaged) above 3C.20.

Fig.58,9,10. Two sherds of the same vessel in hard black fabric, both surfaces and core black; both surfaces burnished. Group 6.10 stamps spaced in ? chevrons and lines. Two other examples of this stamp came from WE 7, L2 and WC 6, L2.

Fig.58,11. Stamped sherd in hard fabric with chaff. Both surfaces and core black, both surfaces burnished. Group 3C.6.

Sunken-Featured Building No.12. (WE/4) — (WE/5).

Type B1, six-post derivative, orientation ENE to WSW (Figs. 59 and 59A). Measurements: A: 18ft (5.5m); B: 14ft (4.3m); C: 13ft (4m); D: 2ft 6in (0.76m); reconstructed depth 3ft 6in (1.07m).

SFB 12 lay on the eastern edge of the Hollow area (I) in WE/5, and north-west of Hall I in WE/3. At the surface of the natural sand the plan of the pit was an irregular rectangle; at the base the pit was more symmetrical in shape. In form the SFB was basically of six-post type, but with additional features. The post-holes at each end of the pit showed a staggered arrangement, with the centre-post in each case outside the line of the purlin-posts. The post in the north-east corner appeared to have been disturbed, possibly by a replacement. Although the post-holes were large in diameter, ranging from 1ft 3in to 2ft (38 to 61cm), they were also rather shallow; the west ridge-post barely 1ft deep, the others between 1ft and 2ft (30 to 60cm) in depth. The north and south sides exhibited short slots in the base of the pit, the north side divided by an apparent post-hole, which was however, only 3in (8cm) deep, the south side having a 3ft (91cm) gap in the middle. The slots were barely 6in (15cm) deep and abutted onto the centres of the purlin-posts, except in the north-west corner where the slot appeared on the inner edge of the post-hole. No traces of slots were found along the short sides of the pit. All the post-holes were set into the angle of the slope of the pit and the bottom. There was no evidence for slumping of the sides of the pit into the lower levels of the fill.

The fill of the pit was in two distinct levels, the lower being consistant with the grey-brown fill common to the other SFBs. The upper fill, of dark brown-black soil, was separated from the lower by a heavy layer of clay in the east half, extending in patches into the western half. Although much broken by tumbling into the pit, many impressions of wattles were found. Some areas in the clay were reddened with burning, but it was not possible to define a hearth. It would seem that the eastern wall of the SFB was lined with wattle and daub and that a fire had been used against it, rather than that the SFB had been burnt. Although there was a fair amount of ash and charcoal flecks in the destruction layer, no large charcoal fragments were found. If fragments of a hearth were included in the tumbled, partly-burned clay, the hearth would have been at the same level, i.e. above the primary fill.

Material culture:

A total of seventy-seven objects were recovered from this SFB, a larger number than from any other. The assemblage is distinctly 'female', with six bone combs, a pottery stamp, four spindle-whorls, four beads, a brooch fragment, loomweights, weaving equipment and a girdle hanger.

SF 250. Roman **bronze coin.** Uncertain.

SF 251. Roman **bronze coin.** Theodora type (irreg.)*c.*337-41.

SF 280. Roman **bronze coin.** Constantine II, 335-41.

SF 309. Roman **bronze coin.** Valens, 364-78.

SF 327. Roman **bronze coin.** Constantius II, 330-5.

SF 328. Roman **bronze coin.** Uncertain, 4th c.

SF 350. Roman **bronze coin.** Constantius II, 353-4.

SF 360. Roman **bronze coin.** House of Valentinian, 364-78.

Fig.60,1. SF 175. Fragment of **silver** with gilded surface. Flat triangular end with upturned projection with

perforation. The triangular part decorated with deep 'chip-carved' scrolls and group of tiny annular and dot-in-ring stamps. The ascending arm has two deep Vs. There is no sign of any attachment on the reverse to suggest that this is a brooch. The broken, triangular part is not complete enough to disclose the presence or otherwise of attachment holes.

Fig.60,2. SF 182. **Bronze stud.**
SF 252. Fragment **bronze strip.** Not illustrated.

Fig.60,3. SF 278. Miniature **bronze axe.**
SF 283. Small **bronze fragment.** Not illustrated.

Fig.60,4. SF 284. **Bronze ring** with small, spaced serrations on one edge.

Fig.60,5. SF 285. **Bronze strap separator** or suspension loop, 'D' shaped, with single bronze plate. Threaded onto the loop are two 'iron' loops from straps, see 'exploded' view with plate removed.
SF 302. **Bronze fragment.** Not illustrated.

Fig.60,6. SF 314. Long **bronze needle.**

Fig.60,7. SF 315. Small **bronze key** or girdle hanger.
SF 329. Small **bronze fragment.** Not illustrated.

Fig.60,8. SF 367. Small **bronze ? washer.**
SF 311. **Iron nail** fragments. Not illustrated.
SF 321. **Iron fragment.** Not illustrated.
SF 217. **Iron nail.** Not illustrated.
SF 272. **Iron nail.** Not illustrated.
SF 274. Flat **iron fragment.** Not illustrated.
SF 275. **Iron fragment.** Not illustrated.

Fig.60,9. SF 279. **Iron knife,** triangular section, cutting edge and back curve to make point.
SF 282. **Iron nail.** Not illustrated.
SF 290. **Iron fragment.** Not illustrated.

Fig.60,10. SF 291. **Iron object.**

Fig.60,11. SF 292. **Iron rod.**
SF 296. **Iron nail.** Not illustrated.
SF 297. **Iron nail.** Not illustrated.
SF 303. **Iron nail.** Not illustrated.

Fig.60,12. SF 305. **Iron bar** with loops at each end on opposing planes.

Fig.60,13. SF 306. **Iron strike-a-light.**
SF 311. **Iron nail.** Not illustrated.

Fig.60,14. SF 323. **Iron rod** or **spike.**

Fig.60,15. SF 324. Iron plate with hole and suggestions of second. ? **wrist clasp.**
SF 356. **Iron fragment.** Not illustrated.
SF 368. **Iron fragment.** Not illustrated.
SF 374. **Iron nail.** Not illustrated.

Fig.60,16. SF 253. **Spindle-whorl;** fine grained sedementary rock. Turned.

Fig.60,17. SF 277. **Amber bead,** disc.
SF 210. Colourless fragment of **glass,** Roman. Not illustrated.

Fig.60,18. SF 245. Green **glass bead.**
SF 286. Fragment Roman **window glass.** Not illustrated.

Fig.60,19. SF 289. Dark blue, translucent, annular, **glass bead.**

Fig.60,20. SF 316. Cylindrical **bead.**

Fig.60,21. SF 361. Dark blue annular **glass bead.**

Fig.60,22. SF 288. **Fired clay spindle-whorl,** plain-convex.

Fig.60,23. SF 298. **Fired clay spindle-whorl,** cylindrical.

Fig.60,24. SF 287. Turned **bone spindle-whorl**

Fig.61,1. SF 181. Composite, triangular **bone comb.** Tooth segments protrude slightly beyond connecting plates. Nine surviving rivet positions. Connecting plates outlined with double lines, interiors filled with inscribed double rings and dot ornament, same pattern both sides. Teeth well worn.

Fig.61,2. SF 237. End tooth segment from composite, double-sided **bone comb.** End section beyond teeth very narrow.

Fig.61,3. SF 357. Tooth segment from single-sided, composite **bone comb.** Traces of two rivet holes; *cf.*complete comb from SFB 22 (Fig.94,16) where the end segment projects from the back of the comb and has a similar notch. In this case this segment would be in the next-to-last position.

Fig.61,4. SF 320. Composite **bone comb** with low, rounded back. Eight tooth segments; the terminals of the end pieces are lost, but enough remains to show they were of the long, flaring type. Fourteen iron rivets. Both sides of connecting plates plain, with triple outlines.

Fig.61,5. SF 236. Fragment of connecting plate from triangular **bone comb.** Outlined with triple line, interior filled with small, single ring and dot ornament with traces of larger, double rings around a central, larger, similar motif.

Fig.61,6. SF 366. End tooth segment from composite, double-sided **bone comb.** End section beyond teeth very narrow.

Fig.61,7. SF 273. **Antler tine,** sawn and snapped. No sign of use.

Fig.61,8. SF 262. **Bone needle** with squared, pierced, head. Cut from long bone.

Fig.61,9. SF 307. **Bone needle** with squared, pierced, head. Cut from long bone.

Fig.61,10. SF 310. **Bone awl or pin.** Head slightly flattened. Unpierced pig fibula.

Fig.61,11. SF 362. Fragment of **bone pin** or pin-beater.

Fig.61,12. SF 322. Large **bone awl.**

Fig.61,13. SF 326. Upper portion of roe deer antler with one tine removed and double chamfer and groove cut onto the stump to form a **pot stamp.** Another groove at the base of the piece (arrowed) may be utilising a natural convolution for the same purpose. Stamp similar to, but longer than, Group 10.6.

Fig.61,14. SF 308. **Pot stamp** made from tip of antler tine in the form of a figure of '8'. Well polished with considerable wear. No examples of this stamp were found on the site and none can be matched with it from elsewhere.

Early Anglo-Saxon pottery:

Fig.62,1. Large cooking pot (Myres 1977, sub-biconical wide-mouthed Form 1.1; fig.32, Corp.No.3991) in very thin, hard fabric. Outer surface patchy red, brown and black, inner surface and core black. The fabric, although thin, has angular flint grits and noticeable flecks of yellow mica giving a rather 'pimply' appearance. Both surfaces smoothed and roughly burnished.

Fig.62,2. Large, irregular cooking pot (Myres 1977, sub-biconical, wide-mouthed Form 1.1; fig.32, Corp.No.3992) in very hard, fine sandy fabric, rare large angular flints up to 6mm and some chaff. Outer surface buff, black on neck, inner surface and core grey. Outer surface smoothed and crudely burnished, inner surface scraped and wiped, dragging particles horizontally in main body and diagonally towards the base.

Fig.62,3. Small cooking pot in hard fabric with some small rounded grits. Outer surface dark brown-black, inner surface and core black. Both surfaces roughly burnished.

Fig.62,4. Cooking pot in hard fabric with small, angular grits and flecks of yellow mica. (Myres 1977, sub-biconal, wide mouthed Form 1.1; 32, Corp.No.3990). Outer surface dark brown-black, inner surface dark grey-black, core black. The whole of the outer surface burnished, the inner surface wiped but rough.

Fig.62,5. Rusticated bowl with rounded profile in hard gritty fabric. Outer surface brown-grey, inner surface and core black. Outer surface smoothed before ornament applied. A patch of unfired clay remains in some of the rustications. Type I rustication.

Fig.62,6. Rusticated bowl with rounded profile in hard gritty fabric with some chaff. Both surfaces orange-black, core black. Outer surface burnished before ornament applied. Type 8 rustication, top row horizontal, lower rows with angled impressions.

Fig.62,7. Small rusticated bowl in hard, fine fabric. Both surfaces and core black. Not burnished. Type I rustication.

Fig.62,8. Sherd with Type 6 rustication.

Fig.63,1. Large cooking pot in very hard, fine fabric. Outer surface brown, black at neck and rim, inner surface and core black. Both surfaces roughly burnished. Patch of clay smeared on outer surface and burnt orange.

Fig.63,2. Cooking pot in fine, thin, very hard fabric with small, rounded grits. Both surfaces black, core black with brown outer layer. Faint traces of fingering around the rim. Both surfaces burnished, the careful, close burnishing on the outer surface has produced a shiny surface of high quality.

Fig.63,3. Cooking pot in hard fabric with small rounded grit and one angular flint 5mm across. Both surfaces and core black, outer surface close burnished, inner surface wiped horizontally.

Fig.63,4. Large cooking pot in hard gritty fabric. Both surfaces and core grey-black. Other surface smoothed, inner surface wiped horizontally.

Fig.63,5. Cooking pot in hard, gritty fabric. Both surfaces black, core brown-black. Outer surface smoothed or burnished, inner surface wiped.

Fig.63,6. Small bowl in hard, crumbly fabric with sparse white mica, small grit and some chaff. Both surfaces and core black, both surfaces burnished, the outer surface has a slightly 'bumpy' appearance. The uneven rim simply rounded off and left turned in.

Fig.63,7. Small rounded bowl in hard fabric with small grits. Both surfaces black and crudely burnished. Core black.

Fig.63,8. Small bowl in hard fabric with sparse yellow mica and small rounded grit. Both surfaces grey-black, core black. Both surfaces burnished, the outer surface rather crudely done.

Fig.63,9. Heavy base in hard fabric with small white mica flecks, small rounded grits and some chaff. Outer surface brown-black, inner surface and core black. Outer surface burnished, inner surface smoothed but interior of base worn rough.

Fig.63,10. Straight sided 'cup' in fairly hard, fine fabric. Both surfaces buff-grey, core grey.

Fig.63,11. Three sherds from same vessel in hard fabric with small rounded grits. Both surfaces and core black. Surfaces close burnished. The form was apparently carinated with two lines on the angle and spaced, paired lines above and below.

Fig.63,12. Sherd of hard gritty fabric; grey brown surfaces and core. Outer surface burnished and decorated with three horizontal lines and diagonal lines below.

Fig.63,13. Thin walled sherd in hard fabric with few small rounded grits. Both surfaces and core black. Outer surface smoothed. Diagonal and vertical slashes on angle.

Fig.63,14. Thick sherd in hard, sandy fabric. Inner surface and core black, outer surface brown. Both surfaces smoothed. Decorated with curved lines.

Fig.63,15. Small sherd in fairly hard fabric. Both surfaces and core black. Traces of four perforations. *cf.*SFB 44.

Fig.64,1. Large, rounded bowl in hard fabric with sparse, small white mica flecks. Outer surface brown-black, inner surface and core black. Both surfaces carefully burnished. The simple rim carries one upright, pierced lug, presumably one of two. An exceptionally well constructed vessel of very high quality. (Myres 1977, 74, Corp.No.3994).

Fig.64,2. Large rounded bowl in very hard fabric with large, yellow mica flecks. Both surfaces and core black and close burnished to give a dense, shiny appearance. A vertical, applied lug on the shoulder, but partially pushed out from within, with horizontal perforation.

Not illustrated: Fragments of three elongated bosses, and two round bosses, all pushed out from inside; all on plain forms.

Sunken-Featured Building No. 13. (WE/5).

Type D, no-post (Fig.65).

Measurements: A: 12ft (3.7m) east to west; and C: 13ft (4m) north to south, and 1ft 6in (0.46m) deep.

SFB 13 was situated on the south side of the Hollow Area 1, south-west of SFB 12 and overlaid by SFB 11 to the west. In plan the SFB was oval, the sides curving gently up from the base of the pit. No post-holes could be defined in the floor of the pit or in the sloping sides, but the fill was of the distinctive grey-brown material common to most of the SFB's, suggesting that this was an SFB, but without post-holes. The north to south axis, being slightly the longer, may suggest that this was the alignment of the SFB, but it cannot be certain. There were no other features, apart from a small patch of clay on the south side, at the junction of the primary and secondary fills.

Material culture:

SF196. Iron fragment, ? nail - length 3cm. Not illustrated.

SF 198. Iron nail. Length 5cm. Not illustrated.

Fig.66,1. SF 197. **Chalk spindle-whorl.**

Fig.66,2. SF 192. Double pointed **bone pin-beater.**

Fig.66,3. SF 193. Broken **bone point,** oval section. ? Pin.

Fig.66,4. SF 195. **Bone pin** with pierced triangular head, pig fibula.

Late Roman pottery:

Nene Valley base (Fig.260, NV 3.2)

Early Anglo-Saxon pottery:

Fig.67,1. Hard fabric with some small rounded grit. Black surfaces and core. Outer surface close burnished, inner surface smoother.

Fig.67,2. Hard fabric. Black surfaces and core, both surfaces close burnished.

Fig.67,3. Stamped sherd of very hard, close fabric. Black surfaces and core, both surfaces burnished. Decorated with two horizontal rows of stamps between pairs of lines; Group 2C.1 above Group 6.1. A fine, well-made vessel with sharp, clear ornament.

Not illustrated: Four sherds of Type I rustication, two sherds with simple line ornament and one with four neck rings.

Sunken-Featured Building No.14.

Type D, no-posts, orientation E to W (Fig.68).

Measurements: A: 13ft (4m) E to W; C: 10ft 6in (3.2m) N to S and depth: 2ft 2in (0.66m).

This SFB was one of the two found a short distance to the east of the knoll in an isolated and low-lying position (see SFB 10). The pit, as uncovered, was irregular in outline; the walls sloped gently in to meet the rather uneven floor. The fill was of the normal grey material.

A hearth constructed of flints, clay and fragments of Roman tile was found some four feet to the north of the hut but was not apparently associated with the structure.

Material culture:

Thirteen objects were recovered from the hut fill.

SF 2237. Roman **bronze coin.** Constantius II (irreg). 353.

SF 2239. Roman **bronze coin.** Victorinus, 268-70.

SF 2244. **Iron nail.** Length 3cm. Not illustrated.

SF 2248. **Iron nail.** Length 3cm. Not illustrated.

Fig.69,1. SF 2245. **Iron collar** from shaft, cross-section shown.

SF 2240. **Iron nail.** Length 9cm. Not illustrated.

Fig.69,2. SF 2242. **Iron key** or hook.

Fig.69,3. SF 2243. Small **chalk spindle-whorl** or **bead.**

SF 2246. Small fragment of **puddingstone quern.** Not illustrated.

Fig.69,4. SF 2241. **Bone awl** or pin-beater, broken.

Fig.69,5. SF 2250. Distal end **sheep tibia,** pierced.

Fig.69,6. SF 2252. **Antler tine,** showing cut marks.

Fig.69,7. SF 2238. **Amber bead,** three sided oval.

Early Anglo-Saxon pottery:

Fig.70,1. Cooking pot with slightly upturned rim with thumbing. Very hard sandy fabric with white mica. Outer surface and core black, inner surface brown and black. Outer surface scraped.

Fig.70,2. Stamped sherd in hard, sandy fabric. Brown surfaces, black core. Group 3C stamps.

Sunken-Featured Building No.15. (WC/4).

Type A, two-post, orientation E to W (Fig.71).
Measurements: A: 19ft (5.8m); B: 16ft (4.9m); C: 15ft (4.6m); D: 1ft 3in (0.38m); reconstructed depth 2ft 3in (0.69m).

SFB 15 lay on the north side of Hollow 2 and to the east of SFB 2. The plan was markedly rectangular, the floor of the pit flat, the sides sloping gently, with no sign of collapse. The SFB had been burnt down and considerable quantities of charcoal remained to indicate the positions of planks running across the width of the SFB, separated into an upper and lower series by over 100 loomweights, in three groups. The SFB is of the two-post type with the posts set into the slope of the pit walls, with no modifications.

The burnt remains represented, stratigraphically, lower planks on which the loomweights rested, over which were quantities of fragments of small hazel sticks, concentrated mainly around the edges of the SFB. These fragments measured up to 6in (15cm) in length but gave little detail of their original format. The impression was, however, that they formed the basis for the thatched roof. A further series of plank fragments rested over all and must be presumed to have come from the walls. The charred fragments of planks measured from 7 to 10in (*c.*8 to 24cm) in width and between 1½ to 2in (3.8 to 5cm) in thickness, but some allowance must be made for shrinkage in the fire. The section of the planks is not restorable; the charring affected only one surface, so that it is not known whether or not the planks were split logs or flat on both sides. No recognisable fragments of the ridge-posts survived.

The deposition of the loomweights into three groups was important; in the north-east and south-west corners of the SFB, a number were found stacked like books on a shelf, presumably as they had dropped from looms. In the north-west quadrant the weights were more numerous and more tumbled. The grouping of the weights would seem to indicate at least three looms in the SFB.

A patch of burnt clay, 3ft (0.9m) long and 2ft (0.61m) wide, partly overlaid the edge of the SFB in the south-west corner, with the upper surface burnt red. This could well have been a small hearth.

The SFB was free standing, with no post-holes nearby which could have been associated, cutting only a small Iron Age ditch, (D.49).

Material culture:

Eighteen small finds were recovered from the SFB, of which nine might be described as 'female' objects.

Fig.72,1. SF 373. Small **silver knob-headed pin** with ring-moulding at the head of the shaft.

Fig.72,2. SF 89. Fragment twisted wire **bronze bracelet.** Roman type.
SF 244. **Iron nail** fragment. Not illustrated.
SF 258. **Iron nail.** Length 2.5cm. Not illustrated.

Fig.72,3. SF 267. **Iron rivet,** square section, flattened ends.

Fig.72,4. SF 293. **Iron rivet,** rectangular section, one flattened end.

Fig.72,5. SF 336. **Iron knife.**

Fig.72,6. SF 312. **Chalk spindle-whorl.** Burnt, beehive shape, with lower surface slightly convex.

Fig.72,7. SF 269. Light green **glass** 'kicked' **base**, fragment of cone beaker, C4-C5.

Fig.72,8. SF 243. Dark olive green, translucent, **disc bead.**

Fig.72,9. SF 276. Fragment of plain, cylindrical, light blue **glass bead.**

Fig.72,10. SF 344. Cylindrical, yellow-green **glass bead.**

Fig.72,11. SF 359. Fragment of plain, cylindrical, blue-green **glass bead.**

Fig.73,1. SF 270. Small 'cheese-headed' **bone pin.** *cf.*SFB 3, Fig.36,1, in bronze.

Fig.73,2. SF 294. single-sided, hog-backed, composite **bone comb.** End tooth plates plain, extending above the back. Seven iron rivets, two of which are close together in the middle. The central connecting plates are decorated at each end with panels, defined by bands of lines, with wide-spaced criss-cross diagonals and close criss-cross ornament between, which is repeated on each side. The backs of the connecting plates are decorated with an irregular cross pattern. A curious feature of the comb is the gap in the middle of the teeth where the stumps of six teeth have been carefully smoothed down. The teeth show a fairly heavy degree of wear, many of them being worn to a rounded shape.

Fig.73,3. SF 295. Double-sided, composite **bone comb** with coarse and fine teeth. Five iron rivets. No ornament apart from the saw marks at the base of the teeth on the connecting plates.

Fig.73,4. SF 318. Portion of double-sided, composite **bone comb** with coarse and fine teeth. Five iron rivets. Surviving end tooth-plates plain and squared, projecting further than normal from end of connecting plates. Decoration restricted to four lines at the ends of each connecting plate.

Fig.73,5. Fragment of **bone pin-beater.**

Late Roman pottery:

Nene Valley spindle-whorl see SF 2251.
Oxford rim (WC 7).
Oxidised base (form OR 1.3).

Early Anglo-Saxon pottery:

Fig.74,1. Small cooking pot with rounded profile in hard fabric. Both surfaces and core black. Outer surface burnished, inner surface smoother and roughly burnished on inner rim and towards base.

Fig.74,2. Upright rim with small internal bevel and exterior modelling in hard sandy fabric. Both surfaces black, core grey. Traces of finger-nail impressions.

Fig.74,3. Stamped sherd in fairly hard fabric with some chaff visible. Dark brown surfaces, red-brown core. Both surfaces burnished, inner surface roughly. Two stamped impressions of Group 7.7 apparently in outlined panel.

Not illustrated: three sherds Type I rustication.

Sunken-Featured Building No. 16. (WD/3).

Type A, two-post, orientation E to W (Fig.75).
Measurements: A: 16ft 6in (5.1m); B: 14ft 6in (4.4m); C: 12ft 6in (3.8m); D: 2ft 3in (0.64m) or 3ft (0.9m) reconstructed.

SFB 16 lay at the east end of Hollow 2, some 18ft (5.49m) north of Hall 1. The pit was sub-rectangular in plan. The sides were steep, rising from an even floor. The form was of the normal two-post type, the post-holes set in the sloping pit walls, 1ft 3in (0.38m) east, and 1ft 6in (0.46m) west, below the floor of the pit. The fill was of two distinct levels; the lower a sandy grey, typical SFB fill with some patches of black, overlaid by the darker black layer consistent with the cultural layer over the whole site (Layer 2). The lower level was more sandy towards the bottom with a slight amount of sand from the sides, consistent with the weathering of an unprotected surface.

The filling of the post-holes was a darker mottled black which may represent the decaying stumps of the posts. A fragment of a clay loomweight found in the eastern post-hole was found to join another fragment from the lower level of the pit fill and must have dropped into the cavity formed by the decayed post. There was no disturbance of the filling of the pit to suggest the removal of the posts after the abandonment of the SFB.

Two dog skeletons were recovered from the SFB which have a bearing on the nature of the structure. The first was contained within the lower fill, just 3in (8cm) above the 'floor' of the pit, at the western end. The skeleton was complete and still articulated. The second was lying on the slope of the lower fill, at the junction with the black Layer 2 material. The main body was near the edge of the pit, with the head and parts of the forelimbs down the slope, away from the rest of the skeleton, indicating that the bones had been undisturbed during the process of decay and that a considerable time had elapsed between the deposition of the dog and the sealing of the bones by the Layer 2 material. It is suggested that the process took place in a hollow space, protected from the attentions of other dogs, children or village activities and that this protection could have been afforded by a wooden floor. Examination of this second dog showed that it had suffered a number of injuries, including broken ribs and a broken leg from which it had recovered. The skull, however, exhibited a depressed fracture on the upper left side of the muzzle and forehead which may have led to its death, perhaps prompting it to crawl into a hole under the SFB and there to die.

Material culture:

Twelve small finds were recovered from the primary fill of the SFB, a further five from the post-SFB fill (level 2) cannot positively be associated with the life of the SFB.

SF 441. Roman **bronze coin.** Constantius II, 341-8.
SF 442. Roman **bronze coin.** Constans, *c.*348-50.
SF 454. Roman **bronze coin.** Marcus Aurelius, 161-180.
SF 458. Roman **bronze coin.** Antoninus Pius, 138-161.

Fig.76,1. SF 447. **Bronze ear scoop** with simple loop for suspension and double twist.
SF 440. **Iron nail.** Length 4cm. Not illustrated.
Fig.76,2. SF 435. **Glass bead,** red and white dots.
Fig.76,3. SF 452. Blue. ? translucant **glass bead** with red on white dots.
Fig.76,4. SF 505. **Fired clay spindle-whorl** made from late Romano-British redware pedestal base.
Fig.76,5. SF 434. Fragment of double-sided, composite **bone comb.** Fine teeth on both sides. Two iron rivets. No decoration apart from saw cuts along central connecting plates.
Fig.76,6. SF 445. Large **bone awl** from sharpened fragment of long-bone.

Late Roman pottery:

Nene Valley body sherd.
Oxidised everted rim fragment.

Early Anglo-Saxon pottery:

Fig.77,1. Fairly hard fabric with some chaff and fine white mica. Both surfaces and core black; outer surfaces show signs of having been scraped, both surfaces smoothed.
Fig.77,2. Hard fabric with sparse rounded quartz and ? chaff. Outer surface dark brown to black, inner surface and core black. Coarsely burnished on both sides.
Fig.77,3. Hard fabric, black surfaces and core. Badly worn rustication.
Fig.77,4. Illington/Lackford, Fabric I; three lines with ? swag and J1 stamps.

Sunken-Featured Building No. 17. (WD/2).

Type C, four-post, orientation E to W (Fig.78).
Measurements: A: 13ft 3in (4m); B: no ridge-posts; C: 10ft 3in (3.1m); D: 3ft 4in (1m) or 4ft 4in (1.3m) reconstructed.

SFB 17 was situated on the extreme east edge of the knoll and from its position should be associated with the Hall 1 group, which included SFB 16 and the three SFBs known to have been destroyed by the small sand-pit on the north-east corner of the site.

The pit was roughly rectangular, but slightly narrower at the east end, and was unique to the site in that it was a four-post type, and deeper than any other SFB at West Stow. The post-holes were 9ft 6in (2.9m) apart on the long east to west axis but varied in the north to south axis, being 6ft (1.8m) at the west end and 5ft 6in (1.8m) at the east. The post-holes were set into the bottom of the slope of the walls of the pit, which were steep, almost vertical at the east end of the pit. The southern edge of the pit exhibited an irregularity in the plan at the point where the wall became almost vertical. No explanation could be advanced for this.

The fill of this SFB was also unusual. Basically divided into three deposits, the upper, or post-SFB fill (1) was much thicker than in any other SFB suggesting a shorter life for the structure. Below this, a layer of yellow sand, (2) some 9in (23cm) thick covered the lowest level (3), which consisted of a layer of normal SFB fill averaging 6in (15cm) thick, with a discontinuous layer of burnt material, including charcoal and thatch, over most of the area of the SFB. Between this and the base of Layer 2 a layer of grey sandy material with charcoal flecks occurred.

It would appear that after level 1 had accumulated on the floor of the pit, the SFB was burnt, perhaps only partially. The charcoal was too fragmentary to interpret in terms of structural components, but traces of thatching material were recovered. The SFB may have been restored, which would account for the continuation of the grey material above the burnt layer. Level 2 would seem to be a deliberate infilling of clean yellow sand into the pit which was still 3ft 6in (1m) deep. Level 1 is the more normal post-SFB fill. The burning was accompanied by some slumping of the north wall of the pit.

The SFB was free standing, without any stratigraphy with other features.

Material culture:

Only four objects were recovered from level 1 and can be considered as contemporary with the life of the SFB. An unidentifiable bronze fragment was found in level 2, and a bone pin (SF 729), a bone point (SF 730), and a coin of *c.*270 AD. (an irregular radiate) (SF 408), were found in level 3, the post-SFB fill.

Level 1:

Fig.79,1. SF 443. **Bronze ring.**
Fig.79,2. SF 528. Small flat **iron fragment.**
Fig.79,3. SF 529. Fragment of **iron strap work** with large headed rivet.
Fig.79,4. SF 463. Small **bone handle,** trimmed down.

Late Roman pottery:

Nene Valley base (form NV 1 or NV 2).
Oxidised flat base.

Early Anglo-Saxon pottery:

Fig.80,1. Group I *Buckelurne* in very fine, hard fabric with tiny white mica specks. Both surfaces and core black. Both surfaces well burnished, the outer surface closely to give dense, black, shiny surface. Decorated with wide diagonal bosses outlined with two lines. (Myres 1977, fig.179. Corpus No. 3427).
Fig.80,2. Hard sandy fabric. Brown outer surface, black inner surface and core. Smoothed.
Fig.80,3. Hard fabric, black surfaces and core, outer surface close-burnished.

Sunken-Featured Building No. 18. (WF/4).

Type B1, six-post derivative, orientation E to W (Fig.81).
Measurements: A: 14ft 6in (4.4m); C: 11ft 3in (3.4m); D: 1ft 3in (0.4m); or 2ft 6in (0.8m) reconstructed.

SFB 18 was situated immediately to the south-west of Hall 1, geographically close to two very much smaller SFBs: nos. 28 and 29; but probably not contemporary with them.

The pit was rectangular in plan, slightly rounded in the south-west corner. The sides sloped gently to the floor on all but the south side where the slope was steeper. The post-holes had an irregular distribution, with three along each of the long sides of the pit, with those in the corners clearly placed in the long side, with two off-centre in the west end, and two widely spaced in the east end. The west half of the SFB was largely occupied by the remains of a large, oval, clay oven, 3ft 6in (1.02m) along the surviving axis. The oven consisted of a flat plate of clay, 2½in (6.4cm) thick, incorporating a layer of flints. At the perimeter the walls remained standing to a height of 6 to 8in (15 to 20cm) and were up to 6in thick. The surface of the clay plate and the inner surface of the walls were fired hard. Approximately one third of the oven had been destroyed by the cutting of Ditch 54 which may have destroyed any evidence for flues. In common with all other examples of clay hearths in SFBs on the site, the oven lay immediately upon the lower fill, with some fragments of clay and charcoal defining the division between the upper and lower levels in the SFB. The later fill, and oven itself, was in turn cut by Ditch 54, which is of 7th century date.

This was the only hearth at West Stow with evidence of walls and which could therefore be called an 'oven'. The mass of unfired clay which was found on the oven floor suggested some form of enclosed dome, but this cannot be proved. There was no evidence to suggest the purpose of the oven; no metal slag, pottery wasters or charred grain was found.

Material culture:

Fifteen objects were recovered from the lower fill of the pit, including an amber bead, a plain silver ring and a fragment of a neolithic stone axe.

Fig.82,1. SF 545. **Spiral silver finger ring,** with longitudinal grooves and snake's head terminal.
SF 702. Roman **bronze coin.** House of Valentinian, 364-78.
SF 713. Roman **bronze coin.** Gratian, 367-75.

Fig.82,2. SF 698. Small **bronze fragment,** possibly the pin from a brooch.
SF 710. Small bronze fragment, length 1.8cm. Not illustrated.

Fig.82,3. SF 752. **Bronze pin,** round section. Head missing. ? Roman.

Fig.82,4. SF 707. **Iron fragment,** length 6.5cm.

Fig.82,5. SF 572. Fragment of **greenstone axe,** from base of pit (Clough and Green, 1972, 151; listed as No.S.81, ungrouped greenstone series).

Fig.82,6. SF 706. Small roughed-out **amber bead.** Unpierced.

Fig.82,7. SF 551. Broken **bone point,** oval section, made of splinter from long bone.

Fig.82,8. SF 576. Fragment of bone connecting plate from double-sided, composite **bone comb.** Decorated with two medial lines and saw marks along one edge only. One iron rivet.

Fig.82,9. SF 480. Double-sided, composite **bone comb,** eight iron rivets, both connecting plates with six longitudinal lines.
SF 708. Tooth from **bone comb.** Not illustrated.
SF 711. Tooth from **bone comb.** Not illustrated.

Fig.82,10. SF 749. **Bone pin.** Slight swelling at upper end and irregular incised spiral. Head missing, circular section.

Late Roman pottery:

Nene Valley body sherd.
Oxford body sherd (C97).
Oxidised ware flange (Fig.260, OR 2), handle (Fig.260, OR 8).

Early Anglo-Saxon pottery:

Fig.83,1. Small, globular cooking pot in hard, sandy fabric with some chaff, small rounded grits and tiny specks of white mica. Both surfaces and core black, outer surface close burnished.

Fig.83,2. Small, rounded rim, hard sandy fabric. Dark brown to black surfaces, black core. Outer surface burnished, inner surface scraped.

Fig.83,3. Hard fabric with sub-angular grits. Brown to grey surfaces, core black with outer layer of oxidation. Both surfaces smoothed.

Not illustrated: Three sherds of Type 2 rustication.

Sunken-Featured Building No. 19. (WG/5).

Type A, two-post, orientation E to W (Fig.84).
Measurements: A: 13ft 6in (4m); B; 13ft 6in (4m); C; 10ft 6in (3.2m); D: 1ft 9in (0.5m) or 3ft (0.9m) reconstructed.

SFB 19 lay on the crest of the steep south slope of the site as it drops down to the flood-plain of the river. It formed part of the group around the rebuilt structures in the south-east corner, including SFBs 44, 45 and 49.

The pit was roughly rectangular, with rounded corners and a slight bulge in the north side. The sides sloped gently to merge imperceptibly with the base. The pit was entirely filled with a uniform dark grey material consistent with that of other SFBs on the site, there was no secondary fill. The SFB was basically of the two-post type, but with an extra post at the base of the pit on the north side and another in the slope of the south-east corner. The ridge-posts were not in the usual position; that on the east being in the very top of the sloping side; that on the west being virtually outside the pit itself. A small amount of ash and charcoal occurred in the centre of the western half of the pit. There were no other features. The west edge of the SFB cut through the east edge of the SFB 20, the fill of which was of a slightly lighter grey.

Material culture:

Thirteen objects were recovered from the fill, plus two loom-weight fragments.

SF 514. Roman **Bronze coin.** Tetricus 1, 270-3.
SF 558. Roman **Bronze coin.** Constantine 11, 335-41.

Fig.85,1. SF 560. **Bronze fragment.**

Fig.85,2. SF 567. **Bronze pin** with glass head.

Fig.85,3. SF 583. Catchplate and portion of the bow of a **plain bronze** brooch. Camulodunum Type III, mid 1st century AD.

Fig.85,4. SF 699. Simple wrap-round **bronze ring** of flat metal, ornamented with a single row of dots.
SF 566. **Iron nail.** Length 5cm. Not illustrated.
SF 599. **Glass fragment,** Roman.

Fig. 85,5 SF 561. **Bone needle** with triangular head, well rubbed down, pig fibula.

Fig.85,6. SF 574. Incomplete, double-sided, composite **bone comb.** One side slightly finer teeth than the other. Seven iron rivets, connecting plates plain, with slight saw marks. One end tooth plate survives; this is large but projecting only 8mm beyond the central spine, and is pierced with a single hole, presumably for suspension.

Fig.85,7. SF 605. Fragment of thin, squared **bone plate** pierced with two holes. Possibly part of a tablet for weaving.

Fig.85,8. SF 606. Worn fragment of plate from triangular **bone comb.** Edge defined by a single line and a haphazard arrangement of scribed single circles and dots. Remains of three rivet holes.

Fig.85,9. SF 607 .Fragment of double-sided, composite **bone comb** with fine and coarse teeth. Remains of one iron rivet. Much worn.

Late Roman pottery:

Nene Valley flagon sherd (Fig.260, NV 6.1), base (Fig.260, NV 10.2).

Anglo-Saxon pottery:

Fig.86,1. Hollow-necked, biconical bowl in hard, sandy fabric with occasional large flints. Outer surface brown and black, inner surface black, core black with brown layer under inner surface. Inner surface smoothed, outer surface close-burnished.

Fig.86,2. ? Globular vessel with small, upturned rim in hard fabric with chaff. Both surfaces and core grey-black. Both surfaces smoothed.

Fig.86,3. Small, upright bowl in very hard fabric with some small white mica. Both surfaces and core grey-black.

Fig.86,4. Small, upright bowl in fairly hard fabric with some chaff. Outer surface buff to black, inner surface grey, core black. Both surfaces smoothed.

Fig.86,5. Large vessel in hard open fabric. Outer surface grey-black, inner surface and core black. Solid, probably pierced, lug high on shoulder, recalling Myres' shoulder-boss type.

Fig.86,6. Sherd in hard sandy fabric. Both surfaces and core black, outer surface smoothed. Decorated with irregular scored lines.

Fig.86,7. Rusticated sherd in hard fabric, with occasional yellow mica. Red-brown surfaces and core, inner surface burnished. Type 2 rustication.

Fig.86,8. Fragment of spout in hard fabric with plentiful quartz grits and some yellow mica. Black surface and core.

Illington/Lackford pottery: Ten sherds were recovered from the contemporary fill of this SFB and are dealt with in detail elsewhere. All except one were small sherds, the largest is illustrated here. Schemes, stamps and fabrics refer to Green, *et al,* 1981.

Fig.86,9. Illington/Lackford, Scheme 6, panel and boss style, I/L fabric I. Slashed collar and I/L stamps AIa, D4 and H2.

Illington/Lackford sherds not illustrated:

a.	Scheme 2/4	I/L stamps A3 and D4	I/L Fabric 5
b.	Scheme 3a or 4a	I/L stamps J1	I/L Fabric 7.
c.	Scheme 3a or 4a	I/L stamps J2	I/L Fabric 1

d.	Scheme 6	I/L stamps D4	I/L Fabric 1.
e.	Scheme 6	I/L stamps D3	I/L Fabric 1.
f.	Scheme 6	I/L stamps ?D	I/L Fabric 10.
g.	Scheme 6a	I/L stamps J2	I/L Fabric 1.
h.	Scheme 6a	I/L stamps J2	I/L Fabric 5.
i.	Scheme unknown	I/L stamps A4	I/L Fabric 1.

Fig.86,10. Decorated sherd in hard fabric with angular grit. Both surfaces and core black, both surfaces burnished. Horizontal line of Group 6.7 'S' stamps forming an almost continuous scroll. Vertical, pushed-out boss and diagonal line.

Fig.86,11. Stamped sherd in fairly hard fabric. Outer surface brown, inner surface and core black. Both surfaces burnished. Horizontal line of Group 6.7 cross stamps within double lines. Fragments of larger, possibly oval cross-hatched stamp above.

Fig.86,12. Stamped sherd in hard fabric. Both surfaces and core black, layer of oxidation under outer rim. Outer surface burnished. Triangular cross-hatched stamps of Groups 7A.4 above damaged Group 3B. Suggestions of complex layout.

Fig.86,13. Stamped sherd in hard sandy fabric. Both surfaces and core black, outer surface burnished. Clear impressions of Group 7C.1 cross-hatched stamp.

Not illustrated: Two small fragments of applied, rounded lugs; six sherds Type 2 and two sherds Type 3 rusticated pottery.

Sunken-Featured Building No.20. (WG/6).

Type A, two-post, orientation E to W (Fig.87).
Measurements: A: 14ft (4.3m); B: 12ft 6in (3.8m); C: 13ft (4m); D: 2ft 6in (0.8m) or 3ft 9in (1.1m) reconstructed.

SFB 20 lay on the south edge of the site, partly overlaid by SFB 19. The pit was oval, the sides sloped gently to the bottom of the pit giving a rounded profile, with no definition between the sides and the base, unlike most of the other SFBs which displayed some change of angle. There were two posts, set into the sloping sides of the pit. Two distinct layers were discernible in the pit, the lower being the normal SFB fill of fine grey, compact material; the upper darker fill merging with the general cultural layer. There was no evidence of slumping from the sides.

The SFB cut through Pit 69 and was in turn overlaid by SFB 19 and Pit 65. Immediately to the south there was a mass of post-holes (Building 10) representing a minor post-built structure.

Material culture:

Only four objects were recovered from the lower fill of the SFB, together with twelve fragments of loomweights which were found mainly along the northern side, at a depth of two feet from the natural surface.

SF 660. Roman **bronze coin.** Type of Magnentius, *c.*351.

Fig.88,1. SF 515. **Bronze 'dolphin' brooch,** catch-plate missing, Camulodunum, Type V. Mid 1st century AD.

Fig.88,2. SF 650. **Iron fragment** triangular in section, suggesting a cutting edge from an axe.

SF 717. Fragment of **puddingstone quern.** Not illustrated.

Late Roman pottery:

Oxidised ware rim, colour coated (Fig.260, OR 10).
Grey ware rim (Fig.260, GR 3).
Base sherd of hard grey-brown fabric with shell temper (but less than normal late Roman shell gritted).

Early Anglo-Saxon pottery:

Fig.89,1. Small cooking pot in hard fabric with chalk inclusions and small angular grit. Outer surface patchy, buff and black, inner surface and core black. Outer surface smoothed.

Fig.89,2. Cooking pot in hard fabric with some quartz, angular and rounded grits. Both surfaces and core black. Rim flattened above. Both surfaces roughly burnished.

Fig.89,3. Cooking pot in thick, hard fabric with chalk and quartz inclusions. Both surfaces black, core grey with outer layer of red, under the black surface. Outer surface burnished on shoulder.

Fig.89,4. Rounded bowl in hard fabric with some chalk. Both surfaces and core black, both surfaces close-burnished.

Fig.89,5. Large cooking pot in hard fabric with chaff backing visible. Both surfaces dark brown to black, core black. Burnished on both surfaces.

Fig.89,6. Body sherd from small vessel in hard fabric. Both surfaces and core black. Outer surface burnished and grooved. Traces of oval facets on girth-line.

Fig.89,7. Body-sherd from small cup in hard, sandy fabric with angular pink inclusions. Both surfaces and core black. Small, added, pierced suspension lug.

Fig.89,8. Body-sherd in hard fabric with rare large flint grit. Both surfaces and core black, with oxidised layer beneath both inner and outer surfaces and beneath surface in holes. Both surfaces smoothed and burnished. Seven perforations visible.

Not illustrated: One sherd with Type 1 rustication, two sherds with Type 2 rustication.

Sunken-Featured Building No. 21. (WG/5).

Type B, six-post, orientation E to W (Fig.90).
Measurements: A: 15ft (4.7m); B: 11ft 9in (3.6m); C: 10ft 9in (3.3m); D: 2ft (0.6m) or 2ft 9in (0.8m) reconstructed.

SFB 21 lay to the south-east of Hall 2 and was probably an outlier of the group that surrounds it. The pit was sub-rectangular in plan, the sides steep but not upright; the floor flat. The SFB was a typical six-post type, with no modifications. The posts at the west end were in a straight line, those at the east slightly bowed in plan. The ridge-posts were markedly larger than the 'corner' posts; the post at the east end was set into the bottom of the slope of the pit wall, that at the west end into the floor of the pit a few inches away from the base of the wall.

The lower level of the SFB fill was capped with a layer composed of quantities of ash, charcoal and fragments of clay. The clay fragments, concentrated in the north-west quadrant, represented a mass of unfired loom weights, covering an area of 3 by 4 feet (0.9 x 1.2m). An irregular hearth of clay, 2ft 6in (0.9m) in diameter occurred in the post SFB fill, 9in (0.2m) above the junction of the two layers, and must be later than the SFB.

Material culture:

Seventeen small finds were recovered from the lower fill of the pit.

Fig.91,1. SF 757. Thin **bronze sheet** or patch with three bronze rivets and holes for four more.

Fig.91,2. SF 645. **Iron staple.**
SF 648. **Iron fragment.** Not illustrated.

Fig.91,3. SF 655.**Iron knife** with wide blade and rounded cutting edge. Probably Roman.
SF 756. **Iron fragment.** Not illustrated.

Fig.91,4. SF 793. Fragment of **chalk spindle-whorl.**

Fig.91,5. SF 839. **Glass fragment.** Neck of flask with rim folded out and down. Roman.

Fig.91,6. SF 627. Dark blue, translucent, annular, **glass bead.**

Fig.91,7. SF 774. **Glass fragment.** Cupped rim, ground flat.

Fig.91,8. SF 667. **Bone pin** with pierced triangular head; point broken, pig fibula.

Fig.91,9. SF 670. Fragment of side plate with triangular, composite **bone comb.** Six rivet holes. Decorated with four lines on each edge and two inscribed multiple circles.

Fig.91,10. SF 775. Pierced **bone needle** with flattened, rounded head.

Fig.91,11. SF 781. **Bone pin,** not pierced.
SF 782. Human **molar,** from the lower level of the fill. Not illustrated.

Fig.91,12. SF 783. Complete double-sided, composite **bone comb.** Coarse teeth both sides, eight iron rivets. Connecting plates decorated with three lines and saw cuts on each edge. This comb is unusual in that the teeth are cut to the edges of the end tooth plates, which do not, in this case, project beyond the

connecting plates with a blank portion. It was found on the floor of the pit and is considered to be contemporary.

Fig.91,13. SF 840. Fragment of tooth plate from single-sided composite **bone comb,** with rivet hole on the edge. Coarse, worn teeth.

Fig.91,14. SF 656. Large, **fired clay spindle-whorl.** Hard fabric; black, smoothed surface.

Late Roman pottery:

Nene Valley base (form NV 1 or NV 2), two body sherds.
Oxford mortarium sherd (WC type), flange (C 51), base and body sherd.
Oxidised ware base (Fig.260, OR 2.2), body sherd.

Early Anglo-Saxon pottery:

Fig.92,1. Lower half of small bowl with faceted carination. Fairly hard fabric with no inclusions. Outer surface brown to black, inner surface grey to black, core black. Outer surface burnished. The globular body has a solid foot-stand, the oval facets not knife cut as they are concave in the transverse plain, but probably removed by a finger-nail. Above the facets are two fragments of circular, cross-hatched stamps apparently in a horizontal line. Myres 1977, fig. 95, Corpus No. 3421, omits stamps.

Fig.92,2. Fragments of large vessel in hard fabric with rare chalk inclusions. Black surfaces and core. Outer surface coarsely burnished, inner surface smoothed. Hollow-necked, biconical form with alternating series of small bosses and vertical grooves/bosses on the carination. A single line of lunate, V and annular stamps, between two deep grooves, occur below the carination. Above the carination a random scatter of annular impressions are confined by crude neck-lines but straggle down to the carination below. No rim or base (Myres 1977, fig.129, Corpus No. 3428).

Fig.92,3. Body sherd in fairly hard fabric with some white mica. Both surfaces black, core dark grey. Both surfaces burnished, the outer close-burnished. The form is a rounded, open bowl with small neck cordon and two outlined grooves. One vertical groove with double lines suggest a spaced vertical ornament.

Fig.92,4. Small, carinated bowl in hard sandy fabric with small rounded quartz grains. Black surfaces and core. Both surfaces close-burnished, but not in grooves. Neck with at least four horizontal grooves; spaced vertical hollows.

Fig.92,5. Rim in soft fabric with some chalk. Both surfaces black and close-burnished. Core red-brown. Neck grooves.

Fig.92,6. Body sherd (and base 6a) in hard fabric. Both surfaces and core black.
Outer surface close-burnished. Three grooves on neck.

Fig.92,7. Lion-head mask in fairly hard, fine fabric. Outer surface, upper half of inner surface and core black. Lower half of inner surface red-brown. Both surfaces close-burnished. Mask applied and freely modelled in position. Muzzle and upstanding parts of ears and edges worn. Internally there are traces of rounded grit in lower half of wall. Clearly a copy of samian Form 44, even to the overhanging rim, but in an acceptibly early Anglo-Saxon fabric. The burnishing tends to obscure the pottery process but there are irregularities which suggest that the piece is not wheel thrown.

Fig.92, 8. Body-sherd in hard, sandy fabric. Both surfaces and core black, outer surface close burnished, inner surface smoothed. Horizontal and three diagonal grooves on shoulder.

Fig.92,9. Body-sherd in hard fabric with some yellow mica. Both surfaces and core black. Both surfaces roughly burnished. Form apparently angled, with two lines on angle and two vertical, below.

Fig.92,10. Cooking pot in fairly hard, gritty fabric with small angular flints. Both surfaces and core black. Outer surface roughly burnished. Form globular with flaring rim. Fractured along distinct coil.

Fig.92,11. Small, wide-mouthed bowl in fairly hard fabric with yellow mica. Outer surface buff to brown, inner surface and core grey to black. Outer surface smoothed and partly burnished. A fine, thin walled vessel.

Fig.92,12. Hard sandy fabric with white mica. Both surfaces and core black. Rolled-over rim.

Not illustrated: Potsherd in fairly hard fabric with large quantities of sub-angular quartz and yellow mica; a rare fabric at West Stow. Precisely paralleled in SFB 8.

Sunken-Featured Building No. 22. (WG/6).

Type B, six-post, orientation E to W (Fig.93).
Measurements: A: 14ft (4.3m); B: 11ft 6in (3.5m); C: 10ft 6in (3.2m); D: 1ft 9in (0.5m) or 2ft 9in (0.8m) reconstructed.

SFB 22 lay on the crest of the knoll, to the south of Hall 2, clearly associated with the group of SFBs around it, in particular 21, 24, 25, 26 and 27. The pit was rectangular, slightly narrower at the east end; in form it was a typical six-post type; the post-holes at each end set in straight lines, and without any modifications. The lower level was the normal grey-brown SFB fill with no internal stratigraphy, rising to fill the pit at the level of the natural sand at the sides. The pit was flat bottomed, with steep sides particularly on the south, which was almost vertical. The post-holes for the ridge were slightly larger than those in the corners and were 2ft (60cm) deep; the others a uniform 1ft 9in (53cm). The section showed traces of a shallow pit in Layer 2, which could not be seen in plan.

Material culture:

Twenty-four small finds were recovered from the lower level of the SFB and included two bone combs, four spindle-whorls and three weaving implements; the assemblage strongly suggesting female activities, although no loomweights were found.

SF 743. Roman **bronze coin.** Julia Domna, 196-211.
SF 586. Roman **bronze coin.** Constantius II, 355-61.

Fig.94,1. SF 640. Simple **bronze finger-ring,** circular section and butt jointed. Shallow groove on outside.
SF 661. **Bronze fragment.** ? flat strip from bracelet. Not illustrated.

Fig.94,2. SF 663. Fragment of **bronze strip,** decorated with two rows of punched dots. Flattened triangular section, ? bracelet fragment.

Fig.94,3. SF 589. Rectangular **iron blade** with short central tang.
SF 626. **Iron nail.** Length 4cm. Not illustrated.
SF 637. **Iron sheet** fragment; 5 x 4cm. Not illustrated.

Fig.94,4. SF 641. **Iron fragment,** possibly part of a knife blade.
SF 745. **Iron nail,** length 2.5cm. Not illustrated.

Fig.94,5. SF 746. **Iron knife.**
SF 587. Fragment **sheet iron.** Not illustrated.

Fig.94,6. SF 595. **Iron stylus.**

Fig.94,7. SF 638. Fragment of **hone.**

Fig.94,8. SF 646. **Shale spindle-whorl.**

Fig.94,9. SF 622. Fragment **fired clay spindle-whorl.** Hard sandy fabric, buff-grey smoothed surface, black core.

Fig.94,10. SF 634. Fragment **fired clay spindle-whorl.** Hard fabric with rare chalk particles, buff to black, smoothed surface, black core.

Fig.94,11. SF 635. Fragment **fired clay spindle-whorl.** Fine soft fabric, smooth grey surface and core.

Fig.94,12. SF 592. Plate from triangular, composite **bone comb.** Rather coarse teeth, two iron rivets and one hole at the edge of the plate. The upper edge clearly protruded from the side plates and is 'frilled', but without holes. Found in the uppermost part of the lower fill.

Fig.94,13. SF 618. Pierced **bone needle** with triangular head, pig fibula.

Fig.94,14. SF 625. **Bone pin-beater,** circular section. Gnawed.

Fig.94,15. SF 630. Broken point from **bone needle,** probably of the same type as SF 618.

Fig.94,16. SF 653. Single-sided, composite **bone comb.** This complete comb is a unique type from the site; the tooth plates are held by connecting plates of a shallow, rounded form; the two end teeth plates protrude well beyond the ends and backs of the connecting plates and have concave edges. Beyond the back, they are deeply slotted. The other tooth plates follow the edges of the connecting plates. The shaping of the back appears to have been done after the comb was assembled as there is trace of a hole (arrowed) piercing one connecting plate and the tooth plate, which has almost been removed by subsequent work on the back. As this is close to one end it may represent one of a pair originally designed to enable the comb to be suspended. Ten iron rivets and one of bronze, *cf* SFB 12, SF.357, Fig.60,3.

Late Roman pottery:

Nene Valley base (form NV 1 or NV 2), base form NV 10.1.
Oxford mortarium base (WC type), base and two body sherds, one with rosette stamp decoration.
Shell-gritted large base.

Early Anglo-Saxon pottery:

Fig.95,1. Fragments of very large vessel in fairly hard fabric with pounded shell backing. Both surfaces and core black. Outer surface close-burnished. Four broad grooves at base of neck, and below wide, paired bosses outlined with broad grooves separated by paired, diagonal grooves. Diameter 54cm.

Fig.95,2. Cooking pot in hard fabric with sparse grits. Brownish-black outer surface, black inner surface, black core with oxidised layer immediately beneath outer surface. Roughly burnished.

Fig.95,3. Small vessel in fairly hard sandy fabric with rare quartz grits. Brown to black surfaces, black core. Outer surface smoothed. Shouldered form with out-turned rim.

Fig.95,4. Cooking pot in hard fabric with traces of chalk. Black surfaces and core. Outer surface smoothed.

Fig.95,5. Hard fabric with some small quartz grit and rare iron pyrites crystals. Black surfaces and core. Outer surface close-burnished. Single surviving neck line.

Fig.95,6. Splay-sided bowl in hard, sandy fabric. Both surfaces and core black.

Fig.95,7. Small bowl in hard fabric with some quartz. Outer surface brown, inner surface and core black. Type 4 rustication in vertical lines.

Fig.95,8. Stamped sherd in fine, hard fabric. Black surfaces and core. Internal burnishing. Single line of annular stamps of Group 2.2 between horizontal lines.

Fig.95,9. Faceted-angled sherd in fairly hard, fine fabric. Both surfaces black and close-burnished. Core reddish-brown. Long shallow facets with grooves above.

Fig.95,10. Fine hard fabric with traces of chalk. Both surfaces light brown. Core black with red outer layers. Both surfaces burnished. Broad neck grooves and Group 2.2 annular stamps.

Not illustrated: Rusticated sherds — six sherds Type 1, three sherds Type 2, two sherds Type 3, one sherd Type 4 and two sherds Type 5.

Sunken-Featured Building No. 23. (WF/5).

Type A, two-post, orientation N to S (Fig.96).
Measurements: A: 9ft 3in (2.8m); B: 6ft 9in (2.1m); C: 8ft 6in (2.6m); D: 2ft (0.6m) reconstructed 3ft (0.9m).

SFB 23 was a structure lying in a slightly isolated position, some 50ft (15m) to the east of Hall 2. An irregular oval in plan, this SFB was unusual for its small size and that the orientation was north to south. In form it was a typical two-post type with the posts set in the base of the sloping wall. The floor was rather uneven, rising on the south side and deeper in the middle. The walls were steep, almost vertical for the lower part of the pit but splayed out on the north, south and east sides. The lower fill was the typical grey-brown material common to the SFBs; the upper, post-SFB fill was darker and deepened in the centre. The division between the two layers was marked by a compact layer of ash and dust; although there was nothing to suggest that the SFB itself had burnt down. It is worth noting that several post-holes in the immediate vicinity of the SFB were full of charcoal, suggesting a fire in a nearby structure.

Material culture:

Seven objects were recovered from the lower, contemporary levels.

SF 548. Roman **bronze coin.** Constantine I, 330-5.
SF 751. Roman **bronze coin.** Gallienus, 259-68.
SF 455. Roman **bronze coin.** Maximinus, 310-13

Fig.97,1. SF 559. Small pair of **iron tweezers.**

Fig.97,2. SF 649. Double-pointed **iron 'spike',** slightly thicker at one end. Hammered, square section. Possibly from heckle.

Fig.97,3. SF 562. Large, irregular, **chalk weight,** with distinct thread marks on one side of the hole. Partially burnt.

SF 544. Sawn fragment of **antler.** Not illustrated.

Late Roman pottery:

Oxford mortarium rim (WC 7), body sherd.

Early Anglo-Saxon pottery:

Fig.98,1. Bowl in hard sandy fabric with some rounded quartz grit. Both surfaces and core black. Both surfaces burnished.

Fig.98,2. Small bowl in hard sandy fabric with some rounded quartz. Outer surface dark brown, inner surface and core black. Both surfaces burnished.

Fig.98,3. Small globular vessel in hard fabric with sub-angular quartz and one piece ? grog. Both surfaces and core black. Both surfaces burnished. Linear chevron zone between horizontal lines on shoulder.

Fig.98,4. Stamped sherd on hard fabric with quartz and some chaff. Both surfaces black, core laminated, black with oxidised layers close to both surfaces. Both surfaces burnished. Group 3C.3 stamps in vertical lines.

Not illustrated: Rim fragments from five further bowls similar to No. 1 above, three rusticated sherds of Type 1 and one sherd of shelly fabric.

Sunken-Featured Building No. 24. (WG/6).

Type A, two-post, orientation E to W (Fig.99).
Measurements: A: 14ft 6in (4.4m); B: 12ft 3in (3.7m); C: 12ft 3in (3.7m); D: 1ft 3in (0.4m); or 2ft 3in (0.7m) reconstructed.

SFB 24 was one of the group lying immediately to the south of Hall 2. In plan the pit was an oval, flattened on the south side. The floor was level, with a slight hollow in the north-east quarter. The sides sloped gently to merge with the bottom of the pit, slightly steeper on the south side. The two post-holes for the ridge-posts were of unequal size and depth, that to the east being 1ft 10in (56cm) in diameter and 1ft 4in (41cm) deep; that to the west being 1ft 2in (36cm) in diameter and only 8in (20cm) deep. The pit fill was the homogenous grey-brown material common to the SFBs and entirely filled the hollow.

A hearth of clay, fired red above, occurred in the west half of the SFB, on the mid-line at the base of the general Layer 2. It was not complete but measured 1ft 6in (46cm) east to west and 2ft 3in (69cm) north to south and was 7in (18cm) thick. There was no evidence to suggest that it was an oven with walls like that in SFB 18.

The north-west corner of the SFB overlaid part of SFB 25, but the SFB itself was cut by Pit 66 in the south-east corner.

Material culture:

The remains of six or seven unfired loomweights were found scattered throughout the fill of the pit together with nine other objects.

SF 695. Roman **bronze coin.** Constantine II, 335-41.
SF 760. Roman **bronze coin.** Constantinopolis, 330-5.

Fig.100,1. SF 761. Short, flat **bronze strip,** of thin triangular section, with two rivet holes, one still bearing remains of an iron rivet.

Fig.100,2. SF 671. Fragment of **iron pin** with round 'knob' head. Roman.

Fig.100,3. SF 682. **Iron fragment;** point of knife blade?

Fig.100,4. SF 759. Small **iron key** of Roman type with two wards and loop. Shank with square section.

Fig.100,5. SF 762. Small, flat **iron disc.**
SF 763. **Iron fragment.** Not illustrated.
SF 673. **Glass fragment.** Not illustrated.

Fig.100,6. SF 672. **Bone pin** with pierced triangular head, pig fibula.

Early Anglo-Saxon pottery:

Fig.101,1. Cooking pot in fairly hard fabric with some large flint grit. Outer surface and core black, inner surface dark brown. An unusually badly made vessel with pinching to form rim plainly visible and 'wipe-marks' on the outer surface.

Fig.101,2. Simple inturned rim in hard, close fabric with some mica. Outer surface brown and black, inner surface and core black. Both surfaces close-burnished.

Fig.101,3. Everted rim in hard fabric with rare, sub-angular grits and pitted with small holes. Both surfaces light brown, core black. Outer surface burnished.

Fig.101,4. Hard fabric, both surfaces and core black.

Not illustrated: 1 sherd of Type 4 rustication.

Sunken-Featured Building No. 25. (WF 6/7, WA 6/7).

Type D, no-post (Fig.102).
Measurements: 13ft 6in (4.1m) E to W; and 13ft (4m) N to S, depth:1ft 2in (0.4m).

SFB 25 was another member of the group immediately south of Hall 2. In plan the pit was an irregular oval; the normal measurements could not be applied as no post-holes were found. The pit was filled with the normal grey-brown SFB fill, which was slightly sandier towards the bottom. An irregular area of unfired clay approximately 3ft (0.9m) across was found at the top of the primary fill just off centre, in the north-west quadrant. There was no evidence of burning to suggest that this was a hearth.

SFB 25 was partly overlaid by SFB 24 to the south-east and was very close to SFBs 26 and 27 to the north; so close in fact as to suggest that it could not be contemporary with either of these, no matter which form of reconstruction is used. Pit 70 also cut into the fill of the SFB, in the north-east corner.

Material culture:

Only two objects were recovered from the fill.

SF 685. Roman **bronze coin.** Constantius II, 353.
SF 689. Fragment Roman **window glass.** Not illustrated.

Late Roman pottery:

Nene Valley base (similar to NV 10.2), body sherd.
Oxidised ware body sherd.
Grey ware rim (Fig.260, GR 2).

Early Anglo-Saxon pottery:

Fig.103,1. Large vessel in hard sandy fabric. Both surfaces and core black. Both surfaces burnished.

Fig.103,2. Fairly hard fabric with some chalk inclusions. Both surfaces black and burnished. Core dark brown to black. Fractured along coil.

Fig.103,3. Shoulder sherd in very hard fabric with chaff. Outer surface brown and black, core black. Both surfaces coarsely burnished. Board, shallow horizontal grooves. No rusticated pottery.

Sunken-Featured Building No. 26. (WF/7).

Type A, two-post, orientation E to W (Fig.104).
Measurements: A: 15ft 3in (4.7m); B: 14ft (4.3m); C: 15ft (4.8m); D: 1ft (0.3m) (average) or 2ft (0.6m) reconstructed.

SFB 26 was another of the group immediately south of Hall 2. In form, it was most unusual, the only other SFB of comparable construction being SFB 8 on the north side of Hall 2. In plan the pit was virtually square, with very rounded corners. As in SFB 8, a shallow trench defined the inner area of the pit, which was flat, with a slight hollow in the centre. In contrast however, to SFB 8, there were only two post-holes instead of four, placed across the shallow trench at the east and west ends of the structure. These post-holes were large, measuring 2ft 6in (0.8m) (W) and 1ft 6in (0.5m) (E) in diameter, and 1ft 9in (0.5m) (W) and 2ft 4in (0.7m) (E) in depth, from the floor of the shallow trench.

A small patch of unfired clay, 2 x 1ft, was found on the floor of the pit in a central position in the west half of the SFB, and a patch of chalk, 1ft 6in x 1ft, above the trench, centrally on the north side. The fill was the normal grey-brown SFB fill with small chalk fragments and having a slightly pinkish tinge to the grey, ashy colour.

The pit cut through SFB 27 and destroyed most of the western half of that SFB, the limits of SFB 26 being given by the position of the east post-hole and the cut through the burnt clay patch in SFB 27.

Material culture:

Although the SFB contained only ninety-nine fragments of pottery, sixteen objects were recovered from the fill.

SF 611. Roman **bronze coin.** Perforated. Constantinopolis, 330-5.
SF 765. Roman **bronze coin.** Constans, 341-8.

Fig.105,1. SF 699. **Bronze fragment.**

Fig.105,2. SF 683. Flat **bronze strip,** widening at each end.

Fig.105,3. SF 739. Small **bronze needle.** Long groove on each side leading to the eye. Probably Roman.

Fig.105,4. SF 610. **Iron tripod bowl** with round base. The bowl stands on three strap legs which are attached below the rim; the feet are turned out.
SF 665. **Iron nail,** (length 3cm). Not illustrated.
SF 676. **Iron nail,** (length 4cm). Not illustrated.
SF 686. **Iron nail,** (length 3cm). Not illustrated.
SF 778. Thin, colourless **glass fragment,** Roman. Not illustrated.

Fig.105,5. SF 677. Half light green **glass bead** with white trails. Originally double.

Fig.105,6. SF 675. Six unfinished **bone gaming pieces** cut from a long bone, probably ox. The pieces had been prepared by first splitting the bone longitudinally, then rubbing down one edge to remove the sharp angle. Initial grooves were chopped across the bone to guide the saw which was used to cut this bone into rough squares. The sawing was done mainly from the upper surface but also from the sides and back, the final separation achieved by snapping. The backs of two of the pieces had been ground flat; one (A) rubbed down to half its original thickness. Three of the pieces still fit together, although some attempt had been made to remove the rough ends and to round off the corners. As only three fit together, there must have been more.

Fig.105,7. SF 679. **Bone awl,** unpierced pig fibula. Point broken.
SF 680. Group of four teeth from **bone comb,** worn. Not illustrated.

Fig.105,8. SF 690. Fragment of connecting plate from double-sided, composite **bone comb.** Parts of two holes with rust from iron rivets. Decorated with saw marks indicating fine and coarse teeth and a central row of compass-drawn circle and dot motifs.

Fig.105,9. SF 771. Long **bone needle,** the pierced end left rough. Although the point is polished with use, it seems likely that the whole implement could have been drawn through any material.

Early Anglo-Saxon pottery:

Fig.106,1. Hard, sandy fabric with rare specks of chalk. Both surfaces black and burnished, core black with oxidised layer under each surface.

Fig.106,2. Coarse, open bowl in fairly hard fabric with rounded quartz grains. Both surfaces brown to black, core black. Both surfaces rough. Suggestion of hollowed neck.

Fig.106,3. Splay-sided bowl in hard, fine fabric with rare specks of chalk. Both surfaces and core light brown. Close-burnished on both surfaces. Fingering visible on inside of rim.

Fig.106,4. Small 'cup' in hard fabric with angular grit. Both surfaces and core black, both surfaces burnished.

Fig.106,5. Solid, blind, boss in fairly hard fabric with some tiny chalk specks. Outer surface dark brown, inner surface and core black. Both surfaces burnished.

Not illustrated: Two sherds Type 2 rustication.

Sunken-Featured Building No. 27. (WF/7).

Type A, two-post, orientation E to W (Fig.107).
Measurements: A: 14ft 6in (4.4m) (approximately, the western edge obscured by the fill of SFB 26); B: 13ft (4m); C: 12ft (3.7m); D: 1ft 3in (0.4m) or 2ft 3in (0.7m) reconstructed.

SFB 27 was the fifth member of the close-packed group on the south side of Hall 2; a bare four feet from the south wall of the hall itself. The SFB was of the two-post type, the post-holes being set in the slope of the pit wall. No other modifications occurred. The pit was flat-bottomed, sub-rectangular with very rounded corners, with the sides curving gently up from the floor. The fill was of the homogeneous grey-brown material common to most SFBs on the site. The north-west quadrant contained a tumbled area of clay, part fired, with a backing of large flints, down the slope of the pit and across the floor; but was very unevenly distributed in depth. If this represented a hearth, it was clearly not 'in situ' and must have tumbled from above. The hut-fill above the clay, however, was comparable to that of other SFBs and so would suggest that the SFB was repaired and continued to be used after the collapse of the 'hearth'. If that was not the case, then all the small finds and pottery from the hut, listed below, must belong to a post-hut phase.

The western half of SFB 27 was largely destroyed by SFB 26 which was slightly shallower; the base of the wall of the pit of SFB 27 could just be defined beneath the later SFB.

Material culture:

A dozen fragments of unfired clay loomweights were scattered throughout the fill of the SFB together with eleven other objects, which, on the whole, have female associations.

SF 687. Roman **bronze coin.** Constans, 341-8.

Fig.108,1. SF 694. Thin **bronze strip,** perforated.

Fig.108,2. SF 504. Small **iron knife.** Straight back, tang angled to blade.

Fig.108,3. SF 684. Small **iron knife** with pointed tang and curved back. Well worn blade, triangular section.

Fig.108,4. SF 688. Longitudinal fragment of **double bead** in white glass. Straight sided, with a groove to suggest the division into two.

Fig.108,5. SF 766. Yellow, glossy **glass double bead.**

Fig.108,6. SF 508. **Bone awl** made on splinter from long bone.

Fig.108,7. SF 693. **Bone pin-beater,** short and stout, oval section.

Fig.108,8. SF 767. End tooth plate from double-sided, composite **bone comb.** One iron rivet remaining and part of the hole for a second. Teeth on both sides fine and very worn. Teeth staggered virtually to the end of the plate.
SF 768. Single tooth broken from **bone comb.** Very thin, flat section with almost no wear; not from the same comb as those from SFB 26 (SF No.680) or from SF No.767 above. Not illustrated.

Early Anglo-Saxon pottery:

Fig.109,1. Hard fabric with rare flecks of chalk. Both surfaces and core black, both surfaces burnished.

Fig.109,2. Hard fabric with occasional flecks of white mica. Both surfaces and core black, both surfaces close-burnished.

Fig.109,3. Body sherd in hard fabric with rounded quartz grits. Outer surface brown-black, inner surface and core black. Outer surface close burnished. Trace of hollow vertical boss and paired dot stamp, cf Group 10.8.

Fig.109,4. Body sherd in hard fabric with chaff. Both surfaces black, core dark red. Surfaces smoothed. Irregular lines separating circular cross-stamps of Group 3C.1.

Not illustrated: One sherd of Type 2 rustication.

Sunken-Featured Building No. 28. (WF/4).

Type A, two-post, orientation N to S (Fig.110).
Measurements: A: 10ft 3in (3.1m); B: 9ft 6in (2.9m); C: 6ft 6in (2m); D: 1ft 3in (0.4m) or 2ft 3in (0.7m) reconstructed.

SFB 28 was physically close to SFBs 18 and 29, to the south-west of Hall 1 and was unusual in two respects. Firstly it was orientated N to S, and secondly it was very small. In shape, the pit was roughly rectangular, the ridge-posts sited at the level of the natural sand at the top of the sloping pit wall as seen in the excavation, but in reality just inside the original limit of the pit as reconstructed from the old ground surface. In profile the section of the pit was bowl-shaped with long sloping sides, restricting the flat area of the floor of the pit to only 5ft 6in x 2ft 6in (1.7m to 0.8m).

The east edge of the pit was cut by a single small pit or post-hole which did not appear to be associated.

Material culture:

Fig.111,1. SF 503. Small **iron key,** round section to shank.

Fig.111,2. SF 518. Small **iron spike,** square section above, becoming round at pointed end. ? drill.

Early Anglo-Saxon pottery:

Fig.112,1. Hard sandy fabric. Both surfaces and core black, surfaces smoothed and coarsely burnished.

Fig.112,2. Hard fabric with angular grit. Outer surface and core black, inner surface dark brown. Both surfaces close-burnished.

Fig.112,3. Body sherd in fairly hard fabric with some white mica flecks. Outer surface dark brown, inner surface and core black. Inner surface close-burnished. Type 1 rustication.

Fig.112,4. Large vessel in hard fabric with some angular quartz. Both surfaces burnished, black. Core black. Raised, slashed collar with nine grooves above, four below. One row of Group 7C.2 stamps, design incomplete.

Fig.112,5. Stamped sherd in hard fabric, both surfaces and core black. Row of Group 6.5 stamps between lines.

Not illustrated: One further sherd Type 1 rustication; one sherd with iron pyrites crystal, and one sherd 'pimply' Ipswich ware.

Sunken-Featured Building No. 29. (WF/4).

Type D, no-post (Fig.113).
Measurements: A: 11ft (3.4m); C: 10ft (3m); D: 1ft (0.3m) or 2ft (0.6m) reconstructed.

SFB 29 was the third member of the small group lying to the south-west of Hall 1, together with SFBs 18 and 28. In plan the pit was rounded, narrowing at the east end. The sides sloped gently to the flat floor of the pit on all sides, except on the south where the slope was long and uneven. As no post-holes were found, only overall measurements were possible.

The fill was entirely of the grey-brown material common to the SFB pits, with some charcoal flecks. A small patch of burnt clay, 4in (10cm) across, was found centrally, some 5in (12cm) above the floor, in the primary fill. Seven post-holes outside the west end may represent a small post-built building largely destroyed by this SFB; there was no evidence to suggest that they were connected with it. The SFB destroyed the upper levels of a 'fire pit' under the northern half and was, in turn, cut by the 7th century Ditch 54.

No pottery or small finds were recovered from this SFB.

Sunken-Featured Building No. 30. (WB/5).

Type D, no-posts, orientation E to W (Fig.114).
Measurements: A: 8ft (2.4m); C: 7ft (2.1m); D: 2ft 6in (0.8m).
Excavated by Professor V.I. Evison, who writes:

This SFB lay in the north-east corner of the knoll. It was roughly rectangular, eight feet east to west and seven feet six inches north to south, the walls sloping in to a depth of two feet six inches, fairly uniformly, except in the south-east corner where the slope was much more gradual.

The fill was brown with much charcoal, and medium-sized stones, bones, sherds, lumps of chalk, clay and daub. There was a concentration of burnt material on the slope in the south-west corner, and immediately north of this, on the floor, a collection of large bones, stones and sherds, mainly of one pot.

The SFB was overlaid in the north-east corner by SFB 31.

Material culture:

Four small finds were recovered from the fill.

Fig.115,1. SF 3137. **Bronze wire** fragments.

Fig.115,2. SF 3136. Fragments of broken **iron rods,** square in section, probably linked together at a right angle. Possibly keys. Only one fragment drawable.

Fig.115,3. SF 3139. **Iron nail,** square shaft.

Fig.115,4. SF 3142. **Iron nail,** bent, thickened at end.

An **iron disc-headed pin** (SF 3107) was recovered from the overlying layer, see Fig.246,4.

Late Roman pottery:

Oxford flange (C 52), Oxford base, body sherd.

Early Anglo-Saxon pottery:

Fig.116,1. Large rounded cooking pot in fairly hard, sandy fabric with rounded quartz, some white mica and rare red 'grog' inclusions. Outer surface buff to black, patchy; inner surface and core black. Both surfaces have distinct 'wipe' or scrape marks, the outer surface smoothed. The rounded base had been achieved by scraping, not paring as in Ipswich ware. The outer surface has traces of the applied clay, partially fired, as noted on other large pots from the site.

Fig.116,2. Hard fabric with sub-angular quartz and tiny white mica flecks. Both surfaces and core black. Outer surface burnished.

Fig.116,3. Fragment of straight-sided bowl with upright perforated lug, in hard fabric with sub-angular quartz and chalk flecks. Both surfaces reddish-brown with grey patches, core reddish-brown. Outer surface has been 'wiped'; both surfaces smoothed.

Fig.116,4. Rim, vertical, of rusticated bowl in soft, sandy fabric. Both surfaces and outer layers of core reddish-brown, core black. Type 1 rustication.

Fig.116,5. Illington/Lackford sherd, from elaborately panelled vessel with vertical boss and swag. (Scheme 6a) with J2 stamps. Hard, gritty fabric with angular quartz. Both surfaces black, burnished; core black.

Sunken-Featured Building No. 31. (WB/5).

Type A, two-post, orientation E to W (Fig.117).

Measurements: A: 14ft (4.3m); C: 11ft 6in (3.5m); D: 1ft 3in (0.4m).

Excavated by Professor V.I. Evison, who writes:

At the north-east corner of the knoll, the south-east corner overlying SFB 30. Only one post was traceable as the opposite end (west) had been destroyed by rabbit burrows. This post was clearly square-cut, eight inches wide, and tapering below, three feet three inches (99cm) deep. The sides were roughly sloping and the floor uneven.

The length of the pit was fourteen feet (4.3m), the width eleven feet six inches (3.5m) and the depth one foot three inches (0.4m). In the south-west area there was a patch of gravel about two feet square and two inches thick. It appears that when this pit was dug, the bottom was in the natural sand, but in this corner the dark fill of SFB 30 was exposed, and this patch of gravel was laid to cover it. There was an irregularity in the middle of the south wall where a triangular patch of compressed red sand, three inches deep, overlay the hut fill. There was a patch of burnt material, about two feet in diameter in the middle of the east end, near the post-hole. There was much 'green' clay in lumps, one shaped as a loom weight in the northern half, some at the northern edge.

Stratigraphy: The north-west part of SFB 31 overlies most of SFB 30.

Material culture:

Eight small finds were recovered from the fill.

SF 3138. Roman **bronze coin.**

SF 3143. Roman **bronze coin.**

Fig.118,1. SF 3145. **Bronze strip** fragment.

Fig.118,2. SF 3141. **Iron nail,** disc head, square shaft.

Fig.118,3. SF 3146. **Iron lock fragment;** flat strip, oval at one end and pierced by a rivet, broken off at the other across a middle slot; with two further rivets; wood adhering to one face.

Fig.118,4. SF 3148. **Whetstone** fragment; light grey, rectangular in section, one wide face smooth and stained black, one narrow face smoothed.

Fig.118,5. SF 3149. **Flint axe,** neolithic. Flaked both sides, white patination.

Fig.118,6. SF 3117. **Glass bead,** dark blue, streaky, disc.

Late Roman pottery:

Oxidised ware, base (Form OR 1.3).

Early Anglo-Saxon pottery:

Fig.119,1. Rusticated bowl in hard fabric with chaff. Both surfaces and core black. Inner surface smoothed, rim burnished. Type 2 rustication.

Fig.119,2. Open bowl in fairly soft fabric with angular quartz inclusions and white mica. Both surfaces and core black. Both surfaces burnished.

Fig.119,3. Splay-sided bowl in fairly soft, sandy fabric with white mica flecks. Outer surface brown to grey, inner surface and core black.

Fig.119,4. Open-mouthed bowl in hard fabric with rounded quartz and large white mica fragments. Both surfaces and core black.

Fig.119,5. Body sherd fairly soft, sandy fabric with tiny white mica flecks. Both surfaces and core black. Both surfaces burnished. Horizontal and vertical lines.

Fig.119,6. Stamped sherd in soft fabric. Outer surface brown to black, inner surface and core black. Both surfaces smooth. Triangular stamps similar to Group 5.3.

Fig.119,7. Stamped sherd in hard sandy fabric. Both surfaces and core dark grey. Outer surface burnished. Group 7C.9 stamp.

Fig.119,8. Stamped sherd in fairly soft fabric. Both surfaces and core black, outer surface close-burnished. Group 5.10 stamp.

Not illustrated: One sherd Illington/Lackford, eight lines and 'A' stamp, one stamped sherd with Group 6.2 stamp; one sherd Type 1 rustication and six sherds rusticated, not typed.

Sunken-Featured Buildings 32 and 33.

SFB 32 (WC/2), Type ?, orientation E to W.

SFB 33 (WC/2), Type ?, orientation E to W.

Both SFBs were observed in course of destruction by Basil Brown in 1947 in the gravel pit in the north-east corner of the site. (For general comments see SFB 4).

Sunken-Featured Building No. 34 (WB/6).

Type A, two-post, orientation E to W (Fig.120).

Measurements: A: at least 12ft (3.7m); B: 9ft 4in (2.8m); C: 9ft 3in (2.8m); D: 3ft or 3ft 6in (1.1m) reconstructed.

SFB 34 was part of the group on the north slope of the knoll; around Hall 7, overlaid to the west by SFB 35. The pit was rectangular; the surviving east end had markedly rounded corners. The floor of the pit was flat and even on the north with a steeply sloping side. The southern half of the pit was more irregular, with an uneven slope. No traces of retaining walls or collapse was found.

Of the two posts, the east post was distinct and set in the lower part of the slope, but not beyond it; the west post was presumably the most westerly of the two; at the base of the overlying SFB 35; the surviving section showing it to have been in the lower part of the sloping wall of the pit. The east post was 1ft (30cm) deep but the west post was larger, being 2ft 3in (69cm) deep. The posts were not centrally placed to the pit, but 1ft to the north of that line. The pit fill, where it could be distinguished from that of SFB 35, was the normal uniform grey material common to SFBs on the site. The fill was excavated in two inch 'spits' which provided a detailed series of plots of charcoal, bone fragments, pottery and small finds showing a concentration in the lower levels in the north-west quadrant which spread over the south-west and north-east quadrants about half way up the fill. The south-east quadrant always showed a light distribution.

Material culture:

Twenty-five finds were recovered from the undisputed fill of this SFB; although varied and rich in bronze and glass, there were no bone objects.

SF 893. Roman **bronze coin.** Gratian, 367-75.
SF 923. Roman **bronze coin.** Constantine I, 312-13.
SF 1017. Roman **bronze coin.** Constans, *c.*348-50.
SF 874. Small fragment of **bronze.** Not illustrated.

Fig.121,1. SF 887. Fragment of flat **bronze strip** with punched ornament.

Fig.121,2. SF 892. Fragment of flat **bronze strip** or **bracelet,** folded over a cylindrical, opaque, yellow **glass bead** with pale green crossing trails. The bronze strip is ornamented with dot and ring stamps and bordered with small 'V' stamps.

Fig.121,3. SF 945. **Bronze buckle plate** with dot and ring stamps. From disputed area between SFB 34 and 35.
SF 1018. Small folded fragment of **bronze sheet,** 1cm across. Not illustrated.
SF 1034. Small fragment of **bronze strip,** 1cm wide. Not illustrated.

Fig.121,4. SF 1041. Fragment of **bronze spoon bowl,** tinned. Roman.
SF 863. **Iron nail,** length 3cm. Not illustrated.
SF 866. **Iron nail,** length 4cm. Not illustrated.
SF 867. ? **Iron nail,** length 4cm. Not illustrated.

Fig.121,5. SF 1024. **Iron mount** with central rivet, possibly from bucket. All ends fractured.
SF 855. **Hone stone.**

Fig.121,6. SF 872. Large fragment of **amethyst,** polished on both sides with flaw on upper surface. One corner distinctly rounded, but shaped originally by flaking. Other edges flaked and rounded off slightly, from upper surface. Possibly complete or in the process of being re-worked.

Fig.121,7. SF 883. **Hone stone.**

Fig.121,8. SF 885. **Hone stone.**

Fig.121,9. SF 889. Fragment unfinished **chalk spindle-whorl.**

Fig.121,10. SF 891. Light blue/green **glass rim,** outsplayed with trail below; Roman, 3rd/4th century.
SF 898. Fragment **window glass.** Roman. Not illustrated.
SF 913. Fragment **window glass.** Roman. Not illustrated.

Fig.121,11. SF 1071. Almost colourless out-splayed **rim** rounded at tip with trail below, from a flask or flagon with a funnel-shaped mouth. Roman, 3rd/4th century.

Fig.121,12. SF 1021. **Glass rim,** rounded, out-splayed, end of 4th/early 5th century. Same vessel as SF 1029, from SFB 40, close by (Fig.138,6).

Fig.121,13. SF 1014. Fragment of **fired clay** with deep impressions. Possible coin mould from nearby Iron Age context.

Late Roman pottery:

Nene Valley base (Fig.260, NV 10.1).
Oxidised base with metallic brown colour coat (form as NV 10.2).

Early Anglo-Saxon pottery:

Fig.122,1. Cooking pot in fine, hard fabric with rare, tiny white mica. Both surfaces and core light brown. Both surfaces burnished.

Fig.122,2. Soft fabric with rare small grit. Both surfaces and core black. Outer surface burnished.

Fig.122,3. Hard fabric with rounded quartz, one piece 5mm in length. Both surfaces black and burnished, core black.

Fig.122,4. Hard fabric with some small quartz. Both surfaces and core black. Both surfaces burnished.

Fig.122,5. Splay-sided bowl in hard fabric with chalk. Both surfaces grey to brown, core black. Outer surface smoothed.

Fig.122,6. Fairly hard fabric, markedly 'chaffy'. Brown outer surface, inner surface and core black. Both surfaces rough.

Fig.122,7. Splay-sided bowl in fairly hard sandy fabric. Outer surface brown to black, inner surface and core black. Both surfaces smoothed.

Fig.122,8. Fairly hard, sandy fabric. Outer surface and core black, outer surface burnished.

Fig.122,9. Hollow-necked vessel in fairly soft fabric with some quartz. Both surfaces black, core dark red. Outer surface burnished.

Fig.122,10. Globular bowl in very hard sandy fabric. Both surfaces and core dark grey. Outer surface burnished.

Fig.122,11. Large vessel in hard fabric with much red 'grog' and quartz backing. Black surface and core. Close packed Type 1 rustication.

Fig.122,12. Stamped sherd in fairly hard, much pitted, fabric. Both surfaces and core grey. Both surfaces smoothed. Single line of Group 3B.5 stamps between lines. Stamps and fabric precisely paralleled from nearby square WB 5, and from SFB 44.

Fig.122,13. Stamped sherd in thin, hard fabric with rare mica crystals. Black surfaces and core, outer surface very well burnished. Four neck-rings and three horizontal lines of stamps; Group 9.2, above Group 7C.6, above Group 6.8.

Fig.122,14. Stamped sherd of Illington/Lackford potter. Two-line swags with J1 stamps. Burnished. Illington/Lackford Fabric 1.

Fig.122,15. Stamped sherd of Illington/Lackford potter. Burnished Scheme 6, panels with vertical bosses. Stamps: J2 and C. Illington/Lackford Fabric 1.

Not illustrated: Two Illington/Lackford stamped sherds; one with J? stamps, I/L Fabric 6 and one with J1 stamps, Fabric 1. Three sherds Type 2 rustication.

Sunken-Featured Building No. 35. (WB/6).

Type B, six-post, orientation E to W (Fig.120).
Measurements: A: c.11ft (3.4m); B: 7ft 9in (2.4m); C: 9ft 6in (2.9m); D: 2ft (0.6m) or 2ft 6in (0.8m) reconstructed.

SFB 35 was part of the group close to Hall 7 on the north slope of the site and overlaid the west edge of SFB 34. A shallower pit than that of SFB 34, the floor was flat and even with steeply curving sides; the pit itself being roughly rectangular with the surviving west end very rounded. Five post-holes survived, there was no trace of one in the north-west corner. It is worth noting that the east post was well within the pit and inside the limits set by the north-east and south-east posts, whereas the west ridge-post would appear to have been outside that limit. Again, as for SFB 34, the west ridge-post is deeper than the east ridge-post.

The pit fill, where it could be distinguished from that of SFB 34, was of the normal uniform grey material. The detailed plot of charcoal, bone fragments and pottery that was described for SFB 34 was continued for 35 and showed a fairly even distribution, slightly heavier in the northern half of the pit.

Material culture:

SF 1037. Roman **bronze coin.** Constantine I, 323-4.

Fig.123,1. SF 827. **Bronze belt tag.** Bevelled edges and punched dot ornament. Single rivet hole and slight nick in end.

Fig.123,2. SF 829. Thin **bronze plate** with rounded end and opposite end folded under. ? belt tag.

Fig.123,3. SF 834. Small **bronze fragment,** semi-circular in section.
SF 852. Folded **bronze sheet,** 5cm across. Not illustrated.

Fig.123,4. SF 853. Flat **bronze strip,** broken one end. Single rivet hole opposite end, strap-end.
SF 896. Two flat, plain fragments, bronze sheet; 3cm long. Not illustrated.
SF 902. Fragment **bronze strip,** 1cm wide. Not illustrated.

Fig.121,3. SF 945. Bronze **buckle-plate.** From disputed area between SFB 34 and 35.
SF 1022. Fragment **bronze sheet,** 2cm across. Not illustrated.
SF 1032. Small fragment **bronze,** 0.5cm across. Not illustrated.

Fig.123,5. SF 862. Fragment **chalk spindle-whorl.** Burnt after breakage.

Fig.123,6. SF 991. **Spindle-whorl** made from pottery body sherd. Edges roughly rubbed down. Hard, fine grey fabric, rare chalk inclusions. Burnished black surface.

Fig.123,7. SF 826. **Glass.** Light green ring-base. Roman.

Fig.123,8. SF 833. Small fragment of central connecting plate from double-sided **bone comb.**

Fig.123,9. SF 861. Fragment of composite double-sided **bone comb,** with coarse and very fine teeth. Three surviving iron rivets. Both connecting plates ornamented with four central lines.

Early Anglo-Saxon pottery:

Fig.124,1. Cooking pot in hard fabric. Black surfaces and core, both surfaces smoothed.

Fig.124,2. Out-turned rim in hard fabric. Black surfaces and core. Both surfaces smoothed.

Fig.124,3. Bowl in fairly hard fabric with some chaff. Black surfaces, dark brown core. Both surfaces roughly burnished. Type 8 rustication.

Fig.124,4. Stamped sherd in hard fabric with rounded quartz grits. Black, burnished surfaces and grey core. Horizontal row of Group 6.2 stamps between lines.

Fig.124,5. Stamped sherd of the Illington/Lackford potter. I/L Fabric 6. Both surfaces burnished. J1 stamps.

Not illustrated: Stamped sherd with Group 6.3 stamp; four sherds Type 1 rustication, one sherd Type 2 rustication.

SFB 34/35 Pottery from overlap area:

Fig.124,6. Illington/Lackford stamped sherd in I/L Fabric 1. Scheme 6b raised swastika with dots and A1a stamps between arms. Both surfaces burnished.

Sunken-Featured Building No. 36. (WF/8).

Type B, six-post, orientation E to W (Fig. 125).
Measurements: A: 14ft 4in (4.4m); B: 12ft (3.7m); C: 10ft 6in (3.2m) — 11ft (3.4m) approximate; D: 1ft 10in (0.6m) or 3ft (0.9m) reconstructed.

SFB 36 lay on the central axis of the knoll, six feet to the north-east of Hall 3, closely associated with SFB 39. In plan the pit was rectangular, with rounded corners, a flat bottom and clean cut sides, rather steeper on the west. The 7th century Ditch 76 obscured the northern edge but some measurements were possible. The form was typically six-post with no modifications; the posts being set in straight lines at each end. The ridge-posts and the two north purlin-posts were at the base of the slope of the side of the pit, but the two south posts were well up the slope itself.

The fill was consistently the tough grey-brown material common to the SFBs, with charcoal flecks. Some sand occurred on the edges of the fill in the upper half of the pit, consistent with drying and dusting of the sides. The profile remained clean and distinct; there was no evidence for slumping from the sides.

Material culture:

Twelve unfired clay loomweights and ten other fragments were found in the lower levels of the fill, mainly in the north half. Twenty small finds were recovered from various levels in the fill of the SFB, all of those listed belonged to the contemporary fill.

SF 871. Roman **bronze coin.** House of Valentinian, 364-78.
SF 1075. Roman **bronze coin.** Theodosius I, 388+.
SF 870. Pierced **bronze fragment, ? coin.**

Fig.126,1. SF 865. **Bronze fragment.**
SF 1057. **Bronze fragment** 0.5cm across. Not illustrated.

Fig.126,2. SF 1059. **Bronze ear scoop** from toilet set; flat, twisted body. Roman type.
SF 897. Short **iron nail** found jammed into the socket of an incisor in the lower jaw of an ox. Not illustrated.
SF 1060. **Iron nail,** length 3cm. Not illustrated.
SF 1069. **Iron nail,** length 2cm. Not illustrated.
SF 1070. **Iron nail,** length 4.5cm. Not illustrated.
SF 1073. **Iron nail,** length 3cm. Not illustrated.

Fig.126,3. SF 876. **Shale spindle-whorl.** Turned.

Fig.126,4. SF 1074. Fragment of **chalk spindle-whorl,** turned.

Fig.126,5. SF 1099. **Chalk spindle-whorl.** Turned in same style as 1074 above.
SF 879. **Glass fragment,** light green. Roman. Not illustrated.

Fig.126,6. SF 859. **Bone pin-beater,** circular section.

Fig.126,7. SF 868. **Bone needle** with pierced triangular head, pig fibula.

Fig.126,8. SF 869. **Bone point,** probably part of pin-beater.

Fig.126,9. SF 884. **Bone pin-beater,** circular section.

Fig.126,10. SF 900. Solid head of **bone pin.**

Late Roman pottery:

Nene Valley bowl with two holes in side (Fig.260, NV 1), base (form NV 1 or NV 2), small base (similar to NV 10.2).
Oxford rim (Fig.260, OX 4), rim fragment (? C 51), two bases and body sherd.

Early Anglo-Saxon pottery:

Fig.127,1. Large biconical cooking pot in hard fabric with some white mica and chalk. Brown-black surfaces, grey core with outer oxidised layers. Both surfaces burnished. Traces of coils.

Fig.127,2. Large, heavy cooking pot in hard sandy fabric with some chalk. Brown to black surfaces, brown to grey core. Both surfaces roughly burnished. Fingering round rim.

Fig.127,3. Open mouthed bowl in hard fabric with some chaff. Black surfaces and core. Both surfaces smoothed.

Fig.127,4. Hard fabric with some white mica and quartz grits. Reddish-brown surfaces, dark brown core. Both surfaces smoothed. Rim flattened above.

Fig.127,5. Everted rim in hard fabric with angular quartz and some small chalk. Both surfaces brown to black, core black. Outer surface roughly burnished.

Fig.127,6. Bowl in hard, but rather crumbly fabric with much chalk. Black outer surface, brown inner surface and black core. Outer surface scraped vertically and burnished.

Fig.127,7. Bowl in hard, sandy fabric with some chalk. Dark grey outer surface, red-brown inner surface, black core. Both surfaces burnished.

Fig.127,8. Hard fabric with chalk. Brown surfaces, grey to brown core. Outer surface burnished.

Fig.127,9. Shouldered form in hard, sandy fabric with some rounded grits. Brown to black surfaces, core black with brown inner layer. Outer surface close-burnished.

Fig.127,10. Base in hard fabric with chalk and rounded grits. Black surfaces and core. Both surfaces burnished.

Fig.127,11. Small, round based 'cup', in fairly hard sandy fabric with chalk. Brown surfaces and core.

Fig.127,12. Sherd in hard sandy fabric with rare quartz and flint up to 5mm. Red-brown surfaces, black core. Decorated with rough, cross-hatched lines.

Fig.127,13. Small, solid boss in hard, sandy fabric. Surface and core grey to black.

Fig.127,14. Sherd in fairly soft fabric with rounded quartz grains. Black, burnished outer surface, red-brown inner surface, black core. Zone of diagonal lines.

Fig.127,15. Fragments of vessel with line and dot scheme in hard fabric with some white mica. Both surfaces and core black, inner surface smoothed, outer close-burnished. Decorated zone of broad lines and panels of dots. One joining fragment from fill of SFB 39, close by.

Fig.127,16. Sherd in hard fine fabric with small quartz grains. Both surfaces and core black. Both surfaces close-burnished. Three lines above carinations; deep, angular facets with groups of three dots between each. This vessel is the finest piece of pottery on the site, displaying complete mastery of the material even though it is not thrown.

Not illustrated: One sherd Type 1 rustication.

Sunken-Featured Building No. 37. (WG/9).

Type A, two-post, orientation N to S (Fig.128).
Measurements: A: 13ft 9in (4.2m); B: 12ft (3.7m); C: 10ft (3m); D: 1ft (0.3m) or 2ft (0.6m) reconstructed.

SFB 37 lay immediately south-west of Hall 3, in the same group as SFBs 36, 39, 46 and 47. The orientation, north to south is unusual, occurring in only two other cases (SFBs 23 and 29).

In plan the pit was rectangular with rounded corners, of the two-post type without modifications. The sides sloped gently to merge with the floor of the pit. The post-holes were large and set into the slope, both being 2ft 3in (0.7m) in depth. The pit was filled to the level of the natural sand with the tough grey material normal to the SFB fills, clearly distinguishable from the overlying cultural layer (Layer 2).

To the north and west the pit cut the Romano-British Ditch 88.

Material culture:

Four fragments of clay loom-weights were found in the north-west corner, 9in (22.9cm) from the bottom of the pit.

Fig.129,1. SF 963. Eye of **bronze needle.** Roman.
SF 979. Pierced **bronze sheet** fragment. Not illustrated.
SF 980. Broken point of **bronze pin,** 2.3cm long. Not illustrated.

Fig.129,2. SF 959. Pair of interlinked **iron loops,** each with two rivets, to take narrow straps.
SF 968. **Iron nail?,** length 4cm. Not illustrated.

Fig.129,3. SF 973. **Iron knife,** triangular section.
SF 1268. **Iron nail,** length 6cm. Not illustrated.
SF 1269. **Iron fragment,** length 2cm. Not illustrated.

Fig.129,4. SF 967. **Bone pin-beater.**

Fig.129,5. SF 969. **Bone pin-beater.**

Fig.129,6. SF 1023. **Metacarpal** of sheep, pierced in centre of shaft.

Fig.129,7. SF 971. Mesolithic quartzite **macehead** with hour-glass perforation.

Fig.129,8. SF 982. Quartzite **hammerstone.**

Fig.129,9. SF 1130. **Shale spindle-whorl,** turned.

Fig.129,10. SF 972. Dark blue-glass translucent **glass bead,** globular.

Fig.129,11. SF 1261. Light blue, cylindrical **glass bead,** with turquoise translucent trails.

Late Roman pottery:

Nene Valley flagon rim (Fig.260, NV 8.2), base sherd.
Oxford body sherd.

Early Anglo-Saxon pottery:

Fig.130,1. Hard fabric with quartz grit. Light brown surfaces, grey core. Both surfaces smoothed, outer surface roughly burnished.

Fig.130,2. Hard fabric with chaff and some chalk. Both surfaces and core black, both surfaces burnished.

Fig.130,3. Stamped sherd in hard fabric with chaff and some chalk. Outer surface burnished. Neck-lines and Group 3C.10 stamp.

Fig.130,4. Sherd with line and dot decoration. Fits sherds from SFB 36, No.15.

Sunken-Featured Building No. 38. (WH/8).

Type B, six-post, orientation E to W (Fig.131).
Measurements: A: 10ft 3in (3.1m); B: 9ft (2.7m); C: 8ft (2.4m); D: 1ft 9in (0.5m) or 3ft (0.9m) reconstructed.

SFB 38 was situated in the south-east corner of Hollow 4. In plan the pit was rectangular with rounded corners, the east side of the pit sloping gently to the floor; but the south and west sides were noticeably steep. Only five post-holes were found, but as the south-east corner cut through SFB 42 the missing post (4 on Fig.) may have been obscured. The fill was the normal tough grey-brown material with charcoal flecks, which filled the pit to the surface of the natural sand. A lens of ash was visible in the section in the centre at the junction with Layer 2. The SFB was cut into the material filling Hollow 4 and the two-post SFB 42.

Material culture:

Ten objects were recovered from the lower fill of the SFB; a further three, (SF nos 977, 993 and 1113) may well be contemporary as they were found at the junction of the fill and the general cultural Layer 2, and are included here.

SF 955. Roman **bronze coin.** Constantine I, 312-3.
SF 956. Roman **bronze coin.** Licinius, 310-3.
Both coins are heavily abraded.

Fig.132,1. SF 957. **Bronze fragment,** folded to make small **tube;** ? toilet brush.

Fig.132,2. SF 953. Small **iron knife,** triangular section.
SF 1113. Iron nail, length 3.7cm. Square shaft. Not illustrated.
SF 1123. **Iron nail,** length 3.2cm. Not illustrated.

Fig.132,3. SF 993. **Glass base.**

Fig.132,4. SF 1010. Dark blue, translucent annular **glass bead.**

Fig.132,5. SF 977. Fragment of connecting plate from triangular **bone-comb.** Traces of three rivet holes with iron staining; decorated with single line on the edge and compass-drawn dot and circle. Stratigraphy uncertain, found at junction of SFB fill and Layer 2, but unlikely to be contemporary, the dot and circle being the same size and style as those on SF 1118 below.

Fig.132,6. SF 1118. Fragment of connecting plate from triangular **bone comb.** Traces of four rivet holes with iron staining. Decoration of three lines along each edge drawn after the rows of circle and dot motifs. A third row of circles and dots divides the plain central area. The style and execution of the circles is the same as SF 977, but not from the same comb.

Early Anglo-Saxon pottery:

Fig.133,1. Hard fabric with some chalk and quartz grit. Both surfaces and core black. Outer surface burnished.

Fig.133,2. Very hard sandy fabric. Both surfaces and core dark grey. Outer surface smoothed.

Fig.133,3. Large rusticated bowl in hard fabric with some chalk, yellow mica and quartz grit. Both surfaces brown to black, core black. Both surfaces burnished. Type 1 rustication, horizontal rows but rather random.

Fig.133,4. Sherd with portion of applied lug. Hard sandy fabric. Black surfaces and core. Outer surface smoothed.

Not illustrated: One sherd Type 1 rustication; four sherds and two rims of Type 2 rustication; one rim of 'pimply' Ipswich ware.

Sunken-Featured Building No. 39. (WF/8).

Type A, two-post, orientation E to W (Fig.134).
Measurements: A: 13ft (4m); B: 11ft 7in (3.5m); C: 8ft 3in (2.5m); D: 1ft 3in (0.4m) or 2ft 3in (0.7m) reconstructed.

SFB 39 lay immediately north-east of Hall 3 and was associated with SFBs 36, 37, 46 and 47. In plan the pit was roughly rectangular, the length rather longer than usual in proportion with the width. The form was two-post, with steep sides in the north and west and a rather uneven base with the two posts set at the base of the wall of the pit.

The filling of the pit was the normal, tough, grey-brown material with some charcoal. Along the north, south and west sides there was a band of sand alternating with grey material, possibly the remains of a turf retaining wall, that on the south being less distinct. A fragment of red, burnt clay, three inches across, was found in the centre of the pit (see section).

Material culture:

Sixteen small finds were recovered from the fill of the SFB.

Fig.135,1. SF 1103. Spiral **silver finger-ring.** Flat band with two shallow, longitudinal grooves.

Fig.135,2. SF 1056. **Silver ring** with 'slip knot'.
SF 932. **Bronze fragment.** Not illustrated.

Fig.135,3. SF 1107. **Bronze small-long brooch,** three knobs on head-plate cast in one with the body, lozenge foot-plate; 5th century.
SF 858. **Iron nail.** Length 2.5cm. Not illustrated.
SF 1105. **Iron nail.** Length 7.5cm. Not illustrated.
SF 912. Fragment of **melted lead,** 7.5 x 2.5cm. Not illustrated.

Fig.135,4. SF 854. Miniature one-piece triangular **bone comb,** with hole for suspension and decorated with single ring and dot motifs. The comb has the appearance of having been worn for a considerable period.

Fig.135,5. SF 966. **Bone pin or awl** made from sharpened pig fibula. Not pierced.

Fig.135,6. SF 1129. **Chalk spindle-whorl.**
SF 1104. Fragment blown Roman **window glass,** 3rd-4th century. Not illustrated.
SF 1106. Thick fragment Roman **window glass.** Not illustrated.

Fig.135,7. SF 855. Minute **disc bead** of black glass.

Fig.135,8. SF 922. Small dark blue **glass bead.**

Fig.135,9. SF 930. Cylindrical, **yellow glass bead,** surface decayed.

Fig.135,10. SF 1128. Fragment of light blue **glass bead;** with blue translucent trails and red dots.

Fig.135,11. SF 929. **Spindle-whorl;** rubbed down Romano-British potsherd, of hard red ware with black, reduced surface. Hole bored from both sides.

Late Roman pottery:

Nene Valley body sherd.

Early Anglo-Saxon pottery:

Fig.136,1. Vessel with solid lugs in hard fabric with chalk and quartz grits. Outer surface buff, inner surface and core black. Inner surface smoothed, outer surface of body rough but rim burnished. Single, small solid lug. The outer surface smeared with yellow clay, partly reddened.

Fig.136,2. Very hard, sandy fabric with white mica and rounded quartz grains. Grey outer surface, darker inner surface and core. Both surfaces smoothed, outer burnished.

Fig.136,3. Open bowl in fairly hard, rather crumbly fabric with large amount of small chalk. Both surfaces and core black. Both surfaces close-burnished.

Fig.136,4. Globular bowl in hard sandy fabric with some angular quartz grits. Outer surface brown to black, inner surface and core black. Both surfaces smoothed. Irregular rim, slightly overhanging in places.

Fig.136,5. Hard sandy fabric with rare rounded quartz grit. Both surfaces black, and close-burnished. Core red-brown.

Fig.136,6. Small biconical bowl in hard fabric with some chalk and rounded quartz. Black surfaces and core. Both surfaces close-burnished.

Fig.136,7. Small 'cup'.

Fig.136,8. Rusticated sherd in hard fabric with some large flecks of mica. Outer surface grey, inner surface and core black. Outer surface smooth, inner surface burnished. Type 7 rustication close together, giving 'X' effect.

Sunken-Featured Building No. 40. (WB/6).

Type A, two-post, orientation E to W (Fig.137).
Measurements: A: 12ft 3in (3.7m); B: 7ft 6in (2.3m); C: 9ft (2.7m); D: 2ft (0.6m) or 3ft (0.9m) reconstructed.

SFB 40 lay on the north slope, very close to SFBs 34 and 35. In basic form it was of the two-post type, but the shape of the pit was irregular, having a constricted extension beyond the east ridge-post. Careful sectioning showed that this was not a pit of another phase, or, it seemed, any form of entry into the SFB pit, as it was almost six feet in width and occupied most of the whole of the east side. The fill was contiguous with that of the rest of the pit, which was the normal, tough, grey-brown material with some ash and charcoal flecks. The pit, between the posts, was very small, the sides steep, the floor flat but rising slightly to the south. The west post-hole was set at the base of the sloping wall; the east post-hole was in the floor of the pit which extended beyond it for 18in (0.5m) before rising into the extension noted above. The extension, although giving the immediate appearance of a step, still producd a drop of 18in (0.5m) from the surface of the natural, or 2ft 6in (0.8m) from the old ground surface. However this feature is interpreted it does show that the SFB extended for some 4ft (1.2m) beyond the east post-hole.

Material culture:

One loomweight and twenty-three objects were recovered from the SFB fill, which can be considered as contemporary with the SFB.

SF 1007. Roman **bronze coin.** Valens, 364-78.
SF 1012. Roman **bronze coin.** Valens, 364-78.
SF 1013. Roman **bronze coin.** Constantius II or Constans.
SF 1111. Roman **bronze coin.** Constanius II, 341-8.

Fig.138,1. SF 1000. **Bronze pin** with flattened head and suspension loop. The head is plain on one side, but has an empty socket on the other and is a simpler version of the ornate gold and silver examples from elsewhere of 7th century date, which are usually found paired in graves, connected by a chain. The stratigraphy of this find, in the top inch of the fill, just as it becomes defined from Layer 2, must leave its association in doubt, but Illington/Lackford sherds occur low down, so this could represent the last object to be deposited in the SFB.
SF 1005. Fragment of **bronze sheet,** length 0.5cm. Not illustrated.

Fig.138,2. SF 1011. **Bronze strip,** ? fragment of ring, slightly tapering at one end. Traces of stamped ornament. Very worn.

Fig.138,3. SF 1014. Broken, flat **bronze strip,** decorated with two diagonal lines and a row of punched dots.
SF 1015. Fragment of **bronze pin,** length 7.3cm. Plain rod, both ends missing. Not illustrated, probably Roman.

Fig.138,4. SF 1114. Thin **bronze sheet,** broken.
F 996. **Iron strip fragment,** length 2.8cm. Not illustrated.
SF 997. **Iron fragment,** length 3cm. Not illustrated.
SF 1003. **Iron nail.** Length 4.6cm. Not illustrated.
SF 1006. **Iron nail.** Length 3cm. Not illustrated.
SF 1008. **Iron fragment.** Not illustrated.
SF 1110. **Iron strip,** length 1.5cm. Not illustrated.
SF 1117. **Iron pin or nail.** Not illustrated.
SF 1028. **Iron nail,** length 1.5cm. Not illustrated.

Fig.138,5. SF 1009. **Iron pin or spike,** head missing.

Fig.138,6. SF 1029. Light green **glass rim.** Rounded out-splayed rim, end of 4th or early 5th century. Same vessel as SF 1021 from SFB 34, close by.
SF 1072. Colourless **glass fragment,** Roman. Not illustrated.

Fig.138,7. SF 1083. Large **spindle-whorl.** Late Roman red-ware base, bored and rubbed down.

Fig.138,8. SF 1027. **Long bone pin,** cylindrical shaft, plain head with six grooves below.

Late Roman pottery:

Nene Valley strap handle.
Small colour coated base in yellow-orange fabric (form as NV 10.2).
Oxidised ware body sherd.

Early Anglo-Saxon pottery:

Fig.139,1. Bowl in hard close fabric. Outer surface brown to black, inner surface and core black. Rim burnished. Type 1 rustication, spaced close up to rim.

Fig.139,2. Bowl in hard fabric with some large angular flints. Both surfaces and core black. Both surfaces burnished. Rim everted. Type 1 rustication.

Fig.139,3. Rim sherd in hard sandy fabric with some rounded quartz. Black surfaces and core, outer layers of core below surfaces, red. Both surfaces rough. Portion of one hole.

Fig.139,4. Body sherd in hard sandy fabric. Black surfaces and core, outer layers of core below surfaces, red. Outer surface smooth. Traces of four holes. Possibly part of No. 3.

Fig.139,5. Illington/Lackford sherd in I/L Fabric 1. Scheme unknown, but at least eleven neck-lines with horizontal row of A4 stamps.

Fig.139,6. Illington/Lackford sherd in I/L Fabric 6. Scheme 6A, vertical boss with two line swag with J2 stamps.

Fig.139,7. Illington/Lackford sherd in I/L Fabric 1. Scheme 6A (probably), vertical boss plus panel, A5 and J? stamps.

Fig.139,8. Stamped sherd in hard fabric with some white mica. Dark brown to black outer surface, black inner surface and core. Line of Group 6.8 stamps. Possibly part of same vessel from SFB 34/35.

Not illustrated: Five sherds and one rim with Type 1 rustication, and three sherds Type 2 rustication.

Sunken-Featured Building No. 41. (WE/2).

Type A, two-post, orientation E to W (Fig.140).
Measurements: A: 14ft 8in (4.5m); B: 12ft 4in (3.8m); C: 10ft (3.1m); D: 1ft or 1ft 9in (0.5m) reconstructed.

SFB 41 lay in an isolated position on the extreme eastern edge of the knoll, some 50ft (15.2m) south-east of Hall 1 and north of the pottery clay-reserve. In plan the pit was rectangular, of the two-post type. The post-holes were asymmetrically placed to the main east-west axis of the pit, the western post centred some 2ft (0.6m) north of the line, the eastern 1ft (0.3m) to the south. The pit was shallow, flat bottomed, with gently sloping sides and entirely filled with the normal tough grey-brown SFB fill, without internal stratigraphy. The west end of the SFB overlay Ditch 100 and the southern half was cut by Ditch 60, running in an east to west direction.

Material culture:

Fragments of unfired clay loomweights were scattered throughout the fill and six small finds were recovered from the fill.

SF 1101. Roman **bronze coin.** Constantine II, 335-41.

SF 1417. Roman **bronze coin.** Valens, 364-78.

Fig.141,1. SF 1080. Fragment **bronze bracelet,** simple hook fastening. Stamped ornament.

Fig.141,2. SF 1089. Fragment of small squared **bone.**

Fig.141,3. SF 1098. **Bone pin or awl** made from splinter of long bone, flattened oval section, plain.

Fig.141,4. SF 1102. **Bone pin** with knobbed head and swelling in lower part of shaft. Circular section.

Late Roman pottery:

Nene Valley base (form NV 1 or NV 2).
Oxford ware flange (C 51).

Early Anglo-Saxon pottery:

Fig.142,1. Cooking pot in very hard fabric with some chaff and rare large rounded quartz. Both surfaces dark brown to black, core black. Both surfaces smoothed. Simple neck-line with row of Group 10.5, double-dot stamps below.

Fig.142,2. Large cooking pot or storage jar in very hard fine fabric with some yellow mica. Both surfaces and core dark grey, both surfaces burnished.

Fig.142,3. Upright rim in very hard fabric with much chalk, most of which has been burnt out, leaving voids. Outer surface and core grey, inner surface buff to grey. Both surfaces smoothed.

Fig.142,4. Rusticated sherd in very hard, sandy fabric with some yellow mica. Both surfaces black, core black with oxidised outer layers. Rustication damaged, possibly Type 3.

Sunken-Featured Building No. 42. (WH/8).

Type A, two-post, orientation E to W (Fig.143).
Measurements: A: 11ft 6in (3.5m); B: 10ft 3in (3.1m); C: 8ft 9in (2.7m); D: 1ft 4in (0.4m) or 2ft 4in (0.7m) reconstructed.

SFB 42 lay in a central position on the south side of the site, in the south-east corner of Hollow 4. In plan it was rectangular, of the two-post type, the posts set centrally to the ends, at the junction of the wall and the floor of the pit.

The fill was the homogeneous, tough grey-brown material common to the SFBs, with two areas of black in the east end, and filled the entire pit to the top of the natural sand. The walls of the pit sloped gently to the floor, which was rather uneven. The north-west quadrant was destroyed by the six-post SFB 38.

Material culture:

Six objects were recovered from the primary fill of the SFB and two more from the base of the general cultural Layer 2 above, which could well be associated, (SF Nos 796 and 799).

SF 941. Roman **bronze coin.** Arcadius, 388+.

Fig.144,1. SF 796. **Bronze awl,** rectangular shape, round, curved point. From junction of SFB fill and overlying Layer 2.

Fig.144,2. SF 1100. Handle of small **bronze spoon.** Romano-British type.

Fig.144,3. SF 1124. **Iron fragment** with traces of twisting.

SF 1125. **Iron fragment,** length 1.5cm. Not illustrated.

SF 1036. **Glass** fragment, yellowish, curved. Roman. Not illustrated.

SF 1038. **Glass** fragment, abraded, rounded, outsplayed rim, colourless. 4th century, type uncertain. Not illustrated.

Late Roman pottery:

Nene Valley base (form NV 10.3).
Oxford ware mortarium base sherd, re-used to wear interior surface flat (Fig. 260, OX 8).

Early Anglo-Saxon pottery:

Fig.145,1. Hard fabric with shell tempering. Brown to black outer surface, black inner surface and core. Both surfaces burnished. Four lines at base of neck.

Fig.145,2. Wide-mouthed bowl in hard sandy fabric. Brown to black outer surface, black core. Inner surface obscured by burnt deposit. Outer surface smoothed.

Fig.145,3. Globular bowl with everted rim in hard sandy fabric with occasional rounded quartz. Outer surface buff to grey, inner surface brown to grey, core black. Outer surface burnished, inner surface smoothed.

Fig.145,4. Small rounded bowl in hard, thin sandy fabric. Outer surface buff to pale grey, inner surface and core black. Both surfaces close-burnished. Everted rim with irregular neck-line.

Fig.145,5. Small cup in fairly soft fabric with rare large rounded grit. Black surfaces and core. Both surfaces rough.

Fig.145,6. Rusticated sherd in hard sandy fabric. Both surfaces and core black. Inner surface burnished. Type 7 rustication.

Fig.145,7. Rusticated sherd in hard fabric with rounded grits, some chalk, and rare yellow mica. Both surfaces and core black. Both surfaces smoothed. Type 6 rustication.

Sunken-Featured Building No. 43. (WB/3).

Type ? (Fig.146).

Excavated by Professor V.I. Evison. A possible SFB, largely destroyed by gravel working.

'Above the pit C.P.8 at the quarry edge was a layer of dark fill, about one foot deep, containing burnt daub, many bones, Saxon sherds, and some Saxon objects. No post-holes or other features remained.'

Material culture:

Six objects were recovered.

Fig.147,1. SF 3005. **Bronze dome.**

Fig.147,2. SF 3013. Semi-circular **bronze spangle** with nicked decoration along the straight edge, one rusted iron ring passes through a perforation.

Fig.147,3. SF 3006. Part of opaque, brick-red biconical **bead.**

Fig.147,4. SF 3011. **Bone comb** rectangular, double-sided, mid ribs attached by six iron rivets and decorated with incised border lines.

Fig.147,5. SF 3021. **Bone comb,** triangular, incurved ends, flat plates decorated with ring and dot ornament and fixed by ? seven iron rivets.

Fig.147,6. SF 3012. **Fired clay spindle-whorl** fragment; bun shaped disc, original diameter 4cm.

Early Roman pottery:

Nene Valley sherd.

Early Anglo-Saxon pottery:

Fig.148,1. Body sherds in soft, very chaffy fabric. Outer surface buff with grey patches, inner surface and core black. Coarsely defined *stehende bogen* with slashed zone. Both surfaces smoothed.

Sunken-Featured Building No. 44. (WG/4).

Type B1, six-post derivative, orientation E to W (Fig.149).

Measurements: A: 14ft 3in (4.3m); B: 10ft 3in (3.1m); C: 10ft 9in (3.3m); D: 2ft (0.6m) or 3ft 6in (1.1m) reconstructed.

SFB 44 lay on the low south-east corner of the site close to SFBs 45 and 49 and the complex series of post-holes (Hall 5) immediately to the south of those. In plan the pit was roughly rectangular, with very rounded corners. The basic post-hole pattern was of a six-post SFB, but three other posts appear on the plan, of which that in the south-east corner was not associated with the SFB. The other two, in the middle of the west end and in the north-east corner, were larger than the other post-holes in the SFB and may have been replacements. The west and north sides of the pit were very steep, particularly for so deep an SFB, but the south and east sides were much shallower. The floor of the pit was flat; the fill the uniform, compact material common to the SFBs, which filled the pit to the level of the natural sand.

In the middle of the north side and coming to the edge of the pit, a large hearth of clay measuring 4ft 9in (1.5m) E to W and 3ft (0.9m) N to S lay on the top of the primary fill. On the south side of the hearth fragments had tumbled down the slight slope of the fill. There was no indication that the hearth had been any form of oven with side walls.

On the south side, immediately outside the pit, a patch of chalky clay, 2ft 6in (0.8m) x 2ft (0.6m) was found in the general cultural Layer 2 and may represent the site of the door. A heap of animal bones, mainly ox and including the skeleton of a cat, occurred half way down the fill in the south-east corner.

The SFB cut Ditch 111 but was not itself disturbed by any feature other than the later post-hole in the south-east corner.

Material culture:

This SFB was remarkably rich in both pottery and small finds. Thirty-two objects were recovered from the contemporary fill, of which ten were Roman coins and a further ten of the remainder may be considered as 'female' objects.

SF 1154. Roman **bronze coin.** *cf.*Constantine II.
SF 1155. Roman **bronze coin.** Constantine I, 317-8.
SF 1165. Roman **bronze coin.** Valentinian I, 364-78.
SF 1166. Roman **bronze coin.** Tetricus I, 270-3.
SF 1167. Roman **bronze coin.** Valentinian I, 364-78.
SF 1168. Roman **bronze coin.** Valens, 364-78.
SF 1180. Roman **bronze coin.** Valentinian I, 364-78.
SF 1181. Roman **bronze coin.** Gratian, 367-75.
SF 1195. Roman **bronze coin.** Magnentius, 350-1.
SF 1338. Roman **bronze coin.** Gratian, 367-75.
SF 1153. Fragment **bronze sheet,** length 1.5cm. Not illustrated.

Fig.150,1. SF 1174. Fragment **bronze bracelet,** three twisted wires. Roman type.

Fig.150,2. SF 1229. Fragment **bronze sheet,** with one 'frilled' edge. One surface tinned or silvered.

Fig.150,3. SF 1306. Fragment **bronze annular brooch.** Trace of perforation for pin. Decorated with tiny stamped dots along each edge.

Fig.150,4. SF 1188. **Iron spike.** Circular section.
SF 1225. **Iron nail,** length 4cm. Not illustrated.
SF 1240. **Iron nail,** length 5cm. Not illustrated.
SF 1257. **Iron fragment,** ? nail length 2.5cm. Not illustrated.

Fig.150,5. SF 1302. **Iron object,** square section, pointed one end, flattened the other.
SF 1307. **Iron nail,** length 3cm. Not illustrated.
SF 1342. Head of **iron nail.** Not illustrated.

Fig.150,6. SF 1169. Small, turquoise translucent, globular **glass bead.**

Fig.150,7. SF 1197. Annular, dark blue translucent **glass bead.**

Fig.150,8. SF 1184. **Fired clay spindle-whorl,** cylindrical hole.

Fig.150,9. SF 1189. Fragment biconical, **fired clay spindle-whorl.** Hard, dark grey fabric.

Fig.150,10. SF 1190. **Fired clay spindle-whorl.** Hard dark grey fabric with yellow mica.

Fig.150,11. SF 1170. **Bone pin.** Head with flattened end and longitudinal grooves. ? Roman.

Fig.150,12. SF 1241. **Bone pin** with pierced, triangular head. Made from pig fibula.

Fig.150,13. SF 1247. Heavy **bone awl.**

Fig.150,14. SF 1178. Triangular, composite **bone comb.** Tooth segments project slightly above connecting plates. End tooth segment projects beyond end of connecting plates which are decorated with large dot and double ring centrally placed, with small single dot and rings around it. Repeated on other side. Twelve iron rivets.

Fig.150,15. SF 1459. Double-sided, composite **bone comb.** Connecting plates with four central lines and seven iron rivets. Very fine teeth, averaging eleven to the inch.
SF 1304. **Glass** fragment. Not illustrated.

Early Anglo-Saxon pottery:

Fig.151,1. Bowl in hard fabric with some rounded grits and some yellow mica. Both surfaces and core black. Both surfaces burnished.

Fig.151,2. Bowl in fairly hard sandy fabric with some white mica. Both surfaces black, burnished, core black with oxidised outer layers at the rim.

Fig.151,3. Large vessel in very hard, thin fabric with rounded quartz. Both surfaces and core black, both surfaces smooth and roughly burnished.

Fig.151,4. Shouldered vessel with high neck in hard sandy fabric. Outer surface brown to black, inner surface and core black.

Fig.151,5. Wide mouthed bowl in hard fabric with chaff. Both surfaces dark brown to black, core black with thin, outer oxidised layers.

Fig.151,6. Vessel with flaring rim in hard fabric with some rounded quartz. Both surfaces and core black. Inner surface smoothed, outer surface burnished.

Fig.151,7. Fairly hard, sandy fabric. Outer surface reddish brown, burnished; inner surface and core black.

Fig.151,8. Splay-sided bowl in hard fabric with some white mica. Both surfaces and core black, both surfaces rough.

Fig.151,9. Hard, close fabric. Outer surface brown to black, inner surface and core black. Outer surface burnished. Eight neck-rings, horizontal line of

Group 1.2 dots, three lines below and two or three line chevrons.

Fig.151,10. Stamped sherd in hard fabric with some angular grits and white mica. Both surfaces and core black. Outer surface close-burnished, inner surface scraped. Two horizontal rows of stamps on neck; Group 5.2 above Group 3c.8. Pendant two line triangles on shoulder, filled with 'T' shaped arrangement of 3c.8 stamps.

Fig.151,11. Stamped sherd in hard sandy fabric. Both surfaces and core black. Both surfaces burnished. Group 1.4 stamps.

Fig.151,12. Sherd in hard, close fabric with sub-angular grits and rare large flat flint. Both surfaces and core black, both surfaces burnished. Part of lined vertical boss, annular Group 2.12 stamps.

Fig.151,13. Stamped sherd in thin, hard fabric. Both surfaces and core black, both surfaces burnished. Horizontal row of Group 9.3 stamps between lines.

Fig.151,14. Illington/Lackford sherds, I/L Fabric 7. Outer surface black, burnished, inner surface brown to black, burnished. Core black with red outer layer below surface. Seven neck-lines, horizontal row of I/L A.5 stamps. Three line chevrons with three lines below.

Fig.151,15. Large Illington/Lackford urn in I/L Fabric 7. Both surfaces and core black, both surfaces burnished. I/L Scheme 4a with I/L D4, A8b and J1 stamps.

Fig.152,1. Rim of perforated pot in hard fabric with angular white flint and red 'grog'. Both surfaces brown to black, core black with oxidised outer layers. Simple, upright rim, perforations start at base of neck.

Fig.152,2. Fragment of perforated pot in hard fabric with some angular white grit and, apparently no red 'grog'. Both surfaces and core black, outer surface burnished. Closely packed perforations, apparently in lines.

Fig.152,3. Rim and fragment of upright lug in hard fabric with rounded quartz. Outer surface dark grey, inner surface brown to grey, core grey. Both surfaces smoothed. Upright lug added to rim, apparently pierced twice.

Fig.152,4. Rusticated sherd in hard, sandy fabric with some white mica. Both surfaces and core black, outer surface burnished. Horizontal, Type 1 rustication.

Fig.152,5. Small stamped sherd in soft, pitted fabric. Both surfaces and core brown. Group 3B.5 stamp.

Not illustrated: Illington/Lackford sherd in I/L Fabric 1, brown to black surfaces, black core. Five neck-lines, horizontal row of I/L A4 stamps, three lines and three line chevrons.

Sunken-Featured Building No. 45, A and B.

A: (WG/4), Type B, six-post, orientation E to W (Fig.153).
B: (WG/4), Type B, six-post, orientation E to W.

SFB 45 lay in the south-east corner of the site close to a complex mass of post-holes and hearths (Hall 5). The pit was found to contain two distinct sets of post-holes representing a rebuilding, which have been designated 45A and 45B. The stratigraphy of the pit did not reveal traces of two fills so that it was not possible to determine which set of post-holes belonged to the filling of the pit, or whether the rebuilding took place immediately, or if the pit was cleaned out at the time of rebuilding.

In plan the pit was rectangular with rounded corners, with steep, sloping sides to a rather uneven bottom. The post-holes of both groups were situated at the base of the pit wall, in the slope and on the upper edge at the level of the natural sand. Both arrangements were of the six-post Type B, in both cases the measurement B was 12ft 9in (3.9m). The overall Length A of the pit and the Breadth C cannot be given accurately but the depth of one of the SFBs must have been 2ft 6in (0.8m) from the top of the natural, or 3ft 6in (1.1m) reconstructed. The fill was the homogeneous, dark grey, tough material common to most of the SFBs. Two levels of more ashy material were noted and there were a number of chalk fragments high up in the fill. A horse skull was found a few inches above the base of the pit, in the east half, and an ox skull in the top of the primary fill on the north side.

Material culture:

Twenty-four fragments of loomweights were recovered from different levels in the fill, mostly of unfired clay and thirty-nine small finds. Of these, there were a relatively large number of combs (6), beads, spindle-whorls and weaving-pins; in all, some twenty items could be attributed to female activities. Bone and antler working, however, was also in evidence.

SF 1412. Roman **bronze coin.** Gallienus, 259-68.
SF 1421. Roman **bronze coin.** Claudius II, 268-70.
SF 1499. Roman **bronze coin.** Constantinopolis, 330-5.
SF 1513. Roman **bronze coin.** Constantine II, 335-41.
SF 1410. Fragment of **bronze ? pin.** Length 4.2cm. Circular section, both ends broken. Not illustrated.

Fig.154,1. SF 1429. Two fragments **bronze strip,** riveted together, the rivet head incorporated into the design, which continues with two double ring and dot stamps and a series of transverse grooves. Broken at both ends.

Fig.154,2. SF 1479. Romano-British **bronze 'dolphin' brooch.** Camulodunum Type V with knurled ridge. Solid catch-plate.

Fig.154,3. SF 1404. **Iron knife.** Cutting edge curves to meet straight back.
SF 1409. **Iron knife.** Length 4cm. Not illustrated.
SF 1413. **Iron nail.** Length 4.3cm. Not illustrated.

Fig.154,4. SF 1416. Small **iron hook.**

Fig.154,5. SF 1434. Small, double pointed, **iron object.** Square section.

Fig.154,6. SF 1456. **Iron object.**

Fig.154,7. SF 1414. **Glass bead.** Colour unidentifiable. Disc.

Fig.154,8. SF 1415. **Glass bead.**

Fig.154,9. SF 1427. **Amber bead,** almond shaped.
SF 1505. **Glass fragment.** Unidentifiable, not illustrated.

Fig.154,10. SF 1422. End tooth segment from composite triangular **bone comb.** Square ended and shallow angle.

Fig.154,11. SF 1423. Fragment of connecting plate from round backed, single-sided **bone comb.** Four rivet holes round edge. Design enclosed with double lines, composed of central motif of double ring and dot with three adjoining single rings and dots. Triple groups of single rings and dot motifs round edge.

Fig.154,12. SF 1475. Triangular, composite **bone comb.** Tooth segments project slightly beyond connecting plates, surviving end tooth segment broken. Connecting plates plain apart from double outline. Thirteen iron rivets.

Fig.154,13. SF 1461. Tooth segment from double-sided, composite, **bone comb.** Eight teeth one side, seven the other. Trace of rivet hole.

Fig.154,14. SF 1481. Double-sided, composite **bone comb.** Connecting plates have double outlines but otherwise plain. Eight iron rivets. One end tooth segment is pierced, the other a deep dot.

Fig.154,15. SF 1495. Fragment of double-sided, composite **bone comb.** Connecting plates have double outlines only, apparently scored with a double-toothed implement. Four iron rivets.

Fig.154,16. SF 1559. Flat **bone strip,** with double ring and dot ornament, two holes for attachment.

Fig.154,17. SF 1507. Fragment of shaft of **red deer antler,** cut and snapped in three plains, and split longitudinally. Not apparently sawn.

Fig.155,1. SF 1407. Broken **bone needle** with pierced triangular head, pig fibula.

Fig.155,2. SF 1411. Broken **bone needle** with pierced triangular head, pig fibula.

Fig.155,3. SF 1419. Broken **bone pin-beater.**

Fig.155,4. SF 1449. Shaft of goose ulna with both ends removed. The bone is highly polished from much use and could well have been used as a **pot stamp.**

Fig.155,5. SF 1718. Fragment of long bone, showing **groove and splinter** technique for the removal of long fragments for pins.

Fig.155,6. SF 1470. **Bone 'shaving',** cut on three sides, possibly detached by adze.

Fig.155,7. SF 1460. **Metatarsal** of sheep, pierced at distal end.
Fig.155,8. SF 1477. **Metacarpal** of sheep, pierced at distal end.
Fig.155,9. SF 1478. **Metatarsal** of sheep, pierced at distal end.
Fig.155,10. SF 1405. Romano-British Nene Valley **pottery base,** with built-in hole, but broken edge rounded off.
Fig.155,11. SF 1406. **Fired clay spindle-whorl** in hard, black, burnished fabric.
Fig.155,12. SF 1453. Fragment of **spindle-whorl** or **large bead,** sandstone.
Fig.155,13. SF 1426. Fragment of turned **bone spindle-whorl.**

Late Roman pottery:

Nene Valley rim (form NV 2); base (form NV 10.1), possibly reused — very worn on almost horizontal broken edge, 2.8cm above bottom; base (Fig.260, NV 10.4); worn pierced base see SF 1405.
Oxford flange (C 51), three base sherds, one body sherd.
Oxidised body sherd.
Shell gritted body sherd.

Early Anglo-Saxon pottery:

Fig.156,1. Open bowl in very hard, sandy fabric with rounded quartz grit. Both surfaces and core black, both surfaces smoothed.
Fig.156,2. Small bowl or cup in hard, sandy fabric with rare small chalk flecks. Both surfaces brown to grey, core grey with external, oxidised layers. Both surfaces smoothed.
Fig.156,3. Small vessel in thin hard fabric with some chalk and large yellow mica. Both surfaces dark brown to black, core black. Both surfaces very smooth.
Fig.156,4. Fairly hard, sandy fabric, both surfaces and core black. Outer surfaces burnished.
Fig.156,5. Small cup in fairly hard fabric with much quartz. Both surfaces dark grey, core black with external oxidised layer. Surfaces rough.
Fig.156,6. Rusticated bowl in hard fabric with chaff. Both surfaces black and burnished, core black. Type 1 rustication.
Fig.156,7. Globular bowl in hard, sandy fabric with angular flint. Both surfaces dark grey-black, outer surface close-burnished, inner surface smooth. Core black with oxidised layer beneath outer surface. Linear design with nine neck-rings, three line chevrons and three lines below.
Fig.156,8. Globular bowl in hard, sandy fabric. Outer surface brown, inner surface and core black. Both surfaces close-burnished. Linear design as No. 7 above, but with coarser lines.
Fig.156,9. Body sherd in fairly hard fabric with small particles of red 'grog'. Both surfaces and core black, outer surface burnished. Linear design with crossing, double line empty swags below horizontal lines.
Fig.156,10. Body sherd in hard fabric with white angular flint. Both surfaces black, burnished; core black. Linear design with horizontal necklines and small double line swags beneath.
Fig.156,11. Stamped sherd in hard fabric with sparse large quartz and yellow mica. Both surfaces and core black. Both surfaces burnished. One line and part of a row of Group 10.4 stamps.
Fig.156,12. Stamped sherd in hard fabric with sparse large quartz and yellow mica. Both surfaces black, core black with outer oxidised layer. Outer surface burnished. Five line chevrons above zone of horizontal lines and one line of Group 3B.6 stamps.
Fig.156,13. Stamped sherd in hard fabric with quartz grits and yellow mica. Outer surface brown to black burnished, inner surface lost, core black. Deep lines and Group 10.4 stamp.
Fig.156,14. Illington/Lackford urn in I/L Fabric 1 var. Outer surface brown to black, inner surface and core black. Both surfaces burnished. I/L Scheme 3a with A8b and J1 stamps.
Fig.156,15. Illington/Lackford sherd in I/L Fabric 1. Both surfaces and core black. Outer surface burnished. I/L stamps A? and L.
Fig.156,16. Illington/Lackford sherd in I/L Fabric 7. Both surfaces and core black, core with outer oxidised layers. Inner surface smooth, outer surface close-burnished. Scheme 5b, horizontal line of stamps above three line chevrons.

Illington/Lackford sherds not illustrated:

a) I/L Fabric 6. Black surfaces and core, both surfaces burnished. I/L A4 stamp.
b) I/L Fabric 1. Black surfaces and core, both surfaces burnished. I/L E stamp, in ? swag.
c) I/L Fabric 1. Black surfaces and core, both surfaces burnished. I/L E stamp in ? swag.
d) I/L Fabric 1. Black surfaces and core, both surfaces burnished. I/L E stamp.
e) I/L Fabric 1. Black surfaces and core, outer surface burnished. Horizontal line of I/L E stamps.
f) I/L Fabric 1. Black surfaces and core. Both surfaces burnished. I/L A4 stamp.
g) I/L Fabric 6. Black surfaces, outer surface burnished. Core black with outer layers oxidised. I/L A5 and J1 stamps, Scheme 3a or 4a.

Fig.156,17. Perforated sherd in hard, sandy fabric. Both surfaces and core black. Core with oxided layers under surfaces. Traces of four holes.
Fig.156,18. Small 'pinched' pot in fairly hard, dark-brown fabric.
Not illustrated: Stamped sherd with part of Group 3B stamp and trace of small cross-hatched stamp.

Sunken-Featured Building No. 46. (WG/9).

Type A, two-post, orientation E to W (Fig.157).
Measurements: A: 14ft 6in (4.4m); B: 12ft (3.7m); C: 10ft 6in (3.2m); D: 1ft 9in (0.5m) or 2ft 9in (0.8m) reconstructed.

SFB 46 lay in the north-west corner of Hollow 4, some 40ft (12.2m) south of Hall 3, in the central region of the site, close to SFB 37. In form it is rectangular, of the two-post Type A. The relationship of the post-hole axis to the plan of the pit was unusual in that there was considerably more of the pit on the north than on the south. All sides of the pit sloped gently down to a flat base, except the north side which was almost vertical. The filling of the pit was the normal tough grey material with no discernable layers. Three lumps of unfired clay were found close together in the upper levels in the west end of the pit.

SFB 46 post-dates Hollow 4 and Ditches 105 and 107 and Pit 119.

Material culture:

Eight objects were recovered from the contemporary filling of the pit together with two fragments of unfired clay loomweights.

SF 1078. Roman **bronze coin.** Constans, 341-8.
SF 1079. Roman **bronze coin.** Arcadius, 388-402.
Fig.158,1. SF 1270. Fragment of **hone.**
Fig.158,2. SF 1062. Greenish **glass imitation gem stone,** circular with crude figure advancing left with upraised right arm holding spear (?) and left arm with shield. Roman.
Fig.158,3. SF 1305. **Glass** fragment, brown, horizontal trails. Anglo-Saxon.
Fig.158,4. SF 1437. Rim of small **glass cup,** or beaker, yellowish-colourless, late 4th century.
Fig.158,5. SF 1239. **Spindle-whorl.** Base of small Nene Valley vessel, bored and slightly rubbed-down.
Fig.158,6. SF 1237. Body of **bone pin or awl,** head missing.

Late Roman pottery:

Oxford body sherd.
Nene Valley base, pierced, see SF 1239.

Early Anglo-Saxon pottery:

Fig.159,1. Small bowl in hard fabric with much sub-angular quartz and some large yellow mica. Both surfaces and core black. Outer surface close burnished. Three lines on shoulder above a line of Group 3A.2 stamps. Two-line pendant triangles divided centrally.

Fig.159,2. Rim sherd in hard, sandy fabric with some quartz and yellow mica. Outer surface brown, inner surface and core black. Both surfaces burnished.

Sunken-Featured Building No. 47. (WF/9).

Type B, six-post, orientation E to W (Fig. 160).
Measurements: A: 13ft 6in (4.1m); B: 12ft 9in (3.9m); C: 11ft 9in (3.6m); D: 1ft 6in (0.5m) or 2ft 6in (0.8m) reconstructed.

SFB 47 lay immediately north-east of Hall 3 and close to SFBs 36, 37, 39 and 46. In plan the pit was markedly rectangular, with near vertical sides and a flat bottom. The purlin-posts were set in the lower slope of the pit wall and the ridge-posts, which were considerably larger, in the slope, overlying the edge at the level of the natural sand. The posts, in a typical six-post arrangement, were in straight lines at both ends. The normal, tough grey fill occupied the whole pit and was capped by a patchy layer of ash and charcoal.

SFB 47 overlay the Iron Age ditches 78 and 104 and was in turn, cut by Ditch 101, the latest feature on the site.

Material culture:

There were thirty-one finds distributed throughout the contemporary fill of the SFB, together with sixteen complete and eighteen fragments of clay loomweights. Although the loomweights were scattered throughout the fill of the pit, there were two main groups, one in the east end and the other in the north-east corner.

SF 1318. Roman **bronze coin.** Gallienus, 259-68, very worn.

Fig.161,1. SF 1273. Fragment of **silver wire** in form of open loop.

SF 1277. Small **bronze fragment.** Not illustrated.

Fig.161,2. SF 1311. Fragment of twisted **bronze bracelet** with open loop end. Double twist. Roman.

SF 1332. Fragment of scrap, melted, **lead.** Length 4cm. Not illustrated.

SF 1312. **Iron nail.** Length 4cm. Not illustrated.

SF 1316. **Iron nail.** Length 7.5cm. Not illustrated.

SF 1320. **Iron nail.** Length 4cm. Not illustrated.

SF 1328. **Iron nail.** Length 3.5cm. Not illustrated.

SF 1330. **Iron fragment.** Length 1.5cm. Not illustrated.

SF 1334. **Iron nail.** Length 3.5cm. Not illustrated.

SF 1335. **Iron nail.** Length 7cm. Not illustrated.

SF 1337. **Iron nail.** Length 6cm. Not illustrated.

Fig.161,3. SF 1275. **Chalk spindle-whorl,** most of surface decayed away. Diameter of remainder 0.8cm.

SF 1272. Convex, nearly colourless **Roman glass** fragment. Not illustrated.

Fig.161,4. SF 1314. Fragment of neck of deep **blue glass.** Probably 1st to early 2nd century, but the colour is also Saxon.

SF 1329. Fragment, nearly colourless blown Roman **window glass.** Not illustrated.

SF 1333. Fragment, nearly colourless blown Roman **window glass.** Not illustrated.

Fig.161,5. SF 1276. Half light blue **disc glass bead** with blue translucent trails and red dots.

Fig.161,6. SF 1315. White **glass bead** with light blue translucent trails. Cube.

Fig.161,7. SF 1336. Large, annular, dark blue translucent **glass bead** with white zig-zag trail.

Fig.161,8. SF 1375. Small dark green **glass bead** with three unmavered white dots.

Fig.161,9. SF 1297. **Fired clay spindle-whorl** in hard, gritty fabric, part oxidised surface.

Fig.161,10. SF 1331. Half **spindle-whorl** in fired clay. Red core with reduced burnished surface. Diameter 0.8cm.

Fig.161,11. SF 1274. Fragment of connecting plate of triangular **bone comb** with traces of three rivet holes. Decorated with simple ring and dot design grouped in centre of plate and edged with two lines on lower border and four along the upper edge.

Fig.161,12. SF 1278. Portion of composite double-sided **bone comb,** teeth of same size each side. Connecting plates plain on both sides, except for saw marks at the base of the teeth; five iron rivets and traces of another spaced fairly regularly along its length. Three tooth plates, of which the end one, protruding beyond the spine, has a simple, broad notch coinciding with the end of the spine.

Fig.161,13. SF 1298. **Bone needle** with triangular head, pig fibula.

Fig.161,14. SF 1308. **Bone needle** with triangular head, pig fibula.

Fig.161,15. SF 1310. **Bone needle** with triangular head, pig fibula. Length of surviving portion 1.23cm.

Late Roman pottery:

Nene Valley base (form NV 1 or 2), body sherd.
Oxford body sherd.

Early Anglo-Saxon pottery:

Fig.162,1. Hard, sandy fabric with rare white mica. Brown to black surfaces, black core. Both surfaces roughly burnished.

Fig.162,2. Hard fabric with rounded quartz and some white mica. Brown to black surfaces, black core with oxidised surfaces. Both surfaces smoothed. Inner surface shows signs of 'wiping'. Lower fracture along coil.

Fig.162,3. Large vessel in hard sandy fabric. Outer surface buff, with black rim, inner surface dark grey, core black. Both surfaces smoothed, then apparently lightly brushed, making the surface harsh to the touch.

Fig.162,4. Small bowl in hard fabric with much rounded grit. Both surfaces brown to black, core brown with black outer layer. Outer surface roughly burnished, inner surface heavily worn.

Fig.162,5. Fragment of decorated urn in fairly hard fabric with some chaff and some white mica. Outer surface brown to black, inner surface and core black. Outer surface close-burnished. Horizontal neck-lines and row of Group 9.4 stamps. Small, spaced bosses with double outlines; black panels between.

Fig.162,6. Body sherd in hard fabric with chaff and some white quartz. Both surfaces and core black. Surfaces smoothed. Two wide grooves and Group 8.3 stamps.

Fig.162,7. Small cup in hard fabric with rounded quartz grit. Outer surface brown to grey, inner surface red, core black. Two small, solid, pointed lugs.

Not illustrated: One applied, small, solid boss.

Sunken-Featured Building No. 48. (WD/9) — (WE/9).

Type A, two-post, orientation E to W (Fig.163).
Measurements: A: 13ft 9in (4.2m); B: 12ft (3.7m); C: 9ft 6in (2.9m); D: 1ft (0.3m) or 1ft 9in (0.5m) reconstructed.

SFB 48 lay on the north slope in the central area of the site, associated with SFBs 50 and 51 and almost 100ft (30m) to the north of Hall 3. In plan, the pit was rectangular, masked by earlier Iron Age pits in the south-east corner. The pit was shallow, even for a two-post type, with the sides sloping gently to an uneven floor. The post-holes were set at the foot of the slope and were both deep; the base of the east post-hole being 2ft (0.6m) deep from the floor of the pit.

The fill was the familiar homogeneous, tough grey material with charcoal flecks and a few stones, common to the SFBs. A fragment of a puddingstone quern, found in the centre of the pit, may well have been derived from the Iron Age pits in the south-east corner. No external features of any kind were found which might relate to this structure.

Material culture:

Eight objects, other than pottery, were recovered from the fill, including a fine triangular bone comb and two glass fragments.

SF 1386. Small **bronze fragment.** Length 0.5cm. Not illustrated.

SF 1372. **Iron nail.** Length 7cm. Not illustrated.

SF 1377. **Glass** fragment, thin, yellow-pale amber, may be post-Roman. Not illustrated.

Fig.164,1. SF 1418. Rim of **glass vessel.**
Fig.164,2. SF 1368. Dark green **glass bead,** with red trails and ? yellow dots.
Fig.164,3. SF 1376. **Fired clay spindle-whorl,** in hard black fabric with rare large flint. Some oxidisation on outer surface. Burnished, biconical.
Fig.164,4. SF 1378. Fine triangular, composite **bone comb.** Tooth segments project slightly beyond connecting plate. End tooth segments complete, drooping away from main body of comb. Connecting plates very plain, with four-line borders only. Fourteen iron rivets.
Fig.164,5. SF 1379. Broken **bone needle** with triangular head, pig fibula.

Late Roman pottery:

Nene Valley rim (form NV 1).
Oxford two body sherds.
Oxidised base (Fig.260, OR 1.3).

Early Anglo-Saxon pottery:

Fig.165,1. Faceted-angled bowl in hard fabric with sparse large flint (up to 1cm). Both surfaces dark brown to black, core black. Both surfaces burnished. A rather poorly made vessel with a slightly beaded rim, four neck-lines and irregularly cut fabric. Simple base.
Fig.165,2. Faceted-angled bowl in fairly soft fabric with plentiful quartz and flint grit (some up to 0.5cm). Both surfaces black, and originally burnished. Core reddish brown. Remains of three shallow, outlined cordons on the neck, with spaced diagonal slashing. Rounded facets.
Fig.163,3. Body sherd in fairly soft fabric with much quartz grit. Both surfaces dark brown to black, core black with red oxidised layer beneath outer surface. Both surfaces burnished. Deep neck-grooves and deep diagonal grooves on carination.
Fig.165,4. Rusticated bowl in fine fairly hard fabric with rare small quartz. Both surfaces brown patched with grey and black. Core black. Both surfaces smoothed, almost to a burnish. Outer surface of junction of base and wall flaked, original form not possible to determine. Unusual Type 8 rustication, carefully prepared. A fine, thin-walled vessel.

Sunken-Featured Building No. 49. (WH/4).

Type B, six-post, orientation E to W (Fig.166).
Measurements: A: 15ft (4.6m); B: 12ft (3.7m); C: 11ft (3.4m); D: 2ft 3in (0.7m) or 3ft 3in (1m) reconstructed.

SFB 49 lay in the south-east corner of the site in the lowest area, closely associated with SFBs 44 and 45 and the rebuilt post-hole structures in the same area. The pit was rectangular, the purlin-posts set well into the corners, overlying the edges of the pit, at the point at which it entered the natural sand. In profile the pit was bowl-shaped with a steep slope on the north side. The fill of the pit was in two quite distinct layers; the lower being the normal tough grey homogeneous material; the upper dark grey, with tip-lines apparent. The junction of the two fills had markedly more ash and charcoal.

On the north side, overlapping the edges of the pit, was the remains of a clay-based hearth, 4ft (1.2m) from east to west and broken away from the lip of the pit. The clay pad, 3in (35cm) thick, was fired hard on the upper surface, the underside remaining in an unfired condition. Broken fragments from the hearth were found to extend down the slope of the primary fill in the pit and were covered by the secondary filling. The hearth, when originally constructed, must have extended over the pit and therefore must have been supported in that position.

Material culture:

Thirty-two objects were recovered from the contemporary fill of the SFB; predominantly of bronze and iron.

SF 1374. Rubbed down Roman **bronze coin.** Irreg. Claudius II, 270.
SF 1390. Roman **bronze coin.** Valens, 367-75.
SF 1433. Roman **bronze coin.** Type of Magnentius. *c.*350.
SF 1496. Roman **bronze coin.** Diocletian, 302-3.
SF 1514. Roman **bronze coin.** Valens, 364-78.
SF 1516. Roman **bronze coin.** Constantius II, 353.
Fig.167,1. SF 1354. **Bronze plate** with four perforations.
Fig.167,2. SF 1381. Fragment of **bronze strip** with three holes on central lines and traces of two or more at one end.
Fig.167,3. SF 1389. Fragment of **bronze plate** with two perforations.
SF 1454. **Bronze fragment.** Length *c.*1cm. Not illustrated.
Fig.167,4. SF 1462. Thin **bronze plate** with four holes.
Fig.167,5. SF 1500. Fragment of **twisted bronze,** two strands. ? Roman bracelet.
Fig.167,6. SF 1501. Thin **bronze strip** fragments. One perforation.
SF 1503. Folded mass of thin **bronze sheet,** 2.5 x 5cm. Not illustrated.
Fig.167,7. SF 1506. Fragment of **rolled bronze** with transverse lines, ? ferrule from a small cosmetic brush.
SF 1527. Corroded fragment of **bronze strip,** 0.4 x 3cm. Not illustrated.
Fig.167,8. SF 1364. **Iron nail** or **stud** with domed head.
SF 1350. **Iron nail.** Length 5.5cm. Not illustrated.
SF 1355. **Iron ? nail.** Length 2.7cm. Not illustrated.
SF 1356. **Iron nail** fragment. Length 2.7cm. Not illustrated.
SF 1384. **Iron nail.** Length 2.5cm. Not illustrated.
SF 1425. **Iron nail.** Length 6.5cm. Not illustrated.
SF 1435. **Iron nail.** Length 3.5cm. Not illustrated.
SF 1531. **Iron nail.** Length 2.6cm. Not illustrated.
SF 1480. Fragment **iron nail.** Length 4.5cm. Not illustrated.
Fig.167,9. SF 1440. **Iron object.** Flattened end, rectangular section.
Fig.167,10. SF 1447. **Iron knife,** long straight back, much worn cutting edge, traces of wood on tang.
Fig.167,11. SF 1443. Flat polished **pebble.**
Fig.167,12. SF 1504. Turned **shale spindle-whorl.**
Fig.167,13. SF 1371. End tooth segment from triangular **bone comb.** Rather coarse teeth.
Fig.167,14. SF 1436. Polished **bone gaming counter.**

Late Roman pottery:

Nene Valley small base (as form NV 10.2), body sherd (NV 9).
Oxford two rims (C 51), three body sherds.
Oxidised face mask (Fig.260, OR 9.1), handle.
Grey rim (Fig.260, GR 1.2), base (probably form GR 1), smaller flat base.

Early Anglo-Saxon pottery:

Fig.168,1. Large urn in hard, sandy fabric with rounded quartz and white mica. Both surfaces and core black, both surfaces smoothed.
Fig.168,2. Rounded, open bowl in hard, sandy fabric with small white mica. Both surfaces and core black, outer surface with coarse burnishing strokes. Thin walled with 'bumpy' surface, possibly a 'punched' pot.
Fig.168,3. Bowl in hard fabric with rounded quartz, white mica and rare flecks of ? shell. Both surfaces and core black, outer surface burnished.
Fig.168,4. Hollow necked, shouldered vessel in fairly hard fabric with some chaff, chalk and sub-angular quartz. Both surfaces black. Outer surface highly burnished, inner surface burnished but worn. Core dark brown.
Fig.168,5. Miniature bowl in fairly soft fabric with sub-angular quartz, white mica and some red 'grog'. Both surfaces and core black, outer surface burnished. Irregular lines on neck.
Fig.168,6. Body sherd in hard fabric with much sub-angular quartz and white mica. Outer surface reddish-brown with blacked patches, inner surface and core black. Outer surface close-burnished. Short hollow vertical boss.

Fig.168,7. Rusticated bowl in hard fabric with sub-angular quartz and some yellow mica. Both surfaces and core black, outer surface above rustication burnished. Type 7 rustication.

Fig.168,8. Rusticated bowl in fairly hard fabric with some chaff. Rare yellow mica. Both surfaces and core black, no burnishing. Type 1 rustication.
Note: An unusual sherd with a 'negative' version of Type 1 rustication was also recovered from this SFB; apparently a thick layer of clay had been smeared over the surface of an already decorated vessel, and then fired; later to become detached.

Fig.168,9. Stamped sherd in fairly hard fabric with small chalk inclusions. Dark grey surfaces and core, outer surface burnished. Two lines and Group 7B.3 stamps.

Not illustrated: Illington/Lackford pottery:

a) I/L Scheme 6a, I/L Fabric 2, brown to black surfaces, black core. Both surfaces burnished. Neck-lines with A7 stamps, vertical bosses with panels; Stamps B2 and C with two-line swags, alternating stamps E and J2.
b) I/L Scheme 3a or 4a, I/L Fabric 1, light brown to black surfaces, grey core, outer surface burnished. Two-line swag, Stamp E.
c) I/L Scheme 3a or 4a, I/L Fabric 1, dark grey surfaces and core. Outer surface burnished. Two-line swag, Stamp E.
d) I/L Scheme 3a or 4a, I/L Fabric 1, black surfaces and core, both surfaces burnished. Two-line swag, Stamp E.
e) I/L Fabric 1, black surfaces and core, both surfaces burnished. Stamp E.
f) I/L Scheme 3a or 4a, I/L Fabric 1, brown to black outer surface, inner surface and core black. Outer surface burnished. Two-line swag, Stamp J1.
g) I/L Scheme 3a or 4a, I/L Fabric 6. Black surfaces and core, outer surface burnished. Stamp J1.

Not illustrated: Rusticated sherds; seventeen body sherds, three rims of Type 1; 1 sherd of Type 6.

Sunken-Featured Building No. 50. (WE/8).

Type B, six-post, orientation NE to SW (Fig.169).
Measurements: A: 13ft 6in (4m); B: 10ft (3m); C: 9ft 3in (2.8m); D: 2ft 9in (0.9m) or 3ft 9in (1m) reconstructed.

SFB 50 lay on the north slope, north of Halls 2 and 3; close to SFBs 48 and 51, which formed a small group 100ft (30m) from either Hall. The sunken area was roughly rectangular, with very rounded corners, the sides sloping down to the flat bottom of the pit. The post-holes were large and situated at the base of the slope, in part impinging upon the floor of the pit and backed into the sloping walls, and ranged in depth from 1ft 9in (53cm) to 2ft 3in (69cm). In two cases (the NE and NW), the sections of the post-holes showed traces of the original post, both 6in (15cm) across. A heavy layer of clay in the east half of the pit separated the primary and secondary layers and extended into the western half in fragments. The clay, which bore wattle marks, had considerable areas of reddening and ash and was clearly from a collapsed wall at the east end of the structure. No hearth was found, but this could have been obscured by the collapsing wall. The situation was comparable to that of SFB 12. The lower fill, of light grey material, was in every way similar to that in the other SFB pits. The upper filling, above the destruction layer, was darker and of the consistency of the overall Layer 2.

The orientation of the SFB was NE to SW rather than the usual E to W of most of the SFBs, following the line of the Iron Age Ditch 2 into which it was cut, suggesting that the Ditch may still have been visible as a slight depression.

Material culture:

Only two objects were recovered from the contemporary fill (Group 1); a further five from the destruction layer (Group 2).

Group I (Contemporary).

Fig.170,1. SF 1424. Fragment of claw from **claw beaker.** Amber colour.

Fig.170,2. SF 1457. **Fired clay spindle-whorl,** oval section, hard dark brown fabric.

Group II (Destruction Layer).

Fig.170,3. SF 1360. Thin, flat **bronze strip** with single bronze rivet. Broken.

Fig.170,4. SF 1359. **Broken fragment** with loop at one end.

Fig.170,5. SF 1366. Fragment of connecting plate from triangular **bone comb.** Traces of four rivet holes with iron staining. Decoration consists of four fine lines forming a border, containing a single row of dot and circle motifs. A single example of the dot and circle ornament survives in the enclosed field to suggest that this comb was highly decorative.

Fig.170,6. SF 1396. Fragment of **bone pin or awl,** 'D' section.

Fig.170,7. SF 1458. Large composite **bone comb,** single-sided, with rounded back. The end plates continue the line of the back beyond the connecting plates, with a small 'kick' at the end; the total length of the comb being originally approximately 22.5cm. The comb is held together with fourteen iron rivets with probably one more in the missing portion. The teeth are heavily worn, many of those in the centre being reduced to stumps. The connecting plates are decorated with two lines to form a border, enclosing a single row of inscribed dot and circle motifs; the central area of each plate bearing identical patterns, with three dot and circle motifs in each of the two corners and a cross-pattern formed of seven in the centre. The comb was found close to the bottom of the destruction layer.

Late Roman pottery:

Oxford flange (Fig.260, OX 3).

Early Anglo-Saxon pottery:

Fig.171,1. Hard sandy fabric, outer surface grey, inner surface and core black. Irregular rim, but basically rolled over.

Fig.171,2. Wide mouthed bowl in very hard, thin fabric with some rounded quartz. Both surfaces and core black, both surfaces smoothed.

Fig.171,3. Body sherd in hard fabric with some small angular flints. Both surfaces black, core black with thick outer brown layer. Outer surface burnished. Small suspension lug, partially pushed out and partially applied.

Fig.171,4. Small body sherd in hard fabric with occasional large rounded quartz, up to 2mm. Diagonally slashed on carination, small battered stamp above.

Not illustrated: Body sherd in hard fabric with sub angular quartz from very large vessel with diameter of more than 45cm and body wall thickness of 7mm.

Sunken-Featured Building No. 51. (WD/8) — (WE/8).

Type A, two-post, orientation E to W (Fig.172).
Measurements: A: 13ft 3in (4m); B: 10ft 6in (3.2m); C: 7ft 3in (2.2m); D: 1ft (0.3m) or *c.*2ft (0.6m) reconstructed.

SFB 51 lay on the crest of the north slope, closely associated with SFBs 48 and 50. In plan the pit was rectangular with rounded corners and the profile shallow, with steep sides and a flat bottom; the two post-holes cut into the junction of the floor and the base. The fill was a uniform dark grey brown colour of the normal SFB type.

The SFB pit cut into the north side of the Iron Age Ditch 2 and is so close to the north-west corner of SFB 50 that it is unlikely that they were contemporary.

Material culture:

Only two objects were recovered from the fill of the SFB.

Fig.173,1. SF 1403. **Iron hook or latch-lifter** with long shank and traces of a suspension loop.

Fig.173,2. SF 1402. Composite, double-sided **bone comb** in very fine condition. The comb is held together with seven iron rivets. The connecting plates are decorated with three fine lines on each border, with a central row of ring and dot motifs. The teeth are of equal size on each side and are extended to almost the very edge of the end segments. Both workmanship and preservation combine to make this one of the finest combs from the site.

Early Anglo-Saxon pottery:

Fig.174,1. Globular bowl in hard fabric with some sub-angular quartz. Outer surface and outer part of core black, inner surface and inner part of core dark brown. Dull burnish on both surfaces.

Fig.174,2. Hard fabric with some black sub-angular quartz. Both surfaces and core black. Both surfaces smooth.

Fig.174,3. Body sherd of rusticated pottery in fairly hard fabric with some sub-angular quartz and sparse red 'grog'. Outer surface brown, inner surface grey to black, core black with brown layer under inner surface. Type 1 rustication.

Fig.174,4. Miniature vessel in fairly hard sandy fabric, with rare flint inclusions, one 8mm across. Both surfaces light brown, greyer toward base; core brown to grey. Base rounded. The extended drawing of the decoration shows annular stamps in an irregular series of vertical lines and knife-cut lines apparently representing an animal on the left, facing a group of paired lines. These may only be scribble but two cases have 'heads', utilising annular stamps, and the third seems to have legs, so the group could be construed as human figures.

Not illustrated: One sherd Type 1 rustication.

Sunken-Featured Building No. 52. (WE/10).

Type B, six-post orientation E to W (Fig.175).

Measurements: A: 14ft 9in (4.5m); B: 13ft (4m); C: 10ft (3m); D: 2ft 3in (0.7m) or 3ft 3in (1m) reconstructed.

SFB 52 was one of the outlying SFBs on the north slope. Although rather isolated, 150ft (46m) NW of Hall 3, it was close to SFB 53. In plan the pit was rectangular with slightly bowed sides and well defined corners, of the six-post type without modifications; the posts set well into the slope of the pit wall. The two central post-holes were noticeably smaller than those of the purlin-posts; the west one forming a straight line with the purlin-posts, whereas the east ridge-post lay slightly inside the line, an unusual feature. The sides of the pit were very steep and the floor slightly uneven. A patch of partially burnt clay overlay the north-west post-hole, at the junction of the contemporary and post-SFB fills. The lower contemporary fill consisted of about 1ft (30cm) of the tough grey-brown material normal to the SFBs with a more sandy lens at the west end, capped with a darker post-SFB filling. A complete skeleton of a dog was found in a central position high up in the post-SFB material. The SFB cut three Iron Age ditches, D.125, D.198, D.202.

Material culture:

In all twenty-four objects were recovered from the contemporary SFB fill and included three spindle-whorls, six fragments of glass, three Roman coins and a boars' tusk amulet.

SF 1623. Roman **bronze coin.** Valens, 364-78.
SF 1626. Roman **bronze coin.** M. Aurelius, 161-80.
SF 1631. Roman **bronze coin.** Gratian, 367-75.
SF 1611. **Bronze fragment.** Length 0.7cm. Not illustrated.
SF 1625. **Bronze fragments.** Corrosion only. Not illustrated.

Fig.176,1. SF 1681. **Bronze pin** from small brooch, with three turns of a spiral spring on an iron core.

Fig.176,2. SF 1683. Thin **bronze plate,** broken, pierced with four small rivet holes.
SF 1609. **Iron nail.** Length 5cm. Not illustrated.
SF 1613. **Iron nail.** Length 6.2cm. Not illustrated.
SF 1682. **Iron nail.** Length 4cm. Not illustrated.
SF 1684. **Iron nail.** Length 2.5cm. Not illustrated.

Fig.176,3. SF 1615. **Iron spike.**
SF 1614. **Lead 'run'.** Length 4.5cm. Not illustrated.
SF 1696. **Lead 'run'.** Length 4.5 x 3cm. Not illustrated.
SF 1622. **Glass fragment.** Unidentified.

Fig.176,4. SF 1628. **Glass rim.** Rounded rim and shoulder of beaker, yellowish-green, 4th century.

Fig.176,5. SF 1629. Small **glass base.**
SF 1680. **Glass fragment.** Unidentifiable. Not illustrated.
SF 1686. **Glass fragment,** thick greenish colour, poor quality, unidentified.

Fig.176,6. SF 1687. **Glass.** Blue-green glass rim, outsplayed and folded at tip. 1st-3rd century.

Fig.176,7. SF 1604. **Fired clay spindle-whorl;** hard, compact grey-black ware, oval section, cylindrical hole, smoothed.

Fig.176,8. SF 1630. **Fired clay spindle-whorl.** Hard, compact burnished brown-black ware, asymetrical but roughly biconical.

Fig.176,9. SF 1722. **Bone spindle-whorl.** Made from head of femur.

Fig.176,10. SF 1721. **Boar's tusk amulet,** pierced towards root end. In central area of the SFB on floor of pit.

Late Roman pottery:

Nene Valley two flagon necks (forms NV 8.1 and NV 6.1), bowl (form NV 1), base.
Oxford sherd.
Oxidised dark brown colour coated base (form as NV 10.2).

Early Anglo-Saxon pottery:

Fig.177,1. Corrugated, bossed urn in very hard fabric with rounded quartz and rare flint. Both surfaces and core black. Outer surface and inner surface of neck burnished. One horizontal groove at the base of the rim, otherwise strong vertical grooves, dividing to pass small bosses.

Fig.177,2. Reconstructed profile of small vessel in fine, thin, hard fabric with small angular quartz and ? tiny shell fragments, both surfaces pitted where these have burnt out. Both surfaces and core dark grey, both surfaces burnished. A small, biconical form with vertical grooves on the carination; above these a zone of dots and inverted double arcs. At the base of the rim a horizontal line of dots between lines. A highly competent piece.

Fig.177,3. Body sherd in fairly hard crumbly fabric with small, sub-angular quartz grains and some chaff. Outer surface black, inner surface brown with red layer beneath, core dark brown. Outer surface probably burnished, inner surface smooth. Shoulder has at least four pairs of horizontal grooves giving a cordoned effect. The sherd, on balance, would appear to be wheel thrown. There is the possibility that it is of late Iron Age date, although nothing comparable occurs in the Iron Age material from the site. Otherwise it should be compared to the sub-Roman vessels discussed by Myres (Myres 1977,18,fig.92).

Fig.177,4. Body sherd in fairly hard, sandy fabric with some rounded quartz grits. Both surfaces black, burnished. Core dark grey with thin oxidised layer under outer surface. Grouped horizontal lines, traces of rosette-type stamp on bottom edge of sherd.

Fig.177,5. Body sherd in fairly hard, sandy fabric with rounded quartz grit. Both surfaces black, burnished; core dark grey with outer oxidised layer. Four deep grooves and traces of deep diagonal slashing on carination.

Fig.177,6. Body sherd in hard fabric with small fragments of chalk. Both surfaces and core black, outer surface highly burnished. Decoration of broad grooves, horizontal and vertical.

Fig.177,7. Very large urn in hard fabric with shell fragments. Outer surface reddish brown, inner surface and core black. Crude burnishing on outer surface.

Fig.177,8. Small bowl in hard fabric with sub-angular quartz and some chalk. Both surfaces brown, burnished. Core black. Applied, solid, rounded boss.

Fig.177,9. Bowl or cup in fairly hard sandy fabric. Outer surface black, burnished, inner surface brown. Core black.

Fig.177,10. Large vessel in hard fabric with angular quartz. Outer surface brown, inner surface and core black. Both surfaces burnished.

Not illustrated: Four sherds Type 7 rustication.

Sunken-Featured Building No. 53. (WF/10).

Type A, two-post?, orientation E to W (Fig.178).
Measurements: A: 10ft 6in (3.2m); B: —; C: 7ft (2.1m); D: 1ft 5in (0.4m); or 2ft 6in (0.8m) reconstructed.

SFB 53 was small, lying in an isolated position to the north-west of Hall 3. The outline and details of the SFB pit were much confused by both earlier Iron Age ditches and later, Middle Saxon ones overlying the east half of the pit. Only one post-hole was found, a little off-centre in the east end. The south-east corner was free of disturbance and clearly had no post-hole; it is considered likely that the SFB was probably of the two-post type. The measurements were not precise but approximate only. The fill, however, could be divided into two, the contemporary lower level of typical SFB fill; at the top of which there was a concentration of fragments of daub dividing the lower fill from the post-SFB material; although there was not enough of this material to suggest that all the walls were wattle and daub.

Material culture:

Only one object (SF 1733) was recovered from the lower fill of the pit, and two more from the 'destruction level' of daub fragments.

Fig.179,1. SF 1733. Plain **bronze strip,** flat, overlapping, ? bracelet or ring. Contemporary.

Fig.179,2. SF 1732. **Chalk spindle-whorl.** Destruction layer.
SF 1725. Large **quartzite hammerstone.** Not illustrated. Destruction layer.

Late Roman pottery:

Nene Valley base with circle of white slip dots on interior (form NV 3.2).
Oxford rim (? C 51).

Early Anglo-Saxon pottery:

Fig.180,1. Hard fabric with some angular flint, rare yellow mica and red 'grog'. Both surfaces black, core black with oxidised outer layer, outer surface burnished. Remains of five neck-lines.

Fig.180,2. Body sherd in fairly hard fabric with some large mica flecks and rare shell fragments. Dark brown outer surface, grey inner surface and black core. Both surfaces smooth. Zone of two-line chevrons or swags enclosed by horizontal lines.

Fig.180,3. Cooking pot in very hard fabric with rare angular flint; surfaces and core pitted with holes. Both surfaces and core black, outer surface burnished.

Fig.180,4. Open bowl in hard, close, sandy fabric. Both surfaces dark brown, core black. Outer surface burnished.

Fig.180,5. Rounded bowl in hard sandy fabric with some small chalk flecks. Both surfaces brown to black, core black. Both surfaces smoothed.

Fig.180,6. Rusticated bowl in very hard fabric with quartz and angular flint. Outer surface grey to black at rim, inner surface and core black. Inner surface originally burnished. Type 1 rustication.

Fig.180,7. Stamped urn in fine soft fabric with some chalk, chaff and rare flint. Outer surface buff, inner surface and core grey. Horizontal line of Group 3c.3 stamps enclosed by lines.

Not illustrated: Five sherds and one rim of Type 1 and one sherd of Type 7 rustication. The sherd of Type 7 has red grog inclusions. Two Illington/Lackford sherds; Scheme 3a or 4a, I/L Fabric 1, outer surface black, inner surface light grey, core grey with red oxidised layer under outer surface. Outer surface worn. I/L A? stamps with J1 stamps in swags.

Sunken-Featured Building No. 54. (WE/10).

Miscellaneous Type, orientation E to W (Fig.181).
Measurements: C: 7ft (2.1m); D: 6in (0.2m) or 1ft (0.3m) reconstructed (only possible measurements).

SFB 54 was situated above the north slope, close to SFBs 52 and 53. The west half of the structure was destroyed by the mass of Middle-Saxon ditches crossing the site, making it impossible to determine the length or real form of the SFB. The east end was fairly clear and showed a rather irregular, rounded outline with three post-holes in a line at that end. A further post-hole occurred in the centre of the south side, but in view of the profusion of features in that vicinity it could not be positively associated with the SFB; no post-holes were found at the west end. The floor of the pit was uneven and the walls irregular.

Material culture:

Six objects were recovered from the SFB fill; another five which were found in the overlying ditches at the west end of the SFB may well have been derived from this structure as they form an unusual number in a small area of the ditch system which was normally barren of objects. They have been included as a second, separate list.

Group 1: Contemporary.

SF 1602. Roman **bronze coin.** Valentinian I, 364-78.
SF 1586. **Iron nail.** Length 3.3cm. Not illustrated.

Fig.182,1. SF 1594. Dark blue, translucent, annular **glass bead.**

Fig.182,2. SF 1595. Dark blue, translucent, annular **glass bead,** large hole.

Fig.182,3. SF 1601. **Fired clay spindle-whorl.** Fragment, small, oval section, in soft black ware, with oxidised surface.

Fig.182,4. SF 1599. **Glass fragment.** Pale green, unidentified.

Group 2: overlaying ditches.

SF 1610. Roman **bronze coin.**
SF 1603. **Iron strip** fragment. 2.5 x 2cm. Not illustrated.
SF 1605. **Iron fragment.** Length 2.5cm. Not illustrated.
SF 1612. **Iron nail.** Length 3.3cm. Not illustrated.

Fig.182,5. SF 1619. **Iron awl,** sharp point at one end, tapering at other, four sided. Ditch 212.

Early Anglo-Saxon pottery:

Fig.183,1. Rim sherd in hard sandy fabric with some small white mica. Black outer surface and core brown to black inner surface. Outer surface burnished.

Fig.183,2. Rusticated body sherd in fairly hard fabric with rare large angular flint. Outer surface brown to black, inner surface and core black. Both surfaces burnished. Flattened lug with tiny hole. Vertical Type 3 rustication.

Sunken-Featured Building No. 55. (WG/10).

Type B1, six-post derivative, orientation E to W (Fig.184).
Measurements: A: 15ft (4.6m); B: 12ft 6in (3.8m); C: 12ft 6in (3.8m).

SFB 55 was situated on the southern edge of the site, immediately above the Lark flood plain, in a group of SFBs of differing dates, including Nos 56, 58, 59, 60 and 62. In plan the pit

was rather irregular with a pronounced bulge in the north-east corner, projecting for three feet beyond the NE purlin-post. The measurements make this SFB slightly larger than average and one of the deepest; the profile of the pit was, however, one of the most irregular, with an uneven bottom and sides. On the north side a 'step' was noticeable but the overall impression gained during the excavation was that the pit was badly prepared initially.

There were three post-holes at each end of the pit and another in the middle of the south side. The ridge-post centres lay just outside those of the purlin-posts in both cases and the west ridge-post was asymetrically placed between its purlin posts. In all cases the post-holes were found to be unusually shallow, ranging from 7in (0.18m) to 12in (0.3m) below the floor of the pit. In all cases the posts had been positioned at the junction of the wall and the floor.

The entire pit was filled with the tough grey-brown SFB fill common to the SFBs except for a band of darker material along the north side, reaching from the north-east corner to just beyond the centre. No pottery was recovered from this dark layer, which might in fact be part of an older feature destroyed by the SFB, which would also account for the irregularity on the north side.

Material culture:

Sixteen objects in all were recovered from the filling of the pit, mainly small, unidentifiable fragments of bronze and iron, but including three fragments of glass, a triangular bone comb and a hone-stone. No weaving implements apart from a fragment of a bone pin were found.

SF 1759. Roman **bronze coin.** Carausius, 287-93.

Fig.185,1. SF 1750. **Bronze bracelet,** twisted flat strip, tapering toward each end.

Fig.185,2. SF 1805. Fragment **bronze sheet,** with stamped ornament.

SF 1904. Small **bronze fragment,** 0.5 x 0.3cm. Not illustrated.

SF 1763. **Iron nail** fragment, length 5cm. Not illustrated.

SF 1784. **Iron nail,** length 6.5cm. Not illustrated.

SF 1823. **Iron nail,** length 4.5cm. Not illustrated.

SF 1888. **Iron nail** fragment, length 3.7cm. Not illustrated.

SF 1905. **Iron nail,** length 3.4cm. Not illustrated.

SF 1800. **Lead 'run',** 4.5 x 1cm. Not illustrated.

Fig.185,3. SF 1794. **Small hone.** Limestone.

Fig.185,4. SF 1819. **Glass,** hollow, tubular rim, yellowish green. Roman.

Fig.185,5. SF 1831. **Glass,** nearly colourless rim, rounded at tip. Late 4th century.

SF 1897. Blown **window glass,** nearly colourless. Roman. Not illustrated.

Fig.185,6. SF 1797. Composite, triangular **bone comb.** Thirteen iron rivets. Surviving fragment of one end tooth segment suggests a drooping form. Connecting plates decorated with multiple, inscribed ring and dot decoration, rather haphazard; enclosed by border of five lines on the long side and four on the others.

SF 1799. Fragment of bone pin. Shaft only, point and head missing. Length 6.3cm. Tapering at each end. Not illustrated.

Late Roman pottery:

Nene Valley bowl rim (Fig.260, NV 2).
Oxidised base, burnt, (form OR 1.1).

Early Anglo-Saxon pottery:

Fig.186,1. Hard fabric with rounded quartz. Both surfaces black, close-burnished. Core black with an oxidised layer under outer surface. Angled sherd with shallow facet and trace of horizontal line above.

Fig.186,2. Cooking pot in very hard fabric with rounded quartz. Both surfaces and core black. Both surfaces burnished.

Fig.186,3. Hard fabric with rounded quartz and minute chalk fragments. Outer surface dark brown to black, inner surface and core grey. Inner surface smoothed, outer surface close-burnished. Zone of at least five horizontal lines on neck.

Fig.186,4. Rim sherd in fairly hard fabric filled with shell fragments. Outer surface dark brown to black, inner surface and core black. Outer surface burnished.

Fig.186,5. Body sherd in hard, sandy fabric. Outer surface and core grey, inner surface brown. Horizontal lines with diagonals below.

Fig.186,6. Stamped sherd in hard, sandy fabric with some angular flint. Both surfaces and core black. Both surfaces burnished. Line of Group 3B stamps, damaged, but closest to 3B.4.

Sunken-Featured Building No. 56. (WH/11).

Type B, six-post, orientation E to W (Fig.187).
Measurements: A: 15ft (4.6m); B: 12ft 3in (3.7m); C: 12ft 3in (3.7m); D: 2ft (0.6m) or 3ft (0.9m) reconstructed.

SFB 56 was situated on the south edge of the site, in the same group as Nos 55, 58, 59, 60 and 62, immediately to the east of the two Romano-British pottery kilns excavated in 1947, although virtually undisturbed by that excavation; the shape of the west end was determined under the sloping edge of the earlier excavation. In plan the SFB pit was a squat rectangular shape, with rounded corners. It is of the six-post type with the post-holes well spaced in relation to one another. Post-hole 4 could not be defined in section. The pit had steeply sloping sides and a rather uneven bottom.

The fill was entirely the normal homogenous grey-brown material common to the SFBs, with a distinct black layer about half way up, sloping up towards the sides. This black layer was not continuous over the entire pit but was concentrated mainly in the middle. Two recognisable fragments of charred wood occurred at this level together with three patches of unfired clay. The evidence for burning did not seem sufficient to suggest the destruction of the SFB, but rather localised damage, after which the SFB appears to have continued in use.

Two ox skulls and a quantity of other bones were recovered from the upper filling of the pit, but it was felt at the time of excavation that both levels were of the same nature and that the uppermost did not represent the use of the pit as a rubbish dump after the decay of the SFB. A dog skeleton was found in the post-SFB Layer 2 in the north-west quadrant. The SFB pit cut the Iron Age Pits 409, 453 and a Romano-British kiln-waste pit, Pit 403.

Material culture:

Twelve very assorted objects were recovered from the fill, including a triangular comb, two hones, an awl, two coins and a spindle-whorl.

SF 1789. Roman **bronze coin.** Victorinus, 268-70.

SF 1811. Roman **bronze coin.** Gratian, 367-75.

Fig.188,1. SF 1755. Small **iron awl** (?) with shaped antler handle. Upper portion of shaft square, lower round. Point missing.

SF 1786. **Iron nail** fragment. Length 4cm. Not illustrated.

SF 1795. Mass of corroded **iron,** 5 x 2cm. No form visible. Not illustrated.

SF 1846. **Iron fragment,** length 2.6cm. Not illustrated.

Fig.188,2. SF 1848. Small **hone,** fine grained sandstone.

Fig.188,3. SF 1781. **Glass bead.** Colour unidentifiable. Disc.

SF 1812. **Glass.** Roman, unidentified. Not illustrated.

Fig.188,4. SF 1849. Small, **fired clay spindle-whorl.** Hard, gritty black fabric.

Fig.188,5. SF 1801. Fragment, composite, triangular **bone comb.** Traces of seven iron rivets. Connecting plate bordered with three lines and filled with multiple ring and dot motifs with single rings and dots surrounding them.

Fig.188,6. SF 1822. Tooth segment from composite, triangular **bone comb.** Two rivet holes in centre. Not from SF 1801 above.

Late Roman pottery:

Nene Valley base (form NV 10.2).
Oxford base, body sherd.

Early Anglo-Saxon pottery:

Fig.189,1. Large bowl in fairly hard fabric with quartz and chalk inclusions. Outer surface buff, inner surface and core black. Outer surface smoothed.

Fig.189,2. Large bowl, very similar to No. 1 above but in a very hard fabric with much angular quartz and some yellow mica. Outer surface grey-brown to black, inner surface and core black. Inner surface smoothed almost to a burnish, outer surface smoothed and clearly 'wiped'.

Fig.189,3. Small bowl with flaring rim in very hard fabric with rounded quartz, some chalk and rare large mica. Both surfaces brown to grey, core grey. Both surfaces smoothed.

Fig.189,4. and 4a. Carinated bowl in very hard sandy fabric with some rounded quartz. Both surfaces and core dark brown to black, core dark grey. Inner surface smoothed, outer close burnished. Short neck with horizontal lines above carination and long, low, horizontal bosses with poorly executed diagonal hatching. Below the carination an extensive zone of horizontal lines and ? two rows of single-line swags. A second fragment (4a) almost certainly from this vessel suggests the bosses were interspersed with short zones of single line chevrons.

Fig.189,5. Body sherd in hard, coarse fabric with quartz and white mica flecks. Outer surface brown to grey, inner surface and core grey. Both surfaces smoothed. Simple linear decoration of one horizontal and spaced, paired lines. Internally the fingering suggests the original intention was to have small bosses between the vertical pairs of lines.

Fig.189,6. Body sherd in hard, fine fabric with tiny white mica flecks and rare rounded quartz. Outer surface black, inner surface brown, core grey. Both surfaces close-burnished. Biconical form with hollowed neck; small, low bosses with diagonal spacing lines on shoulder, with two horizontal lines of simple, Group 5.3 stamps above.

Fig.189,7. Small cup in fairly hard fabric with some rounded quartz and flint. Outer surface dark brown, inner surface and core black. Outer surface burnished. Zone of triangular, Group 5.4 stamps on neck, with others below.

Fig.189,8. Angled body sherd in hard sandy fabric. Black surfaces and core. Outer surface close-burnished. Linear decoration with imperfect Group 7 cross-hatched stamps.

Fig.189,9. Large cooking pot in hard fabric with rounded quartz and much broken shell. Both surfaces dark grey, core dark grey with oxidised areas near rim. Outer surface smoothed.

Not illustrated: Part of base of wall of very large vessel in hard close, sandy fabric. The underside of the base and the inner surfaces are very smooth but the wall seems to have been deliberately roughened.

Sunken-Featured Building No. 57. (WF/12).

Type A, two-post, orientation E to W (Fig.190).
Measurements: A: 9ft 3in (2.8m); B: 7ft 8in (2.3m); C: 8ft (2.4m); D: 2ft (0.6m) or 3ft (0.9m) reconstructed.

SFB 57 lay in an isolated position to the north-west of Hall 4 although close enough, at, 35ft (10.7m) to be associated with that hall. In plan the pit was a rounded, rectangular shape, with two post-holes for the ridge-posts placed centrally in the short sides. In size, it was one of the smallest SFBs on the site; SFB 40 (two-post) being equal, SFB 23 (two-post) being 6ft 9in (2.1m); SFB 35 (six-post) only slightly larger at 7ft 9in (2.4m) and SFB 30 at 8ft (2.4m). With a depth of 3ft (0.9m) or more it was one of the deeper group of two-post SFBs. The sides of the pit were steep and clear-cut, meeting the flat floor of the pit at a sharp angle rather than the more normal curve. The fill was the homogeneous tough grey brown material normal to the SFB pits, slightly darker in the upper half, but without a definable junction.

In the centre of the pit a large pile of bones was found, which included two ox skulls and the skeleton of a cat. There was no evidence to suggest that this material had been dumped into the pit from the side, in fact, the cone-shaped heap of bones suggested that they had been deposited through a hole in the floor of a structure above the pit. The bones occurred about half way up the fill and were subsequently covered by later SFB fill material. There was no evidence for a later pit cut into the SFB. It was concluded at the time of excavation that the entire fill of the SFB pit was contemporary with the life of the structure, and that there may well have been a change of function for the building at about that time. It was noticeable that of the twelve small finds recovered, eight were from the lowest level, but only seventy-three potsherds came from that level as opposed to 187 from the upper level.

The north-east corner of the SFB pit cut the Iron Age Ditch 233, and the Iron Age Ditch 232 on the west, otherwise no other feature was disturbed.

Material culture:

Thirteen objects were recovered, including three Roman coins and three weaving tools.

SF 1842. Roman **bronze coin.** Theodora, 337-41.'
SF 1856. Roman **bronze coin.** Irreg. Tetricus 1, *c.*270.
SF 1857. Roman **bronze coin.** Gratian, 367-75.

Fig.191,1. SF 1790. **Bronze strip,** with two holes. One end rounded, other broken.

Fig.191,2. SF 1813. **Fragment of bronze pin.** Conical head, with deep grooves. Roman.

Fig.191,3. SF 1814. Dark blue translucent, annular **glass bead.**
SF 1835. **Iron fragment.** c.0.5cm. Not illustrated.

Fig.191,4. SF 1862. **Pottery bead,** disc shape.

Fig.191,5. SF 2251. **Pottery gaming counter** made from rounded sherd of grey Roman ware.

Fig.191,6. SF 1798. **Bone ? handle,** made from proximal end of metatarsal of sheep, Shaft squared, cut and snapped.

Fig.191,7. SF 1803. **Bone pin-beater.**

Fig.191,8. SF 1821. **Bone needle** with triangular head. Sharpened pig fibula.

Fig.191,9. SF 1827. **Bone needle** with triangular head. Pig fibula.

Early Anglo-Saxon pottery:

Fig.192,1. Thin-walled, open bowl in hard, sandy fabric with some tiny white mica. Both surfaces and core black. Both surfaces smoothed, internally, diagonal 'wipe' marks are visible.

Fig.192,2. Cooking pot in hard, fine fabric with some 'chaff'. Outer surface dark brown to black, inner surface and core black. Inner surface smoothed with horizontal strokes, outer surface burnished.

Fig.192,3. Small vessel in hard, close fabric with few rounded quartz grains and rare large flecks of white mica. Both surfaces grey to black, core black. Both surfaces smoothed. Fingering under the rim and coarse horizontal scraping internally.

Fig.192,4. Rim and neck of 'marginal' Illington/Lackford vessel in I/L Fabric 10. Both surfaces brown to black, core variable brown to black in patches. Outer surface burnished, inner smoothed. The stamp is I/L A6, which suggests that it comes from that workshop, but the decorative scheme and its position is quite unlike anything else which is attributed to this workshop.

Fig.192,5. Rusticated sherd in fairly hard fabric with some chaff and quartz. Both surfaces brown, core black; inner surface smoothed. Type 2 rustication.

Fig.192,6. Base in soft, shelly fabric. Outer surface black, smoothed, inner surface and core brown. Foot-ring.

Sunken-Featured Building No. 58. (WH/10).

Type A, two-post, orientation E to W (Fig.193).
Measurements: A: 11ft (3.4m); B: 10ft (3.1m); C: 10ft 6in (3.2m); D: 1ft 6in (0.5m) or 2ft 6in (0.8m) reconstructed.

SFB 58 lay on the extreme south edge of the site at the crest of the steep slope dropping into the floodplain of the river Lark, spatially closely associated with SFBs 55, 56, 60 and 62.

In form it was a two-post type, but unusual in that it was in fact broader than it was long, being in plan an irregular shape, very rounded in outline. The sections showed a shallow, bowl-shaped depression with low sloping sides, probably eroded to some extent along the south side. The post-holes were not central to the pit, particularly the post at the west end, but if some allowance was made for possible erosion on the south, the pit would be in excess of 12ft (3.7m) wide. The fill of the pit was entirely the homogeneous grey-brown material common to the SFBs and all finds were considered contemporary with the life of the SFB. A large patch of ash and charcoal occurred centrally on the floor of the north half of the pit, but no trace of a clay hearth was found. The SFB cut the Romano-British Pits 390 and 439 and the R.B. Ditch 246.

Material culture:

Six objects were recovered from the SFB fill.

SF 1863. Fragment of **bronze sheet.** 3.5 x 2.5cm. Not illustrated.

SF 1864. Fragment of folded **bronze sheet.** 1.3 x 1.5cm. Not illustrated.

Fig.194,1. SF 1871. **Bronze strap end?** Rivet hole at one end.

Fig.194,2. SF 1826. Large **iron knife.** Roman type.

Fig.194,3. SF 1854. **Iron mount.** Rolled over rim, with two joining rivets. On the inside lower edge there is a band of pale staining with vertical graining 2cm wide, with two small surviving rivets for attachment to the mount, which suggests that the material was thin, possibly horn. Associated with the mount but not attached to it, were fragments of two iron loops which could have come from the damaged rim. The outside of the mount is covered with impressions of straw. The diameter of the opening is not unreasonable for Anglo-Saxon horn cores. It is suggested that this is a mount for a drinking horn.

Fig.194,4. Roughed out **spindle-whorl** from body sherd of Roman grey ware.

Late Roman pottery:

Nene Valley base (form NV 10.4).

Oxford mortarium rim (WC 7).

Early Anglo-Saxon pottery:

Fig.195,1. Rim sherd in hard fabric with rounded quartz and some chalk. Both surfaces and core black, both surfaces burnished.

Fig.195,2. Illington/Lackford sherd in I/L Fabric 2. Black surfaces and core. Outer surface burnished. Fragment of two or three-line swag with J?1 stamps.

Sunken-Featured Building No. 59. (WH/11).

Type B, six-post, orientation E to W (Fig.196).

As the east half of the SFB had been disturbed, complete measurements were not possible; only C: 12ft (3.7m); D: 1ft 9in (0.5m) or 2ft 6in (0.8m) reconstructed. The plan, as far as it survived, showed a regular spacing of the three post-holes within a pit with very rounded corners. The sides sloped gently to a flat, even floor; two layers were distinguished in the SFB fill, separated by an inconsistent layer of black, sooty material, with some ash. The lower layer, of typical tough grey-brown SFB fill, rose up the sides of the pit; the upper merged with the base of the general Layer 2.

Material culture:

Nine objects were recovered from the lower level, plus two from the base of the layer of black immediately above. One of these, No. 1861, parts of a triangular bone comb, was found to join another fragment of the comb (No. 1809) found 9in (23cm) outside the north-west corner of the SFB pit. Both fragments were burnt and No. 1809 may therefore be considered as contemporary with the final phase of the SFB.

Group 1: Contemporary Level.

Fig.197,1. SF 1870. **Bronze bracelet** fragment. Two transverse lines and simple ring and dot stamps.

Fig.197,2. SF 1909. **Bronze pin** with glass head.

SF 1868. Mass of **iron** corrosion, 5 x 2.5cm. Not illustrated.

SF 1875. **Iron nail** shaft ? Length 4.5cm. Not illustrated.

SF 1890. **Iron nail** shaft ? Length 3.5cm. Not illustrated.

Fig.197,3. SF 1892. **Iron ring** with flat fragments, ? brooch or buckle.

SF 1899. **Iron nail.** Length 3.5cm. Not illustrated.

Fig.197,4. SF 1891. **Glass.** Blue green rim outsplayed and infolded at tip. 1st-3rd century.

SF 1907. Fragment of connecting plate from triangular **bone comb.** Three border lines. Not illustrated.

Group 2: Black layer.

Fig.197,5. SFs 1861, 1809. Fragmentary, triangular composite **bone comb.** Burnt. Connecting plates with three-line borders; central area outlined with simple ring and dot design. Three triple rings and dots each surrounded by simple rings and dots.

Fig.197,6. SF 1889. Burnt fragment of connecting plate from triangular, composite **bone comb.** Traces of four rivet holes. Four-line borders.

Late Roman pottery:

Nene Valley flagon rim (Fig.260, NV 8.1), two bases (forms NV 10.1 and NV 3.2).

Oxford flange (C 51), body sherd.

Early Anglo-Saxon pottery:

Fig.198,1. Rounded open bowl in hard fabric with rounded quartz and large flakes of yellow mica. Both surfaces and core black, both surfaces burnished.

Fig.198,2. Bowl in hard fabric with rounded white quartz and shell. Outer surface reddish brown, inner surface and core black. Both surfaces coarsely burnished.

Fig.198,3. Bowl in soft fabric with much chalk and some chaff. Outer surface and core black, inner surface dark brown. Outer surface burnished.

Fig.198,4. Bowl in soft, sandy fabric with rare red 'grog'. Outer surface brown to black, inner surface dark brown, core reddish brown. Outer surface burnished.

Fig.198,5. Stamped sherd in hard, sandy fabric with some mica. Both surfaces and core black, outer surface close-burnished. Horizontal line of Group 7C.8 stamps between lines.

Fig.198,6. Stamped, bossed sherd in hard sandy fabric with chalk inclusions. Both surfaces worn off; core grey. Indistinct, large Type 3C stamps, small bosses with double out lines on carination.

Sunken-Featured Building No. 60. (WH/10).

Type A, two-post, orientation NE to SW (Fig.199).

Measurements: A: 13ft 6in (3.2m); B: 11ft 9in (3.6m); C: 10ft 9in (3.3m); D: 1ft 3in (0.4m) or 2ft 3in (0.7m) reconstructed.

SFB 60 lay on the extreme south edge of the site immediately above the flood plain of the river Lark, close to SFBs 55, 56, 58 and 62. In plan the pit was an irregular oval, almost pointed at the south-west end, but in view of the animal disturbance and erosion along the south edge, the plan could well have been distorted. The profile was a shallow bowl-shape, with floor and walls forming a continuous slope, the fill was the normal, compact, tough grey-brown material common to the SFBs and filled the pit entirely.

The SFB cut Ditches 178B and 179B and is, in turn, cut by the south edge of SFB 62.

Material culture:

Three objects were recovered from the SFB fill and two more were found immediately adjacent to it, on the south side, which could, in view of the disturbance at this point, have belonged to this SFB.

SF 1930. Roman **bronze coin.** Valens, 364-78.
SF 1853. **Iron nail.** Length 6.5cm. Not illustrated.
SF 1860. Roman **bronze coin.** Adjacent. Tetricus II, 270-3.
SF 1745. **Iron nail.** Not illustrated. Adjacent.

Late Roman pottery:

Nene Valley large flat base with foot-ring groove (form probably bowl as NV 3.2).
Oxidised mortarium (Fig.260, OR 4).

Early Anglo-Saxon pottery:

Fig.200,1. Body sherds in fairly hard fabric with chaff and chalk inclusions. Outer surface brown, burnished, inner surface and core grey. Decorated with ? panels of Group 10.3 stamps, low down on profile.

Fig.200,2. Stamped sherd in hard sandy fabric. Outer surface grey and burnished, core grey; inner surface lost. Horizontal lines with Group 2.4 stamp.

Not illustrated: Sherd in hard, sandy fabric. Both surfaces grey, burnished, core black. Fragment of Group 8.8 stamp.

Sunken-Featured Building No. 61. (WH/12).

Type and orientation not defined.

No actual measurements were possible for this SFB, as it had been cut into the stoke-hole deposits of the Romano-British Kiln 4, but enough differentiation was visible in the section to give an overall length of A: *c.*12ft (3.7m); and D: 1ft 3in (0.4m) or 2ft 3in (0.7m) reconstructed. No post-holes were visible in the stoke-hole fill. A large patch of clay, 4ft (1.2m) square and 2in (5cm) thick, burnt on the upper surface, occurred high up in the fill of the SFB. The Romano-British kiln was immediately below this feature but the clay did not appear to be associated with it, so that it may represent an internal hearth; but in view of the quantities of burnt clay associated with the kiln, this is open to question.

Material culture:

Twenty objects were recovered from the fill of the SFB pit, including an important iron brooch (No. 1923).

SF 1928. Roman **bronze coin.** Posth. Claudius II, 270.
SF 1934. Roman **bronze coin.** Valens, 364-78.

Fig.201,1. SF 1895. Small **bronze ring?,** flat strip with serrated edge.

Fig.201,2. SF 1915. Thin **bronze strip,** edged with small holes.
SF 1925. **Iron** fragment, **? nail,** length 1.7cm. Not illustrated.

Fig.201,3. SF 1932. **Iron brooch** with up-turned foot. Semi-circular bow; at the head the end of the bow is turned inward to form a flat loop to hold a transverse pin. This projects at each side to take the iron spring and pin, the spring formed by one and half turns on each side, the joining piece projecting as a loop against which the pin is sprung. The bow is half-round in section and decorated with small faceted bands. The foot is also faceted and the up-turned end provided with a broad, square, slot.
SF 1894. **Iron fragment.** Length 3.4 x 1cm. Not illustrated.
SF 1896. **Iron nail.** Length 2.5cm. Not illustrated.
SF 1898. **Iron nail.** Length 6cm. Not illustrated.
SF 1903. **Iron nail.** Length 4cm. Not illustrated.
SF 1919. **Iron nail.** Length 5cm. Not illustrated.
SF 1926. **Iron nail.** Length 6.5cm. Not illustrated.
SF 1927. **Iron nail.** Length 4cm. Not illustrated.

Fig.201,4. SF 1900. **Iron knife,** point missing. Straight back, with shouldered tang.

Fig.201,5. SF 1914. Curved **iron bar,** square section.

Fig.201,6. SF 1893. Dark blue, translucent, annular **glass bead.**

Fig.201,7. SF 1920. Dark blue, translucent, annular **glass bead.**

Fig.201,8. SF 1908. Tooth segment from single-sided, composite **bone comb.** Part of one rivet hole.

Fig.201,9. SF 1931. Triangular, composite **bone comb.** Connecting plates plain with central double-ring and dot motif (warped) and lined borders.

Early Anglo-Saxon pottery:

Fig.202,1. Cooking pot in close, soft fabric with rare mica and chalk. Both surfaces brown to grey, core buff. Both surfaces smoothed.

Fig.202,2. Hollow-necked, biconical vessel in hard fabric with some chalk. Both surfaces and core black. Both surfaces burnished. Rather poorly finished.

Fig.202,3. Bowl in hard fabric with small quartz grits and common white mica visible on surfaces. Both surfaces brown to black, core black. Both surfaces smoothed.

Fig.202,4. Bowl with in-turned rim in close, hard fabric. Both surfaces and core reddish brown. Outer surface smoothed.

Fig.202,5. Body sherd from large vessel in hard fabric with some quartz and tiny flecks of white mica. Both surfaces and core grey, both surfaces very smooth. Decorated with well defined, deep grooves.

Sunken-Featured Building No. 62. (WG/10 — WH/10).

Type A, two-post, orientation E to W (Fig.203).
Measurements: A: 12ft 3in (3.7m); B: 10ft 6in (3.2m); C: 7ft (2.1m); D: 1ft 3in (0.4m) or 2ft 3in (0.7m) reconstructed.

SFB 62 lay in the group on the south edge of the site which included SFBs 55, 56, 58 and 60. In plan the SFB was narrow with very rounded ends. The two post-holes were positioned in the slope of the pit walls which curved to meet the uneven floor. The fill was of light grey-brown material, rather more sandy than usual for an SFB fill and containing a number of fragments of unfired clay and specks of charcoal.

The south-west corner of this SFB cut the Iron Age Ditches 163, 179A and 244, and the north part of SFB 60.

Material culture:

Only three objects were recovered from the filling of the pit.

Fig.204,1. SF 1749. Fragment of **bronze wire.**
SF 1929. Edge fragment of blown **window glass.** Roman, 3rd-4th century.

Fig.204,2. SF 1913. **Fired clay spindle-whorl.** Hard, dark grey fabric.

Early Anglo-Saxon pottery:

Fig.205,1. Large vessel in fairly hard fabric with shell and some flint. Outer surface reddish brown, inner surface black, core grey. Both surfaces smoothed.

Fig.205,2. Hard sandy fabric with sparse large rounded quartz and flint. Both surfaces grey to black, core black with outer oxidised layers.

Fig.205,3. Fairly hard fabric with sub-angular flint. Outer surface dark brown to grey, inner surface and core black. Both surfaces smoothed.

Not illustrated: Large base, diameter 17cm, in hard, chaffy fabric.

Sunken-Featured Building No. 63. (WG/13).

Type B, six-post, orientation E to W (Fig.206).
Measurements: A: 13ft 6in (4.1m); B: 13ft (4m); C: 10ft 6in (3.2m); D: 1ft (0.3m) or 2ft (0.6m) reconstructed.

SFB 63 lay among the westernmost group of SFBs which included Nos. 65, 67, 68 and 69. The plan was rectangular, the six post-holes positioned so that four of them overlap the edge of the pit as it enters the natural gravel; although they would have been inside the hole, as dug from the original ground surface. The form was six-post without modification; the ridge-post centres outside

those of the purlin-posts and both ridge-posts markedly off centre in relation to their purlin-posts. The profiles showed a shallow, bowl-shaped depression with the walls sloping gently inward to merge with the fairly even floor. The SFB pit was filled entirely with the normal homogeneous tough grey-brown fill common to the SFBs, without differentiation or evidence of collapse from the sides.

Outside the pit, about 18in (46cm) from the centres of both the north and south sides, a single post-hole was found. It was not possible to relate these specifically to this structure, but in view of the fact that they were so symmetrically placed and that the SFB lies in an otherwise barren area, these two post-holes may well have been associated with the structure.

A large number of animal bones were found close together in the north-east quadrant of the pit, mostly sheep and ox.

Material culture:

Sixteen objects were recovered from the fill, including a fine bone comb case and three weaving implements.

Fig.207,1. SF 1958. Fragment **bronze strip,** with traces of ring and dot ornament. ? Bracelet.
SF 2011. Fragment **bronze rod,** ? pin. Length 3.8cm. Not illustrated.

Fig.207,2. SF 2045. Fragment of simple **bronze bracelet.**

Fig.207,3. SF 2050. Fragment of bronze **strip-binding** with one edge thickened, the other tapering off. No rivet holes.

Fig.207,4. SF 2134. Square **bronze plate,** folded over. Two rivet holes.
SF 1956. **Iron nail.** Length 4.5cm. Not illustrated.
SF 2047. **Iron strip.** 2 x 1cm. Not illustrated.
SF 2060. **Iron nail.** Length 6.5cm. Not illustrated.
SF 2062. Large **iron nail.** Length 9cm. Not illustrated.

Fig.207,5. SF 2003. Green **glass bead,** disc.

Fig.207,6. SF 2217. **Fired clay spindle-whorl.** Hard, black fabric. Biconical form.

Fig.207,7. SF 2218. **Fired clay spindle-whorl.** Hard grey-black fabric with flint grit. Small hole. Biconical form.

Fig.207,8. SF 2012. **Bone comb case.** Two side plates and a central 'keel' made from one long base piece and two end pieces, held together by ten iron rivets. The end pieces are rounded with single ring and dot ornament at the top, the finals are lost. The side plates each have three-line borders and groups of ring and dot ornments, on one side in opposed triangular groups of six and five triple-rings and dots interspersed along the plate; on the reverse only the opposed triangular groupings of single rings and dots. Each end of the six plates have double hollows with single ring and dot ornament.
SF 2051. Shed **roe deer antler.** Extensive rodent tooth marks. Not illustrated.

Fig.207,9. SF 2133. Triangular, composite **bone comb.** Ten iron rivets. Tooth segments project beyond the backs of the connecting plates; the surviving end tooth segment continues the back line with a concave back. The connecting plates are both ornamented in identical fashion, with three-line borders enclosing three spaced rosettes of multiple and single ring and dot motifs.

Fig.207,10. SF 2145. Bone **pin-beater.** Both points missing.

Late Roman pottery:

Nene Valley base with grafitto X on underside (form NV 10.2), base (probably bowl form NV 3.2 but without footring groove).
? Oxford small base of ? flagon.
Oxidised base (form OR 2.2).

Early Anglo-Saxon pottery:

Fig.208,1. Biconical vessel, close, sandy fabric with sub-angular quartz. Rare yellow mica. Hard at base but soft at top of surviving part. Outer surface dark brown to grey, inner surface grey; core grey to reddish brown. Zone of large Group 3B.24 stamps within lines. Base barely defined.

Fig.208,2. Group I *Buckelurne* in fairly soft, fine fabric with rare white mica. Both surfaces dense black, and highly burnished. Core dark brown. Moulded foot stand, globular body with vertical chevron bosses outlined with broad grooves and lines. Three broad grooves on neck defining cordons.

Fig.208,3. Small cooking pot in soft fabric with rounded quartz, rare angular flint. Both surfaces dark brown to grey, core dark brown. Pinched-up rim.

Fig.208,4. Small bowl in fairly hard fabric with much shell. Both surfaces pitted where shell has burnt out; surfaces grey to brown, core grey. Outer surface roughly burnished, inner surface worn.

Fig.208,5. Small open 'cup' in soft fabric with pitted surfaces and core. Outer surface light brown, inner surface brown to black, core black.

Fig.208,6. Small cooking pot in soft fabric with some large mica and traces of shell. Both surfaces and core pitted, suggesting shell backing has burnt out. Both surfaces brown to grey, core grey. Both surfaces smoothed.

Fig.208,7. Small cooking pot in fairly hard fabric with some large, yellow mica. Both surfaces grey to black, core black with oxidised outer layer. Both surfaces roughly burnished.

Sunken-Featured Building No. 64. (WH/12 — WH/13).

Type B, six-post, orientation E to W (Fig.209).
Measurements: A: 13ft (4m); B: *c.*11ft (3.4m); C: 11ft 3in (3.4m); D: 1ft 9in (0.5m) or 2ft 9in (0.8m) reconstructed.

SFB 64 lay on the south edge of the site close to Nos 61, 65, 66, to the south-west of Hall 4. In plan, the surviving portion indicated the normal rounded, rectangular form, with three post-holes at each end, the west end had been extensively damaged, by a foxearth and the northern half overlaid by SFB 66, but enough survived to ascertain the original form. The post-holes at the east end showed a bowed plan, noticeable in others (e.g. No. 21) with the ridge-post outside the line of the purlin-posts. The post-hole for the ridge-post at the west end had been destroyed, but the purlin-post-holes were present. The pit was flat bottomed with steeply sloping sides, very clean-cut without disturbance or slip from the sides. The fill was the familiar tough grey-brown material to the brim of the pit.

Material culture:

Forty-six objects were recovered from the fill, including six coins, four spindle-whorls, one triangular bone comb, fifteen nails and five fragments of Roman glass.

SF 2014. Roman **bronze coin.** Maximinus, 310-12.
SF 2024. Roman **bronze coin.** *cf.*Constantine I.
SF 2036. Roman **bronze coin.** Valentinian I, 364-78.
SF 2065. Roman **bronze coin.** Tetricus I or II, 270-3.
SF 2066. Roman **bronze coin.** Theodosius I, 388-402.
SF 2101. Roman **bronze coin.** Constans, 341-8.

Fig.210,1. SF 2028. Fragment **bronze strip,** decorated with repousse stamps of pellets in borders, originally semi-circular. Central hole made by large stud with square shaft, the impression of the head, 1.5cm across, clearly visible.
SF 2040. **Bronze fragment,** 0.7 x 0.2cm. Not illustrated.
SF 2093. Flat **bronze fragment,** 1.5 x 2.3cm. Not illustrated.

Fig.210,2. SF 2105. **Bronze bracelet.** Fine rod, terminal missing. ? Roman.
SF 2146. **Bronze fragment,** 1.3 x 1cm. Not illustrated.
SF 2187. **Bronze fragment,** 1.8 x 1.3cm. Not illustrated.
SF 2005. **Iron nail** ? shaft. Length 2.3cm. Not illustrated.
SF 2022. **Iron nail.** Length 4cm. Not illustrated.
SF 2026. **Iron nail** ? shaft. Length 2cm. Not illustrated.
SF 2032. Flat **iron strip.** Length 3.5cm. Not illustrated.

SF 2033. Flat **iron fragment.** 2 x 2cm. Not illustrated.
SF 2041. **Iron fragment.** Length 1.5cm. Not illustrated.
SF 2063. **Iron nail.** Length 3cm. Not illustrated.
SF 2084. **Iron nail** fragment. Length 3cm. Not illustrated.
SF 2094. **Iron nail.** Length 2.5cm. Not illustrated.
SF 2138. **Iron ? nail.** Length 5cm. Not illustrated.
SF 2143. **Iron nail.** Length 4.5cm. Not illustrated.
SF 2154. **Iron ? nail.** Length 3.7cm. Not illustrated.
SF 2162. **Iron nail.** Length 4.5cm. Not illustrated.
SF 2165. **Iron ? nail.** Length 3cm. Not illustrated.
SF 2166. **Iron ? nail.** Length 3cm. Not illustrated.
SF 2169. **Iron nail.** Length 4cm. Not illustrated.
SF 2170. **Iron nail.** Length 4.1cm. Not illustrated.
SF 2171. **Iron nail.** Length 4.5cm. Not illustrated.

Fig.210,3. SF 2039. Small **iron buckle.**

Fig.210,4. SF 2049. Flat **iron fragment.**

Fig.210,5. SF 2185. **Iron pin** with flat topped head.

Fig.210,6. SF 2054. Irregular **lead fragment** with hole. ? weight.
SF 2021. **Glass** fragment. Thin, poor quality, colourless. 4th century.
SF 2079. **Glass** fragment. Blue-green thick metal. 1st-3rd century.

Fig.210,7. SF 2092. **Glass** fragment. Light, yellow-green base, vertical wall with horizontal trails. Roman.
SF 2099. **Glass** fragment. ? Window glass. 3rd-4th century.
SF 2161. **Glass** fragment. Blue-green chip. Roman.

Fig.210,8. SF 2070. **Fired clay spindle-whorl.** Black gritty fabric with brown surface. Oval form.

Fig.210,9. SF 2095. Fragment **fired clay spindle-whorl.** Soft dark brown fabric with buff surface. Beehive form.

Fig.210,10. SF 2124. **Fired clay spindle-whorl.** Dark brown-black fabric. Smoothed. Flattened oval form.

Fig.210,11. SF 2213. Large **antler spindle-whorl.**

Fig.210,12. SF 2132. Triangular, composite, **bone comb.** Fifteen iron rivets. End tooth segments broken, remainder project slightly beyond back of connecting plates, which are decorated with three-line borders with triple ring and dot motifs in the field; three centrally placed with one in each of the other corners. Design repeated on other side.

Fig.210,13. SF 2153. Long **bone pin-beater.** Highly polished all over.

Fig.210,14. SF 2178. **Bone needle** with triangular head. Pig fibula.

Late Roman pottery:

Oxford, two flanges (C51 and C52), body sherd.

Early Anglo-Saxon pottery:

Fig.211,1. Wide mouthed bowl in very hard, sandy fabric with sub-angular quartz. Outer surface and core black, inner surface dark grey. Both surfaces smoothed.

Fig.211,2. Globular vessel in hard fabric with some rounded quartz and tiny white mica flecks. Outer surface brown to black, inner surface patchy red-brown to black, core black. Both surfaces smoothed.

Fig.211,3. Hard, sandy fabric, both surfaces red to dark brown, core black. Outer surface dull, burnished.

Fig.211,4. Bowl in hard fabric with some chaff and ? shell. Outer surface light brown to grey; rim, inner surface and core black. Both surfaces smoothed, the inner surface appears to have been scraped first. Rim flattened above.

Fig.211,5. Shouldered vessel in hard, sandy fabric with sub-angular quartz. Both surfaces dark red to black, core grey to black. Both surfaces smoothed.

Fig.211,6. Hemispherical bowl in hard, sandy fabric with sub-angular grit. Outer surface light brown to black, inner surface and core black. Both surfaces dull burnished. Incomplete base has line drawn towards centre, possibly a '+' pattern.

Fig.211,7. Splay-sided bowl in hard, sandy fabric with sub-angular quartz. Both surfaces patchy light brown to black, core black. Both surfaces roughly burnished.

Fig.211,8. Body sherd in hard fabric with rounded quartz. Outer surface and core red to light brown; inner surface lacking. Small, applied, vertical boss with traces of ? lines.

Fig.211,9. Small, rusticated bowl in fine, hard, sandy fabric. Both surfaces and core grey to black. Both surfaces smoothed. Random finger-tip impressions.

Fig.211,10a-c. Fragments of Group 3 or 4 *Buckelurne* in fairly hard fabric with sub-angular quartz. Both surfaces black, highly burnished. Core black with oxidised layer under inner surface. Not enough survives to show the complete design, but it appears to have been based upon vertical, outlined, diagonally slashed bosses interspersed with lozenges. A tiny, bifurcated stamp occurs in each corner of the lozenge shape; this being the reason for placing this vessel in Myres' Groups 3 or 4, although in general character it would be better in Groups 1 or 2. Neither base nor rim survives.

Fig.211,11. Decorated bodysherd in fairly hard sandy fabric. Outer surface dark brown to black, inner surface and core black. Outer surface burnished. Broad shallow grooves above or below the shoulder.

Fig.211,12. Small, thin walled vessel in hard sandy fabric with rounded quartz. Both surfaces and core black; core with oxidised layer beneath outer surface. Inner surface smoothed, outer surface highly burnished. Lines with broadly spaced, shallow dots on shoulder, above zone of ? chevrons.

Fig.211,13. Decorated fragment in hard sandy fabric with rounded quartz. Both surfaces and core black; core with oxidised layer beneath outer surface. Inner surface smoothed, outer surface highly burnished. Lines with broadly spaced, shallow 'dots'. Possibly part of No. 10 above, but a thicker sherd.

Fig.211,14. Small faceted-angled vessel in hard fabric with some small rounded quartz. Both surfaces dark brown to black, core red. Both surfaces highly burnished. Three irregular lines above elongated facets.

Fig.211,15. Body sherd from large vessel in hard fabric with rounded quartz and much tiny white mica. Outer surface brown to grey, inner surface and core grey. Outer surface dull burnished. Decorated with at least three broad shallow grooves.

Fig.211,16. Two body sherds in hard fabric with rounded quartz and much tiny white mica. Outer surface black and highly burnished, inner surface and core dark grey. Decorated with broad grooves.

Not illustrated: a. Sherds from very large vessel with clay smeared on the exterior.
b. Five sherds with Type 6 rustication.

Sunken-Featured Building No. 65. (WG/13).

Type A, two-post, orientation E to W (Fig.212).
Measurements: A: 15ft 9in (4.8m); B: 11ft 10in (3.6m); C: c.11ft (3.4m); D: 2ft (0.6m) or 3ft (0.9m) reconstructed.

SFB 65 was situated among the group of the west end of the knoll, which included Nos. 63, 66, 67 and 69. In plan the SFB pit was an oval shape with the two ridge-posts at the foot of the pit wall. The section showed a clean-cut pit with steep sides on the west and south and long gentle slopes on the north and east. The floor of the pit was uneven on the north side, distorting the junction of wall and floor, but otherwise flat. The fill was entirely the normal tough, grey-brown material common to the SFBs, slightly sandier towards the base. An ox skull was found almost in the centre of the pit, 6in (15cm) above the floor.

As this SFB stood in an area with relatively few other features it was noticeable that it was situated inside a group of post-holes which formed a rectangle on the same E to W alignment. This post-hole structure, the evidence of the masses of flints, clay daub fragments, kiln waste, and apparently cut by the SFB, may well be of Romano British date, associated with the kilns. However, the coincidence of the placing of the SFB so neatly inside the post-hole area leaves some room for doubt. The SFB lay towards the east

end of the post-hole structure which had overall measurements of length: 25ft (7.6m) and breadth: 15ft (4.6m). It should also be noted in this connection that twelve objects were recovered from the west half of the post hole building, a high concentration for finds that were not confined to SFB pits.

Material culture:

The pit contained forty objects in all, a high number, comparable to the forty-seven from SFB 64 nearby. One complete, unfired, loom-weight and two fragments were found in the fill.

SF 1962. Roman **bronze coin.** Valens, 364-78.
SF 2098. Roman **bronze coin.** Domitian, 81-96.
SF 2102. Roman **bronze coin.** Gratian, 364-78.
SF 2120. Roman **bronze coin.** Trajan, 98-117.
SF 2135. Roman **bronze coin.** Constantine II, 330-5.
SF 2136. Roman **bronze coin.** Trajan, 98-117.
SF 2202. Roman **bronze coin.** Gratian, 364-78.
SF 1970. Small triangular **bronze fragment.** Length 1cm. Not illustrated.

Fig.213,1. SF 1975. **Bronze strip** with three holes.
SF 1983. **Bronze rod.** ? Fragment of pin. Length 3.3cm. Not illustrated.

Fig.213,2. SF 1999. Fragment thin **bronze strip.** One perforation.
SF 2087. Fragment **bronze rod.** Square section. Length 2.5cm. Not illustrated.
SF 2090. **Bronze fragment.** 0.7cm across. Not illustrated.

Fig.213,3. SF 2100. Plain **bronze finger-ring.**

Fig.213,4. SF 2123. **Bronze strap-end.** Traces of solder at rounded end. Fine, longitudinal lines. One hole.

Fig.213,5. SF 2150. Fragment of bronze bracelet with rouletted stamp ornament. Roman.
SF 2176. Flat **bronze fragment,** 4.5 x 2.5cm. Not illustrated.

Fig.213,6. SF 2177. Flattened fragment of **bronze bracelet,** with diagonal facets and ring and dot ornament. Roman.

Fig.213,7. SF 2181. Perforated **bronze disc.** Rubbed down Roman coin.

Fig.213,8. SF 2200. Large **bronze stud** with long (broken) shank. The upper surface of the stud has a very thin, plain **bronze plate** covering the entire surface.

Fig.213,9. SF 2203. Fragment of two-strand **bronze bracelet.** ? Roman.
SF 1969. Flat iron fragment, 3 x 1cm. Not illustrated.
SF 1985. **Iron nail.** Length 4cm. Not illustrated.

Fig.213,10. SF 1998. **Iron washer** and associated **iron fragment.**
SF 2086. **Iron nail.** Length 3.8cm. Not illustrated.
SF 2088. **Iron nail.** Length 3.4cm. Not illustrated.
SF 2089. **Iron nail.** Length 4.5cm. Not illustrated.
SF 2103. **Iron nail.** Length 3.8cm. Not illustrated.
SF 2114. **Iron nail.** Length 3.5cm. Not illustrated.
SF 2137. **Iron nail.** Length 4cm. Not illustrated.

Fig.213,11. SF 2191. Fragment of **knife?** Tang springs from rear edge of blade.
SF 2201. Irregular fragment of flat **iron sheet** 3.5 x 3cm. Not illustrated.
SF 2091. Fragment **window glass.** Abraded. 3rd-4th century. Roman.

Fig.213,12. SF 2107. **Glass fragment.** Rolled, hollow rim, colourless. Roman.

Fig.213,13. SF 2113. Fragment of large **fired clay ? spindle-whorl.** Very hard, pale grey fabric. Trimmed.

Fig.213,14. SF 2142. **Fired clay spindle-whorl** in hard red to grey fabric. Trimmed similar to 2113 above.
SF 2115. Fragment of **fired clay spindle-whorl** in hard black fabric. Thick oval form as 2113 and 2142 above. Not illustrated.

Fig.213,15. SF 2149. Point of **bone pin or pin-beater.**

Fig.213,16. SF 2215. **Bone needle** with triangular head. Pig fibula.

Late Roman pottery:

Nene Valley base, body sherd (with lightly rough-cast exterior).
Oxford base.
Oxidised flagon neck sherd.

Early Anglo-Saxon pottery:

Fig.214,1. Hard, sandy fabric with sub-angular quartz, tiny white mica and some large yellow mica. Outer surface reddish-brown to grey, inner surface light brown to grey, core black. Both surface smoothed.

Fig.214,2. Wide-mouthed bowl in soft, sandy fabric with rounded quartz and tiny white mica. Outer surface brown to black, inner surface black. Core outer half black, inner half brown. Outer surface smoothed.

Fig.214,3. Rusticated sherd in hard, sandy fabric with some chaff and tiny white mica. Both surfaces grey, core black, both surfaces smoothed. Type 2 rustication.

Fig.214,4. Stamped sherd in fairly soft, sandy fabric with tiny white mica. Outer surface brown to black, inner surface and core black. Outer surface smoothed. Large stamp, Group 3B.27.

Fig.214,5. Stamped sherd in fairly soft, sandy fabric with some white mica. Both surfaces and core black. Outer surface burnished. Group 3B.28 stamps.

Not illustrated: One sherd with shell inclusions.

Sunken-Featured Building No. 66. (WH/13).

Type A, two-post, orientation E to W (Fig.215).
Measurements: A: 16ft (4.9m); B: 13ft (4.1m); C: 9ft (2.7m); D: 1ft 9in (0.5m) or 2ft 9in (0.8m) reconstructed.

SFB 66 lay on the south edge of the site as part of the west group of SFBs, which included 61, 63, 65, 67 and 69. Although part of the south side overlapped SFB 64, the form was sufficiently distinct to show the plan to be markedly rectangular, with the ridge-posts set centrally into the short sides, halfway down the slope of the wall of the pit. There were no other post-holes associated with the structure. The section showed a bowl-shaped pit with walls and floor area merging gently with one another; the fill the normal homogeneous material, grey-brown in colour, with rather more charcoal flecks in the upper part.

Material culture:

As with others in this group of SFBs, an unusually large number of objects was recovered from the fill; forty-four in total, comparable to the forty-six in SFB 64 and the forty in SFB 65, and including ten coins and three bone combs.

SF 2000. Roman **bronze coin.** Type of Constantius II, 353.
SF 2013. Roman **bronze coin.** Constans, 348-50.
SF 2035. Roman **bronze coin.** Theodora, 337-41.
SF 2075. Roman **bronze coin.** Valentinian I, 364-78.
SF 2076. Roman **bronze coin.** Constantine I, 330-5.
SF 2097. Roman **bronze coin.** Constantine I, 319-20.
SF 2110. Roman **bronze coin.** Allectus, 293-6.
SF 2111. Roman **bronze coin.** Type of Constantius II, 353.
SF 2112. Roman **bronze coin.** Urbs Roma, 330-5.
SF 2116. Roman **bronze coin.** Carausius, 287-93.

Fig.216,1. SF 2068. Fragment **bronze bracelet.** Plain, with hole at end. Roman.

Fig.216,2. SF 2069. Fragment of bronze **drop-handle.** Roman.

Fig.216,3. SF 2073. **Bronze pin** with conical head and groove. Roman.

Fig.216,4. SF 2080. Lozenge-shaped **bronze spangle.** Central row of holes, possibly with two more across the centre. End curled over for suspension.
SF 2126. Crumbled **bronze fragments** of thin sheet. Not illustrated.
SF 2180. Fragment of thin **bronze sheet.** 2.3 x 1cm. Not illustrated.

Fig.216,5. SF 2188. **Bronze wire** ? fragment of bracelet.
SF 2001. **Iron nail.** Length 4cm. Not illustrated.
SF 2023. **Iron nail.** Length 7cm. Not illustrated.
SF 2025. **Iron nail.** Length 3cm. Not illustrated.
SF 2027. **Iron fragment.** 2 x 1cm. Not illustrated.
SF 2031. **Iron nail.** Length 4cm. Not illustrated.

SF 2058. **Iron nail.** Length 2cm. Not illustrated.
SF 2082. **Iron nail.** 2 x 1cm. Not illustrated.
SF 2122. **Iron nail.** Length 7.2cm. Not illustrated.
SF 2140. **Iron stud.** Diameter of head: 2cm, length 0.5cm. Not illustrated.
SF 2158. **Iron nail.** Length 4cm. Not illustrated.

Fig.216,6. SF 2164. Large **iron nail** of unusual form with flattened head.
SF 2179. **Iron nail.** Length 5.5cm. Not illustrated.

Fig.216,7. SF 2008. Flat **iron strip.** Broken.

Fig.216,8. SF 2077. Small **iron knife,** traces of wooden handle covering the shoulder of the blade. Straight back, cutting edge sloping to meet at the point.

Fig.216,9. SF 2083. Small **iron 'key',** square section, twisted shaft.

Fig.216,10. SF 2096. **Iron tool?** Broken tang, section rectangular, no cutting edge.
SF 1961. **Glass** fragment. Yellow. Not illustrated.

Fig.216,11. SF 2115. Cylindrical, ? white **glass bead** with dark horizontal trail decomposed.

Fig.216,12. SF 2118. Light blue-green glass **ring-base.** Roman.

Fig.216,13. SF 2172. Dark brown, **glass disc bead.**

Fig.216,14. SF 2174. Rough **spindle-whorl,** made from body sherd of Roman grey ware.

Fig.216,15. SF 2117. **Bone needle** with triangular head. Pig fibula.

Fig.216,16. SF 2152. **Bone needle** with expanded, flattened head. Highly polished all over.

Fig.216,17. SF 2130. Triangular, composite **bone comb.** Ten iron rivets. Connecting plates with five line borders and central rosettes of multiple ring and dot surrounded by single rings and dots.

Fig.216,18. SF 2131. Double-sided, composite **bone comb.** Teeth coarse on both sides. Nine iron rivets. Connecting plates plain, with two-line borders.

Fig.216,19. SF 2189. Fragment, double-sided, composite **bone comb.** Teeth coarse on both sides, connecting plates with triple lines and double semi-circles.

Late Roman pottery:

Oxford ? flagon rim (Fig.260, OX 7), mortarium rim (Fig.260, OX 1), three bases and one body sherd.
Oxidised base (Fig.260, OR 1.1).
Small sherd of ? Colchester colour coated ware, rough cast, probably from early Roman kiln site phase.

Early Anglo-Saxon pottery:

Fig.217,1. Wide-mouthed bowl in hard fabric with sub-angular quartz and chalk fragments. Both surfaces brown to black, core black. Both surfaces smoothed.

Fig.217,2. Fairly hard fabric with sub-angular quartz and tiny white mica. Both surfaces black and close-burnished. Core black with thin oxidised layer beneath outer surface.

Fig.217,3. Hard fabric with rounded quartz up to 2mm. Outer surface brown to black, inner surface and core black. Both surfaces smoothed.

Fig.217,4. Fairly soft fabric with chaff, and some chalk. Both surfaces and core black. Both surfaces burnished, but rather roughly.

Fig.217,5. Fairly hard fabric with some angular quartz up to 3mm. Both surfaces and core black. Both surfaces smoothed.

Fig.217,6. Small, straight sided cup in fairly soft fabric with angular quartz and rare large yellow mica. Both surfaces and core black, outer surface crudely burnished.

Fig.217,7. Small bowl in hard fabric with some angular quartz and chalk grains. Outer surface brown to black, inner surface and core black. Both surfaces 'wiped' smooth. Pinched rim.

Fig.217,8. Body sherd with vertical, applied lug in soft fabric with some small rounded quartz. Outer surface grey, inner surface brown, core black.

Fig.217,9. Rim of ? flagon in hard sandy fabric. Both surfaces and core black, both surfaces well-burnished but showing strokes.

Fig.217,10. Stamped sherd in hard fabric, much pitted on inner surface. Both surfaces light brown to light grey, core grey. Decoration apparently in panels, filled with Group 6.12 stamps. Not Illington/Lackford.

Fig.217,11. Stamped sherd in thin, soft fabric with rare flint and quartz up to 3mm. Outer surface red, inner surface and core black. Group 3C.9 stamps.

Fig.217,12. Stamped sherd in hard fabric with chaff. Both surfaces and core black. Group 3B.7 stamps.

Fig.217,13. Illington/Lackford rim in I/L Fabric 5. Both surfaces and core black, both surfaces close-burnished. I/L Scheme 4B: at least fourteen neck-rings above I/L A8b stamps, then I/L B2 stamps. Large, two-line pendant triangles filled alternately with E and J2 stamps.

Fig.217,14. Small bowl in hard fabric with rounded quartz. Both surfaces and core black. Core has thin outer oxidised layers under the surfaces. Outer surface burnished. In general treatment, the regularity of the burnish marks and the general symmetry, the bowl looks wheel-made; the fabric fits well, however, with so much of the Anglo-Saxon pottery on the site. Its position, at the very base of the SE quadrant of SFB 66 suggests that it could well have come from SFB 64, an early 5th century building, where, it should be noted, there is a hand-made bowl (Fig.211,6) clearly of the same form.

Not illustrated: 1 sherd Type 3 rustication.

Sunken-Featured Building No. 67. (WG/13).

Type D, no-post, orientation NW to SE (Fig.218).
Measurements: A: 16ft 6in (5m) E to W; C: 10ft 3in (3.1m) N to S; D: 1ft 9in (0.5m) or 2ft 9in (0.8m) reconstructed.

SFB 67 lay at the western extremity of the site in the group which included Nos 63, 65, 68 and 69. In plan the form of the pit was most irregular; not only was the shape indefinite, but the floor of the pit very uneven, with a deeper area at the west end. The walls of the pit had a shallow slope on all sides, much restricting the area of the floor. No post-holes were found associated with the pit, although one occurred outside the limits of the pit, in the centre of the south side and may have been related. The pit was, however, filled with the normal grey-brown fill only associated with SFBs and the overall measurements conformed to the general pattern, so that this feature is included as an SFB.

Material culture:

Ten objects were recovered from the fill, all but one of them iron and of those, six were nails.

Fig.219,1. SF 2056. Fragment, **bronze tube,** flattened at one end.

Fig.219,2. SF 1984. **Iron loop** fragment.
SF 1987. **Iron fragment.** Length 2cm. Not illustrated.
SF 1989. **Iron nail.** Length 2cm. Not illustrated.
SF 2007. **Iron nail.** Length 4.2cm. Not illustrated.

Fig.219,3. SF 2037. **Iron** object.

Fig.219,4. SF 2052. **Iron loop** fragment.
SF 2055. **Iron nail.** Length 3.5cm. Not illustrated.
SF 2059. **Iron nail.** Length 3.3cm. Not illustrated.
SF 2061. **Iron nail.** Length 3cm. Not illustrated.

Early Anglo-Saxon pottery:

Fig.220,1. Small vessel in fairly hard fabric, both sides dark brown, core black, with some white flint grit.

Fig.220,2. Rim in hard fabric, both core and surfaces black.

Fig.220,3. Rusticated sherd in hard fabric, black core, dark brown surfaces. ? Type 1 rustication.

Sunken-Featured Building No. 68. (WF/14).

Type B, six-post, orientation E to W (Fig.221).
Measurements: A: 12ft 3in (3.7m); B: 10ft 9in (3.3m); C: 9ft (2.7m); D: 1ft 6in (0.5m) or 2ft 6in (0.8m) reconstructed.

SFB 68 lay in an isolated position on the west edge of the site on the slope of the knoll some 50ft (15m) to the north-west of the group containing Nos 63, 65, 67 and 69. The plan showed a rectangular pit with unusually sharp corners, with post-holes symmetrically placed, in the lower slope of the walls. The sections showed a flat-bottomed pit with steep sides on the south and west. The fill was entirely the normal grey-brown material common to the SFBs on this site, with no evidence of collapse from the sides; both floor and walls were sharply defined from the fill.

Material culture:

Fifteen objects were recovered from the fill, including two spindle-whorls, a bead, a pin-beater and parts of an iron bound bucket.

Fig.222,1. SF 2160. **Bronze strip** fragment. Rectangular section.

Fig.222,2. SF 2163. **Bronze pin** and part of spring from brooch. Pin section circular, spring flat.

Fig.222,3. SF 2167. **Iron edge-binding** from bucket?, curved, with diameter of c.35cm, semi-circular section to bind material 0.7cm thick.
SF 2192. Fragment, **iron strip.** 1.7 x 1.3cm. Not illustrated.
SF 2194. **Iron fragment,** shapeless. 4 x 1.5cm. Not illustrated.

Fig.222,4. SF 2197. **Iron strip handle,** flat central section, broad twists at both ends.
SF 2198. Large **iron nail.** Length 9cm. Not illustrated.

Fig.222,5. SF 2199. **Iron strip** fragment.
SF 2207. **Iron nail.** Length 5.3cm. Not illustrated.
SF 2209. **Iron nail.** Length 5.7cm. Not illustrated.
SF 2210. **Iron fragment.** 2.4 x 1cm. Not illustrated.
SF 2212. **Iron nail.** Length 5.3cm. Not illustrated.

Fig.222,6. SF 2205. Colourless, translucent **glass bead.**

Fig.222,7. SF 2157. **Fired clay spindle-whorl.** Hard sandy fabric, red to black surface. Flattened oval form.

Fig.222,8. SF 2214. **Fired clay spindle-whorl,** hard, sandy fabric, brown to grey surface. Oval form.
SF 2204. Shattered fragments of **bone pin-beater.** Not illustrated.

Late Roman pottery:

Nene Valley base (probably bowl form similar to NV 3.2).
Nene Valley bowl (form NV 1).
Oxford body sherd.

Early Anglo-Saxon pottery:

Fig.223,1. Small cooking pot in fairly hard, fine fabric with no backing material. Both surfaces and core brown to black. Outer surface burnished. Large areas of the outer surface have burnt off in patches 4cm across since initial firing, rather akin to frost pitting on flint. Complete.

Fig.223,2. Fairly soft, sandy fabric. Both surfaces and core black. Shaped rim.

Fig.223,3. Fairly soft fabric with some angular grit and pitted surfaces. Both surfaces dark grey, core black.

Fig.223,4. Fairly soft fabric with chaff. Both surfaces brown to grey, core black. Outer surface smooth.

Fig.223,5. Soft, sandy fabric. Both surfaces light brown, pitted. Core grey.

Fig.223,6. Hard fabric with chalk. Both surfaces dark brown to black, core black. Both surfaces smooth.

Fig.223,7. Bowl in hard, sandy fabric. Both surfaces and core black. Inner surface burnished. Random Type 6 rustication.

Fig.223,8. Small 'pinched' pot in hard, sandy fabric. Both surfaces grey; reddish brown at rim. Core not visible.

Sunken-Featured Building No. 69. (WG/14).

Type A, two-post, orientation E to W (Fig.224).
Measurements: 11ft 9in (3.6m); B: 10ft (3.3m); C: 9ft 6in (2.9m); D: 1ft 4in (0.4m); or 2ft 4in (0.7m) reconstructed.

SFB 69 lay in the extreme south-west corner of the site on the edge of the slope above the flood plain, associated with Nos 65 and 67. In plan it was a broad oval, with two large ridge-post-holes in the upper part of the slope of the pit wall. The section showed a bowl-shaped pit with gently sloping walls on all sides except the north, which was steep. The pit was full of the normal grey-brown, compact material common to the SFBs.

This SFB was remarkable for the rarity of objects and the very small quantities of pottery and animal bone recovered, particularly as it was so close to others with extremely high numbers of finds.

Material culture:

Fig.225,1. SF 2121. Small **bronze ring,** three coils.

Early Anglo-Saxon pottery:

Fig.226,1. Hard, sandy fabric with rounded quartz and white mica. Outer surface brown, inner surface and core grey. Both surfaces pitted. Very large vessel.

D. THE HOLLOWS

In cleaning the surface of the natural sand four large areas of grey, disturbed soil were found, of which three were in the eastern half of the site. All had a distinct outline when first defined, but equally, all were without any structural features. All were filled with similar material, containing quantities of small potsherds, much of it rather worn. In a number of cases, Iron Age and Romano-British features were destroyed or obscured; the Anglo-Saxon potsherds indicate that they belonged to the Anglo-Saxon settlement.

The purpose of these shallow hollows is not clear, although the obvious suggestion is that they were animal pens with some form of hurdling or light fencing which has left no trace, but which could have been lost in the medieval ploughing of the site. Such pens may well have been necessary at shearing time or for over-wintering stock, although indications of a strong fence could surely be expected if that had been the case.

Hollow 1. (WD 3/4).

The largest of the hollow areas, lying in the north-east corner of the site, was roughly rectangular, measuring 80ft by *c.*30ft (24 x 9m) and orientated on an east to west axis. The hollow cut into the natural subsoil to an average depth of 1ft (30cm) over the whole area and must therefore have been 18in — 2ft (46 — 60cm) deep originally.

Over 600 sherds of Anglo-Saxon pottery were recovered from the fill, including fragments of Illington/Lackford stamped wares. The relationship with SFB 16 at the east end could not be determined.

Material culture:

SF 214. Roman pierced **bronze coin.**
SF 234. Roman **bronze coin.**
SF 255. Roman **bronze coin.**

Fig.227,1. SF 78. **Bronze object.** Oval shaft, flattened end.

Fig.227,2. SF 101. **Bronze bracelet,** flat, plain strip. Hook fastening.

Fig.227,3. SF 102. **Bronze wrist clasp** with hook. Developed bar and loop type. Flat 'bar' with three panels, each with four dots. *cf* Fig.265,1 and 2.
SF 265. Fragment, flat **bronze sheet.** 3.5 x 2.5cm. Not illustrated.

Fig.227,4. SF 266. Fragment **bronze strip** with borders of repoussé dots.

Fig.227,5. SF 84. **Iron strip,** broken, pointed at one end, constricted in the middle.
SF 90. **Iron ? nail,** length 4.5cm. Square shaft. Not illustrated.
Fig.227,6. SF 105. **Iron handle.** Thin rod with perforated, flattened end.
Fig.227,7. SF 218. **Iron 'spike'.** Circular section. Broken.
Fig.227,8. SF 211. **Iron object,** ? key.
Fig.227,9. SF 222. **Iron 'spike'.**
SF 223. **Iron fragment.** 2.2 x 1.7cm. Not illustrated.
Fig.227,10. SF 238. **Iron pin** with loop.
Fig.227,11. SF 259. **Iron nail.**
Fig.227,12. SF 263. **Iron knife.** Angled back.
Fig.227,13. SF 268. **Iron spike,** slightly flattened end.
SF 99. Light green **glass handle** fragment. Roman. Not illustrated.
Fig.227,14. SF 212. **Spindle-whorl;** Romano-British body sherd. Red ware.
Fig.227,15. SF 254. **Spindle-whorl,** Romano-British body sherd; with lattice pattern. Grey ware.

Early Anglo-Saxon pottery:
Fig.227,16. Sherd in hard fabric, black surfaces and core. The 'hockey-stick' design figures on a pot from Lackford, dated after 550 by Lethbridge (Lethbridge 1951, fig.20; Myres' 1977, No.946).

Hollow 2. (WE 4/5).

A long, roughly rectangular hollow, 40ft x 20ft (12 x 6m) and 9in to 1ft (23 to 30cm) deep and cut by SFB 12 at the east end and cutting a number of later Iron Age ditches. Orientated east to west.

Material culture:

Fig.227,17. SF 162. **Bronze plate,** curved, with four holes.
Fig.227,18. SF 174. Blue **glass ribbed bead.** Roman.

Hollow 3. (WG 7).

A long narrow feature not completely excavated as it ran under the central belt of trees, measuring at least 45ft long (13.7m) x 15ft (4.6m) wide.

Hollow 4. (WG 8-9, WH 8-9).

A roughly circular area, 50ft (15m) across and 18in (46cm) deep, with indistinct edges. SFBs 38 and 46 both cut into the fill of this hollow.

Material culture:

Fig.228,1. SF 1047. Long **bronze pin or spike,** head missing.
SF 1043. Abraded, rounded, outsplayed, colourless, **glass rim.** 4th century type.
Fig.228,2. SF 1001. **Iron links.**
Fig.228,3. SF 1004. Small **iron ferrule.**
Fig.228,4. SF 1039. **Iron knife** with thickened, solid handle.
Fig.228,5. SF 1112. **Iron hook** or **Suspension loop.**
Fig.228,6. SF 1085. **Spindle-whorl,** Romano-British grey ware body sherd.

A number of very shallow depressions occurred in the surface of the natural sand where the general Layer 2 dipped slightly. In these cases no definition could be obtained, the depth of the depressions being only a few centimetres. The general impression was that these were natural undulations but in the case of one of them, (F.75) close to SFB 44, a quantity of pottery and two small finds suggested that the slight hollow was contemporary. The pottery included fragments of Illington/Lackford pottery and two objects:—

Fig.228,7. SF 915. **Bronze spoon or spatula.** Flat sheet with end curled over to form loop. Decorated with single ring and dot motifs and border lines.
Fig.228,8. SF 917. **Iron purse bar** with turned-up ends and central loop.

E. THE DITCHES

Ditches were not common in the Anglo-Saxon settlement area and those that did occur were all attributable to the last phase of the settlement; most of them were demonstrably cutting earlier Anglo-Saxon features and many contained Ipswich ware. In the east part of the site a few short stretches were impossible to interpret functionally; an angled fragment in WE 5 cut SFBs 11 and 13 and a semi-circular piece occurred in the area of SFB 1 (WC 5). In the western sector, however, the ditches took on a more meaningful pattern, and seemed to define areas within the settlement. Three phases could be determined amongst the tangled mass of ditches centred on WE 11, in two of which the ditches were clearly recut a number of times. In the first scheme a pair of ditches (D96, D174) defined an irregular area on the north side of the slope. The two ditches may have been contemporary or one a recut to one side. This scheme was apparently replaced by two opposing ditches (D197, D213) roughly 10ft (3.05m) apart for part of their courses, before bending away to define two areas, one again to the north and one in the south-west corner of the site. The second ditch appeared to avoid an incomplete setting of post-holes of an outlying building north of Hall 4.

There was no sign of recutting in either ditch. These were, in turn, replaced in part by a new alignment to the east of part of the north ditch (D191, D192, D193); this new line was recut at least six times. On the north of the site the ditch systems passed beyond the limits of the excavation at the foot of the slope. The east side of the enclosures represented would appear to be unexcavated under the belt of trees. An undated ditch (D101) traversed the site from north to south from WC 9 to WH 9, cutting across all other features, but underlying the medieval field system. Closer dating could not be obtained.

In all cases the fills were of a light brown, undifferentiated sand and the ditches of a shallow, U-shaped section, 2 to 2½ft (0.61 to 0.76m) in depth. Ipswich ware was found in ditches of the first and third phases, thus placing all except D101 within a short period in the seventh century.

Material culture:

A number of objects were recovered from the ditches and are illustrated on Fig.229, and listed below.

Fig.229,1. Ditch 54, WG 4. SF 487. **Bronze ring** or bracelet fragment, one end broken; the other with a terminal formed lug folding back a small piece of bronze on itself and decorating it with nicks and sloping lines to suggest an animal head. Four transverse rings occur below the 'head'.
Fig.229,2. Ditch 54, WG 4. SF 1134. Small **iron knife** with slightly angled back. Heavily worn blade.
Ditch 54, WG 4. SF 728. **Iron nail,** square shaft. Length 3.5cm. Not illustrated.
Fig.229,3. Ditch 54, WG 4. SF 727. Dark blue, translucent annular **glass bead.**

Fig.229,4. Ditch 54, WG 4. SF 1358. Fragment of tooth segment from double sided, composite **bone comb.** Iron rivet, coarse and fine teeth.

Fig.229,5. Ditch 76, WF 8. SF 916. Tinned **bronze brooch,** Roman. *cf* Camulodunum Type XVII, (Aucissa type), mid 1st century. Derived from late Iron Age or Roman levels.

Fig.229,6. Ditch 76, WF 8. SF 1361. Small **iron buckle.** Ditch contained Ipswich ware. 7th century.
Ditch 76, WF 8. SF 894. **Iron nail.** Length 4cm. Not illustrated.
Ditch 76, WF 8. SF 933. **Iron nail.** Length 3cm. Not illustrated.

Fig.229,7. Ditch 77, WF 8. SF 1176. Fragment **bronze brooch,** Roman. Enclosed wings, remains of loop at head and recessed panels for enamel. Flavian — 2nd century, derived from period of Romano-British pottery kiln activity on the site.

Fig.229,8. Ditch 77, WF 8. SF 857. Fragment of tooth segment from single sided, composite **bone comb.** The low angle of the back suggests that it is from a comb of the type from SFB 15 (Fig.73,13) of the 7th century.

Fig.229,9. Ditch 77, WF 8. SF 903. **Bone splinter** from edge of rib, pointed and used as an **awl.**

Fig.229,10. Ditch 87, WF 9. SF 987. Small **thumb-pot** or crucible in hard, buff to grey fabric with some chalk.

Fig.229,11. Ditch 87, WF 9. SF 986. Large, triangular plate, rough-out for **connecting plate** for composite bone comb. Made from red-deer antler.

Fig.229,12. Ditch 204, WG 3. SF 1081. **Iron needle.** Eye broken.

Fig.229,13. Ditch 101, WF 9. SF 1339. **Bronze pin** with knob head. 7th century.

Fig.229,14. Ditch 111, WG 4. SF 1369. **Bone spindle-whorl** fragment.

Fig.229,15. Ditch 113, WE 10. SF 1279. Fragment of a **finger ring of blue glass** with almost circular bezel, on which is a crude moulding of two confronting heads. Roman.

Fig.229,16. Ditch 127, WG 4. SF 1380. Fragment **bone pin** with triangular head. Pig fibula.

Fig.229,17. Ditch 191, WE 10. SF 1665. Fragment bronze, **? ring** with notched edge.
Ditch 162, WG 11. SF 1517. Roman **bronze coin.**

Fig.229,18. Ditch 162, WG 11. SF 1802. Fragment, triangular, composite **bone comb;** end tooth segment and part of connecting plate. Tooth segment projects well beyond end of connecting plate, with concave back. Double border lines on connecting plate. Two iron rivets.
Ditch 162, WG 11. SF 1817. **Iron nail,** length 4cm. Not illustrated.

Fig.229,19. Ditch 162, WG 11. SF 1589. **Iron pin** with grooves, knobbed head and grooved swelling on shaft.
Ditch 191, WE 11. SF 1610. Roman **bronze coin.**

Fig.229,20. Ditch 213, WE 12. SF 1968. Spiral **bronze ring.** One and a half turns.
Ditch 204, WG 3. SF 1651. Roman **bronze coin.**
Ditch 204, WG 3. SF 1710. Roman **bronze coin.**

Fig.229,21. Ditch 204,WG 3. SF 1709. **Iron fragment,** bent into circle.

Fig.229,22. Ditch 204, WG 3. SF 1711. Dome shaped **bone counter,** turned from fragment of large bone.

Fig.229,23. Ditch 204. WG 3. SF 1712. Fragment of connecting plate from double sided, composite **bone comb.** Three rivet holes, double border lines and central row of single ring and dot motifs.

Fig.229,24. Over I.A. Ditch 233, WF 12. SF 1806. **Bronze disc brooch** with traces of ? solder for the attachment of applied disc.
Ditch 254, WG 14. SF 2144. Poor quality, colourless **glass fragment,** Roman, 4th century. Not illustrated.

Fig.229,25. Ditch 254, WG 14. SF 2211. **Bronze scoop,** twisted shaft, trace of suspension loop. Roman.

F THE PITS (Fig.230).

Seventy-nine pits were attributed to the Anglo-Saxon period of settlement, with a further twenty possibles. The latter included twelve pits in WD 6 which formed a discrete group with similar characteristics; all were rectangular, vertically sided and flat bottomed. All were filled with buff sand with occasional suggestions of linings and, with the exception of Nos 4 and 8, none contained any dating evidence. Their proximity to one another and the nature of the fills suggested that they represented a series of pits, probably lined, which were used and filled in with the material from successive pits. Numbers 2 and 8 each contained one small sherd of Anglo-Saxon pottery, and this, although weak, when taken with the superimposition of the pits over a series of Iron Age Phase 3 features strengthens the suggestion of an Anglo-Saxon origin for them. Circular and oval pits predominated (64%), rectangular or square pits much fewer (24%) in numbers. In section the bowl shape with sloping sides and rounded base was most frequent (43%), but narrow, square cut shapes were fairly common (23%). In most cases no close dating within the Anglo-Saxon period was obtained, the exceptions being:

Pit 64 with 5th century brooch, but with fragments of Illington/Lackford pottery.
Pit 63 with Illington/Lackford sherd.
Pit 90 with a fragment of faceted, angled pottery.
Pit 158 with 7th century bone pin.
Pit 87 with large cowrie shell.
Pits with Ipswich ware: 19, 26, 71, 141, 329, 437.

Table 1. Anglo-Saxon Pits: Analysis by shape.

(a)

Plan	Totals	%
Square	5	6.3
Rectangular	11	13.9
Circular	20	25.3
Oval	34	43
Irregular	8	10.1
Uncertain	1	1.3

(b)

Section	Totals	%
A. Flat base, vertical sides	15	18.9
B. Rounded, bowl shape	39	49.4
C. Very shallow, rounded	13	16.5
D. Steep, splay sided	1	1.3
E. Irregular	5	6.3
Uncertain	6	7.6

These tables show that circular and oval pits were the most frequent plan and that rounded bowl shaped profiles the commoner section.

Preferred sections of circular pits: A: 3; B: 10; C: 3; E: 3.

Preferred sections of oval pits: A: 10; B: 18; C: 5; D: 1.

Table 2. Anglo-Saxon Pits: Type, fill and contents.

Types by section:
- A: Flat bottom, vertical sides.
- B: Rounded, bowl shaped profile.
- C: Very shallow, rounded profile.
- D: Steep, splayed sided, flat bottom.
- E: Irregular.

Types by plan:
- S: Square.
- R: Rectangular.
- C: Circular.
- OV: Oval.
- I: Irregular.

Pit No.	Grid	Section Type	Fill	Plan	Contents A.S. pottery	Date
2	WD 6	A	Light brown sand.	R		
3	WD 6	A	Light brown sand.	R		
4	WD 6	A	Light brown sand.	R	1 sherd.	
5	WD 6	A	Light brown sand.	R		
6	WD 6	A	Light brown sand.	R		
7	WD 6	A	Light brown sand.	R		
8	WD 6	A	Light brown sand.	R		
9	WD 6	A	Light brown sand.	R		
10	WD 6	A	Light brown sand.	R		
11	WD 6	A	Light brown sand.	R		
12	WD 6	A	Light brown sand.	R		
13	WD 6	A	Light brown sand.	R	Pits 2-13 noted as possible group.	
16	WE 6/7	A	Light brown sand.	OV		
26	WF 6	A	Brown, sandy.	OV	1 Ipswich ware.	7th
30	WD 5	B	Brown, sandy.	I	2 sherds.	
31	WD 5	A	Brown, sandy.	R	2 sherds.	
32	WE 5	B	Brown, sandy.	OV	25 sherds.	
34	WE 5	B	Brown, with charcoal.	OV	3 sherds.	
35	WD 5	A	Brown.	OV	7 sherds.	
37	WD 5	E	Brown with clay patch.	C		
44	WL 5	B	Black.	S	6 sherds.	
45	WC 4	A	Dark brown, sandy.	I	A.S. comb.	
47	WC 5	A	Grey brown.	C	34 sherds.	
48	WC 5	B	Grey brown.	OV	13 sherds.	
58	WE 4	B	Brown.	I	3 sherds.	
59	WE 4	B	Grey.	OV		
60	WE 4	B	Brown.	C		Strat
61	WE 4	B	Dark grey/brown.	C		
63	WG 5	C	Brown.	OV	90 inc. I/Lackford.	L.6th
64	WG 5	B	Grey, sandy.	OV	Brooch: I/Lackford.	?
65	WG 6	A	Grey.	OV		Strat
66	WG 6	A	Dark grey.	OV	12 sherds.	
67	WF 4	A	Black and brown.	C	1 sherd.	
68	WF 6	C	Brown.	OV	Comb.	
69	WG 5	C	Brown.	OV	1 sherd.	
70	WG 5/6	B	Dark brown.	OV	16 sherds.	
71	WG 5	B	Grey brown.	R	9 sherds, 2 Ipswich.	7th
72	WG 5	B	Black.	S	1 sherd.	
74	WF 7	A	Grey brown.	OV	5 sherds.	
75	WF 4	B	Grey. Cuts D 54	OV		Strat
76	WF 6	B	Grey, ashy.	S	16 sherds.	
77	WF 6	B	Grey/brown.	S	35 sherds.	
78	WD 3	B	Dark brown.	OV	6 sherds.	
81	WF 5	C	Grey.	OV	1 sherd.	
82	WF 6	A	Dark grey/brown.	C	4 sherds.	
87	WG 6	B	Brown.	C	12 sherds. Cowrie.	7th
88	WG 6	B	Grey/brown.	I	8 sherds.	
89	WF 6	A	Black.	OV	6 sherds.	
90	WG 7	A?	Dark brown.	OV	Faceted sherd.	5th
101	WE 7	B	Brown.	OV		
102	WE 7	B	Brown.	OV	1 sherd.	
112	WG 8	A/B	Black.	R	1 sherd.	
117	WG 8	D	Brown.	OV	3 sherds.	
119	WG 9	?	Brown.	C	1 Ipswich sherd.	7th
120	WF 8	?	Brown.	?	1 sherd.	
131	WG 5	B	Brown.	OV	125 sherds.	? 6th
139	WG 9	B	Brown.	OV	1 sherd.	
140	WH 5	E	Brown.	I	2 sherds.	
141	WH 5	E	Brown.	I-OV	12 sherds. 1 Ipswich.	7th
142	WH 5	B	Brown.	OV	1?	
144	WG 9	B	Dark brown.	OV	3 sherds.	
152	WF 9	B	Clay lined. Small.	C	? IA/AS sherd.	
153	WF 9	B	Brown.	R		Strat
154	WF 9	B	Brown.	C	40 sherds.	
158	WF 9	B	Dark brown.	C	? 1 sherd.	
174	WE 9	B	Grey, clay lined.	C	3 sherds.	

Table 2 continued.

187	WH 6	B	Grey brown	C	2 sherds.	
198	WE 10	A	Black with ash.	OV		
201	WH 3	B	Black/brown.	C	10 sherds. 1 Ipswich.	7th
202	WH 3	B	Black brown.	I	3 sherds.	
203	WH 3	B	Grey brown with charcoal.	C	4 sherds.	
204	WH 3	B	Brown.	OV	1 sherd.	
205	WH 3	E	Grey brown.	C	2 sherds.	
234	WD 9	C	Brown.	R	8 sherds. 1 ? Ipswich.	
262	WG 11	C	Grey/brown.	R	1 sherd.	
263	WE 10	C	Grey/brown.	R	10 sherds.	
304	WF 11	E	Grey.	C	1 sherd.	
311	WG 4	B	Grey.	R	24 sherds.	
312	WG 3	B	Grey with charcoal.	OV	A.S. area	
324	WF 10	C	Grey/brown.	R	1 sherd.	
325	WF 10	C	Grey brown.	I	1 Ipswich sherd.	? 7th
332	WG 11	C	Grey brown.	C	A.S. comb.	
350	WE 11	B	Dark brown.	OV	1 sherd.	
353	WF 11	B	Dark brown.	R	16 sherds.	
356	WE 11	B	Grey/brown.	S	3 sherds.	
372	WG 11	C	Grey.	C	1 sherd.	
393	WF 12	C	Brown.	OV	2 ? sherds.	
394	WF 12	C	Brown/black.	C	1 sherd.	
398	WF 12	A	Dark brown.	OV	1 ? sherd.	
408	WG 11	B	Brown.	OV	8 sherds.	

Note: Strat. = A.S. date by stratigraphy.

Material culture:

Objects were not common in the Anglo-Saxon pits; all objects are illustrated and listed below.

Fig.231,1. Pit 37, WD 5. SF 260. **Lead 'plug'.** A similar object is known to me on a cremation urn from the Lackford cemetery (private possession), this piece is the same, with two flanges to overlap the edges of the hole.

Fig.231,2. Pit 44, WC 5. SF 300. **Iron knife** with angled back.

Fig.231,3. Pit 44, WC 5. SF 330. **Iron knife** with steeply angled back.

Fig.231,4. Pit 45, WC 5. SF 337. Double sided, composite **bone comb.** Five iron rivets, connecting plate with double line borders. Teeth extremely badly cut. A 'trial' piece, but apparently used.

Fig.231,5. Pit 53, WG 5. SF 636. **Iron fragment** with loop.

Fig.231,6. Pit 63, WG 5. SF 534. Fragment **bone pin-beater.**

Fig.231,7. Pit 64, WG 6. SF 459. **Bronze brooch;** small-long type with lozenge foot and 'cross-potent' head.

Fig.231,8. Pit 65, WG 6. SF 596. Buff **glass bead** with white crossing trails.

Fig.231,9. Pit 65, WG 6. SF 758. **Bead.**

Fig.231,10. Pit 65, WG 6, SF 513. Flat section of **cut bone plate;** rough-out for tooth segment for comb.

Fig.231,11. Pit 65, WG 6. SF 598. Thin, flat **bronze strip.** ? bracelet fragment.

Fig.231,12. Pit 68, WF 6. SF 704. Tooth segment from double-sided composite **bone comb.** No rivets.

Fig.231,13. Pit 68, WF 6. SF 701. Large **chalk spindle-whorl,** flat top and bottom.

Fig.231,14. Pit 77, WF 6. SF 732. Small **iron spike.** Square section.

Fig.231,15. Pit 87, WG 6. SF 772. **Cowrie shell.**

Fig.231,16. Pit 90, WG 7. SF 784. Pierced **sheep metacarpel.**

Fig.231,17. Pit 112, WG 8. SF 1066. Cut **bronze plate** with rivet.

Fig.231,18. Pit 158, WF 9. SF 1340. **Bone pin** with flattened head. 7th century type.

Fig.231,19. Pit 158, WF 9. SF 1341. Fragment of **bone plate** with lattice ornament.

Fig.231,20. Pit 158, WF 9. SF 1299. Pair of plain **bronze tweezers.**

Fig.231,21. Pit 283, WE 10, under SFB 54. SF 1606. Penannular **iron brooch.**

Fig.231,22. Pit 90, Anglo-Saxon faceted-angled sherd in hard, fine fabric, black core, black inner surface and brown-black outer surface. Highly burnished inside and out. Long well-cut facets.

Fig.232,1. Pit 79, WG 4. SF 1264. **Iron hook** with loop.

Fig.232,2. Pit 79, WG 4. SF 1392. Small **iron ferrule.**

Fig.232,3. Pit 79, WG 4. SF 1347. **Bone pin** with triangular head. Pig fibula.

Fig.232,4. Pit 79, WG 4. SF 1262. **Bone awl.** Sharpened pig fibula.

G. THE HEARTHS (Fig.233)

Five hearths were found unassociated with structures, in an open situation, and are described below; others in halls and SFBs are described in their contexts. Six of the hearths were conclusively shown to be Anglo-Saxon in date, with either late Roman coins or Anglo-Saxon pottery associated with them. The remaining hearth (H 3) is of the same type and closely associated with a group of isolated Anglo-Saxon pits, which produced carbonised grain. This was the only evidence for possible uses for the hearths, other than cooking, as none produced slag or waste pottery.

Hearth 1. WC 5.

Stratified above Ditch 2 (Iron Age Phase III). A circular burnt area, 4ft (1.2m) in diameter, of reddened earth and burnt flints; 6in (15cm) thick. No other structural form. SF 20: Roman **bronze coin.**

Hearth 2. WE 6.

An irregular area of burnt clay 3ft 6in to 4ft (1.07 to 1.22m) across and 3 to 5in (7.6 to 12.7cm) thick, based on large flints. SF 67: Roman **bronze coin.**

Hearth 3. WE 4.

An irregular and patchy area of burnt clay *c.*8ft (2.44m) across and 3 to 6in (7.6 to 15.2cm) thick. Closely associated with Pits 59, 60, 61 which contained carbonised grain.

Hearth 4. WD 9.

A small area of Roman tile fragments laid to form a small hearth, 1ft 6in (0.46m) by 2ft 6in (0.76m). Reddening of the sand beneath the tiles confirmed their use as a hearth.

Hearth 5. WH 3.

An oval area of fired clay with fragments of Roman tile and flint nodules, 4ft by 3ft (1.22 by 0.9m) and 5in (12.7cm) thick. Anglo-Saxon sherds in soil beneath hearth.

Material culture:

Fig.234,1. SF 1432. **Bronze wrist-clasp.** Flat sheet with one hole and slot for fastening. Broken.
Fig.234,2. SF 1641. **Bronze tweezers.** Single line borders.
Fig.234,3. SF 1707. **Bronze finger ring** with denticulated edge.

Hearth 6. WH 3.

Small patch of burnt clay and stones, 1ft 6in (46cm) square.

Hearth 7.

Small patch of burnt clay and flints, 2ft (61cm) square.

H. THE CLAY RESERVE (Fig.235)

On the extreme east edge of the site (WF 2/3) a roughly circular, ditched enclosure, 25ft (7.6m) east to west and 28ft (8.5m) north to south, enclosed an irregular patch of clay 2 to 4in (5 to 10cm) thick. No post-holes or other features could be associated with the ditch or the enclosed area. The clay was entirely in an unfired condition and bore no signs of shaping, or impressions of wattles. The ditch (D 96) was irregular in width but a typical section was of a shallow U-shape, *c.*2ft 6in (0.76m) across and 1ft (0.3m) deep, filled with brown soil, with no apparent entrance.

A Roman **bronze coin,** (SF 1352) was found beneath the clay, which together with Anglo-Saxon pottery from the ditch and in the enclosed area, supported an Anglo-Saxon date for the feature. The clay contained chalk fragments and could have come from known boulder clay deposits along the 100ft contour only 700 yards (640m) away to the north. A 19th century brick kiln just west of the Icknield Way on this contour exploited this deposit and may well be responsible for the existing pits which expose the boulder clay along this line. It is suggested that as clay does not occur naturally on the site, this was a reserve area where supplies could be allowed to weather before being used for pottery making. It is interesting that of the four antler pottery stamps known from the site, two came from close by this feature, one from SFB 12 (Fig.61,14) and one from WF 4, barely 50ft (15m) away (Fig.254,2). Two more, one from Hall 7 (Fig.21,24) and one found loose on the site before the excavation (Fig.254,1) came from the northern end, again not far from this feature.

I. THE BURIALS IN THE SETTLEMENT

Two burials (Fig.236) were found within the settlement area, both extended, with heads to the west and some five metres apart, in WF 10.
Both cut Iron Age pits. Neither had any grave goods other than the bronze loop from Grave 1, found in the area of the chest (Fig.238,17). Fragments of Anglo-Saxon pottery were found in the fill of Grave 2 above the skeleton, which suggests that the grave was Anglo-Saxon or later; in which case Grave 1, so closely associated, can be supposed to be the same date.

(1) Grave 1: Description by Rosemary Powers.

Preservation.

The bones have been treated with durofix thinned with acetone. This was necessary for plant roots have grown through the bone, contaminating it and making it very fragile. Where it has started to peel it has caused surface damage, on fibulae and mandible for example. Most of the skeleton is represented though parts of the left foot and ankle are missing and the left side of the skull and pubis damaged. The coating of durofix slightly confuses some of the pathological features.

Sex.

The pelvis is small, and lacks the pre-auricular sulcus but the size seems more female than male.

Age.

The skull is youthful. The basal synchondrosis appears to be still open indicating an age-range of between 18 and 21. The sacral bodies are not yet ossified though the sacral 'wings' are, and parts of the iliac rim still show open sutures. So do the radius and ulna at the wrists. Ripple-marks are still clear on the remaining (rubbed) piece of pubic symphysis as in youth. Age: 12-23.

Teeth.

These are well preserved except for some enamel flaked off post-mortem, from upper right incisor and all first molars. Attrition has removed only cusp tips on M2 and M1 is not quite at stage 4 (Brothwell). Both lower third molars have failed to form but otherwise there is no dental pathology except molar pits in the lower second molars suspected of being incipient caries.

Skull.

There is a fairly symmetrical pattern of small wormians at and around lambda, two in each suture radiating from the central one at lambda. There is a faint 'rash' (periostitis?) over parts of the skull, especially the frontal, the layer of durofix makes it difficult to differentiate from post-mortem weathering. Radiography revealed no pathology. The usual main measurements were taken:

	mm
Glabella-occipital length:	(L) 188
Maximum bi-parietal breadth:	(B) 142
Basio-bregma height:	(H) 141
Cranial Index	75.5

Stature.

Using the most normal looking limb bones we get femur maximum length 440mm and tibia length 345, thus stature calculated on the Trotter and Gleiser formula is 162.7cm (5ft 4in) if female or 167.61 (5ft 6in) if male.

Pathology.

The following bones are obviously pathological.

The left humerus has a collapsed and flattened appearance in its upper third. The epiphysis of the head may have been displaced in childhood but the peculiarities of the shaft may be to blame for this impression. The humerus dimensions just below the head are 25mm x 19mm; on the normal side they are 24mm x 23mm.

In rib L3 there is a burrow running along its length, about the middle of the bone and with at least three openings to the surface.

In the right femur the lesion looks like a knuckle-print or small 'sausage'. It does not appear to follow the course of any nerve or vessel yet it bulges out the bone around it. It lies on the rear inner aspect above the condyle. The lesions in the left tibia are: healing over the anterior surface of the bone and swelling with small spikes of ossification over the back surface which is otherwise smooth and non-porous in comparison.

Radiographic Report by Theya Molleson and John Price.

Radiography of the skeleton revealed a number of pathological and anomalous conditions which must have existed independently of one another. There are two developmental or congenital anomalies. The left humerus is shorter than the right and there is a slight varus deformity of the humeral head. The lesion in the right femur is of doubtful significance though of remarkable appearance. There is a scalloped radiolucent zone involving and widening the cortex in the metaphysis at the lower end of the femur. The lesion is well defined and has a sclerotic rim. It is a fibrous cortical defect (non osteogenic fibroma).

Several years previous to death the individual had sustained injuries which fractured his rib and left tibia. Healing had not proceeded normally. The rib is deformed and its contour is irregular, there is marked patchy sclerosis present and the bone texture is disorganised, some lacunae and a sinus are present. The appearances are those of a chronic osteomyelitis which probably followed a fracture.

The upper part of the shaft of the left tibia is widened; the cortex is thick, sclerotic and irregular. The original cortex can just be identified and there is an appearance of a cortex within a cortex. The changes are due to a periostial reaction with dense new bone formation. There seems to be slight medial angulation of the upper tibia and a fracture is probable at this site. The changes can thus be accounted for by a fracture of the upper tibial shaft, with sub periostial heamatomas (bleeding) stripping the periosteum and causing the dense periostial new bone to form. This may have been a repetitive process with an unstable fracture and inefficient splinting.

Examinations of thin sections taken from the tibial shaft by a histopathologist, Professor Norman Gibbs, confirm that the irregular cortical bony thickening is likely to have a traumatic, e.g. healed fracture, cause.

(2) Grave 2: Description by Carole Keepax.

Bones from the feet, fragments of skull (partly reconstructable), and long bones of a young adult female are present. The preservation of the bone is poor, with much surface erosion and slight distortion of the skull. There are nineteen permanent teeth, most with slight wear (the third molars are worn very little). The left upper first molar has distal neck caries. The right upper third molar is not developed (this area was lost post-mortem on the left side).

One lambdoid wormian bone and medium *torus palatinus* were observed. The following skull and long bone measurements were possible:—

Skull	mm
Glab. occipital length (L)	171
Min. frontal breadth (B′)	93.2
Frontal arc (S_1)	125
Parietal arc (S'_2)	132
Frontal chord (S'_1)	105.2
Parietal chord (S'_2)	114.7
Palate length (G'_1)	40 ?
Simotic chord (SC)	10.3
Bi-dacryonic chord (DC)	21.7
Tibia (right)	
Max. length (TiL_1)	333

(3) Fragments of human bone from Anglo-Saxon contexts by Guy Grainger.

The remains examined consisted mainly of infant bones, with two adult fragments. All the infant bones were of individuals less than one year old, most apparently new born. A minimum of four infants is represented, this being the number of left femurs seen in the sample.

Although the bones from Layer 2 could be residual, those from the closed SFB groups are less likely to be, raising the associated problems of how they came to be there and why fragmented.

The maximum length of the tibia gives an estimated maximum stature of 158cm (5ft 2½″) using the regression equation devised for American white females by Trotter and Gleser (1952).

Adult bones identified:

SFB 28. Cranial fragment.
SFB 37. Cranial fragment.

Table 70. Infant bones.

Context Number	Cranial	Mandible/ Maxilla	L femur R	L tibia R	L humerus R	L radius R	L ulna R	inominate	rib	vertebra	clavicle	other
WC 5 L2	/											
WF 3 L2	/											
WG 6 L2					R							
WG 10 L2			R									
WE 12 L2				R								
SFB 12		/										
SFB 21				L								
SFB 22	/	/	L			L			/		/	/
SFB 34/35 A.S.	/											
SFB 44 A.S.			L									
SFB 44 A.S.	/					L						
SFB 64 A.S.	/		L R	R	L	L	L		/			
D67 A.S.	/		L R				R		/			
D111 A.S.			R									

(Note — Layer 2 = general cultural layer, not dated.)

Key: L: left; R: right; /: present.

THE MATERIAL CULTURE FROM LAYER 2

The site was covered with blown sand, beneath which was the original soil, Layer 2, which varied in depth from a few inches in the unoccupied north-west quarter to some 12 to 18in (30 to 46cm) in the south-east.

A considerable quantity of Anglo-Saxon pottery and many objects were recovered from this layer. Although this material is 'unstratified' and contains objects clearly belonging to the Romano-British and possibly the Iron Age occupation, it is considered worthwhile to illustrate the recognisable objects and the more interesting fragments. Objects of obvious Romano-British origin of 1st-2nd century date have been held for publication in a subsequent volume.

The objects are arranged in object class rather than by materials.

1. Roman objects, possibly associated with Anglo-Saxon occupation.

Fig.237,1. SF 341. **Bronze spoon bowl.**
Fig.237,2. SF 392. **Bronze steelyard bar** with suspension loop. The long side has 21 dots, the short side a number of transverse lines, singly and in pairs.
Fig.237,3. SF 291. **Bronze spoon handle.**
Fig.237,4. SF 1676. **Bronze spoon handle.** Faceted.
Fig.237,5. SF 1948. Fragment of **bronze spoon handle.**
Fig.237,6. SF 3058. **Glass finger-ring.** Black (? dark brown). Circular bezel with bust relief.
Fig.238,28. SF 1133. **Bronze ring** with yellow paste bezel.

2. Brooches.

Fig.237,7. SF 614. **Bronze small-long brooch,** square-headed type. Foot with concave sides. Two rows of annular stamps on head, suggesting a panelled effect. Fragment of spring; two turns either side with large joining loop to provide pressure bar for pin.
Fig.237,8. SF 1219. Bronze knob from **cruciform brooch.** Full round, detachable.
Fig.237,9. SF 2030. **Bronze disc brooch.** Smooth, plain surface with no trace of attached plate. Fragment of iron pin.
Fig.237,10. SF 3030. **Bronze penannular brooch,** pin missing, plano-convex section, one terminal flattened and curled round, the other missing.
Fig.237,11. SF 1291. **Iron pin** from brooch.
SF 1263 and SF 1291 from WG 5, an area of dense Anglo-Saxon occupation.
Fig.237,12. SF 229. Bronze stud with large oval head and transverse lines beneath.

3. Wrist clasps and strap ends.

Fig.237,13. SF 2175. **Bronze wrist-clasp.** Plain sheet with two holes and single hook.
Fig.237,14. SF 843. **Iron ? strap-end** with one rivet. Rounded end.
Fig.237,15. SF 3140. **Bronze strap-end,** curved at one end, straight at the other. Decorated with border of arc stamps and fastened by two rivets to back plate.

4. Finger rings.

Fig.237,16. SF 657. **Lead ring** with crude knot.
Fig.237,17. SF 1067. **Bronze ? ring.** Made from strip with indented edge.
Fig.237,18. SF 1185. **Bronze ring,** flat strip with transverse lines.
Fig.237,19. SF 1400. **Bronze ring** fragment. Flat strip with denticulated edges.
Fig.237,20. SF 1528. **Bronze ring** or bracelet fragment. Denticulated edge.
Fig.237,21. SF 3115. **Bronze ring.** Oval section.
Fig.237,22. SF 3129. **Bronze ring** fragment, plano-convex section, diagonal moulding.

5. Bronze needles.

Fig.237,23. SF 30. Plain.
Fig.237,24. SF 3030. Plain.

6. Bronze fasteners.

Fig.237,25. SF 3036. **Catch** or **fastener,** flat sheet with one perforated and one slotted end. Faint transverse lines. From the area of Hall 7 on the north slope of the site.
Fig.237,26. SF 3111. **Clasp.** Rectangular middle piece decorated with row of 'S' stamps on two narrower sides, a perforated disc at one end and a hook at the other. Area of Hall 7.

7. Bronze bracelets. Many of these fragments are undoubtedly of Romano-British origin, particularly the twisted examples and those with facets and serrated edges.

Fig.238,1. SF 152. **Flat strip,** rectangular section, regular stamped pattern. Roman.
Fig.238,2. SF 205. Fragment of **bracelet** made from two twisted rods.
Fig.238,3. SF 381. Fragment, round section. Plain.
Fig.238,4. SF 425. Fragment, rectangular section. Plain.
Fig.238,5. SF 510. Fragment, rectangular section. Stamped dots down centre.
Fig.238,6. SF 536. Fragment **jet bracelet,** plano-convex section. Roman.
Fig.238,7. Fragment, flat strip with repoussé dots on borders. Hole for fastening.
Fig.238,8. SF 754. Fragment, decorated with running 'S' stamp scroll between lines.
Fig.238,9. SF 927. Fragment with triangular panel filled with dot and ring stamps and larger one at end. Roman.
Fig.238,10. SF 1064. Fragment. Trace of hole at one end. Two panels of criss-cross lines.
Fig.238,11. SF 1136. Fragment. Twisted wires; hook fastening.
Fig.238,12. SF 1435. Fragment. Two twisted wires.
Fig.238,13. SF 1543. Fragment. Indented edge. Roman.
Fig.238,14. SF 1593. Fragment with pattern of 'X' between lines.
Fig.238,15. SF 2078. Fragment with central rosette bearing traces of enamel. The supporting arms of the central motif are split at the ends and have tiny iron rivets to secure the object into a larger band. Roman.
Fig.238,16. Sf 2195. Twisted **ribbon bracelet.** Hole at one end.

8. Bronze loops.

Fig.238,17. SF 1450. Grave 1. Thin, tapering **loop.** From grave fill in area of chest.
Fig.238,18. SF 3094. **Slip-ring.**

9. Decorative bronze bands.

Fig.238,19. SF 429. Repoussé dot borders.
Fig.238,20. SF 576. Punched ring and dot borders.
Fig.238,21. SF 573. Punched 'S' and double arc borders.
Fig.238,22. SF 1502. Repoussé ornament of dots, crescents; traces of rivet hole.

10. Bronze tweezers.

Fig.238,23. SF 57. Plain, rectangular section, strip.

Fig.238,24. SF 787. Broad, triangular form, with cross pattern of stamped ring and dots motifs and slip ring suspension loop.
Fig.238,25. SF 790. Broad, triangular form with ring and dot pattern. Centre of blade 'stabbed' with knife point from behind, leaving triangular hole.
Fig.238,26. SF 1143. Long, straight sided form with facets at head, grooves loop and stamped double arc ornament.
Fig.238,27. SF 1671. Straight sided with two lines.

11. Miscellaneous bronze objects.

Fig.238,28. SF 1133. **Finger-ring**
Fig.239,1. SF 60. Thin **disc.**
Fig.239,2. SF 129. **Fragment** with diagonal lines.
Fig.239,3. SF 342. Large **patch** with bronze rivets.
Fig.239,4. SF 453. **Tube,** originally straight, tapering slightly.
Fig.239,5. SF 712. **Binding** from edge of vessel, *c.*9cm diameter and not more than 0.3cm thick.
Fig.239,6. SF 909. Fragment **plate** with ring and dot stamps. Broken on all sides.
Fig.239,7. SF 919. Circular **counter.** ? rubbed down coin.
Fig.239,8. SF 1526. **Tack.**
Fig.239,9. SF 1657. **Disc** with slot and four nicks on edge. No trace of attachment.
Fig.239,10. SF 1974. **Bar** from lock?
Fig.239,11. SF 3075. Small **ferrule,** ? cosmetic brush.

12. Miscellaneous bronze strips.

Fig.239,12-23. Flat **strips** of plain bronze, with or without holes, as shown. No.12: SF 11; No.13: SF42; No.14: SF 3118; No.15: SF 123; No.16: SF 399; No.17: SF 731; No.18: SF 888; No.19: SF 1162; No.20: SF 1250; No.21: SF 1343; No.22: SF 1598; No.23: SF 1966.

13. Buckles.

Fig.239,24. SF 517. **Iron buckle** with tongue and tapering buckle-plate. The plate divides to take the tongue and narrows to a strip behind the front plate. It is held in place by a transverse strip of 'copper alloy' which, in turn, is held by two small copper alloy rivets with round, flat heads. These were covered with thin silver discs, one of which is now missing.
Fig.239,25. SF 993. **Iron loop,** ? buckle.
Fig.239,26. SF 1223. **Loop** from iron buckle. Trace of tongue fastening on thinner part. Bow widened.
Fig.239,27. SF 1976. **Bronze buckle-plate.** Frilled edge, two rivet holes and slot for tongue.

14. Girdle hangers and keys.

Fig.240,1. SF 96. **Iron girdle hanger,** rectangular shank, plain loop.
Fig.240,2. SF 3160. **Iron girdle hanger.** Long shank, upper part flattened and decorated with groups of transverse lines, lower part round. Iron suspension ring with slip-knot.
Fig.240,3. SF 27. **Iron key** with suspension loop at right angles to the wards.

15. Iron knives.

Group A. **Knives** with straight backs. No.6 with unusually long tang.
Fig.240,4: SF 741; No.5: SF 97; No.6: SF 1200; No.7: SF 486; No.8: SF 794; No.9: SF 403.

Group B. **Knives** with back and cutting edge curving to a point.
Fig.240,10: SF 659; No.11: SF 86; No.12: SF 433; No.13: SF 1201.

Group C. **Knives** with straight cutting edge and backs curving to meet point.
Fig.240,14: SF 566; No.15: SF 720; No.16: SF 100; No.17: SF 828.

Group D. **Knives** with angled back.
Fig.240,18: SF 76; No.19: SF 1672; No.20: SF 54; No.21: SF 4; No.22: SF 1882; No.23: SF 550; No.24: SF 1135; No.25: SF 462; No.26: SF 2208; No.27: SF 68; No.28: SF 3041.

Group E. Miscellaneous iron objects.
Fig.240,29. SF 1084. Tang and part of wide bladed **knife.**
Fig.240,30. SF 3073. **Knife-shaped object,** but with no cutting edge and rounded end.
Fig.240,31. SF 2109. Broad-bladed **knife.**
Fig.240,32 SF 3037 **Knife** with rivet in tang.

Unillustrated knife fragments.
SF 57; SF 72; SF 479; SF 522; SF 928; SF 1138.

16. Iron spears and arrowheads.

Fig.241,1. SF 85. **Arrowhead,** rounded blade, short, closed socket.
Fig.241,2. SF 569. **Arrowhead.** Shouldered blade, split socket.
Fig.241,3. SF 1244. **Arrowhead.** Angled blade, closed socket.
Fig.241,4. SF 2148. **Arrowhead.** Angled blade, split socket.
Fig.241,5. SF 491. Short **spear head.** Swanton's Type E1.

17. Handles.

Fig.241,6. SF 163. Thin **iron rod** with pierced, flattened end.
Fig.241,7. SF 482. **Iron rod,** flattened and pierced at one end. Broken.
Fig.241,8. SF 779. **Bronze** ? handle, square section, flattened and pierced at both ends. Small bronze ring at one end.
Fig.241,9. SF 1115. Thin **iron rod** with single hook.
Fig.241,10. SF 1243. Twisted **iron rod,** and two flattened strips each ending in simple hooks. When found these appeared to be attached to the ends of twisted rod, but became detached on cleaning.
Fig.241,11. SF 2139. **Iron handle,** sheathed in copper alloy. ? Roman.

18. Ferrules.

Fig.241,12. SF 26; No. 13: SF 430; No. 14; SF 851; No. 15: SF 1224; No. 16: SF 1295; **Iron socketed ferrules.**
Fig.241,17. SF 814. **Iron ring ferrule.**
Fig.241,18. SF 1552. **Bronze ferrule.**
Fig.241,19. SF 1263. **Iron spiral ferrule.**

19. Tools.

Fig.241,20. SF 206. **Iron awl or drill.** Square section above, round below. The end is very fine and would fit the rivet holes in bone combs for instance, but the length suggests an awl for leather working.
Fig.241,21. SF 617. Small **iron adze,** with square tang set at slight angle to the blade.
Fig.241,22. SF 830. **Iron tool.** Square tang widening into a toothed 'blade', probably originally symmetrical to the tang. The tang and the blade are at a slight angle to one another. The teeth are in the same plane as the 'blade'.
Fig.214,23. SF 1084. **Iron tool.** Rounded tang with broad blade at a slight angle. No trace of teeth but similar to No.13 above.
Fig.241,24. SF 734. **Iron tool.** ? spoon bit, very similar to No.25.
Fig.241,25. SF 3109. **Iron spoon bit.** Above SFB 31.
Fig.241,26. SF 906. **Iron tool.** Long split socket, flattened, tapering end with rectangular section. Point rounded.
Fig.241,27. SF 910. **Iron drill.** Tapering square section above, lower half rounded. End flattened into chisel-shaped cutting edge. The square tang presumably hafted.
Fig.242,1. SF 1295. **Iron tool.** Socketed object with heavy head. Could be broken spear, but unlikely.

Fig.242,2. SF 1667. **Iron reaping hook.** Curved blade with square tang at right angles, to be taken through haft. cf two others from SFB 1 and SFB 8. Possibly for cutting rushes, rather than grain.
Fig.242,3. SF 1550. **Iron cutting edge,** fractured side concave, possibly broken weld from axe.
Fig.242,4. SF 1486. **Bronze punch.** Stout tool with squared tang for hafting, rounded point.
Fig.242,5. SF 1674. **Iron wedge.**

20. Iron joiners' dogs.

Fig.242,6. SF 1246; No.7: SF 1266; No.8 SF 1939.

21. Iron nails. Selection to illustrate variety.

Fig.242,9. SF 45; No.10: SF 349; No.11: SF 369; No.12: SF 393; No.13: SF 423; No.14: SF 946; No.15: SF 1561; No.16: SF 428.

22. Iron 'spikes'. Basically pointed at one end, with round section, these objects could have served a variety of purposes, as awls, punches, heckles, drills or needles.

Fig.242,17. SF 206; No.18: SF 248; No.19: SF 301; No.20: SF 497; No.21: SF 568; No.22: SF 578; No.23: SF 649; No.24: SF 770; No.25: SF 789; No.26: SF 875; No.27: SF 907; No.28: SF 1117; No.29: SF 1147; No.30: SF 1160; No.31: SF 1619; No.32: SF 1644; No.33: SF 1658; No.35: SF 163?; No.36: SF 411?. For comparison: No.34, SF 3070 from an area of Hall 7, version 1, a possible heckle.

23. Miscellaneous iron objects.

Fig.242,37. SF 156. Flat **disc** with central hole and indentations on edge. Area of cloth impressions.
Fig.242,38. SF 477. Two **spangles** on iron loop.
Fig.242,39. SF 3069. Diamond-shaped **washer.**
Fig.242,40. SF 3103. Small **penannular object.**
Fig.242,41. SF 3131. Small **ring** clasping larger one.
Fig.242,42. SF 1744. Square-sectioned **bar,** slightly tapering at each end.
Fig.242,43. SF 1562. Flat **fragment** with prongs, ? key.
Fig.242,44. SF 1250. Flat oval **plate,** with two holes.

24. Miscellaneous iron fragments.

Small **suspension loops,** possible belt fittings:
Fig.243,1: SF 825; No.2: SF 981; No.3: SF 1267; No.4: SF 1439.

Looped fragments:
Fig.243,5: SF 939; No.6: SF 512; No.7: SF 1082; No.8: SF 1771.

Rivetted fragments:
Fig.243,9: SF 390; No.10: SF 398; No.11: SF 449; No.12: SF 3134.

Bent rods:
Fig.243,13: SF 106; No.14: SF 412; No.15: SF 654; No.16: SF 714; No.17: SF 724; No.18: SF 2063.

Loops:
Fig.243,19: SF 20; No.20: SF 632; No.21: SF 1323; No.22: SF 1373.

Strips:
Fig.243,23: SF 456; No.24: SF 755.

Others:
Fig.243,25: SF 521; No.26: SF 1840; No.27: SF 1964.

25. Lead.

Fig.243,28. SF 14. **Rod-like fragment.**

26. Glass and Beads.

The glass and beads from Layer 2 are discussed by Professor V.I. Evison in Part 3.

27. Spindle-whorls.

Fig.244,1. SF 1691. Lead. Three grooves on upper surface, plain beneath.
Fig.244,2. SF 339. Bituminous shale.
Fig.244,3. SF 415. Bituminous shale.
Fig.244,4. SF 998. Fine grained sandstone, with unusual groove.
Fig.244,5. SF 348. Limestone, turned.
Fig.244,6. SF 171. Chalk, turned.
Fig.244,7. SF 1587. Chalk.
Fig.244,8. SF 165. Reused Romano-British pot base.
Fig.244,9. SF 1648. Nene Valley, colour-coat base, bored subsequently.
Fig.244,10. SF 692. Roman grey ware bodysherd. Fragment.
Fig.244,11. SF 832. Nene Valley colour-coat sherd, burnt.
Fig.244,12. SF 95. Fragment, turned bone.
Fig.244,13. SF 233. Fragment, turned bone.
SF 1574. Small fragment, turned bone. Not illustrated.
Fig.245,1. SF 591. Fired clay, dark brown fabric, biconical.
Fig.245,2. SF 1150. Flat disc, hard black fabric, burnished.
Fig.245,3. SF 1171. Hard, dark brown fabric, biconical, heavily 'pinched'. From area of Iron Age pits. Date uncertain.
Fig.245,4. SF 1441. Hard, brown/black fabric with much angular grit. Burnished.
Fig.245,5. SF 1818. Hard, dark brown fabric with much angular grit.
Fig.245,6. SF 3124. Unfired clay disc, partially bored.

28. Pins: silver, bronze, iron and bone.

Fig.246,1. SF 786. Silver, knob head with transverse moulding beneath. *cf* Shudy Camps, Grave 95, bronze. (Lethbridge 1936, fig.4, C1.)
Fig.246,2. SF 555. Bronze, knob head with single transverse moulding beneath.
Fig.246,3. SF 58. Bone 'cheese-headed' type. Others from site found in early 7th century contexts in SFBs 3 and 15.
Fig.246,4. SF 3107. Iron 'cheese-headed' pin. (*cf* SFB 30, Fig.115,4.)
Fig.246,5. SF 2206. Iron; four-sided head with faceted angles.
Fig.246,6. SF 3104. Iron, with triple-knobbed head.
Fig.246,7. SF 3112. Iron, with looped head.
Fig.246,8. SF 1542. Bone, head missing; one transverse groove.
Fig.246,9. SF 1530. Bone, with five transverse grooves.
Fig.246,10. SF 3001. Bone, knob head and slightly swollen shaft.
Fig.246,11. SF 3150. Bone, knob head and slightly swollen shaft.
Fig.246,12. SF 2227. Bone with squared pierced head and round shaft.
Fig.246,13. SF 87. Bone with flattened, pierced head.
Fig.246,14. SF 1640. Short stout pin, squared head and round shaft. The head bears two perforations, from opposed directions, the upper is open but the lower is filled with rusted iron.

29. Bone pin-beaters.

Fig.246,15: SF 83; No.16: SF 615; No.17: SF 1560; SF 730; SF 1180: fragments, not illustrated.

30. Bone needles with pierced, triangular heads made from pig fibulae.

Fig.246,18: SF 46; No.19: SF 247; No.20: SF 461; No.21: SF 484; No.22: SF 485; No.23: SF 313; No.24: SF 608; No.25: SF 729.

31. Bone awls.

Fig.247,1. SF 201. Plain, made from splinter of long bone. Round section.
Fig.247,2. SF 1290. Round shaft, slightly flattened head.
Fig.247,3. SF 1194. Unpiercd pig fibula.
Fig.247,4. SF 1734. Pointed.
Fig.247,5. SF 845. Sharpened fragment of antler.
Fig.247,6. SF 189. Sharpened fragment of long bone.

32. Bone and antler working.

Fig.247,7. SF 1549. Red deer antler beam, deep saw-grooves.
Fig.247,8. SF 1344. Prepared fragment of long bone, sawn and trimmed.
Fig.247,9. SF 1577. Long fragment of cannon bone, removed by 'groove and splinter' technique and subsequently begun to be shaped by paring with a knife.
Fig.247,10. SF 1151. Fragment from long bone, partially whittled and ground into shape.
Fig.247,11. SF 1242. Fragment of ox horn-core with square-cut sides.
Fig.247,12. SF 585. Shaft of long bone, smoothed and rounded. ? handle.
Fig.248,1. SF 44. Sawn antler tine, tip chopped, shaft covered with rodent tooth marks.
Fig.248,2. SF 1216. Red deer antler tine. Sawn and pared at butt end, knife trimmed at point.
Fig.248,3. SF 1186. Red deer antler tine, chopped and snapped.
Fig.248,4. SF 371. Red deer antler burr from shed antler, removed from base of main beam by sawing from three directions.
Fig.248,5. SF 1804. Fragment of long bone pared and ground to form a blunted point.
Fig.248,6. SF 1321. Rib fragment, sawn at one end, chopped and snapped at other.

33. Bone and antler objects.

Fig.249,1. SF 2252, WG 2; No.2: SF 914, WG 5; No.3: SF 437, WF 4. One partly-made, and two finished examples of an enigmatic object, made from an antler tine with a movable bone plate pivoted on an iron rivet. The plate is rectangular in cross-section and is clearly not intended for cutting. The complete example has a well worn, much polished handle.
Fig.250,1. SF 1289. ? **handle** made of antler.
Fig.250,2. SF 881. Head of **ox femur,** partially bored from beneath, ? counter.
Fig.250,3. SF 71. **Toggle** with two transverse nicks.
Fig.250,4. SF 1126. **Metacarpel** of sheep, with central hole.
Fig.250,5. SF 1452. **Metatarsal** of sheep, with central hole. Beside the four examples from the SFBs, four more were also recovered, but not illustrated. All are sheep bones; two (SF 1553, SF 1569) are metatarsals, perforated at the distal end; one (SF 1572) is a metacarpal, perforated at the distal end and one, (SF 1643) is a tibia also perforated at the distal end. There is no sign of wear in the holes or on the bone itself.

34. Bone combs.

Fig.251,1. SF 1033. Rough-out of connecting plate for **triangular comb.**
Fig.251,2. SF 464. Antler **fragment,** cut and pared down.
Fig.251,3. SF 394. End tooth segment for **single-sided comb.** *cf* SFB 22, SF 653 (Fig.93.16).
Fig.251,4. SF 74. Fragment, small, one-piece **triangular comb,** with notch in back.
Fig.251,5. SF 1255. Fragment, single-sided, **one-piece comb.** *cf* Lackford (Lethbridge 1951, fig.11,49,25A and fig.28,49,17).
Fig.251,6. SF 1293. Tooth segment from composite, **triangular comb.** Two rivet holes.
Fig.251,7. SF 801. Tooth segment from composite **triangular comb.** Two iron rivets.
Fig.251,8. SF 249. Central tooth segment from composite **triangular comb.** Three rivet holes.
Fig.251,9. SF 911. End tooth segment from composite **triangular comb,** with upturned 'kick'. One rivet hole and another, not finished.
Fig.251,10. SF 61. Fragment of connecting plate from **triangular comb.** Three-line borders and part of a design with double circles and dots. Two rivet holes.
Fig.251,11. SF 1393. End tooth segment from low-backed, composite, **single-sided comb.** Rather crudely-cut teeth. One iron rivet. The projecting end looks as if it has been broken, possibly originally the profile was more rounded.
Fig.251,12. SF 73. Part of a composite, **triangular comb.** Four-line borders; single, five-ring and dot ornament at the apex. Repeated on reverse.
Fig.251,13. SF 600. Large, low-angled, composite, **triangular comb** from post-hut fill of SFB 22. End tooth segments broken. Fourteen iron rivets. Two-line borders, both sides with central pattern of double interlocking arcs producing a cabled effect.
Fig.252,1. SF 696. **Double-sided,** composite, **comb.** Square-ended, plain connecting plates wiht tooth-nicked edge only. Five iron rivets. Type 1A (for types, see discussion). From pit 68, which cuts SFB 27 and could therefore be derived.
Fig.252,2. SF 133. **Double-sided,** composite **comb.** Square end, irregular tooth cuts. Connecting plate plain, with tooth-nicks only. Five iron rivets. Type 1A.
Fig.252,3. SF 92. **Double-sided,** composite **comb.** Square ended, connecting plate with cross-hatched ends. Type 1B.
Fig.252,4. SF 1251. **Double-sided,** composite **comb.** Small rounded ends, end teeth cut on straight, sloping line. Connecting plate with three-line borders and single ring and dot ornament at each end. Repeated on reverse. Twenty iron rivets arranged in pairs along the borders of the connecting plates. Type 2A.
Fig.252,5. SF 612. **Double-sided,** composite **comb.** Small, rounded end, end teeth cut on straight, sloping line. Plain connecting plate. Four rivets, centrally placed.
Fig.252,6. SF 400. Fragments, **double-sided,** composite **comb** with distinctly fine and coarse teeth. Four iron rivets, connecting plate with end zone of criss cross ornament.
Fig.252,7. SF 691. Tooth plate for double-sided, composite **comb.**
Fig.253,1. SF 168. **Double-sided,** composite **comb.** Small, rounded ends with end teeth cut on convex curve. Plain connecting plate. Six iron rivets. Type 2Bi.
Fig.253,2. SF 813. **Double-sided,** composite **comb.** Small rounded ends with end teeth cut on convex curve. Plain connecting plate. Seven iron rivets. Type 2Bi.
Fig.253,3. SF 1567. **Double-sided,** composite **comb.** Small rounded end with teeth cut on convex curve. Connecting plate with single line borders. Five rivets and suspension hole in end tooth plate. Type 2Bii.
Fig.253,4. SF 604. End tooth plate from **double-sided,** composite **comb.** Three single ring and dot motifs and single rivet hole.
Fig.253,5. SF 571. Connecting plate and fragments of tooth segments from **double-sided,** composite **comb.** Double line borders and four surviving iron rivets. Five other rivet holes occur, in groups of two and three at either end.
Fig.253,6. SF 418. Tooth segment from **double-sided,** composite **comb.**
Fig.253,7. SF 1529. Fragments of connecting plate from **double-sided comb,** with two zones of cross hatched ornament. Burnt.
Fig.253,8. SF 492. Fragment of connecting plate from **double-sided,** composite **comb.** Two line border and central line of single ring and dot motifs. One iron rivet.
Fig.253,9. SF 3095. Fragment of **double-sided,** composite **comb.** Connecting plates have central line of double ring and dot motifs. Three iron rivets.
Fig.253,10. SF 420. Fragment of connecting plate from **double-sided,** composite **comb.** One iron rivet and traces of three other holes. Double-line borders.
Fig.253,11. SF 1729. Fragment of **double-sided,** composite **comb,** found with end tooth segment twisted round as shown. Extremely fine teeth, 10: 1cm and 8: 1cm.

Fig.253,12. SF 410. Fragment of connecting plate from **double-sided comb.** Five transverse lines.

Fig.253,13. SF 769. Fragment of connecting plate from **double-sided comb.** One line border.

Fig.253,14. SF 136. Fragment of connecting plate from **double-sided comb.** Plain, apart from extended tooth nicks along edges. Two rivets.

Fig.253,15. SF 1772. Fragment of **handled comb.** Semi-circular section, six transverse lines. One rivet hole and traces of tooth nicks on one side only. From Ditch 232.

35. Bone Pottery Stamps.

Fig.254,1. SF 2253. **Stamp** cut on end of antler tine, in form of cross, with slightly unequal arms. The cross is formed by two intersecting grooves, the border by deep, angular grooves running back along the line. Although the piece has clearly been used, no examples of this stamp were found. The stamp was picked up from a rabbit-scrape in the 1950s, but correspondence with the finder, D. Nelson, has established that it was found in the vicinity of WE 3, not far from clay reserve in WF 2/3. (See Myres 1969, 133; pl.8,b.)

Fig.254,2. SF 395. WF 4.**Stamp** cut on end of antler tine. Extensively damaged, but enough survives to show that the stamp was probably a cross-hatched square type, 3x3. As with No.1 above, the stamp was found close to the clay reserve.

36. Trial pottery stamp:

Fig.254,3. SF 738, WE 3. Block of **fired clay,** with a design of a circle and single cross with dots surviving in three quadrants, probably originally in all four. The fabric is fired brick red with an area of grey on one side. Careful examination has suggested that this is a 'trial piece' for a pot stamp design. The clay lump has been 'wedged' into a roughly squared shape, and a round impression made in the upper surface. The circle and cross were then deeply incised with a fine point and the dots made with another tool. The piece was then fired, accidentally or otherwise. The incised ornament is too fine for use as a mould, it is suggested here that the potter prepared the design before carving the actual tool on antler. The design is known in several forms from other sites, for example, from Spong Hill (Hills 1977, fig.99), but only in a square form from West Stow (Group 8.6).

37. Anglo-Saxon Pottery from Layer 2.

Fig.255,1. WH 3, L 2. Small vessel with three applied, pierced lugs. Hard fabric with angular grit and minute, white mica. Core and both surfaces dark brown to black. Smoothed outside. No rim.

Fig.255,2. WH 5, L 2. Small, crude cup with three applied, pierced lugs. Hard fabric with some grit. Both surfaces brown to grey. Rough surfaces. 'Pinched' pot with foot-ring.

Fig.255,3. WH 4, L 2. Small cup with three applied, pierced lugs. Hard fabric with some rounded grit. Both surfaces brown to black, left rough. Pinched pot with solid base.

Fig.255,4. WF 8, L 2. Small cup in hard, gritty fabric. Both surfaces dark grey, rough. Clear traces of seating for handle on base and rim. 'Pinched', but well made.

Fig.255,5. Miniature vessel in buff, light brown fabric; for comparison, from Ditch 87, WF 9.

Fig.255,6. Small cup in fairly soft, light brown fabric; for comparison, from Pit 158.

Fig.255,7. WG 7, L 2. Fragment of handled bowl in very hard, gritty fabric with white mica. Both surfaces black, core black with red layers under surfaces. Both surfaces poorly burnished. The form seems to have a rounded base. Triangular, pierced lug or handle horizontal to the rim.

Fig.255,8. WE 3, L 2. Fragment of hand-made base in fairly hard, sandy fabric. Both surfaces and core black. Outer surface burnished, inner surface near base partly burnished, suggesting a bowl shaped form. The base is defined by inscribed lines, with two more above. On the base a portion of a double outlined cross. Fragments of a toothed-stamp decoration occur on the body. Although the sherd is relatively thin, the fabric and surface treatment suggest that it is of Anglo-Saxon rather than Iron Age origin, which, nevertheless, must remain a possibility.

Fig.255,9. Post-hut fill, SFB 22. Body sherd in very hard fabric with angular grits and large iron pyrites. Core and both surfaces black. Outer surface close well burnished, with shallow double line empty swags overlying each other. Similar designs occur, on two vessels from the Lackford cemetery and one from 'near Bury St Edmunds' (Myres 1977, fig.343, Nos.947,951,1002).

Fig.255,10. WH 8. L 2. Body sherd in hard fabric with large, rounded quartz grit. Both surfaces brown to black, core black with thin oxidised layer beneath each surface. Inner surface smoothed, outer surface close burnished. Decorative scheme surviving shows line of Group 3C stamps with four lines above a carination, below this a boss apparently in a panel, set with Group 10.6 stamps. There remains a faint trace of small, circular stamps on the crest of the boss. The boss itself is hollow, being formed by the wall of the pot being pushed in and capped with a hollowed-out cover. An X-ray photograph shows tiny stones in the space so provided, which rattle when the sherd is shaken. The stones measure 6, 5 and 4mm in length respectively (Plate 5).

Fig.255,11. WG 8, L 2. Two fragments in hard fabric with white mica. Core and both surfaces black. Inner surface smooth, outer surface originally close burnished. Decorative scheme: Three neck-grooves with panels of random Group 21.3 stamps among Group 3.15 rosette stamps. Vertical, pushed out bosses with triple outlines.

Fig.255,12. In post-hut fill above SFB 22. Very hard fabric with iron pyrites. Both surfaces and core black. Outer surface burnished. Decorative scheme of stamped row between lines above grouped vertical and diagonal lines. Stamps of Groups 6.5 and 8.4.

Fig.255,13. In post-hut fill above SFB 22. Hard, sandy fabric. Core and inner surface black, outer surface brown to black. Both surfaces burnished. Decorative scheme: applied, vertically slashed cordon at base of neck, above four lines and a unenclosed triangle of Group 2.1 annular stamps. Myres' Form II.8 mid 6th century with similar, but not identical schemes in Norfolk. (Myres 1977, figs.327-8.)

Fig.255,14. Fairly hard fabric, core dark grey, surfaces brown/black, some red inclusions and white grit. Slightly sagging base. From general area of Hall 7 in WB 5.

Fig.255,15. Hard, dark brown fabric with sharp angle and narrow, vertical boss below. Annular, Group 2 stamps.

Fig.255,16. Vertical, triangular pierced lug in Ipswich ware.

THE CEMETERY CATALOGUE

The cemetery was found in 1849 by men raising gravel for ballast for the barges, which at that time, were still operating on the River Lark. Although the site and the discoveries are described (Tymms 1853, 315-318, pl.I-VIII), no accurate location is given. The Ordnance Survey marks two sites on the 6 inch and 25 inch maps in the area of West Stow Heath. One, to the north of the settlement and adjoining the gardens of Wideham Cottages (TL 8002 7155) is marked 'Burial Ground' and 'Stone Coffin found' and the second, beside an old pit, some 700ft to the

west of the settlement, (TL 7938 7136) is marked 'Anglo-Saxon coins, weapons, urns, etc. found'. The precise source of the Ordnance Survey information is now lost, but it seems likely to have been based upon the Tymms' 1853 account and an interpretation of the map of the Icklingham district compiled by Henry Prigg of Icklingham and published posthumously by his daughter (Prigg 1901). On this map, the Wideham Cottage cemetery is clearly marked 'Burial Ground', and the discovery of a stone coffin is referred to in the text (Prigg 1901, p.66). The second site, however, is only recorded on the map with a cross and the words 'Anglo-Saxon urns, etc. found'. It would appear that the account of the discovery led the Ordnance Survey to place the second site further to the west because of the disused pit. The Prigg map is, however, very accurately drawn and the site shown is, in fact, further to the east and lies within the settlement itself. This would suggest that some digging was done on the settlement and that the unfinished bonework mixed up with the cemetery material in the Moyses Hall Museum probably came from the settlement. Indeed, a large hole, some ten feet long, was found at the western end of the knoll in 1972 which could well have been the source for this material. (Square WG 13, Pit 475.)

The site of the cemetery was exploited for gravel for several years and an estimated two acres of land was 'turned over'. This corresponds to the uneven area still to be seen behind Wideham Cottages. The published account, (Tymms 1853) states:

> The site of the graves, the intervals of which vary from two or three feet to as many yards, which was the most general distance, were indicated by a dark streak in the gravel or sand. The men worked in a trench, running north and south, and the skeletons, about 100 in number, were found lying nearly in the same direction*, i.e., with the heads to the south-west and the feet to the north-east; a position observable at other burial-places of the same people. The bodies were interred just within the gravel, which is only 15 to 18 inches below the surface. With the skeletons were found urns, beads, brooches, spear blades, etc. The situations of the various articles cannot be described, for the excavations, unfortunately, have not been witnessed by anyone competent to make a careful investigation. *In one spot, about 12 or 14 feet from east to west, and 18 or 20 feet from north to south, several skeletons were found lying in all directions. Nothing was found with them but one small knife.

It is clear that in spite of an appeal for funds, no organised excavations took place and that the objects were merely collected from the workmen by various local people. At least five local worthies were concerned. The owner of the heath, the Rev. E.R. Benyon, who lived at Culford Hall, only heard of the cemetery following the discovery of the stone coffin and many of the antiquities had already been dispersed; after which he directed that further finds were to be given to the Bury Museum. Joseph Warren, a collector and dealer from Ixworth, records in his Journal for 1876 that prior to that, John Gwilt of Icklingham, and the Revd. Samuel Banks of Mildenhall, as well as himself, had material from the site. The account of the cemetery, set out by Samuel Tymms (1853) is concerned mainly with the objects presented to the Bury Museum by the Rev. Benyon. Warren's Journal, along with his collection, was bought by Sir John Evans in 1864 and finally acquired from his son by the Ashmolean Museum, Oxford. Warren's account of the cemetery differs from Tymm's in that he states in two places, (pp.105,110) that there were two iron swords, whereas Tymms asserts that only one had been found up to the time of writing (1852). Some of Warren's collection was given to the British Museum; Bank's collection went to Cambridge, and a few other pieces, including a fine bucket mount, to Thetford Museum via Mr W.G. Clarke, a Norwich antiquary, (d.1925) and a Mr G.O. Read, a Thetford lawyer. The Foster collection at the Cambridge Museum of Archaeology and Anthropology also includes some of Bank's material.

CEMETERY CATALOGUE

In the following catalogue, the Museums housing the material are abbreviated thus: M.H.B.: Moyses Hall, Bury St. Edmunds; B.M.: British Museum, London; C: Museum of Archaeology and Anthropology, Cambridge; A.O.: Ashmolean Museum, Oxford; T: Thetford Museum.

Classes of objects:		
Silver pendants	2	
Roman coins	4	perforated + others
Brooches:		
Up-turned foot type	2	
Cruciform	12	(1 pair)
Square headed	4	
Small-long	18	(1 pair)
Annular	14	(2 pairs)
Bracelets	1	
Finger rings	4	
Girdle hangers	5	
Tweezers	8	
Wrist clasps	8	(sets)
Spiral fasteners	2	
Necklet	1	
Buckets and bucket mounts	5	
'Mounts'	3	(1 pair)
Miscellaneous bronze objects	2	
Swords	2	
Shield bosses	3	
Spears	6	
Arrowheads	2	
Knives	2	
Buckles	5	
Bone pins	3	
*Bone needle	1	
Combs	2	
Comb case	1	
*Comb rough-out	1	
*Bone pin-beaters	2	
*Cut antler tines	2	
Beads	193	
Pots	18	
Miscellaneous objects:		
Iron strike-a-light or purse-bar	1	
Chain fragment	1	
Roman: spoon handle	1	
Brooch	1	
Ear-pick	1	
Stone coffin	1	
	340	+ 4 coins

Note: * denotes objects which may have come from Prigg's trial digging on the settlement site.

1. Objects of bronze.

Fig.256,1. **Brooch,** upturned-foot type, with remains of iron spring. Bow and part of foot faceted, raised square on bow and socket for ring just above spring. Extended foot ending in simple knob. A.O. 1948-260. (Smith 1852, pl.XLIB, 4; Evison 1965, 23-24, fig.10c.)

Fig.256,2. **Brooch,** upturned-foot type with remains of iron spring. Ring at back of bow. Cast in one piece with the rest of the brooch, an iron spring with knob terminals. The foot, with a diminutive terminal, is not so upturned as No.1. Evison 1965, 23-24, fig.10a.)

Fig.256,3. **Cruciform brooch.** Small head plate with two knobs lost, surviving one full-round. Punched dot and semi-circle ornament on head plate and foot. Åberg Group 1, not in Reichstein (1975) but his *Typ* West Stow Heath. A.O. 1909-429.

Fig.256,4. **Cruciform brooch.** Attached, half round knobs, small, heart shaped nostrils. Punched ornament. Probably that figured by Smith (1852, pl.XL, top right); Reichstein (1975), Taf.119,1, unclassified. A.O. 1909-433.

Fig.256,5. **Cruciform brooch.** Attached, half-round knobs, wings nicked above and below; rounded nostrils. Punched ornament. Åberg (1926) Group II; Reichstein (1975) *Typ* West Stow Heath. M.H.B.

Fig.256,6. **Cruciform brooch.** Attached half-round knob; side knobs missing. Heart shaped nostrils. Punched ornament. Probably that illustrated by Smith (1852, pl.XL, bottom left). Åberg (1926) Group II, Reichstein (1975) *Typ* West Stow Heath, Taf 96.1. B.M. Warren bequest, 1856, 5174.

Fig.257,1. **Cruciform brooch.** Attached, half round knob, side knobs missing. Foot with developing scroll nostrils, bow broadening. Åberg (1926) Group III; Reichstein (1975) *Typ* Krefeld-Gellep, Taf 90,2. C.

Fig.257,2. **Cruciform brooch.** Attached, half-round knob, side knobs missing. Plain, stout brooch, pronounced flattening of nostrils. Åberg (1926) Group III. Not included by Reichstein (1975). M.H.B.

Fig.257, 3 and 4. Pair of **cruciform brooches.** Side lappets, developed side scrolls on the nostrils and a downward projecting bar from the centre of the muzzle. Åberg (1926), Group 4. Not classified by Reichstein (1975). (Tymms 1853, fig.8,2.) M.H.B.

Fig.258,1. **Cruciform brooch.** Flattened muzzle with scroll-nostrils and two out-turned bird masks on knob of head plate. Distinct vertical groove on 'forehead' of animal mask. (Smith 1852, pl.XL; Tymms 1853, p.223, No.3.) A.O. 1969-421.

Fig.258,2. **Cruciform brooch,** fragment. Bow with stud and flattened terminals on knobs. Åberg (1926) Group 4b. (Leeds 1971, 27 fig.3,f.) M.H.B.

Fig.258,3. **Square-headed brooch.** Gilt bronze. Perforated head plate with central panel with out-turned masks. Foot-plate pierced with devolved, out-turned beast. (Leeds 1949, 66; No.106, Little Wilbraham Type B.7.) A.O. 1909-929.

Fig.258,4. **Square-headed brooch.** Gilt bronze. Bow with stud. Crudely executed, ornament barely discernable, largely punched dots. (Leeds 1949, 29. No.30; Type A.3) C: Foster Collection.

Square-headed brooch. Gilt bronze, head plate with two quatrefoils and plated discs on foot. Not illustrated. (Leeds 1949, 23, No.18; Type A.3.) C: Foster Collection.

Fig.258,5. Fragment, not recorded by Leeds. A.O. 1909, 31.

Fig.259,1. **Cruciform brooch.** Developed type with exploded humanoid knobs, each with flanking 'bird' masks; 'bird' mask side lappets and terminating in humanoid mask replacing the nostrils. Leeds Type Vf (Leeds 1971, 18, pl.11, E; Tymms 1853, fig.7; Brown 1915, III, pl.XLV,1.) M.H.B.

Fig.259,2. **Cruciform brooch.** Gilt bronze. Developed, florid type with humanoid knobs with flanking 'bird' masks; 'bird' mask side lappets and terminating in humanoid mask with up-turned bird heads. Panelled bow with animal ornament, central stud and pierced with five holes. Triangular plate on reverse of one side knob. Leeds Type VG (1). (Smith 1852, pl. XLI A; Leeds 1971, 19,T.) M.H.B.

Small-long brooches:

Fig.260,1. and 2. Trefoil headed Class a. Serrated edges to lobes. Pair, No.2 broken. (Tymms 1853, 328, pl.VIII, 4; listed by Leeds 1945, 88.) M.H.B.

Fig.260,3. Trefoil headed, Class b, with sub-triangular foot. Punched triangular stamps on head and foot. (Listed by Leeds 1945, 89.) M.H.B.

Fig.260,4. Trefoil headed, Class f, with rectangular lappets. Head plate minus top lobe. Head plate and foot edged with punched dot stamps. (Listed by Leeds 1945, 10,91.) (Tymms 1853, fig.8,1.) M.H.B.

Fig.260,5. Trefoil headed, Class f, simple lappets, crescentic foot. Considered by Leeds to be 'very late'. Not extant but illustrated in Tymms 1853, fig.8,5, reproduced here at larger scale. (Listed by Leeds 1945, 10,91.)

Fig.260,6. Cross potent with crescentic foot redrawn from Smith. (Smith 1852, 166, pl.XL) supposed to be at Moyses Hall; not extant. (Leeds 1945, 93.)

Fig.260,7. Cross potent, sub-triangular foot. Head and foot outlined with punched ornament. Bow heavily ribbed. Not listed by Leeds. A.O. 1909, 432.

Fig.260,8. Cross potent, stepped angles, top lobe missing. Punched dots outlining foot. M.H.B. Not listed by Leeds.

Fig.260,9. Cross potent derivative, Leeds Type c. Burnt and distorted, foot badly damaged. Head plate with ring and dot decoration. Not listed by Leeds. M.H.B.

Fig.260,10. Cross pattee derivative, Leeds Type E(ii). Flat crescentic foot. Not listed by Leeds; extends eastern distribution of the type slightly. C.Z16057.

Fig.261,1. Cross pattee derivative, Leeds Type E(ii). Large incised ring and dot motive on head plate; head plate and foot outlined in horse-shoe shaped stamped impressions. Not listed by Leeds. M.H.B.

Fig.261,2. Square head, plain. Long type. Dot and ring ornamentation on head plate and foot. (Tymms 1853, fig.8,3. Leeds 1945, 96.) M.H.B.

Fig.261,3. Square head, plain. Long type. Dot and ring ornament on head plate and foot. (Leeds 1945, 96.) M.H.B. Square head — plain, short type. Listed by Leeds (1945, 98) as in M.H.B. but not extant.

Fig.261,4. Square head, half panelled. (Leeds 1945, 99.) C. Banks Collection, Z16057.

Fig.261,5. Much damaged fragment; traces of basal notches to head plate. Not listed by Leeds. M.H.B.

Fig.261,6. Small-long brooch with damaged triangular foot and panelled head plate with flat knobs recalling cruciform type. Not listed by Leeds. M.H.B.

Fig.261,7. Illustrated by Tymms (1853, pl.8,6) but not now extant. Square head on flat, plain foot.

Annular brooches:

Fig.261,8. Damaged. Flat, with edge nicked. Rivetted, pin through hole. (Smith 1852, pl.XL1,2.) A.O. 1909,922.

Fig.261,9. Flat, broken, rivetted. Pin through hole. Decorated with comma-shaped punch marks. (Tymms 1853, fig.4,1.) M.H.B.

Fig.262,1. Fragment, similar to 1 & 2, but plain. Pin through hole. C. Z204,5,1.

Fig.262,2. Incomplete, pin through hole, ring and dots ornament.

Fig.262,3. Wide flanged, pin through hole type. Edge nicked, panelled design with groups of ring and dot stamps. (Tymms 1853, fig. opp.p.223, no.2; Smith 1852, pl.XL1, 4.) A.O. 1909-428.

Fig.262,4. Incomplete. Wide flange, pin through hole. Horse-shoe shaped stamps outlining edges. (Smith 1852, pl.XL1, 3.) A.O. 1909-422.

Fig.262,5. Clasping pin, double groups of transverse lines dividing face into four. M.H.B.

Fig.262,6. Clasping pin. Transverse lines. C. Banks Coll.

Fig.262,7,8,9. Heavier cut brooches, possibly all from same mould, with transverse lines, interspersed lozenges and a projecting tri-lobed piece behind the pin fastening. Clasping pins. nos. 7 and 8, M.H.B; no. 9, T.

Fig.262,10. Heavier, cast, clasping pin with transverse lines. (Smith 1852, pl.XLI,1.) A.O. 1909-426.

Fig.263, 1 and 2. Pair, heavy, cast with clasping pins. Alternate broad and narrow segments, on one side only. M.H.B.

Bracelets and Rings:

Fig.263,3. Heavy knobbed **bronze bracelet.** T.

Fig.263,4. Plain **bronze ring,** circular section. T.

Fig.263,5. **Bronze bracelet** partly overlapped ends. M.H.B.

Fig.263,6. **Bronze ring**, spiral, two and a half turns. A.O. 1909, 426c.

Fig.263,7. Penannular **bronze ring.** A.O. 1909, 426c.

Buckles: Five buckles survive, of iron and bronze.

Fig.263,8. Flattened oval. C.

Fig.263,9. 'D' shaped. C.

Fig.263,10. Shield on tongue Frankish type. A.O. 1948-261. Possibly associated with brooch with upturned foot. (Evison 1965, p.23-24, fig.10b.)

Fig.263,11. Flattened oval belt plate with three rivets. Bronze. A.O. 1899-428.

Fig.263,12. Bronze, with open triangular plate with backing piece. Buckle loop hinged to back of tongue plate, ? foil inlay.

Leeds (1945, 66-68) mentions three buckles, one with rectangular plate, plus Style I, another with a triangular plate and a third with foil inlay, possibly no.12.

Girdle hangers:

Fig.264,1. Bronze with traces of iron suspension ring. Open-armed type. Decorated with stamped triangles and semi-circles. (Akerman 1855, pl.XXXIX,2.) The same piece seems to be illustrated in Tymms 1853, fig.5,1 and also earlier in the same volume, opposite p.223, no.6. This second, alhough not mentioned in the text, appears with two other West Stow objects as exhibited by Warren, both of which are now in the Ashmolean, Oxford. Illustrated also by Smith (1852, pl.XXXIX, no.1). A.O.

Fig.264,2. Bronze, with transverse hole for suspension ring. Open armed type. Decorated with stamped armulets. (Smith 1852, pl.XXXIX, no.1.) A.O. 1909-418.

Fig.264,3. Probably bronze, with dot in circle ornament. Not extant. Redrawn from Smith 1852, pl.XLIB, no.1.

Fig.264,4. Iron. Illustrated by Tymms 1853, fig.2,6; but not now extant.

Fig.264,5. Iron, fragment of ? pair. Redrawn by Tymms 1853, fig.2,5.

Tweezers:

Fig.264,6. Bronze, incised lines along blades. M.H.B.

Fig.264,7. Bronze, plain. M.H.B.

Fig.264,8. Bronze, deep longitudinal lines. M.H.B.

Fig.264,9. Bronze, long, narrow blades with two slides. Punched dot ornament. M.H.B.

Fig.264,10. Bronze, faceted, transverse mouldings and dot and semi-circular stamps on blades. Wire loop. M.H.B.

Fig.264,11. Bronze, expanded square blades with punched dot ornament. Sliding collar. M.H.B.

Fig.264,12. Bronze, longer version of no.11, punched dot ornament and sliding collar. M.H.B.

Fig.264,13. Plain, on loop with pick. Not extant. Redrawn from Tymms 1853, pl.3,6.

Wrist-Clasps:

Fig.265,1. Bronze, cast plates with traces of attachment holes at rear. Plates divided panels with dot ornament. The hook and eye pieces are clearly cast in one with the plate, not beaten to shape. (Tymms 1853, pl.8,8.) *cf* Fig.227,3 for same type, possibly by same maker. M.H.B.

Fig.265,2. Bronze, probably the second pair belonging with no.1. M.H.B.

Fig.265,3. Bronze, bar type with projections at rear. Cast, moulded edge, holes for attachment. (Tymms 1853, pl.8; 7; Brown 1915, Vol.3, pl.LXXVIII, no.5.) M.H.B.

Fig.265,4. Bronze, plate-like with heavier edge. Cast. Punched annulet ornament. C. Z20455 A.

Fig.265,5. Bronze, extended bar with back projection. Cast, double 'eye'. Two square panels with quatrefoil ornament, punched triangular stamps. C. Z204558.

Fig.265,6. Bronze. One and a half pairs curved, cast plates with rear projecting attachment loops. Crude spiral ornament in panels. Gilt. C. Z204550.

Fig.265,7. Bronze. Pair cast triangular end plates from suites of wrist clasps. Crude, decoration derived from animal ornament. Side loops for attachment. C.

Fig.265,8. Bronze, cast plate. At the top, two beaked Style I animals are placed back to back above a forward facing mask. The animals at the top have an intelligible pattern of legs, bodies and tails, but that at the bottom is a jumble of legs and body. C. Z20456B.

Fig.265,9. Two pairs, flat bronze sheet, decorated with dot and ring ornament. Not extant, redrawn from Smith 1852, pl.XLI,5.

Fig.265,10. Bronze wire, loop at one end, projecting spirals, central area bound with wire and flattened. M.H.B.

Fig.265,11. Bronze wire, as above but with a hook at each end. M.H.B.

Necklet:

Fig.266,1. Silver strip, wider in front, with simple 'hook and eye' fastening. Decorated with three diagonal crosses between transverse lines. C: Banks Colln., Z20452.

Silver Pendants:

Fig.266,2. Flat disc, broken at edges, with small central boss. Boss outlined with punched annulets and lines connecting them to the centre. Smaller annulets outline the edge. Probably suspended from loop. (Tymms 1853, pl.4, no.4.) M.H.B.

Fig.266,3. Flat disc with embossed, unintelligible, disjointed animal motif. No suspension loop remaining. M.H.B.

Pins:

Fig.266,4. Bronze. Folded tube with two inturned loops at head. B.M., 1921, 12-7,2.

Fig.266,5. Bronze, broken shaft. Flat, pierced head above three rings. A.O. 1909-428b.

Fig.266,6. Bronze, complete, plain shaft with pierced, flattened head. A.O. 1909-428b.

Fig.266,7. Bronze, incomplete, two groups of rings, on shaft and immediately below flattened head. Unpierced. A.O. 1909-428b.

Miscellaneous Bronze objects:

Fig.266,8. Tube with two collars. ? armlet.

Fig.266,9. Fragment of 'figure of eight' chain link.

'Mounts':

Fig.266,10. Bronze, cast with three holes and weak mouldings. Upper hole worn and larger than the others, possibly to take loop or handle. M.H.B. K.74.

Fig.266,11. Bronze, cast with faceted sides and transverse mouldings. Terminal with suggestion of animal head. Top bent over to form loop, holding small loop. No rivets, but the terminal is curved inwards

and the upper loop extended downward to form clasp. The narrow space so formed suggests a metal vessel. M.H.B. K.68.

Fig.266,12. Bronze. Pair of cast mounts, half round above and flattened below. Both have transverse loop at 'top' with remains of iron loop or suspension bar, and both have had extensions rivetted on below. Punched annular ornament. (Tymms 1853, pl.5, nos. 4 & 5.) M.H.B. K.2.

Buckets and Bucket Mounts:

Fig.267,1. Fragments of a wooden stave bucket, or tub, with bronze binding and mounts. Originally the vessel was probably about 22cm high and 21.5cm across the bottom, tapering slightly to 20.3cm at the top. The staves are also thinned toward the top, from 8mm at the lowest surviving piece, to 3mm just below the rim. Two horizontal bands survive, one at the rim and another on the body of the vessel, that at the rim decorated with repoussé dots along the lower edge. A further band must have existed closer to the base. These are overlaid by at least two vertical strips decorated with repoussé dots which underlie the two. Although the staves, as they survive, are not all the same width, there must have originally been in the order of twenty-two to complete the circuit. M.H.B.

Fig.268,1. Part of one stave and fragmented bronze attachments. The plain, bifurcated mount ends in two bird's heads, the rivet heads forming the eyes. (Tymms 1853, pl.1,2.) M.H.B.

Fig.268,2. Cast bronze mount with strong Style I terminal heads. Four rivet holes, edges outlined with stamped triangles and dot and semi-circle. T. A.1706.

Fig.268,3. Bronze mount, cast with rivet incorporated at back of stem; terminals missing. Small hole at top. M.H.B.

Fig.268,4. Bronze mount with sub-triangular, open panels. Terminals resembling bird heads with rivets (holes) for eyes. Multiple ring and dot motifs and punched dots on long members.

Miscellaneous objects:

Fig.268,5. Two fragments of a **spoon handle,** probably **bronze,** of Roman type. Not extant, figured in Tymms 1853, pl.3,7.

Fig.268,6. **Iron strike-a-light.** Not extant, figured in Tymms 1853, pl.2,7.

Fig.268,7. Fragment of **iron,** possibly part of figure-of-eight **chain.** Not extant, figured in Tymms 1853, pl.2,4.

Fig.268,8. Fragment of **bronze** Roman **brooch,** inlaid with enamel. B.M. 1865-4-8,23.

Fig.264,13. **Pick** not extant. Redrawn from Tymms 1853, pl.3,6.

Fig.268,9. **Bronze 'scoop',** twisted shank. Roman type. M.H.B.

Fig.269. **Stone coffin,** overall length 6ft 3½in, with angled shoulders and tapering towards feet, found without lid, 'about fifteen inches under the surface, with a few bones, of small size, probably those of a youth or a female, with half a bronze clasp and one or two pieces of iron ...' (Tymms 1853, p.319, pl.1.) Barnack limestone. M.H.B.
Note: A large fragment of similar limestone was found in the settlement, (below, p.141). This could be part of the lid.

Shield Bosses:

Two are illustrated in Tymms' account, but three survive at Moyses Hall Museum, Bury St. Edmunds.

Fig.270,1. Low squat cone with distinct ridge on the carination. Large button at top. Probably Tymms' 1853, fig. 2,2. M.H.B. K.48.

Fig.270,2. Low cone, with deep neck merging into flange. Not illustrated in Tymms' account. M.H.M. K.48.

Fig.270,3. Low curved cone type, button missing. Probably Tymms' 1853, fig. 2,3; also Evison 1963, fig. 12g.

Knives:

Fig.270,4. Long, straight backed. A.O. 1909-430.

Fig.270,5. Straight backed, pinted. A.O. 1909-430.

Swords:

Proc. Suffolk Inst. Archaeol. I,(1853), 319 No longer extant. Described as having been found with a shield boss, a spear head, fragments of two coffers or pails (Figs. 271,1; 272,1) two elongated fibulae, two clasps, two flat rings and some beads. Presumably two graves represented. Warren 19th century, July 8th 1863. 'Two long swords ... of iron' both mentioned as being in Bury Museum. No longer extant.

Spears:

All the accounts of the cemetery mention spears. One is illustrated in Tymms' account and five survive in Moyses Hall Museum, Bury St. Edmunds. All those surviving have been classified by Swanton and are listed in his Corpus. (Swanton 1974.)

Fig.271,1. Type E.1. length 17.1cm, incomplete. M.H.B. K.48 (relatively early).

Fig.271,2. Type E.1(?) length 21.6cm, incomplete. M.H.B. K.48 (relatively early).

Fig.271,3. Type H.2. length 22.9cm, incomplete. M.H.B. K.48 5th-6th century.

Fig.271,4. Type D.1. length 25.1cm, incomplete. M.H.B. K.71. *c.*6th-7th century.

Fig.271,5. Type J. length 29.2cm, fullered. M.H.B. K.72.

Fig.271,6. Type E.3. length *c.*44.8cm. Not extant. Illustrated in Tymms 1853, pl.1,1.

Arrowheads:

Two are mentioned in Tymms' account; (1853,320) one each in the collection of Warren and Benyon. Neither are now extant.

Beads: (Figs.275-276)

Large numbers of beads are mentioned by both Tymms (1853) and Warren (19th century); 193 are extant in the various museums holding West Stow material. They are all disassociated. Both Tymms and Warren record that amber beads were 'very numerous'; Warren, that they were 'rotten with age'. Tymms mentions that jet beads were very rare, that one was in the Benyon collection and another had been seen by Warren. Warren recorded one crystal bead, one fine pentagonal bead of blue glass, nearly one inch long and three quarters of an inch in diameter; one very large green glass bead inlaid with white and one black, inlaid with white. The beads are described and discussed in detail, with a typological list, by Vera Evison (below,p.71).

Combs and Comb Cases:

Fig.272,1. Single sided, composite; low curved back. Incomplete. Three iron rivets, *c.*2½ teeth to 1cm. Only one tooth segment survives, and is of unusual length, projecting from the back of the connecting plates. The edges of the connecting plates and the tooth segment have diagonal nicks; the connecting plates are outlined with double incised lines with a band of incised ornament between, consisting of double diagonal crosses, centred on the rivet heads, with groups of four double ring and dot ornament between. A.O., 1852, 1909-426.

Fig.272,2. Single sided, composite; low curved back and base. Incomplete. Ten tooth segments survive, with 5 teeth to 1cm, secured by four iron rivets. The connecting plates are convex in section and decorated in panels, with groups of double ring and dot ornament and lozenges of multiple incised lines each with one double ring motif. M.H.B.

Fig.272,3. Long, curved plate of antler or bone, triangular in section. This would seem to be an unfinished connecting plate for a comb of the type described above. Although in the Moyses Hall Museum with the cemetery material it very likely came from the settlement as there is evidence to suggest some small scale digging there by Henry Prigg in the 1860s. M.H.B.

Fig.272,4. Comb case. Two thin plates, with one long and two end separator segments; iron rivets along the case and two at each end. The main area of decoration defined by an oblique line at each end of the panel, and on both sides. The decoration within these oblique lines consists of clusters of single ring and dot motifs, each with one double ring and dot, alternatively reversed along the length of the case above a band of horizontal lines. At each end of the opening the upper edges of the connecting plates and the end separator segments are shaped. M.H.B.

Miscellaneous:

Fig.272,5. Incomplete **bone needle.**M.H.B.

Fig.272,6. Antler tine **handle,** hole for rivet dot and ring decoration. M.H.B.
The following four items are, with the no.3 above, all likely to have come from Prigg's small excavation on the site of the settlement.

Fig.272,7,8. **Antler tines,** cut and trimmed. M.H.B.

Fig.272,9,10. **Bone pin-beaters.** M.H.B.

The Pottery:

Fig.273,1. Sub-biconical urn, wide-mouthed form. Dark brown/black surfaces; burnished. A.O. 1929-79.

Fig.273,2. Globular bowl with short, everted rim. Gritty, brown to black surfaces, burnished. A.O. 1932-882.

Fig.273,3. Rounded vessel, black surfaces with 'chaff' visible, burnished. Birmingham Museum, on loan from A.O. 1932-881.

Fig.273,4. Globular urn with tall neck. Light brown to black surfaces, originally burnished; 'chaff' visible. M.H.B.

Fig.273,5. Globular urn with higher shoulder than No.4. Red to brown surfaces, originally burnished. M.H.B. (Page 1911, Vol. I, pl.IV; Tymms 1853, pl.1.)

Fig.273,6. Hemispherical cup with vertical rim, hard, dark brown to black surfaces. A.O. 1909-434.

Fig.273,7. Splay sided bowl or cup. Coarse, sandy fabric, grey surfaces. Hole in base. Birmingham Museum, on loan from A.O. 1932-883.

Fig.273,8. Hemispherical cup with vertical rim. Grey fabric with patches of brown and black. A.O. 1932-884.

Fig.273,9. Small bowl with out-turned rim. Smooth, reddish brown to black surfaces. A.O. 1932-885.

Fg.273,10. Tall, straight sided vessel. Brown to black surfaces, originally burnished. M.H.B.

Fig.273,11. Small shouldered bowl. Dark grey surfaces. Birmingham Museum, on loan from A.O. 1932-886.

Fig.273,12. Small bossed bowl with hollowed neck. Four hollow bosses. Light brown patchy surfaces, 'chaff' visible. Originally burnished. M.H.B. (Page 1911, Vol. I, pl.IV; Tymms 1853, pl.1.)

Fig.273,13. Small, hemispherical bowl with Type 3 rustication. Brown to black surfaces. A.O. 1932-887. (Smith 1852, pl.XLIB,1.)

Fig.273,14. Small, hemispherical bowl with Type 5 rustication. Reddish brown surface, originally burnished. M.H.B.

Fig.273,15. Globular urn with short, upright rim. Smooth, gritty brown fabric. Upper zone of crude chevrons with included small triangles. Lower zone of spaced groups of curved lines to base. M.H.B.

Fig.274,1. Sub-biconical urn. Brown surfaces. One row of Group 7C stamps on shoulder. M.H.B.

Fig.274,2. Small globular urn. Dark brown surfaces, burnished. Illington/Lackford potter; two stamps. A.O. 1909-435.

Fig.274,3. Sub-globular urn. Reddish-brown surfaces, burnished. Illington/Lackford potter; three stamps. M.H.B.

THE SLAGS by Fiona Macalister

The remains indicate small scale iron working, the slags being principally of two types, smithing slag and fuel ash slag. Much of the smithing slag is magnetic due to the presence of hammer scale. Evidence of the fuel used is found in both fuel ash and smithing slag, in the form of small pieces of wood and charcoal, the quantity being relatively substantial in Pit 142. Some samples are plano-convex indicating that they formed when the slag collected at the bottom of the hearth, others are in the shape of a small bun, e.g. No.2246, Ditch 137 or an irregular 'puddle', No.1668, WH 4, L2. Some indicate that the hearth was not cleaned out and slag collected on top of slag which had already cooled.

Although there is a little ironstone and corroded iron oxide lumps there is no real evidence to suggest that smelting was carried out at the site.

Table 3: Fuel ash slag and smithing slag.

1. **Fuel Ash Slag:**	WH 4/5. L2.	SFB 66. NE 5.
	SFB 42. NE 6.	SFB 68.
	SFB 49, SE 3.	Ditch 101. Late.
	SFB 64.	Ditch 137.
	SFB 66. NE 2.	WH 3. Post-hole 792.
2. **Smithing Slag:**	WH 4. L2.	Ditch 137.
	WH 13. L2.	Ditch 162.
	SFB 24. Post-hole fill.	Ditch 204. Mid-Sax.
	SFB 26.	Ditch 254.
	SFB 34/5.	Pit 58.
	SFB 34/5.	Over Pit 64 + I/L potter.
	SFB 45. NE 1.	Pit 141.
	SFB 49. SE 1.	WH 5. Pit 142.
	SFB 64. SW 2.	Pit 202.
	SFB 65. SW 1.	WF 5. Feature 22.
	SFB 66.	WG 9. SFB 46.
	Ditch 54. Mid. Sax.	WH 4. Hearth.
	Ditch 76.	WH 4. Hearth.
	Ditch 91.	WH 4. Hall 5.

THE TEXTILES by Elisabeth Crowfoot

Only very small textile traces were found on any of the objects from West Stow so far examined. Obviously it would be a very lucky chance if anything of this nature were preserved on small-finds from hut sites, particularly when these are iron. All the fibrous matter present was replaced, and in deteriorated fragments the cellulose bundles in replaced vegetable matter sometimes give an impression of threads; but in some cases spinning twist was clear enough for it to be obvious that objects had been in contact with spun yarns rather than vegetable matter such as grass or flower stems. Preservation is, as usual, clearer on bronze objects.

The following objects were found to have replaced fibrous matter:—

Silver:

SFB 2, Fig.33,1. Disc. Tiny scrap Z spun thread on back.

Bronze:

SFB 12, SF 252. Not illustrated.
SFB 12, Fig.60,3. Miniature axe. Deteriorated textile, Z spun; also wood.
SFB 12, SF 283. Not illustrated.
SFB 12, Fig.60,7. Key.
SFB 12, SF 329. Not illustrated.
SFB 17, Fig.79,1. Buckle or brooch. Traces all over, textile Z,Z.

SFB 18, Fig.82,3. Pin. Traces Z spun textile.
SFB 49, Fig.167,5. Bronze object. Covered with possible textile, and wood or grass traces.
SFB 55, Fig.185,1. Wire. Traces deteriorated textile.
L2 over SFB 12, Fig.238,2. Bracelet.
L2 over SFB 12, SF 220. Not illustrated.
L2 over SFB 12, SF 240. Not illustrated.
Hollow 1, Fig.227,2. Bracelet.
Ditch 203, Fig.229,24. Applied brooch. Small fragments replaced textile round applied edge. Z,Z, probably plain weave (tabby).
WG 10, L2. Fig.238,27. Tweezers. Twist of fine 'threads' are a corrosion product.
WF 4, L2. SF 396. Not illustrated.
WF 3, L2. Fig.238,5. Strip. Fine Z threads.
SFB 6, Fig.42,2. Brooch with animal head. Traces textile, spinning Z,S, on front and on back round pin.
L2 over SFB 22. Fig.237,7. Small cruciform brooch. Traces Z threads on front, on back coarse Z threads (like a bead thread) round the pin head.

The traces on all the above objects are consistent with their having been wrapped up in rag, or dropped among underfloor debris including pieces of woven material. On three brooches, however, the remains suggest that they were buried still pinned to garments.

Iron:

SFB 3, Fig.36,4. Knife. Wood on blade, and on the wood, deteriorated Z spun textile.
SFB 12, Fig.60,14. Nail. Textile, Z, along it.
SFB 12, Fig.60,15. ? Wristclasp. Traces ? textile and wood.
SFB 12, Fig.60,5. ? Buckle and plate. Deteriorated textile round it, ? from belt.
SFB 27, Fig.108,3. Knife. One Z thread near tip.
SFB 27, Fig.108,2. Knife. Some Z threads in textile traces.
SFB 34, Fig.121,5. Fragments. Probably deteriorated textile.
Hall 2, Fig.11,4. Key. Z and S threads.
Hollow 3, Fig.228,2. Links. Threads, ? S ply , through junction of links.
Ditch 76, Fig.229,6. Buckle. Traces Z threads.
Over SFB 21. Not illustrated.
WD5, Layer 2, Fig. 242,37. Plate. Replaced textile, c.5.0 X 3.5 cm. Spinning Z/Z, in clear areas ?warp fine singles, weft pairs, count 12/8 prs per cm, ?half-basket weave; elsewhere, ?both pairs, ?pattern (Cf.Mucking Gr. 939, Wakerley Gr.85, float patterns), but too damaged to see.
WG 2, Layer 2, Fig.243,7. Hook. Patches with Z spun threads.
WG 5, Layer 2. Not illustrated.
WG 5, Layer 2, SF 1291, Fig.237,11. Iron pin from brooch. Area 0.8 x 0.8cm, possible tablet twists, lying S, count 7 twists on 0.5cm.
WH 4, Layer 2, Fig.241,6. Fragments. ? wool fibres replaced by blunt end.
WH 5, Layer 2, Fig.241,7. Iron object. Z spun textile lying in fold.

Apart from the probable tablet-twists on brooch SF 1291, which would indicate a garment — i.e. possibly a burial — the traces would be consistent with general débris on which the objects lay when lost or discarded.

Bone:

SFB 59, Fig.197,.6. Comb. Traces fine textile, Z,S, replaced on nail heads on both sides, suggesting it was probably wrapped.

Some of the pointed pieces of iron found on this site may be teeth from wool-combs. The structure of these tools did not change much in form from Viking days till the 18th century (Hoffman 1964, 284-6, 381-3, figs.117, 118, 119 and Roth 1909, figs.4,5); they were used in pairs; each comb consisted of one or two rows of pointed iron teeth, sometimes straight, sometimes slightly curved, fixed on to a narrow wooden base; the handle is fixed at right angles to the centre of the row of teeth. The teeth are generally *c.*10-12cm long, those in one row sometimes shorter than the other, and have been found in Scandinavian burials detached from the base. David Brown has suggested this use for a collection of long iron points found at Shakenoak, Oxfordshire, now in the Ashmolean (Brodribb, *et al* 1972, 115).

The following objects are worth considering in this context:—

SF 206, WE 5, L2, Fig.242,17; SF 218, Hollow 1, Fig.227,7; SF 222, Hollow 1, Fig.227,9; SF 248, WE 5, L2, Fig.242, 18; SF 268, Hollow 1, Fig.227,13; SF 272, SFB 12, Not illustrated (? nail); SF 649, SFB 23, Fig.97,2; WF 6, L2, Fig.242,24; SF 789, WE 7, L2, Fig.242,25; SF 1200, WH 4, L2, Fig.240,6; SF 1202, WH 4, L2, not illustrated.

They are all iron points, those complete varying in length from 9.0-12.0cm; where the whole object seems to be preserved, one end is flattened and spread, and in two cases (SF 206, SF 649) there are traces of wood, presumably from the base, across this end. On two (SF 1200, SF 1202) there are replaced wool fibres.

In view of the textile industry at West Stow, wool-combs seem a probable source for some of these objects, and perhaps other broken pointed iron fragments.

THE PRESENCE OF FOSSILS IN SFBs, DITCHES AND PITS

A total of fifty-four fossils were recovered from SFBs; all but one were small spherical sponges. Although common in local gravels such a number must represent selection, especially as four SFBs have from four to nine examples.

Table 4. Fossils in SFBs, pits and ditches.

Feature	Fossil	Total
SFB 27	3 small sponges, 1 medium sponge.	4
SFB 34	3 small sponges, 1 medium sponge.	4
SFB 34/35	2 small sponges.	2
SFB 35	3 small sponges, 1 large sponge.	4
SFB 39	1 small sponge.	1
SFB 42	1 small sponge.	1
SFB 44	1 small sponge.	1
SFB 45	3 small sponges.	3
SFB 47	Heart urchin.	1
SFB 49	8 small sponges, 1 medium sponge.	9
SFB 50	1 medium sponge, 2 small sponges.	3
SFB 52	1 small sponge, 1 medium sponge.	2
SFB 54	2 small sponges.	2
SFB 55	1 small sponge.	1
SFB 56	1 medium sponge.	1
SFB 57	1 medium sponge, 1 small sponge.	2
SFB 59	2 small sponges, 1 medium sponge.	3
SFB 62	6 small sponges.	6
SFB 66	3 small sponges.	3
SFB 69	1 small sponge	1
		Total 54

Table 4: continued

Pit 491	1 small sponge.	1
Ditch 76	4 small sponges.	4
Ditch 101	1 small sponge.	1
Ditch 162	1 large sponge, 1 medium sponge, 1 small sponge.	3
Ditch 211	1 small sponge.	1
		Total 10

Note: Large: 3.5cm +; medium: 2.5-3.5cm; small: up to 2.5cm.

Table 5: Distribution of fossils with recorded positions in SFBs.

Position in SFB	SFB Nos.	Post Type	Fossil Totals
NE quadrant	34	? 6 or 2	3
	45	6	2
	49	6	1
	52	6	1
			Total 7
NW quadrant	35	6	1
	50	6	1
	52	6	1
	56	6	1
	57	2	1
	59	6	2
	66	2	1
			Total 8
SE quadrant	27	2	4
	34	? 6 or 2	2
	42	2	1
	47	6	(urchin) 1
	49	6	3
	54	?	2
	59	6	1
			Total 14
SW quadrant	44	6	1
	49	6	3
	50	6	2
	55	6	1
	57	2	1
	66	2	2
			Total 10
	39	2	

Six-post Total No. =: 26
Two-post Total No. =: 10

Conclusions:

Nineteen SFBs have recorded fossils, evenly distributed in the SE, NW and SW areas of the site, with rather less in the NE, but not significantly so. The majority of the fossils occur in six-post SFBs; twenty-six sponges plus one urchin, against ten sponges from two-post types and seven sponges from SFBs with uncertain post count. They occur mainly in sixth-century SFBs with only one fifth, two in the fifth/sixth and one in a late sixth/seventh century SFB. Hall groups 1, 2 and 7 are poorly represented. It would seem likely that the interest in collecting them would have been for gaming counters, of which a number, in other materials, have been recorded on the site. It is worth noting that a female grave at Westgarth Gardens, Bury St Edmunds, (Grave 48) had a fossil echinoid held in the left hand (unpublished).

THE BEADS

by Vera I. Evison and Valerie Cooper

In the following comments the beads from the settlement site and from the cemetery are considered together. It has been possible to examine each bead from the settlement individually. The cemetery beads, however, are housed in various museums, and our knowledge of these beads is not based on personal examination but is limited to information provided by drawings accompanied by indications of colours. The initials preceding identifying numbers, B, C, O and T, in the following indicate the museum in which the beads are housed at Bury St Edmunds, Cambridge, Oxford or Thetford. Most of the beads are of glass, but the few that are not are listed below, and are made of jet, crystal, amber and shale. A total of 78 beads were found in the settlement and a total of 193 are known from the cemetery. The types found in both are set out in Table 7.

Jet beads were known in the Roman period, although they also occur sparingly in Saxon graves, and annular jet beads similar to Fig.275,2, occur at Holywell Row (Lethbridge 1931, fig.3,5) and a faceted jet bead similar to B16 (Fig.275,1) occurred in Grave 13 at Dover, Kent. The shale beads may also be Roman (Brodribb *et al* 1968, fig.15,1; Brodribb *et al* 1973, fig.22,10). The long cylindrical bead with combed trails (SF 1415, Fig.276,25) is a type recognised as being an import from abroad during the Roman period (Guido 1978, 102).

Amongst monochrome beads, the small, sharply biconical beads (B20, Fig.275,34) are recognisable forms of the Roman period (Guido 1978, fig.37,12). At West Stow they are in blue, green and red, and according to Guido those in blue and green seem to belong mostly to the late fourth century, although they also occur earlier. At West Stow they occur in the cemetery only.

The monochrome beads include in their number other forms which occur in the Roman period, but they are also known from the early Saxon period, e.g. Guido 1978, fig.37, forms 2, 3, 4, 5, 8 and 13:

Form 2: drawn, segmented cylindrical, B4, B19 (Fig.275,30).
Form 3: drawn, globular, B9, B22, O9, T15, T16 (Fig.275,18,19).
Form 4: drawn, cylindrical, C18, O3, T13 (Fig.275,31).
Form 5: short cylindrical, B6, B7, O7, T18, SFs 3086, 276, 344, 359, 930 (Fig.275,25,26).
Form 8: long pentagonal, O15, SF 1493 (Fig.275,32,33).
Form 13: small biconical, B2, B3, B20 (Fig.275,34).

The translucent dark blue annular beads (C19, Fig.275,20) correspond to Guido's Group 6, ivb, pl.II No.11. This type appears in the British Isles about the sixth century BC, and persists until the eighth century AD (Guido 1978, 66-8). According to Guido, Saxon beads of this group are very common in seventh-century graves. They do, however, occur in fifth-century graves, e.g. Howletts grave 16, Mucking grave 355 (Evison 1978, 263-4, fig.2,c-j). A

fused lump of glass found in the settlement appears to be a clump or necklace of these beads melted together (SF 1053). Apart from this clump, there were fifteen in the cemetery, and seventeen in the settlement.

'Globular' is a term used here to describe beads with a height similiar to the diameter, so that it does not coincide with the criterion adopted by Guido of 'beads whose height is more than half their diameter' (Guido 1978, 69), which includes some beads here termed annular. Globular, monochrome examples appear in both Roman and Saxon contexts. There are nine globular, drawn beads from the cemetery (B22, T15 (Fig.275,18,19)), a type which occurs in this country from the second century AD to the sixth century (Boon 1966).

The melon form of beads was known in both the Roman and Saxon periods. Guido, however, has established that in the Roman period in Britain they are almost entirely restricted to the first and second centuries (Guido 1978, 100 fig.37, 21-22). As noted by Guido, they reappear in post-Roman contexts, and they may be noted as early as the fifth century in Anglo-Saxon graves. The melon beads at West Stow are all roughly made (O34, O37 (Fig.275, 36,35)), and are therefore probably Anglo-Saxon rather than Roman.

Turning to the beads which can be distinguished as mainly or exclusively Saxon, amber beads are present in both the cemetery and the settlement. Usually these are roughly smoothed to no particular shape, but there are a few distinctive forms; disc, cube and globular. (O11, B14, C25 Fig.275,6,8,7.) They no doubt belong to the period of Anglo-Saxon occupation from the fifth century to about the middle of the sixth century. A disc bead of crystal from the cemetery (O16 Fig.275,4) is a type found in a seventh-century grave at Winnall, and in sixth-century graves at Holywell Row (Meaney and Hawkes 1970, fig.9; Lethbridge 1931, fig.3, 4;fig.15,5).

A distinctive monochrome type is the barrel-shaped or biconical orange bead of matt, porous appearance (C8, Fig.275,23). This type occurs on the Sarre necklace accompanied by amethyst beads, a composite disc brooch and coins no earlier than *c.*AD 625. A fragment of one occurs in the settlement and three in the cemetery.

The polychrome beads include two with the entire surface covered with reticella or twisted threads (SF 1973, T11, (Fig.276,4,5). Bead T11 is biconical with three circumference rows of yellow, red and black twisted threads. The settlement bead SF 1973 is cylindrical with reticella threads of yellow and green. This belongs to Koch's series 48. 1-14, (Koch 1977, Farbtafel 4) and both are no doubt imports (cf Swanton 1963-6, fig.8, 4 and 6). A bead of this type from Droxford is broken, so that it is possible to see how the threads are laid over a core of other material (Aldsworth 1978, fig.36,59). Three cemetery beads in bad condition are long, with square section and appear to be red beads with green and yellow reticella trails (O28, Fig.276,3). One other, disc-shaped in brick-red, has crossing trails of twisted yellow and green (C7, Fig.276,1). At Schretzheim the reticella beads occur in the part of the cemetery dated to the second half of the sixth century, and this time span is confirmed at the cemetery of Dover, Kent, with a possibility of a slightly earlier or later date.

At Schretzheim polychrome beads with crossing trails or crossing trails and dots occur in *Stufe* 4: AD 590/600-620/30. (Koch 1977, Taf.242.)

Table 6: Polychrome beads: The polychrome beads may be compared as follows:—

	Cemetery or SF Nos	Koch 1977	Comparisons
Trails: stripes	O26, O27 (Fig.276,6)		Philp 1973, fig.55; 526, 528, 529.
	B1, SF 3020, SF 2115, (Fig.276,7,8,9)	42	
Zig-zag	O21 (Fig.276,10)	27.12*	Green and Rogerson 1978, fig.69, grave 7, Jviii.
	O17 (Fig.276,11) SF 1336	27.12	
Crossing trails	C5, T6	33.6*	
	C1, (Fig.276,12)	34.11*	Green and Rogerson 1978, fig.93, grave 56, Avi.
	C14, T4 (Fig.276,13)	34.1	
	T5, SF 596	34.18	
	C13 (Fig.276,14)	34.6*	
	SF 677 (Fig.276,16)	34.6	
	SF 1261, SF 1494 (Fig.276,15)	34.5	
Crossing trails with dots	O24 (Fig.276,20)	20.4*	
	C2	20.1*	
	C3, C12 (Fig.276,18) O29, SF 1300	20.4	Green and Rogerson 1978,fig.65, grave 3, Cv.
	SF 156, SF 1128 (Fig.276,19)	21.3	
	SF 1276, SF 1368, SF 1444		
Dots	O31, (Fig.276,21)	1.16	
	C4, SF 1375 (Figs.276, 23, 24)	24.2	
	SF 452, (Fig.276,22)	7.1*	

* Identical bead. Where there is no asterisk the comparison is close, but not identical in form, pattern and colour.

The form of biconical, green spindle-whorl decorated with combed white trails (O14, Fig.276,26) is rare in this country, but occurs in six graves at Schretzheim (Koch 1977, 85, Taf.15,10; 23,5; 62,14; 75,2; 75,10; 131,1). Three of these graves belong to *Stufe* 2, AD 545/50-565/70, although the other graves are earlier and later.

The beads at West Stow, both from the settlement and from the cemetery, constitute an assortment of types normal in early Anglo-Saxon contexts, and as most of the types occur widespread in England and on the Continent, they are acknowledged to be traded over long distances. Roman beads are forthcoming from both cemetery and settlement, suggesting some close connections in the early period of occupation by the Anglo-Saxons.

Table 7: Bead types from West Stow settlement and cemetery.

	Cemetery	Settlement
Jet	1	1
Shale		1
Amber	51	7
Crystal	1	
Clay	1	
Pottery		1
Glass: Monochrome	91	46
Glass: Polychrome		
Reticella	6	1
Trails: stripes	4	2
Zig-zag	2	1
Crossing trails	19	5
Crossing trails with dots	5	6
Dots	2	2
Combed trails		1
Miscellaneous	10	4
Totals	193	78

A. THE BEADS FROM THE SETTLEMENT:

Jet

1 annular SF 821, WH 4, L2 (Fig.275,2).

Shale

1 disc, flat one side SF 1608 (Fig.275,3).

Amber

3 roughly shaped SF 706, SF 1119, SF 2238 (*cf* Fig.275,5).
2 disc and one fragment SF 3125, SFB 31; SF 277, SFB 12; SF 2196 (frag.) WG 13, L2 (*cf* Fig.275,6).
1 almond shaped SF 1427, SFB 45 (Fig.275,9).

Pottery

1 disc fragment SF 1862, SFB 57 (Fig.275,11).

Glass

(a) Monochrome.

Disc.

2 yellow; SF 1585, WE 10, L2; SF 1645, WG 3, L2; 2 dark blue translucent SF 3085, WB 5, L2; SF 922, SFB 29; 1 dark olive green translucent SF 243, SFB 15 (*cf* Fig.275,13), 1 green SF 2003, SFB 63; 1 dark green SF 471, WF 6, L2; 2 black SF 3087, Hall 7; SF 3116, WB 5, L2; 1 tiny black SF 855, SFB 39 (Fig.275,14); 1 brown SF 3105, WB 5, L2; ½ dark brown SF 2172, SFB 66; 1 colourless translucent SF 2205, SFB 68; 2 colour unidentifiable SF 1414, SFB 45; SF 1781, SFB 56; 1 yellow glossy double SF 766, SFB 27 (*cf* Fig.275,16).

Globular.

1 dark blue green translucent SF 972, SFB 37; (*cf* Fig.275,17); 1 turquoise translucent SF 1169, SFB 44.

Annular.

17 dark blue translucent SF 3064, Hall 7; SF 3066, Hall 7; SF 3081, WB 5, L2; SF 3133, WB 5, L2; SF 3155, WB 5, L2; SF 361, SFB 12; SF 563, WG 6, L2; SF 627, SFB 21; SF 727, D54; SF 744, D15; SF 1010, SFB 38; SF 1197, SFB 44; SF 1594, SFB 54; SF 1595, SFB 55; SF 1814, SFB 57; SF 1893, SFB 61; SF 1920, SFB 61; 1 black SF 289, SFB 12 (Fig.275,21).

Cylindrical.

1 yellow SF 930, SFB 39, ½ light blue SF 276, SFB 15 (Fig.275,25); ½ blue-green SF 359, SFB 15, (Fig.275,26); 2 yellow-green SF 3086, Hall 7; SF 344, SFB 15; 1 coiled, colour unidentifiable SF 1596, unstrat.; 1 white double SF 688, SFB 27 (Fig.275,29); 1 five-sided white SF 1493, unstrat. (Fig.275,33).

Biconical.

½ orange opaque dull SF 3006, SFB 43.

Roughly shaped.

1 yellow SF 3108, WB 5, L2, ? SFB 30.

(b) Polychrome.

(i) Reticella.

Cylindrical.

1 red with yellow and green thread SF 1973, WG 13, L2, (Fig.276,4).

(ii) Trails.

(1) Stripes.

Cylindrical.

1 ? white with green translucent trail SF 3020, WB 5, L2, ? SFB 43 (Fig.276,8). 1 ? white with dark trail SF 2115, SFB 66 (Fig.276,9).

(2) Zig-zag.

Annular.

1 dark blue translucent with white trail SF 1336, SFB 47 (*cf* Fig.276,11).

(3) Crossing trails.

Disc.

1 buff with white trails SF 596, Pit 65 (*cf* Fig.276,12).

Cylindrical.

2 light blue with turquoise translucent trails SF 1261, SFB 37; SF 1494, unstratified (Fig.276,15).
1 light green (originally double) with white trails, SF 677, SFB 26 (Fig.276,16).

Cube.

1 white with light blue translucent trails SF 1315, SFB 47 (Fig.276,17).

(4) Crossing trails with dots.

Disc.

1 light blue with red trails and green dots SF 3156, WB 5, L2;

2 fragments light blue with blue translucent trails and red dots SF 1276, SFB 47; SF 1128, SFB 39 (Fig.276,19).
1 white with blue translucent trails and red dots SF 1444, WE 8, L2;
1 ? white decomposed with blue translucent trails and dots SF 1300, WE 8, L2; 1 dark green with red trails and ? yellow dots SF 1368, SFB 48.

(iii) Dots.

Disc.

1 blue ? translucent with red on white dots SF 452, SFB 16 (Fig.276,22); 1 dark green with 3 white unmarvered dots SF 1375, SFB 47 (Fig.276,24).

(iv) Miscellaneous.

1 cylindrical, swelling in the middle; black with unmarvered, combed red trails; SF 1415, SFB 45 (Fig.276,25).
3 fragmentary polychrome, decoration or colours unidentifiable SF 3099, Hall 7; SF 526, WF 7, L2; SF 1951, unstratified.
1 cylindrical yellow with light green trail inside an ornamented bronze band.

B. THE BEADS FROM THE CEMETERY:

Note: Abbreviations for Museums:
B — Moyses Hall, Bury St. Edmunds.
C — Museum of Archaeology and Anthropology, Cambridge.
O — Ashmolean Museum, Oxford.
T — Thetford Museum.

Jet

a cube with faceted corners B16 (Fig.275,1).

Crystal

1 disc O16 (Fig.275,4).

Amber

8 roughly shaped B10, B11, B13 (Fig.275,5), C23, C24, O8, O12, O13.
5 disc B12, B15, C21, C22, O11 (Fig.275,6).
1 globular C25 (Fig.275,7).
1 cube B14 (Fig.275,8).
36 beads strung in T.

Clay

1 disc flat B27 (Fig.275,10).

Glass

(a) Monochrome.

Disc.

1 yellow C9, 2 light blue T8 + 1 in T, 1 dark blue O23, 4 white O2 (Fig.275,12), T7 (Fig.275,13) + 2 in T, 1 large coiled dark blue O39 (Fig.275,15), 1 white-green O5, 1 dark green T22, 1 yellow double B21 (Fig.275,16), 1 dark blue double T19, 1 brown (originally double) C11.

Globular.

2 blue B17, O32 (Fig.275,17), 5 drawn white-pale green single B9 + 4 in T, 3 drawn double B22 (Fig.275,18), O9, T16, 1 drawn treble T15 (Fig.275,19).

Annular.

15 blue B23, B25, B26, C19 (Fig.275,20), C20, O35, T21 + 8 in T, 2 green, 1 small B24, 1 large O22.

Barrel-shaped.

2 dark blue T14 (Fig.275,22) + 1 in T, 2 off-white T17 + 1 in T, 1 dark green T1, 3 orange opaque dull C8 (Fig.275,23), O1, T2.

Cylindrical.

5 white T9 (Fig.275,24) + 4 in T, 1 light green T18, 2 green B7, O7, 1 black brown B6, 1 long yellow O20 (Fig.275,27), 1 long green B8, 1 double C17, 4 long, rectangular-sectioned light green T12 (Fig.275,28) + 3 in T, 1 square-sectioned grey B18, 1 large five-sided blue O15 (Fig.275,32), 1 roughly-shaped light blue C16, 2 roughly-shaped light green O25, O33, 1 roughly-shaped 'earthenware', with groove round middle C10, 1 drawn green B4, 1 drawn green double B19 (Fig.275,30), 4 long drawn dark blue C18 (Fig.275,31), O3, T13 + 1 in T.

Biconical.

1 blue B2, 1 green B3, 1 red B20 (Fig.275,34).

Melon.

1 yellow O37 (Fig.275,35), 1 light blue O34 (Fig.275,36), 1 mid blue in T, 4 light green T20, T23, + 2 in T, 1 yellow-green O19, 1 green O30, 1 dark red T3.

(b) Polychrome.

(i) Reticella.

Disc.

1 brick-red with crossing trails reticella yellow and green C7 (Fig.276,1).

Cylindrical.

1 red, yellow, green O36 (Fig.276,2), 3 square-sectioned, red, yellow, green C6, O18, O28 (Fig.276,3).

Biconical.

1 with 3 rows reticella yellow, red, black T11 (Fig.276,5).

(ii) Trails.

(1) Stripes.

Disc.

1 mid-blue, white trails O27 (Fig.276,6), 1 dark green, white trails O26.

Cylindrical.

1 blue square-sectioned with darker trail B1 (Fig.276,7), 1 white, trail missing, O6.

(2) Zig-zag.

Annular.

1 black with white trail O21 (Fig.276,10), 1 blue with white trail O17 (Fig.276,11).

(3) Crossing Trails.

Disc.

1 yellow with red trails T5, 1 white with green trails C5, 3 white with blue trails C14 + 2 in T, 1 brown with white trails C1 (Fig.276,12), 2 white double with blue trails T4 (Fig.276,13) + 1 in T.

Globular.

8 red with white trails T6 + 7 at T, 1 red double with white trails in T.

Cylindrical.

1 light blue with turquoise trails C13 (Fig.276,14), 1 roughly-shaped white with green trails O10.

(4) Crossing trails with dots.

Disc.

1 yellow with red trails and dots C3, 2 white with light blue trails and dots C12 (Fig.276,18), O29, 1 brown with white trails and dots C2.

Barrel-shaped.

1 brown with yellow trails and dots O24 (Fig.276,20).

(iii) Dots.

Disc.

1 green with 3 red dots O31 (Fig.276,21), 1 yellow with 3 green unmarvered dots C4 (Fig.276,23).

(iv) Miscellaneous.

1 biconical green spindle-whorl with combed white trails O14 (Fig.276,26).

9 polychrome, shape, decoration or colour unidentifiable B5, C15, O4, O38, T10, T24 + 2 and 1 like T24 in T.

THE GLASS

by Vera I. Evison

The glass fragments have been examined by the late Miss Dorothy Charlesworth as well as myself, and a complete list bearing some comments, together with the fragments themselves, have been deposited at Moyses Hall Museum. Most of the fragments belong to the Roman period, and those selected for description, comment and illustration here are a few unusual Roman pieces and those which belong to the fourth to sixth century.

Of the total of 139 fragments, about sixty are sufficiently distinctive to be recognisable as parts of Roman vessels, and some may be allocated to specific dates ranging from the first to the fourth century. There are twenty fragments of window glass, mostly light green or colourless and one blue-green, and some of these have been allocated to the third or fourth century by Miss Charlesworth. There is also part of a light green twisted rod. Two bronze pins with glass heads, a game counter, an imitation jewel, three glass finger-rings, and glass vessel fragments of the fourth to sixth century are discussed below.

The twisted rod (SF 3106, Fig.277,1) is a type common in Roman contexts, but a fragment has also been found in a mid or late Saxon context at Southampton (Isings 1957, 94-5, Form 79; Hunter 1980, fig.11,2,6).

There are the remains of two bronze pins, each with a head consisting of a translucent, light green glass globule impaled on the end of the pin (Fig.277,2,3). A better preserved bronze pin with a dark glass head was found at Shakenoak, (Harden 1971, 106, no.152, fig.45,69) and the glass head in that case was not pierced right through. A bronze pin with a globular glass head was also found at Cheddar, where it was not dated (Rahtz 1979, 280, fig.94,81). A pottery ball with a perforation in one side only (SF 2034, Ditch 249, unillustrated) was found in the West Stow Settlement and may have formed the head of a similar pin. The game-piece, (SF 1743, Fig.277,4) is also a type found at Shakenoak (Harden 1971, 106, fig.45, 62-5).

The small glass disc with intaglio design (SF 1062, Fig.277,5) belongs to the series of Romano-British imitation gem-stones discussed by Henig (1974, 164ff). Their stylistically degenerate figures have much in common with those on the radiate coinage. These glass gems were produced during the third century in the lowland zone of Britain, as may be seen from Henig's distribution map, figure 3. The shape of the West Stow gem is now roughly similar to the type No.8 in figure 1 of Henig, i.e. a flat top, inward bevel and roughly concave base. The present shape of the base, however, is due to the fact that the glass has been chipped away at the lower edges, and the original shape must have been as No.4, i.e. flat top, and inward bevel both above and below, the lower angle of the flat base being chipped away so that the gem could be set into a concave cell. The intaglio design of a stick figure seems closest to Henig's Type 3, and it fits in well with the distribution of this type which is found only in a triangular area between the Wash, the Bristol Channel and the Thames mouth (Henig 1974, fig.3). Designs of a similar figure holding something in each hand occur on the gems in Henig's catalogue (Henig 1974, pl.XVII, 549-552).

Two of the finger-rings (SF 619 and SF 1279 Fig.277,6 and 7) are probably made from the same translucent dark blue glass. The form of circular bezel and plano-convex hoop was no doubt the same for the fragment SF 619 as for the better preserved SF 1279, and the designs in relief of single profile head and two profile heads have some affinity with each other. The third ring is also related in form and in the design in relief of a head and shoulders profile, although the glass is different, being black in appearance, and the bezel slightly larger (Fig.277,8). An opaque yellow glass finger-ring was found at Shakenoak (Harden 1971, 106-7, fig.45,70) and one in London of yellow and white with a green bezel, (Liversidge 1973, 143-4, fig.56,g) but these are dissimilar in form and design, and in general glass finger-rings do not seem to have been very common.

Amongst the remains of vessels, five base fragments belong to the cone beaker type with kicked, just stable base which was in production at the end of the fourth century, two light green, two light olive green and one colourless (Fig.277,9-13). (Isings 1957, 137-8; form 109c; Harden 1969, pl.XIE; Harden 1975, fig.198,11,12,14.) Six rim fragments are cupped, broken off and ground, leaving a sharp finish, and belonged to a cup or bowl (Fig.277,14-19) (Harden 1975, fig.197,9) light yellow-green, colourless and yellowish. Both of these forms, the sharp-rimmed cup and near-stable cone, were particularly common at the end of the fourth century and beginning of the fifth century. They could therefore have belonged to the Romano-British inhabitants or to the earliest Germanic settlers.

The only vessel fragments which can with certainty be attributed to the Anglo-Saxon period are the four brown fragments which all look very much alike in colour (Fig.277,22-25). Of these, two are parts of claws from a claw-beaker. One of these, at least, was decorated with a tooled trail, and the other claw fragment could have belonged to the same beaker. The two wall fragments (Fig.277,24,25) do not appear to be fragments of the same beaker as the quality of the glass and the style of applying the trails are dissimilar. All the four pieces, however, must have belonged to the claw-beaker type which was

manufactured in the middle to second half of the sixth century (Evison, 1982, Type 3c), probably in Kent, although it was a luxury article traded to other counties and countries abroad.

A large percentage of the glass fragments are therefore small, abraded pieces of vessel and window glass of the Roman period. Some of the near-stable cones and sharp-rimmed cups or bowls must belong to the earliest part of the Anglo-Saxon settlement, particularly the cone bases which were found in SFB 12 and 15 and the sharp rim in SFB 2. There may be other fragments which belong to Anglo-Saxon vessels, but they are not sufficiently large or sufficiently distinctive to be allocated specifically to the Roman or Saxon period e.g. the everted rim fragment SF 1029 (Fig.277,20). The kicked base with horizontal trails may be part of a squat jar (SF 2092, Fig.277,21). The evidence for the whole period is slight, but suggests that the community was able to acquire this luxury commodity at the beginning of the settlement, either in the role of rapacious conquerors or well-paid mercenaries, that this was followed by a less prosperous period, and that funds for imported items become available again in the middle to second half of the sixth century.

Glass descriptions.

Fig.277,1. WB 5, L2, SF 3106. Light green twisted glass rod, broken at each end. L 2.5cm, diam 4mm.

Fig.277,2. SFB 19, SF 567. Globular green glass head, diam 6mm impaled on bronze pin fragment L 13mm.

Fig.277,3. SFB 59, SF 1909. Globular green glass head, diam 6mm impaled on bronze pin fragment, total L 10mm.

Fig.277,4. WG 10, L2, SF 1743. Small game counter, flat, rough base and domed top, in dark ?green glass of black appearance. Diam 13mm.

Fig.277,5. SFB 46, SF 1062. Circular imitation gem in translucent light green glass for inset into a metal finger-ring. The top is flat and sides bevelled inwards; this shape must have been repeated below, but the edge has been chipped away to make a roughly convex base. Intaglio design of figure advancing right with ?shield in left hand and weapon in right. Diam 10mm.

Fig.277,6. D113, SF 1279. Part of translucent, dark blue glass finger-ring, a circular bezel continues into the plano-convex hoop the other end of which is pressed into the back of the bezel. The design on the bezel is in relief, two heads facing inwards, a male in profile on the left and a three-quarter face ?female on the right. Diam of bezel 10.5mm.

Fig.277,7. over SFB 21, SF 619. Fragment of the (?circular) bezel of a translucent dark blue glass finger-ring; the other end of the hoop can be seen pressed into the back of the bezel. The design is in relief, a male profile head to right.

Fig.277,8. WD 3, L2, SF 3058. Circular bezel and part of hoop of finger-ring in dark glass with black appearance; the end of the plano-convex hoop is pressed into the back of the bezel. The design is in relief, a head and shoulders profile to left. Diam of bezel 14mm.

Fig.277,9. SFB 52, SF 1629. Pushed-in base of cone, punty mark; light olive, bubbly, 2mm thick.

Fig.277,10. SFB 38, SF 993. Pushed-in base of cone, no punty mark; light yellowish, good quality, abraded glass, less than 2mm thick.

Fig.277,11. SFB 15. SF 269. Pushed-in base of cone, punty mark; very light green glass, surface brown and decomposed. 2mm thick.

Fig.277,12. WE5, L2, SF 204. Pushed-in base of cone, punty mark; light green, small bubbles. 2.5mm thick.

Fig.277,13. WH4, L2, SF 1231. Side-base fragment of cone; light green bubbly glass, weathered outer surface. 1.5mm thick.

Fig.277,14. SF 133. SFB 2. Cupped rim, ground flat of cup or bowl; colourless, few small bubbles, surface weathered and iridescent, 3mm thick.

Fig.277,15. SFB 21, SF 774. Cupped rim, ground flat; light green, few small bubbles, surface weathered and iridescent. Wall 2mm thick, increasing to 4mm at edge of rim.

Fig.277,16. SFB 52, SF 1687. Cupped rim, ground flat, zone of faint wheel-incisions at edge of rim and another lower down; light green, small bubbles, abraded. 3.5mm thick.

Fig.277,17. WF 13, L2, SF 1988. Cupped rim, ground flat, light olive green, good quality glass; 2mm thick.

Fig.277,18. Hollow 1. SF 215. Cupped rim, ground flat, light olive green, no bubbles, surface in good condition. 2mm thick.

Fig.277,19. SFB 46, SF 1437. Cupped rim, ground flat, zone of faint wheel-incisions below rim; light olive bubbly, some iridescence; 1.5mm thick.

Fig.277,20. SFB 40, SF 1029. Everted rim, thickened and smoothed, light green bubbly glass; wall 1mm thick. ? Roman or Saxon.

Fig.277,21. SFB 64, SF 2092. Pushed-in base, wall decorated with horizontal trailing; light olive green, few small bubbles, iridescent; wall *c.*1mm thick, increasing to 2.5mm at kick. Possibly a squat jar.

Fig.277,22. SFB 50, SF 1424. Top of a fairly flat claw of a claw beaker with a vertical trail, tooled diagonally, applied down the middle; brown bubbly, iridescent.

Fig.277,23. D16, SF 98. Top of a flat claw with drawing line visible and part of wall of vessel. There is no trace of an applied trail, and as there is a width of 2.2cm preserved, it is possible that there was no trail; brown, few small bubbles, iridescent.

Fig.277,24. SFB 46, SF 1305. Fragment of vessel wall decorated overall with horizontal trails, fairly widely and evenly spaced and slightly melted in; brown, very few small bubbles, inner surface weathered, iridescence; less than 1mm thick.

Fig.277,25. D43, SF 173. Wall fragment, part of which is covered with applied horizontal trails, closely and unevenly spaced; brown, many small bubbles, iridescent. 1mm thick.

THE ROMAN COINS

by Peter Curnow

The interim report on the first three seasons work, 1965-8 contained a note on the coin finds up to that date (West 1969,15), i.e. 123. This total represented less than 50% of the total now listed. The remarks made then, however, remain equally valid today and the following comments are substantially the same as those printed in the interim report but with the statistics brought up to date and a few additional comments.

The 289 Roman coins are of considerable interest by virtue of their number, their chronological distribution and their condition. The relatively large number found on a site which does not appear to have

had an immediate Roman predecessor, although the Roman settlement at Icklingham is in the immediate vicinity, suggests active foraging and, as a result, provides a good sample. The range of the coinage is perhaps surprisingly close to what might be found in excavating a substantial Roman site. Several coins, in the context of site finds, are of some numismatic interest; an Antoninianius struck by Carausius for Diocletian (No.51), a VICTORIA AVGG of Siscia, 341-2 AD (No.156), a SPES REIPVBLICAE of Constantinople, 355-61 AD (No.186), and the GLORIA ROMANORVM (No.187) from Trier is a representative from a mint with a small production at this time, while a VICTORIA AVGGG with two victories from Rome, 383-7 AD, is not a particularly common find on English sites. The coin list is summarised on the histogram (Fig.278) and illustrates the chronological distribution of the coins.

As indicated in the interim report, when dealing with the smaller collection, slight differences from what might be expected from a Roman site, post-Roman damage apart, indicate the secondary nature of this collection. Thus the pre-330 fourth-century coinage is well represented numbering 26 (9%) and including some folles in fine condition. The high ratio of regular Fel Temp Reparatio (fallen horsemen) to irregular copies 8:13 is worth noting; indeed the number of regular Fel Temp issues is quite substantial, for in addition to the Fallen Horseman coins there are four examples of the earlier and larger Hut and Galley types.

The coinage of the House of Valentinian I is also plentiful, consisting of 64 AE.3.: 22.5% a high proportion which may be partly accounted for by the known late occupation of the neighbouring Icklingham site, although judging from the numbers of the coins from these issues which have been subject to secondary usage they were clearly highly collectable items by the Anglo-Saxon occupants of West Stow. No doubt many were relatively easily retrieved from the upper levels of the Roman site; they were also of a convenient size for piercing and suspension.

The AE 4 issues of the House of Theodosius vary widely in numbers from site to site and only form the predominant coinage in a fairly rare group of sites. Here they are represented by sixteen pieces, and, in contrast to those from the preceding period, show no identifiable sign of post-Roman damage, although their small size may partially account for this.

Whilst any of the points mentioned above would be perfectly consistent with coin finds from a primary Roman site with particular high points of activity and hence coin loss, or a particular circumstance involving the loss of a number of pieces in good condition, the combination of all of them does strongly suggest that the collection is a secondary one; one involving some selection of both issues and condition.

The condition and degree of wear of the latest issues, notably the Theodosian AE 4 issues VICTORIA AVGGG and SALVS REIPVBLICAE, of which the latest is one of the former struck for Honorious AD 394 +, is such as would be consistent with wear undergone solely during the Roman period. The numismatic evidence can in no way be used to suggest that there was a sub-Roman or post-Roman money economy at West Stow, on the contrary, the evidence indicates that the coins were collected for other reasons.

The table below lists the coins which show signs of damage and which may reasonably be regarded as post-Roman. The high proportion of coins of the House of Valentinian I (364-78) which are affected should be noted. This — the last Roman AE 3 coinage of any numerical significance to be found in Britain — would not unnaturally commend itself for reuse as ornament or charm.

The presence of Roman coins (Kent 1961,18) and other objects is not uncommon on occupation-sites and in cemeteries of the pagan Saxon period. Piercing of coins, presumably for suspension, is also characteristic. A further feature is the abrading on a number of examples — sometimes the coins are rubbed smooth, but on others the surface had been abraded or filed. The filing down of coins for use as weights has been suggested and this may explain some, but can hardly account for them all. The admittedly slight evidence for chiselling and nicking, if it is in fact post-Roman, may have been to check the metal of the coin. The number of coins from West Stow with parts of their edges nicked or chiselled off, is, I think, greater than would be accounted for by normal striking faults, or Roman coin clipping.

At Abingdon (Leeds 1936) the cemetery produced a small collection of five coins in one grave, two in another, and two, or perhaps three instances of pierced coins. Of the five-coin group two had been polished or rubbed flat and subsequently abraded. All the examples were from female graves.

At Verulamium (Stead 1969,45) a female inhumation-grave yielded a work-box which had spilled a plated denarius of Vespasian in fine condition and two-victories type AE 3 of Constans. A second grave, also with a work-box, yielded three coins, perhaps in a purse, consisting of a fine sestertius of Marcus Aurelius, a denarius of Gordian III, also in good condition, and a corroded Antonine as; these coins had surely been prized collectors' items.

A substantial Anglo-Saxon cemetery at Portway East, Andover, excavated by M. Dacre and A.M. Cook (report in preparation), yielded thirteen coins which were pierced, including one pierced twice and one pierced and abraded. Unfortunately, at Mucking evidence of Roman coins from Anglo-Saxon contexts is difficult to define due to the multi-period nature of the site (i.e. including Roman) and the resultant danger of interpretation of features and residual finds.

At Lackford, (Lethbridge 1951) which lies on the opposite bank of the River Lark from West Stow and Icklingham, the extensive cremation-cemetery produced at least three groups containing Roman coins, a pierced irregular Gloria Exercitus (1 std) in an urn containing child's bones (49.579), two pierced coins in an early sixth-century group (50.71), and another sixth-century group containing a pierced AE 2 (50.127).

Thus, while there is a general tendence to hoard Roman objects (not just coins, but chatelaines, toilet implements, brooches, etc.) there appear to be several motives involved in the collection of coins — for ornament, as collectors' pieces, as counters for games, and as weights or discs.

WEST STOW: COIN LIST 1

	Obverse	Date	Denom	Refs RIC	Condition	Site Coin No.
1	Domitian	81-96	As or Dup	—	VW	2098
2-3	Trajan	98-117	Sest, Dup	663, —	W, VW	2136, 2120
4-5	Antoninus Pius	138-161	Sest [2]	635*, 874	F-W*, G ½p	531, 458
6	Faustina I (Ant Pius)	141-161	Sest	1143	F-W	177
7-8	M Aurelius	161-180	Sest [2]	— [2] (1 ? M Aurel)	W, W	454, 1626
9	Lucilla (M Aurel)	*c.*160-9	Sest	1732*	F-G* Nicked	1738
10	Julia Domna	196-211	Den	—	Corroded	743
11-15	Gallienus	259-268	Ant [5]	157,163,177,208 + 1	W,VW,W,W,W	751,1318,577,3791, 1412
16-17	Postumus	259-268	Ant [2]	87,311	W,W	1145,3787
18-24	Claudius II	268-70	Ant [7]	45,47,54,109,110, [2] + 1*	W,W,W,F-W,F-W, ½p W,VW*	1421,817,1715,792, 466,67,111
25-27	Posth Claudius II	270	Ant 2 + 1 irregular	261,266*, cf.261*	W,F*,Corroded* Broken or Cut 2/3 Coin; Part Coin;?cut	2119,1928,1374
28-34	Victorinus	268-70	Ant [7]	67,114 [3],118 [2], + 1	G,F-W [2], G/W, G, VG, Corroded	3771,1710,2239, 3666,1097,3777,1789
35-41	Tetricus I	270-3	Ant [7]	90,100, cf.100 100/1,127,132,138	F,G-W,W,F-W,W-F, F-W,W	514,1469,3760,1142, 942,1166,1213
42	Irregular Tetricus I	*c.*270	—	cf.146	F-W	1856
43-44	Tetricus II	270-3	Ant [2]	272,272-4	F,F/W	3784,1860
45	Irregular Tetricus II	*c.*270	—	cf.254*	W-F* ½p	3770
46	Tetricus I or II	270-3	Ant	? Spes type	W	2065
47	Aurelian	270-5	Ant	6,	VG	3776
48-50	Carausius	287-93	Ant [3]	482, S|P, 878, + Pax* type	G,F, -*, A ½p + hammered	469,2116,1759
51	Diocletian (Carausius)	287-93	Ant	p552 No.9(Rare)	W	1659
52-53	Allectus	293-6	Ant [2]	33 S|A / ML, 111 S|P / C	F,G	2110,332
54	Uncertain Radiate	*c.*270	Ant	? Tetricus I	W	1049
55-61	Irregular Radiates	*c.*270	Ae3[3], Ae4 [1* + 2], +1 Minim	—	W,G,W*,F,W*, G,VW Cut, A(Rev)	1554,3774,3768, 1497,1548,408, 1748

	Reverse Type	Date	Mint	Obverse	Refs and Mint	Condition	Site Coin No.
62-63	GENIO POPVLI ROMANI	301-3	Lyons	Diocletian	RIC VI Lyons 108a*	G* P	1515
		302-3	Trier	Diocletian	RIC VI Trier 524a*	G* A	1496
64-67	GENIO POP ROM	310-12	London	Maximinus	RIC VI London 209b	G	2014
		313-4	London	LI	RIC VII London 3	F	103
		310-3	Trier	Maximinus LI	RIC VI Trier 845a, 849b*	VG, G/F* A	455,956
68-70	SOLI INVICTO COMITI	312-3	London	CI	RIC VI London 281*	VG/G* A (Rev)	955
		313-4	London	CI	RIC VII London 10*	F* A (Ob)	923
		317-8	Arles	CI	RIC VII Arles 145	F-W	1155
71-73	VICTORIAE LAETAE	319-20	London	CI	RIC VII London 157	G	2097
	PRINC PERP	319	Trier	CI	RIC VII Trier 213*	F* P ? A	1736
		318-20	—	CI	—	W	3761
74	Irregular VICTORIAE LAETAE	*c.*320	—	Crispus	—*	F-W* P	1508
75-76	VIRTVS EXERCIT	320-1	London	CII	RIC VII London 190	G	194
		320-1	Trier	CI	RIC VII Trier 292	VG	810
77	DN CONSTANTINI MAX AVG	321	Aquileia	CI	RIC VII Aquileia 85	VG	799
78-84	BEATA TRANQVILLITAS	321-3	Lyons	Crispus [2]	RIC VII Lyons, 133, 204	G,G	725, 1581
			Trier	CI [5]	RIC VII Trier 303[2] 305*	VG, G/F-W, VG P2	1445.818,1558
					368,369	G, G	347,413
85-86	CAESARVM NOSTRORVM	323-4	Trier	CII	RIC VII Trier 433	F	184
		321-4	Siscia	CII	RIC VII Siscia 176	VG	647
87	SARMATIA DEVICTA	323-4	Trier	CI	RIC VII Trier 435	VG	1037
88-97	GLORIA EXERCITVS	330-5	Trier	CI [2], Cs II	LRBC 64,67,79	G,G,G-F	2076,1570,338
	(2 Stds)		Lyons	CI,CII [2]	186,189,208	VG/G, F,F	548,509,2135
			Arles	CI, CsII	367,370	G,G	709,327
			—	CI, H of CI	—* —*	W/VW*, F* P + Rev flattened (? Over-struck), N	493, 3756
98-99	Irregular GLORIA EXERCITVS	*C.*330-5	—	cf CI, CII	cf 63*, 180*	G*, W* ?N A (Rev)	2024,1154
100-107	Victory on Prow	330-5	Trier	C'opolis [8]	cf 52*, cf 52, 59 [2]	F*, G-W, VG, F/G A(Obv + Rev)	499,1499,549, 56
			Lyons		cf 185,206	G,Corroded,	234,760
			Arles		372*	VW* P	611
			Siscia		751	G-W	3758
108-109	Irregular Victory on Prow	*c.*330-5	—	C'opolis [2]	—* AE4—	G/W* G-W N	1187,3767
110-116	Wolf + Twins	330-5	Trier	U R [7]	26*,51,58,76, 85 + 1	G/W*,W,G, G,G,F-W P2 A? (Rev)	164,64,1752,1383 1146,1
			Lyons	U R	200	G	2112
117-118	Irregular Wolf + Twins	*c.*330-5	—	U R [2]	— AE4 cf 51	F*,F N	80/17,934
119-131	GLORIA EXERCITVS	335-41	Trier	CII [2], CsII, Cn [2]	93[2],94,127*,133*	F,F,G,W* Cut 2/3	280,695,20,1655
	(1 std)					VG* Coin, N	3763
			Lyons	CII,CsII,Cn	241*,242,251*	F,W/F,F* Clipped, ?Clipped,	3760,1760,3782
			Arles	C!,CII,—	392*,400,398—402	F-G*,F/G,W Edge Clipped	1095,558,1513
			—	— [2]	— [2]	F-W,F-W	1101,127

	Reverse Type	Date	Mint	Obverse	Refs and Mint	Condition		Site Coin No.
132-133	Irregular GLORIA EXERCITVS	*c.*335-41	—	cf.CII cf Cn	— AE4 [2]	F-G, VG		1656,3775
134-136	PAX PVBLICA	337-41	Trier	H [3]	104,128,128*	F-W,G-F,W-F*	Attempted piercing	3762,481,937
137-40	PIETAS ROMANA	337-41	Trier	Th [4]	113,120, cf 105 [2]	G,W,G,F		22,1842,1517, 2035
141	Irregular PIETAS ROMANA	*c.*337-41	—	type of Th	— AE4	F		251
142	Uncertain Constantinian	*c.*337-41	—	—	Pietas or Pax type	Corroded		1161
143-155	VICTORIAE DD AVGG QNN	341-8	Trier	CsII[4] Cn[8]	137*,137a*,138*, 139,140*,142a, 146*,148*,148 150[2*]155	G-W*,F*,W*, VG,VG*,W F-W*,F-G*, G-W,G/—*, G-F*,W	P3,N,A + ?Clipped,C, N,N,P2, N?	1509,1111,1132, 931,1078,3786, 255,441,687, 765,2101,3785
			—	CsII or Ch	—	W (frag)	—	1013
156	VICTORIA AVGG	341-8	Siscia	CsII	788	G		180
157	FEL TEMP REPARATIO (Galley)	*c.*348-50	Trier	Cn	LRBC II 41	VG		442
158-160	FEL TEMP REPARATIO (Hut)	*c.*348-50	Lyons	Cn [3]	179,180 + 1	VG,G,W		2013,1017,18/25
161	FELICITAS REIPVBLICAE	350-1	Trier	Mg	50	VG		1195
162	Irregular FELICITAS REIPVBLICAE	*c.*350	cf Trier	type of Mg	cf 51 (but Ob 1F)*	G*	P	1433
163	VICTORIAE DDNN AVG ET CAE	351-3	Lyons	Dec	230	G-W		1492
164	Irregular VICTORIAE DDNN AVG ET CAE	*c.*351	cf Trier	type of Mg	cf 56*	F-G*	PN	660
165-172	FEL TEMP REPARATIO (Fallen Horseman)	353-4	Lyons	CsII [2]	253, 253/6	G-VG,G-W		387,1610
			Arles	CsII [3]	455 [1* + 2]	G*, G-F, G	½p	350,1651,1167
			—	CsII [3]	— [2* + 1]	F*, ?W*, F	C,P (V worn or flattened)	1516,685,488
173-185	Irregular FEL TEMP REPARATIO	353	—	type of CsII	— [13]: 2 large AE3 (1*) 2 overstrikes (one on Gloria Exercitus LRBC1 89, one on uncertain H of Const.I). + 4 small AE3 (2*). 5 AE4(3*)	F-W,F*,F-G, F,F,F,W*,W* W,F*,W*,W*, W	N,P (broken) Part Coin, P,C	1592,80/26,802 1957,490,5, 2000,2237,419, 2111,1685,3781, 3780
186	SPES REIPVBLICAE	355-61	Constan-tinople	CsII	20530*(no branch)	W*	A	586
187-208	GLORIA ROMANORVM	365-75	Trier	Vn	cf 78	G		1173
		364-78	Lyons	VI [2] G[3] + H of VI	cf 287,300*,cf 302, 331/5*, 364* —*	F,G-F*,F,F* W*,W*	C,C, ?Clipped, Obv A (C or broken off)	176,2036,2102, 820,1144,871
		364-78	Arles	VI[5] Vn[2]	479*,479/84,cf 479, 489,512,525*, cf 526	W*,W-F,W-F, W-F,G*,W	P2,N P2N	146,1165,1602, 1180,1164,3773, 62
		364-78	Lyons or Arles	VI,[2] Vn	—*, —*, —,	F*,F*,W	C ?Clipped	110,2075,3783
		364-78	—	Vn, + 4	— [2 + 3*]	W,VW*,VW, VW*,W*	P2,P,N	1534,1551,309, 788,1962
209	Irregular GLORIA ROMANORVM	364	—	H of VI	—(Diam 14-15mm)	F-W		791
210-244	SECVRITAS REIPVBLICAE	364-78	Trier	Vn	82p	G-W		1967
			Lyons	Vn	276p	F-W		1713
			Arles	VI[5].Vn[8] H of VI[2]	cf 477/8*, 481/5*, 483,cf 483*,486, 501,501*,508*,527, cf 527/8*,528,528*, 528/32,cf 528/32[2*]	VW*,G*,VG, W*,F,G,F*, F*,F,VW*, G-VG,F-W*,G, ?F*,W*	N,C,P, N,C + flattened,C, A,? N,P1	2232,104,3772, 776,378,1168, 1930,1417,211, 3790,702,1179, 1623,360,3789
			Lyon or Arles	Vn	—	Corroded		1934
			Rome	Vn	713/9*	F/G*	Cut flan ⅓ coin (AE4 size)	904
			Aquileia	VI,Vn[2]	1021*,1027*,1030	G*,G*,G-W	C,P2½	39,3779,1518
			Siscia	VI,Vn [3]	1393*,1395*(but mm ends VE)1416p*,1427*	G*,G-VG*,G-W* F*	P2 + A after P,C, Obv A,P	674,1007,1514 1390
			—	VI [2], Vn[2] H of VI [5]	— [5 + 4*]	F-W,FW*,F-W, VW* Corroded, F,W*,W,VW*	P 1½,AN, P2,PC	6, 3755,1012, 3778,1535,1541, 214,3757,3759
245-259	GLORIA NOVI SAECVLI	367-75	Arles	G [15]	503[2],503[2*],517 517/23*,523a,529 [5], 529 [3*]	W,F-G,F* (part coin) F*, W,G*,W,F-G, W,W,W-G, W-F, W-F*,W*, G-W*	?C,P2 P P + N, ?N,CN	1631,2202,893, 713,1420,372, 1181,662,697, 1338,1512,1946, 1811,1857,3765
260	House of Val I	364-78	—	—	—	V corroded		3764
261	VOT XV MVLT XX	378-83	—	G	cf 144	G-F		241
262	VICTORIA AVGGG (2 Victories)	383-7	Rome	TI	787/92	W-F		1520
263-271	VICTORIA AVGGG	388-402	Lyons	H of TI	389/96	G		1061
			Arles	VII,TI,Ar,H of TI	563,565/8,566/9, 562-72	F,W,W,F-W		1158,2066,1352, 542
			—	Ar[2], Hon, H of TI	— [4]	G,W-F,F,W		1510,1079,1777, 565
272-277	SALVS REIPVBLICAE	388 +	? Rome	TI [2]. Ar	cf 797 [2] cf 798	CG, G-W, F		1075,1654,941
			Constan-tinople	Ar	2185A	F		1557
			—	H of TI[2] [4](1 + 1*?H of VI, + 1* + 1) [8](1 AE3, 1 AE4, 2 AR frag, 4 AE frag)	cf 796 etc	VW,W		1446,3788
278-281	Uncertain 4th century					W,VW*,VW*,VW	P2,A	414,328,1198, 2844
282-289	Uncertain							302,1660,1054, 1287,870,126, 250,1511

REFERENCES

Unless otherwise indicated references to coins are as follows:

to A.D. 324 R.I.C., I-VII. from A.D. 324 L.R.B.C., 1,II.

Abbreviations for fourth-century Emperors are as follows:

C.I. = Constantine I
C.II = Constantine II
Cr. = Crispus
Cs.II = Constantius II
Cn. = Constans
Mg. = Magnentius, Dec. — Decentius
V. = Valentinian I
Vn. = Valens
G. = Gratian
V.II = Valentinian II
T.I. = Theodosius I
Ar. = Arcadius
Hon. = Honorius

Condition:
VG = Very Good
G = Good
F = Fair
W = Worn
VW = Very Worn

See below (List 2) for abbreviations for Post Roman damage to coins.

Coin List 2: POST ROMAN DAMAGE TO COINS

		Date	Piercing	Clipped or Chiselled Edge	Nicked Edge	Abrading	No. on Coin list 1
1	Antoninus Pius (Sest)	138-161	P(½)				4
2	Lucilla (Sest)	c 160-169			N		9
3	Claudius II	268-270	P(½)				24
4-5	Posth Claudius II	270		C+			26
		270		C+			27
6	Irregular Tetricus II	c 270-3	P(½)				45
7	Carausius	287-293	P(½)			A^x	50
8-9	Irregular Radiate	c 270		C			57
						A(R)	58
10-11	Genio Populi Romani	301-3	P				62
		302-3				A	63
12	Genio Pop Rom	310-3				A	67
13-14	Soli Invicto Comiti	312-3				A(R)	68
		313-4				A(O)	69
15	Victoriae Laetae Princ Perp	319	P			?A	72
16	Irregular Victoriae Laetae Princ Perp	c 320	P				74
17	Beata Tranquillitas	321-3	P(2)				82
18-19	Gloria Exercitus (2 stds)	330-5	P^x(R.flattened?,overstruck coin?)				96
		330-5			N		97
20-21	Irregular Gloria Exercitus (2 stds)	c 330+			?N		107
		c 330+				A(R)	108
22-23	Victory on Prow	330-5				A(O+R)	100
		330-5	P				106
24	Irregular Victory on Prow	c 330			N		108
25	Wolf & Twins	330-5	P(2)			A?(R)	110
26	Irregular Wolf & Twins	c 330			N		117
27-31	Gloria Exercitus (1 std)	335-41		C+			122
					N		123
				C			124
				C			126
				C			127
32	Pax Publica	337-41	P (attempted?)				136
33-39	Victoriae Dd Augg Q Nn	341-8	P(3)				143
					N		144
				?C		A	145
				C			147
					N		149
					N		150
					?N		152
40	Irregular Felicitas Republicae	c 350	P				162
41	Irregular Victoriae Dd Nn Aug et Cae	c 351	P		N		164

		Date	Piercing	Clipped or Chiselled Edge	Nicked Edge	Abrading	No. on Coin list 1
42-44	Fel Temp Reparatio (f.h.3)	353-4	P(½)				167
				C			170
			Px				171
45-50	Irregular Fel Temp Reparatio (f.h.3)	353+	P		N		174
			P				179
							180
				Part coin			182
			P				183
				C			184
51	Spes Reipublicae	355-61				A	186
52-62	Gloria Romanorum	364-78		C			189
				C			191
				?C			192
						A+(O)	193
			P(2)		N		194
			P(2)		N		199
				C			201
				?C			202
			P(2)				205
			P				207
					N		208
63-82	Securitas Reipublicae	364-78			N		212
				C			213
			P				215
					N		218
				C^x			219
				C			221
						A	223
					?N		225
			P				226
				C			228
				(clipped to AE 4)			
				C			229
			P(2½)				230
			P(2)			A	232
			(Abraded after piercing)				
				C			234
						A(O)	235
			P(1½)				237
					N	A	239
			P(2)				242
			P	C			244
83-88	Gloria Novi Saeculi	367-75		?C			247
			P(2)				248
			P				250
			P		N		257
					?N		258
				C	N		259
89-90	Uncertain 4th century		P(2)				279
						A	280
			36	26	22	18	90 Coins

+ Cut or Broken part coin
x Hammered or otherwise flattened

THE SAMIAN POTTERY FROM ANGLO-SAXON CONTEXTS

by Brian Hartley and Brenda Dickinson

The samian listed in this volume only includes those pieces found in Saxon features (mainly the SFBs). Some of these pieces must derive from the period of use of the site for pottery manufacture, but a high proportion of them are dated mid to late Antonine or late second to third century and can be regarded as a part of the late Roman assemblage. There are fifty-two unstratified sherds from Layer 2 which will be published with the Roman material in a subsequent volume, but this also includes ten sherds of East Gaulish samian which could have been acquired by the Anglo-Saxons from a late Roman context, bearing in mind the likely survival of samian as 'antique' tableware into the fourth century. The samian from the closed contexts of the SFBs includes one mid-first century piece, eight pieces of late first or first half of the second century, five Central Gaulish post AD 150 and seven East Gaulish. It is worth noting that of the four fragments of the Form 37 bowl, two were found in SFB 49 in WH 4 and two in WG 13, close to the Romano-British kilns, suggesting that in this case these may have been picked up on the site rather than imported.

IDENTIFICATION OF SAMIAN WARE

by B.R. Hartley and B.M. Dickinson

Origin	Comment
SFB 6	Ludowici form Tg, C.G? Mid to late Antonine.
SFB 7	A fragment of an enclosed vessel, with 'cut-glass' decoration, E.G? Late second or third century.
SFB 8	Form 38, E.G. Late second or third century.
SFB 16	Form 33, G.C. Antonine.
SFB 24	Form 31, E.G. Late second or third century.
SFB 34/35	Form 31R, C.F. Mid to late Antonine.
SFB 37	Form 15/17 or 18, S.G. Flavian.
SFB 42	Form 18/31R, burnt, C.G. Hadrianic or early Antonine.
SFB 44	Dish fragment, E.G. Late second or third century.
SFB 45	Form 37, C.G. The ovolo (Rogers 1974, B 143) and Minerva (Déchelette 1904, 77) were both used at Lezoux by Cinnamus ii, *c.*AD 150-180.
SFB 46	Form 33, E.G. Late second or third century.
SFB 48	Form Curle 15, C.G. Early to mid Antonine.
SFB 49	i) Form 33, C.G. Antonine. ii) E.G. scrap, Antonine or later. iii) (with two further sherds, from layer 2, WG 13 and the 19th-century disturbance in WG 13). Four fragments, two joining, of a bowl of form 37, with freestyle decoration, C.G. Since the ovolo (Rogers 1974, B 14), used earlier by Sacer, and all the figure-types appear on signed bowls of Criciro v, the raised mark below the decoration probably belongs to his signature CR retr. The panther (Déchelette 1904, 799), lioness (Déchelette 1904, 793) and serpent on rock (Déchelette 1904, 960 bis) are on a bowl from Verulamium (Period IID; Hartley 1972), D98) The goat (Déchelette 1904, 892) is on a bowl from London (GH; Stanfield and Simpson 1958, pl.118,13) *c.*AD 135-155.
SFB 50	i) Form 27, burnt, stamped ALBVCI by Albucius ii of Lezoux (die 6j). This stamp has apparently not been recorded before, but Albucius's site recorded and his decorated ware both suggest the range *c.*AD 150-180. ii) Form 18/31-31, C.G. Hadrianic.
SFB 56	A fragment of a gritted samian mortarium, C.G. *c.*AD 170-200.
SFB 63	Form 18/31R, C.G. Early or mid Antonine.
SFB 67	Dish fragment, C.G. Probably Trajanic or Hadrianic.
SFB 69	Form 31, E.G. Late second or third-century.
Ditch 54	Cup, C.G. Hadrianic or early Antonine.
Ditch 76	S.G. fragment, Flavian or Flavian Trajanic.
Pit 79	Form 36 flange, E.G. Late second or third century.
Hollow 2	Form 29, S.G. The decoration of the lower zone, tendrils with fan-shaped leaves on either side of a vertical wavy line, can be closely paralleled on a bowl from London stamped by Labio (Knorr 1952, Taf.32B). On the whole, this type of decoration tends to be Neronian rather than later, *c.*AD 55-70.
Feature 22	Drilled for rivet, Form 31, C.G. Antonine.
Hearth	Form 35, S.G. Flavian.

THE LATE ROMANO-BRITISH POTTERY

by Judith Plouviez

A total of 376 sherds were examined, of which 155 were found in the SFBs, 19 in other features, and the remainder in layer 2 or unstratified. The vast majority of the sherds fall into three broad fabric types and so the material has been classified by fabric and then by form within each fabric group.

OXFORD WARE

Red fabric, sometimes having a grey core, with a red colour coat apart from white coated mortaria. Forms, which are mainly bowl types, are identified with those in Young 1977. They are mostly common fourth-century types, already known to be distributed in East Anglia. At Icklingham it seems that Oxford ware occurred almost exclusively in the latest identifiable phase of occupation, probably mid to late fourth-century (West & Plouviez 1976, 88).

Forms (Fig.279)

OX 1	Mortarium, yellowish white slip. Young 1977, WC 7. From SFB 66. Also in SFBs 15, 23, 58; pit 58; layer 2 .
OX 2	Flanged bowl imitating Dr.38. Young 1977, C 51. From layer 2. Also in SFBs 6, 8, 21, 36, 41, 45, 49, 53, 59, 64; Hearth 6, WH 4; layer 2.
OX 3	Flanged bowl as OX 2 but with trailed white slip decoration on the flange. Young 1977, C 52. From SFB 50. Also in SFB 64, SFB 30; layer 2.
OX 4	Necked bowl. Young 1977, C 75. From SFB 36. Also in D15; layer 2.
OX 5	Necked bowl as OX 4 with trailed white slip decoration on body. Young 1977, C 77. From Hearth 6, WH 4.
OX 6	Sherd with herringbone stamp, probably from necked bowl as OX 4. Young 1977, C 78? From layer 2.
OX 7	? Flagon, inturned rim fragment. From SFB 66.
OX 8	Mortarium base, red colour coated type. Burnt. Reused piece with a smooth flattened upper face, much of the gritting lost; lower part of footring worn and scratched. From SFB 42. Sherds of red mortaria identifiable as Young C 97 also found in SFB 18; layer 2.
OX 9	Unillustrated. Sherds of straight sided bowls, Young C 81, 82 in layer 2.

NENE VALLEY WARE

White or yellowish fabric with occasional ironstone inclusions. Colour coated in red, brown and black. Bowl and flagon types are commonest but there is a high proportion of bases (NV 10) many of which must be from jar and beaker types not otherwise represented in this assemblage. Almost all the pieces are of fourth-century types.

Forms (Fig.279)

NV 1 Bowl, plain, straight or slightly convex sides with a flat base. This example has two holes drilled in the sides after firing. From SFB 36. Also in SFBs 48, 52, 68; layer 2.

NV 2 Bowl, straight sided with a flanged rim and a flat base. From SFB 55. Also in SFB 45; D139; layer 2.

NV 3.1 Hemispherical bowl, flanged, imitating Dr.38. From layer 2.

NV 3.2 Bowl with footring groove, probably from an imitation Dr.38 or similar form. This example is decorated with white slip dots on the interior. From SFB 13. Also in SFB 53; layer 2.

NV 4 Unillustrated. Mortarium, white fabric with angular black ironstone grits, usually a reeded rim. In Pit 65; layer 2.

NV 5 Flagon, widened mouth with a slight flange below a rounded rim. Strap handle(s). From layer 2.

NV 6.1 Flagon, flanged neck. Single handle scar under flange. From SFB 19. Also in SFB 52.

NV 6.2 Flagon neck as 6.1. Reused piece with a near horizontal cut below the flange, a rough worn upper edge and some wear on the edge of the flange. The whole surface is very chipped. From layer 2.

NV 7 Wide mouthed jar or bowl with everted, thickened squarish rim. Light pinkish fabric, texture and inclusions as above. Unstratified. Also in hollow 2; layer 2.

NV 8.1 Bottle-necked flagon. From SFB 59. Also in SFB 52; layer 2.

NV 8.2 Bottle-necked flagon, wider and with cordoned neck. From SFB 37.

NV 9 Unillustrated. Castor box, rouletted, represented by body sherds only. In SFB 49; layer 2.

NV 10.1 Base, flat, with out-turned foot. From SFB 34/35. Also in SFBs 22, 45, 59, 63; layer 2.

NV 10.2 Base, flat, gently curved-out foot. Probably a beaker form. From SFB 19. Also in SFBs 15, 25, 36, 40, 42, 49, 56, 59, 63; Hollow 1; layer 2.

NV 10.3 Base, similar to NV 10.1 but broken down to an almost flat disc and probably re-used in this form. From SFB 8.

NV 10.4 Base, flat, with an almost beaded foot. Probably a beaker form. From SFB 45. Also in SFBs 6, 58, 68A; Pit 324; layer 2.

OXIDISED WARE

This group is distinguished by being orange in colour. The fabric is generally non-micaceous, sometimes with fine grog and/or white sand inclusions visible. The exterior surfaces are mostly highly burnished apart from a few examples having a dark colour coat (OR 10). A similar group has been identified at Icklingham in fourth-century contexts (West & Plouviez 1976, 89) and occurs elsewhere in East Anglia. If all the material derives from a single production centre it is probably the unpublished Much Hadham group.

Forms (Fig.279)

OR 1.1 Pedestal base having a rounded profile with a sharp indentation at the top of the foot. From SFB 66. Also in SFB 55; layer 2.

OR 1.2 Base as OR 1.1 but broken down to an almost flat disc and with a partially drilled hole on the interior surface, just off centre. Chipped and weathered. From layer 2.

OR 1.3 Pedestal base with a straight, angular profile. From SFB 48. Also in SFB 15; layer 2.

OR 1.4 Flat base with an almost beaded foot. Similar to NV 10.4 but larger. From layer 2.

OR 1.5 Base as OR 1.1 but cut off horizontally above the foot for re-use. Worn on the cut edge and around the basal angle of the foot. From layer 2.

OR 2.1 Bowl, flanged, imitating Dr.38. Burnished interior and exterior surfaces. The flanges are generally thicker than on the Oxford ware version (OX 2) and are heavily downturned. From SFB 18. Also in SFB 6; layer 2.

OR 2.2 Bowl base with footring, probably from imitation Dr.38. Burnished interior surface. From SFB 21. Also in SFB 63; layer 2.

OR 2.3 Bowl base fragment, as OR 2.2 but re-used — worn smooth around the break at the junction between the footring and the body. From layer 2.

OR 3 Open bowl, probably derived from samian Curle 15. Burnished on the interior and the upper part of the exterior. From layer 2.

OR 4 Mortarium, burnished exterior, with mixed rounded grits of black, white and grey quartz. From SFB 60.

OR 5 Straight necked beaker. Re-used by cutting or grinding the top edge horizontally. From layer 2.

OR 6 Flagon with everted rim. From layer 2.

OR 7 Flagon with flanged neck, strap handle. From layer 2.

OR 8 Handle with impressed dot decoration, burnished on the edges. From SFB 18.

OR 9.1 Relief decoration; the lower part of a human face, probably from a flagon. Surface dark orange, partially burnished and ? colour coated. From SFB 49.

OR 9.2 Relief decoration: lump with small, roughly pentagonal impressions. Burnished exterior surface. From layer 2.

OR 10 Narrow mouthed jar with a dark brown colour coat. From SFB 20.

GREY WARE

This group includes all grey ware pieces identified by form and fabric as being distinct from the early Roman kiln phase. Although a few pieces could have been overlooked in the areas of the site producing large amounts of kiln debris, all the SFB groups were checked. The total of only eight sherds forms an extremely low proportion of the assemblage.

Forms (Fig.279)

GR 1.1 Straight sided bowl with flanged rim. Incised lines decorating the top of the flange. Red brown fabric with dark grey surfaces, slightly micaceous, fairly sandy. Partly burnished surfaces. From layer 2.

GR 1.2 Bowl, similar to 1.1, with lentoid impressions on the flange. Mid grey fabric, micaceous. Burnished surfaces. From SFB 49.

GR 2 Jar, rim fragment with 'frilly' cordon below rim. Light grey fabric with dark grey sand and grog. From SFB 25.

GR 3 Rim fragment, ? flanged rim type. Mid-light grey micaceous fabric. Burnished surfaces. Possibly early Roman. From SFB 20.

SHELL GRITTED WARE

This common late Roman coarse ware with a high shell content was probably produced in a number of places in the East Midlands. As with the grey wares it is possible that a few sherds have been overlooked, but the total of only seven pieces recovered indicates that it is uncommon in this assemblage. The sherds were probably all from jars similar to those at Icklingham (West & Plouviez 1976, 90-91) but included only one rim fragment.

GENERAL COMMENTS

The late pottery assemblage at West Stow differs from a fourth century settlement site group in several ways. The numbers of sherds in the different fabric groups was compared with two late groups from Icklingham; these contained a similar range of fabrics and forms with a small amount of residual material including samian.

This shows a strong bias against the coarse wares, both grey and shell-gritted fabrics, which make up the bulk of a normal Roman group. There is also a difference in the proportions of the finer wares: at Icklingham, Nene Valley wares make up half the fine ware group, with oxidised and Oxford wares roughly equal, whereas at West Stow, Oxford and Nene Valley wares are about 40% each of the fine ware and the remaining 20% is oxidised. Either there was a preference for red pots at West Stow or the difference is chronological, with the amount of Oxford ware increasing towards the end of the Roman period; neither Icklingham group can be firmly dated beyond the middle of the fourth century.

Another unusual imbalance is in the parts of pots which are represented. The proportions of rim sherds, base sherds and body sherds at West Stow and in one of the Icklingham groups was compared.

	Rim sherds	Base sherds	Body sherds
IKL 063	22%	8%	70%
WEST STOW	19%	44%	37%

The Icklingham group appears normal in terms of complete pot breakage, i.e. numerous body sherds, and rim sherds outnumbering base sherds. At West Stow there is a disproportionate number of bases; this has already been suggested by those forms in Nene Valley and oxidised ware which are almost exclusively represented by base sherds (NV 10, OR 1). Only in Oxford ware do the body sherds number over 50% of the total and the number of base sherds is still greater than the number of rims.

There is a small group of sherds which have been cut or worn in re-use; this includes spindle-whorls mainly using body sherds or Nene Valley bases (SFBs 15,46) and a possible unfinished example using an oxidised base (OR 1.2). The remaining seven pieces showing re-use are illustrated in Fig.279, NV 6.2, OX 8, OR 1.5, OR 2.3, OR 5, plus an Oxford ware fragment shaped as OR 2.3 from layer 2. Many of the other bases look as though they have been deliberately broken down to a flattish disc (as Fig.279, NV 10.3) or to a reel shape (as Fig.279, NV 10.2) and one of the latter in SFB 45 is worn on the broken surface.

Late Roman pottery occurred in SFBs of all dates

Table 8: Late Roman wares at Icklingham (IKL) and West Stow

	Grey ware	Shell gritted	Oxidised	Nene Valley	Oxford ware	Samian	Totals
IKL 033, F.10							
Number of sherds	292	62	23	41	18	9	445
Percentage	65%	13%	5%	9%	4%	2%	
IKL 063 0029, 0032, 0037							
Number of sherds	324	67	55	80	22	5	553
Percentage	58%	12%	10%	14%	3%	1%	
WEST STOW							
Number of sherds	8	7	69	152	140	—	376
Percentage	2%	2%	18%	40%	37%		

and the low numbers of sherds (totalling 155) makes comparisons between periods rather tentative. Comparison of the early fifth-century group (ten SFBs containing thirty-seven sherds) with the late sixth-century (eleven SFBs containing thirty-eight sherds) shows surprisingly little change in numbers, but the five seventh-century SFBs contained only three sherds. The predominance of bases is slightly less in the early fifth century but still definitely unusual (24% rims: 38% bases: 38% body sherds), and becomes more pronounced later (21% rims: 47% bases: 32% body sherds in the late sixth century).

Although it is clear that the pottery is not the result of normal late Roman settlement of the site it is difficult to find a reasonable explanation for all the anomalies. The acquisition of selected pots by the Saxons through contact with a native Romano-British population in the beginning of the fifth century could reasonably account for the bias towards fine wares but would have resulted in 'normal' proportions of rims, bases and body sherds in at least the earliest huts. The implication is that the pottery was already broken before reaching the settlement and that either base sherds were the largest and most obvious pieces from a rubbish deposit elsewhere or that they were selected and kept for a functional reason. The continued presence of the sherds in later sixth-century contexts, which do not otherwise have a high residual content, may suggest that this 'scavenging' from elsewhere was continuing for a considerable time.

THE FAUNAL REMAINS

by Pamela Crabtree

INTRODUCTION

The West Stow faunal sample is among the largest in Britain, and the bones are in an excellent state of preservation. The study of a faunal collection of this size and quality can produce vast amounts of both quantitative and descriptive data on the relative importance of the animal species, butchery patterns, ages at death, and animal sizes. A way was needed to record these data so that (1) a wide range of osteometric and descriptive information could be recorded for each bone or fragment; (2) the data could be grouped and regrouped according to archaeological phase, feature type, and the like; and (3) the data thus recorded could be compared with other sites in Britain. The computer-based osteometric archaeozoology programme devised by Roger Jones of the Department of the Environment Ancient Monuments Laboratory (Jones n.d.) was designed to meet these needs. This system allows a bone worker to record the identification, archaeological context, and measurements for each bone. In addition, up to 14 descriptive fields may be used to record various non-metric features such as butchery and dental pathology. The DoE system was used to record all the animal bone remains from the West Stow site. A brief description of the type of information which can be recorded using this system follows.

Initially each bone fragment is identified to species and anatomical part. Mnemonic codes are used for common species and all anatomical elements to ensure speed and accuracy of recording. In addition to specific identifications, the system allows for higher order identifications (e.g. sheep/goat, small artiodactyl) for those fragments which cannot be fully identified to species. The zoological identification is followed by a five-digit archaeological context number. Using these context numbers it is possible for the faunal sample to be sorted by chronological phase and feature type. Thus it is possible to group all bones which were recovered from Anglo-Saxon Phase 1 contexts together, or to compare the bones recovered from huts with those recovered from pits. Due to the size of the West Stow faunal sample, these re-groupings would be impossible without the aid of a computer.

The zoological identification and context number are followed by a fixed series of measurements. The computer coding system included the standard measurements which have been defined by von den Driesch (1977). This will allow the West Stow metrical data to be compared with other sites, both in the United Kingdom and on the continent. A detailed metrical series is necessary in order to reconstruct the size and stature of the West Stow domesticates.

The measurement data are followed by a series of descriptive fields. Using mnemonic alphanumeric codes, one can describe the side and part of the bone preserved, the sex of the animal, the state of epiphyseal union of the long bones, the state of dental eruption and wear on the teeth, and the presence of any butchery marks. In addition one can note the presence of gnawing, pathology, dental pathology, and bone working. This depth of recording is not only desirable, but necessary, if one is to obtain a reliable picture of the animal economy at West Stow. Data on ephiphyseal union and dental eruption provide information on kill-patterns and ages at death of the major domesticates. This, in turn, may allow us to make inferences about the economic uses to which these animals were put. Detailed study of butchery marks and fragmentation patterns may allow us to reconstruct the ways in which the animals were butchered, distributed, consumed, and disposed of. Presence or absence of pathology can give us much information on the state of health of the West Stow animals. Data on bone working will reveal which bones were regularly chosen for working and the techniques by which these bones were modified. These data will also aid in the interpretation of finished bone artifacts. Finally, data on handedness are necessary for calculation of minimum numbers of individuals and similar estimates of the relative importance of the species represented at the site. Thus, detailed description of each bone fragment is necessary if one is to attempt to reconstruct Anglo-Saxon husbandry and hunting practices.

The processing and analysis of the West Stow faunal data are not yet completed, and this report will include only interim findings. This preliminary report will include a summary of the species present at the site and an introductory discussion of the

metrical data for cattle, sheep, and pigs. Analysis of the data on bone working has been completed, and the results will be presented in full in another section of this report. Preliminary evidence for kill-patterns in sheep, based on a study of dental eruption and wear on maxillae and mandibles, will also be discussed here. Interim analysis of the West Stow bird bones is also included. A more complete summary of the zooarchaeological evidence from West Stow will be included in a forthcoming summary report. This report will provide a full discussion of the kill-patterns for cattle, sheep, and pigs, a complete osteometric summary including comparisons with other sites, a detailed reconstruction of butchery patterns, and a discussion of the relative importance of the species present at the site, including any changes through time. The basic data upon which these summary statements will be based will be stored as a part of the DoE archive and will be available to other researchers for comparative purposes. Detailed methodological and theoretical considerations, as well as more extensive data presentation, will be included in my doctoral thesis.

ACKNOWLEDGEMENTS:

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SPECIES IDENTIFIED AND RELATIVE PROPORTIONS

The West Stow faunal collection produced the remains of a wide range of animal species. The domestic mammals included cattle, sheep and goat, pig, horse, dog, and cat; the wild included red deer *(Cervus elaphus),* roe deer *(Capreolus capreolus),* hare *(Lepus* sp.*),* bear *(Ursus arctos),* badger *(Meles meles),* beaver *(Castor fiber),* and rabbit *(Oryctolagus cuniculus).* The rabbit bones may be intrusive and are probably not contemporary with the occupation of the site. Bird bones identified were of domestic fowl, domestic goose, and domestic duck/mallard, plus wild species including heron, swan, wild goose, wild duck, teal, goshawk, hen harrier, crane, moorhen, lapwing, golden plover, greenshank, woodcock, snipe, common gull, herring/lesser black-backed gull, thrush, and starling. All but starling and goshawk were recovered from indisputably Saxon contexts. Remains of two freshwater species of fish, pike *(Esox lucius)* and perch *(Perca fluviatilis),* were also present at West Stow. Examples of both were recovered from contexts contemporary with the occupation of the SFBs. In addition, the bones of frog *(Rana* sp.*)* and toad *(Bufo* sp.*),* common shrew *(Sorex araneus),* mole *(Talpa europaea),* and water vole *(Arvicola terrestris)* were identified. There was also one rat bone recovered, the context and specific identification of which are still under study.

Although complete quantitative data are not available for the West Stow site, estimates of the relative importance of the major domesticates (cattle, sheep and goat, and pig) can be made for the Saxon faunal material. For the preliminary analysis, the SFBs were subdivided into Phases 1, 2, and 3. Only those huts which could be phased are included in the preliminary totals. In addition, this interim study is limited to those bones which were clearly contemporary with the occupation of the buildings. Post-hut fill was excluded. Phase 3 totals include animal bones from 7th century SFBs and faunal material from some of the 7th century ditches. Animal bones from SFBs only are included in the Phase 1 and Phase 2 totals. The fragments identified for each major domesticate are presented in Tables 9, 10, and 11.

From the tables it is clear that the West Stow animal economy was a mixed one, employing substantial numbers of cattle, sheep and goats, and pigs in all three phases. In terms of fragment counts, sheep (and goats) are always the predominant species, followed by cattle and then pigs. Cattle, however, would have been the most important source of meat. The numerical superiority of sheep/goat in the phased hut material is notable, as the complete West Stow faunal assemblage included roughly equal numbers of cattle and ovicaprids (approximately 30,000 fragments of each). The implications of this intra-site variability will be discussed in detail in the forthcoming summary report. However, it should be remembered that this interim report is almost exclusively limited to faunal material which was contemporary with the occupation of the SFBs. Small anatomies, such as the sheep/goat teeth which are so well represented here, could literally have fallen through the floor-boards. One might therefore expect a higher proportion of small species in the material that is contemporary with the occupation of the huts.

The relative importance of the major domesticates shows some stability through time. Cattle fragments comprise approximately 35% of the faunal sample in all three phases. However, there is an increase in the proportion of sheep/goat and a corresponding decrease in pigs in Phase 2, and this is followed by a reversal in Phase 3.

Table 9:
Phase 1 — Fragments identified by species and anatomy.

	Cattle	Sheep/Goat*	Pig
Horn Core	52	75	—
Skull	246	191	235
Maxilla	56	102	69
Mandible	242	486	155
Scapula	129	138	87
Humerus	85	139	55
Radius	89	257	36
Ulna	61	47	45
Carpals	40(2)[a]	7	4
Metacarpals	86	194	92
First Phalanx	133	49	38
Second Phalanx	65	12	20
Third Phalanx	49	7	20
Sesamoid	5	—	1
Pelvis	135	105	85
Femur	80	84	54
Patella	7	4	1
Tibia	99(5)[b]	223(1)[b]	56(54)[c]
Calcaneus	46	42	32
Astragalus	39	45	14
Tarsals	23	15	5
Metatarsals	110	193	90
Metapodials	11	8	15
Atlas	13	17	13
Axis	26	12	8
Sacrum	13	5	6
Hyoid	14	19	—
Upper teeth	204	206	73
Lower teeth	191	338	118
Tooth fragments	2	9	11
Total (per cent)	2358 34.27%	3030 44.04%	1492 21.69%

* Includes 579 sheep fragments and 4 goat fragments.
a. Includes ancillary metapodials.
b. Includes malleolus in parentheses.
c. Includes pig fibula in parentheses.

Table 10:
Phase 2 — Fragments identified by species and anatomy.

	Cattle	Sheep/Goat*	Pig
Horn Core	39	86	—
Skull	333	325	163
Maxilla	69	109	53
Mandible	266	467	94
Scapula	180	174	66
Humerus	98	167	44
Radius	99	280	23
Ulna	88	72	32
Carpals	62(2)[a]	12	7
Metacarpals	110	205	51
First Phalanx	105	85	60
Second Phalanx	83	33	14
Third Phalanx	47	20	14
Sesamoid	4	—	—
Pelvis	113	126	51
Femur	96	96	39
Patella	12	9	4
Tibia	122(7)[b]	286(1)[b]	43(34)[c]
Calcaneus	44	52	14
Astragalus	42	54	7
Tarsals	23(2)[a]	10	20
Metatarsals	107	237	40
Metapodials	8	11	14
Atlas	17	14	7
Axis	11	12	1
Sacrum	19	14	—
Hyoid	23	48	1
Upper teeth	233	296	66
Lower teeth	275	452	70
Tooth fragments	12	35	7
Total (per cent)	2751 36.30%	3788 49.98%	1039 13.71%

* Includes 682 sheep fragments and 9 goat fragments.
a. Includes ancillary metapodials.
b. Includes malleolus in parentheses.
c. Includes pig fibula in parentheses.

Table 11:
Phase 3 — Fragments identified by species and anatomy.

	Cattle	Sheep/Goat*	Pig
Horn Core	13	—	—
Skull	50	42	31
Maxilla	12	18	15
Mandible	56	83	23
Scapula	39	27	26
Humerus	20	39	17
Radius	13	69	10
Ulna	17	13	12
Carpals	18	1	2
Metacarpals	13	31	14
First Phalanx	28	11	9
Second Phalanx	16	6	6
Third Phalanx	14	2	6
Sesamoid	1	—	—
Pelvis	38	25	28
Femur	13	22	17
Patella	1	—	1
Tibia	18	82	9(6)**
Calcaneus	15	6	4
Astragalus	9	11	4
Tarsals	5	—	2
Metatarsals	20	41	14
Metapodials	5	2	11
Atlas	7	2	1
Axis	4	3	1
Sacrum	3	3	1
Hyoid	—	2	—
Upper teeth	39	68	6
Lower teeth	40	87	23
Tooth fragments	4	4	2
Total (per cent)	531 34.66%	700 45.69%	301 19.65%

* Includes 121 identifiable sheep fragments and 2 fragments of goat.
** Fibula in parentheses.

These changes in the proportions of ovicaprids and pigs are statistically significant at $p = 0.01$, using both a test of the significance of the difference between proportions and a Chi-square test. If this is a true reflection of economic change, the changes in the proportions of sheep/goat and pigs may represent responses to altered circumstances, such as access to and availability of forest and pasture. The reasons for these changing proportions will be considered in more detail in the summary report.

The West Stow pattern of mixed animal husbandry was augmented by a limited amount of hunting. The remains of both red deer and roe deer are present in the faunal samples from all three phases. Although deer bones are always present in very low numbers, the deer remains include post-cranial material, in

addition to antler tines, and thus represent hunting as well as antler working.

The relative importance of sheep and goats deserves further comment. In all three phases, sheep fragments outnumber goat bones by a substantial margin. However, it must be emphasized that goat bones were present in all three Anglo-Saxon phases. The lower number of goat bones might result not only from the presence of fewer goats than sheep at the site, but also from different patterns of economic usage. If goats were kept primarily for dairying, while sheep were used for both meat and milk, one might reasonably expect to find fewer goat bones in the West Stow domestic refuse.

The West Stow pattern of mixed animal husbandry with sheep/goat the predominant species (at least in the contemporary hut material) compares well with the East Anglian Middle Saxon faunal assemblage from North Elmham Park (Noddle 1980). In North Elmham Phase I the proportion of sheep and goat was 39.39%; of cattle, 31.90%; and of pig, 28.71% (proportions recalculated to exclude other species). In contrast, the Wessex Saxon sites of Hamwih (Bourdillon and Coy 1980) and Portchester Castle (Grant 1976) produced a considerably higher proportion of cattle. Thus, patterns of regional variation in Anglo-Saxon husbandry are beginning to emerge from the zooarchaeological record.

ANATOMICAL GROUPINGS

The cattle, sheep/goat, and pig fragments were grouped into five anatomical classes: head, forelimb, hindlimb, feet, and teeth. The head category includes the skull and horn cores, maxilla and mandible, plus the axis and atlas vertebrae; the forelimb includes scapula, humerus, radius, and ulna; the hindlimb is comprised of pelvis and sacrum, femur, patella, tibia, and fibula; and the feet include all other anatomical categories, except loose teeth. (Thoracic, lumbar, and the remaining cervical vertebrae have been excluded here and will be included in the summary report.) In the summary report, more detailed division of the anatomies will be possible when proximal and distal portions are taken into account. This will allow for a more fine-grained analysis of the anatomical distributions of the different species. Explanations for the differences in distributions of anatomical elements will also be considered in the summary report. Among the factors which must be considered are butchery practices, fragmentation patterns, differing disposal patterns, and differing ages at death.

The proportion of cattle fragments in each anatomical group is consistent through all three Saxon phases (see Table 12). Cattle skull fragments are most frequently recovered, while bones of the hindlimb are most poorly represented. One might expect relatively low numbers of cattle long bones from contexts contemporary with the occupation of the huts. It will be interesting to see whether cattle limb bones are better represented in other types of features.

The proportions of ovicaprids and pigs in the different anatomical classes show some variation through time. This variation might be linked to the changing importance of sheep/goat and pig in the different phases. Ovicaprids show a relative decline in skull fragments and an increase in hindlimb bones in Phase 3. The proportion of fragments of pig skull also declines in Phase 3, while both fore- and hindlimb proportions increase. A substantial number of loose teeth of sheep and goats are present in all three phases, while the loose teeth of pigs are comparatively rare, especially in Phase 3.

When all the species are compared, substantial differences in the percentages of bones falling into the five anatomical classes are apparent. Skull fragments of all species are relatively common, but they range in frequency from 21.2% (sheep/goat Phase 3) to 32.17% (pig Phase 1). In all three species, limb bones are comparatively poorly represented. Forelimb fragments outnumber hindlimb bones among cattle and sheep/goat, while hindlimb bones are more common among pigs. This is certainly due to the presence of large numbers of pig fibulae. When quantitative data are available from pits, ditches, and Layer 2, more complete anatomical analysis will be possible.

Table 12: Anatomical Distributions.

Phase 1 — Anatomical Distribution of Cattle, Sheep/Goat, and Pig.

	Cattle		Sheep/Goat		Pig	
	Frag.	%	Frag.	%	Frag.	%
Head	649	27.52	902	29.96	480	32.17
Forelimb	364	15.44	581	19.17	223	14.95
Hindlimb	334	14.16	421	13.89	256	17.16
Feet	614	26.04	573	18.91	331	22.18
Teeth	397	16.84	553	18.25	202	13.54
Total	2358		3030		1492	

Phase 2 — Anatomical Distribution of Cattle, Sheep/Goat, and Pig.

Head	758	27.55	1061	28.01	319	30.70
Forelimb	464	16.87	693	18.29	165	15.88
Hindlimb	363	13.20	531	14.20	171	16.56
Feet	646	23.48	720	19.01	241	23.20
Teeth	520	18.90	783	20.67	143	13.76
Total	2751		3788		1039	

Phase 3 — Anatomical Distribution of Cattle, Sheep/Goat, and Pig.

Head	142	26.74	148	21.20	71	23.59
Forelimb	89	16.76	148	21.20	65	21.59
Hindlimb	73	13.75	132	18.91	62	20.60
Feet	144	27.12	111	15.90	72	23.92
Teeth	83	15.63	159	22.78	31	10.30
Total	531		698		301	

MEASUREMENTS

All the West Stow bones were measured following the recommendations of von den Driesch (1977). This interim report will include measurement data for cattle, sheep, and pigs only. Statistics for the other species will be included in the forthcoming summary report.

Cattle.

Measurements of the West Stow cattle indicate that they were of good size, comparable to the cattle remains from other Anglo-Saxon sites. Selected measurements have been summarised in chart form for the scapula (Table 13), humerus (Table 14), radius (Table 15), metacarpus (Table 16), femur (Table 17), tibia (Table 18), astragalus (Table 19), and metatarsus (Table 20). When these measurements are compared with the extensive metrical series from the Middle Saxon urban site of Hamwih (Bourdillon and Coy 1976), the measurements are remarkably similar, both in means and ranges. The range of measurements also compares well with North Elmham Phase 1 (Noddle 1980). When the greatest lengths of the cattle astragali from West Stow are compared with those from other sites (summarized by Maltby n.d.), the West Stow means of 61.2mm (Period 1), 59.6mm (Period 2), and 60.6mm (Period 3) are well within the Saxon range. Shoulder height estimates (based on 2 radii, 3 metatarsals, and 12 metacarpals, using Fock's factors for metapodia and Matolcsi's factors for radii (von den Driesch and Boessneck 1974) range from 105.0 to 121.4cm (41.3—47.9in) with a mean of 113.2cm. These estimates are well within the Hamwih range of 101.7—137.7cm.

Finally, it should be noted that there is no evidence for size change through time from the West Stow cattle measurements.

Sheep and Goats.

Measurements of sheep scapulae (Table 21), humeri (Table 22), radii (Table 23), metacarpi (Table 24), femora (Table 25), sheep/goat tibiae (Table 26), sheep astragali (Table 27), and sheep metatarsi (Table 28) are included in the interim report. Measurements on goat bones are fewer in number and will be discussed in the summary report. As is the case with cattle, there is no evidence for size change through time in the West Stow sheep measurements.

When the West Stow measurements are compared to those from North Elmham Phase I, the ranges of distal tibial breadth, breadth of the proximal radius, and trochlear breadth on the humerus are remarkably similar. Likewise, the differences between the West Stow and Hamwih sheep measurements are not significant. Distal tibial breadth is the most commonly taken measurement on ovicaprid bones (Maltby n.d.). Mean tibial breadths for other Anglo-Saxon sites range from 25.2mm for the Middle Saxon site of Sedgeford to 26.3mm for the late Saxon remains from Thetford. The West Stow means of 26.2 (Phase 1), 26.4 (Phase 2), and 26.3mm (Phase 3) are near the top of the Anglo-Saxon range. It should be noted that the West Stow means are closest to those from the East Anglian sites of North Elmham and Thetford.

A wide range of shoulder height estimates are available for the West Stow sheep, and these range from 54.0 to 68.8cm (21.3—27.1in). The distribution of shoulder height estimates appears bimodal, with peaks at approximately 59 and 63cm. Once again, the range of the West Stow shoulder height estimates falls within the Hamwih range of 50.1—70.9cm.

Pigs.

West Stow produced a substantial quantity of pig remains, a hallmark of Anglo-Saxon sites in Britain. There is no conclusive dental evidence for wild boar at West Stow. Measurements on the lower M_3 (Table 29) range from 28.4 to 37.0mm (greatest lengths). All are within the domestic range, although the 37.0mm measurement is quite large. It is, however, not incompatible with a large domesticated boar. The lower third molar lengths are consistently longer than those recorded from Melbourne Street, as the Hamwih lower third molars range from 25.5 to 34.0mm in length. However, the longest of the West Stow M_3 are smaller than those from North Elmham which range to over 38mm in Period 1 and to more than 40mm in Period 2.

Measurements on pig scapulae and long bones are summarized in Tables 30-33. In contrast to the dental evidence, the West Stow post-cranial measurements fall within the Hamwih ranges. The ranges of the distal tibial breadth, proximal radial breadth, distal humeral width, and the smallest length of the scapular neck also compare quite closely with the evidence from North Elmham Period 1. No complete pig long bones were recovered from the phased Saxon material from West Stow, and therefore no estimates of shoulder heights could be made.

CONCLUSIONS

Measurements on the West Stow domesticates show that the cattle, sheep, and pigs were all quite large and comparable in size to those recovered from later Anglo-Saxon sites. The cattle, sheep, and pigs are all considerably larger than those recovered from British Iron Age sites (*c.f.* Harcourt 1979). There is no conclusive evidence for wild pig at the site, although there are some large pig remains present in the faunal collection which deserve further study. The metrical evidence reinforces the impression that the inhabitants of West Stow successfully practised a pattern of mixed animal husbandry.

Table 13: Measurements on Anglo-Saxon Cattle Scapulae*

Phase 1	Mean	Range	No.measured
Smallest length of the Column scapulae (SLC)	45.6**	41.9—49.9	5
Greatest length of the Processus articularis (GLP)	61.8	56.9—72.9	8
Length of the glenoid cavity (LG)	53.9	48.6—59.3	7
Breadth of the glenoid cavity (BG)	43.4	38.1—51.3	9
Phase 2			
SLC	50.5	45.6—63.9	6
GLP	65.7	56.0—80.3	8
LG	54.8	49.5—66.9	9
BG	44.3	40.0—54.7	13
Phase 3			
SLG		45.8	1
GLP		—	—
LG		68.6	1
BG		40.4—59.8	2

* All measurements following von den Driesch (1977).
** All measurements in mm.

Table 14: Measurements on Anglo-Saxon Cattle Humeri

Phase 1	Mean	Range	No.measured
Breadth of the distal end (Bd)	74.3	73.3—75.3	3
Breadth of the trochlea (BT)	66.7	63.0—68.3	5
Phase 2			
Bd	73.1	64.8—86.3	7
BT	67.8	62.3—76.3	6
Phase 3			
Bd	74.4	69.7—81.9	4
BT	69.1	65.8—72.5	4

Table 15: Measurements on Anglo-Saxon Cattle Radii

Phase 1	Mean	Range	No.measured
Breadth of the proximal end (Bp)	74.0	65.2—88.4	14
Breadth of the proximal articular surface (BFp)	68.4	59.8—80.3	16
Phase 2			
Bp	71.0	67.4—73.5	10
BFp	64.8	62.1—68.1	9
Phase 3			
Bp		—	
BFp		—	

Table 16: Measurements on Anglo-Saxon Cattle Metacarpi

Phase 1	Mean	Range	No.measured
Breadth of the proximal end (Bp)	54.1	46.6—63.6	15
Breadth of the distal end (Bd)	53.9	48.4—62.6	14
Phase 2			
Bp	53.9	46.8—66.0	23
Bd	56.4	49.4—68.6	16
Phase 3			
Bp		51.2—51.3	2
Bd		50.5—53.1	2

Table 17: Measurements on Anglo-Saxon Cattle Femora

Phase 1	Mean	Range	No.measured
Depth of the Caput femoris (DC)	40.9	39.0—44.9	7
Phase 2			
DC		40.1	1
Phase 3			
DC		42.4	1

Table 18: Measurements on Anglo-Saxon Cattle Tibiae

Phase 1	Mean	Range	No.measured
Breadth of the distal end (Bd)	56.3	50.8—67.4	18
Depth of the distal end (Dd)	42.6	38.9—50.1	15
Phase 2			
Bd	56.2	50.5—65.5	25
Dd	43.0	37.8—51.5	12
Phase 3			
Bd	57.3	52.0—68.5	6
Dd		41.2—44.1	2

Table 19: Measurements on Anglo-Saxon Cattle Astragali

Phase 1	Mean	Range	No.measured
Greatest length of the lateral half (GLl)	61.2	54.2—65.8	27
Greatest length of the medial half (GLm)	55.8	49.8—60.0	28
Breadth of the Distal end (Bd)	40.0	34.9—45.5	28
Depth of the Lateral half (Dl)	34.7	30.6—37.7	27

Phase 2			
GLl	59.6	53.6—65.8	30
GLm	54.7	48.4—60.8	31
Bd	38.3	35.1—43.0	31
Dl	33.7	29.7—39.0	30
Phase 3			
GLl	60.6	56.1—70.3	7
GLm	55.7	52.8—64.0	7
Bd	40.0	35.5—46.9	6
Dl	34.3	32.0—40.0	7

Table 20: Measurements on Anglo-Saxon Cattle Metatarsi

Phase 1	Mean	Range	No.measured
Breadth of the Proximal end (Bp)	45.3	40.0—53.1	12
Breadth of the Distal end (Bd)	52.6	46.8—61.1	15
Phase 2			
Bp	44.0	39.7—51.2	15
Bd	48.9	45.8—53.5	13
Phase 3			
Bp	46.0	41.6—50.4	3
Bd	—	46.2	1

Table 21: Measurements on Anglo-Saxon Sheep Scapulae

Phase 1	Mean	Range	No.measured
SLC	19.0	14.7—22.9	27
GLP	31.7	27.6—35.5	21
LG	25.0	22.2—29.4	21
BG	20.0	17.6—22.9	23
Phase 2			
SLC	18.6	14.6—21.4	33
GLP	31.7	28.0—36.7	19
LG	24.8	22.4—28.0	20
BG	19.0	16.8—23.5	21
Phase 3			
SLC	17.5	14.8—19.6	8
GLP	30.0	26.8—33.0	4
LG	24.2	21.9—26.7	4
BG	18.1	16.1—20.0	2

Table 22: Measurements on Anglo-Saxon Sheep Humeri

Phase 1	Mean	Range	No.measured
Bd	29.5	26.2—34.0	35
BT	28.2	25.1—32.0	30
Phase 2			
Bd	29.5	25.6—33.8	34
BT	27.6	24.4—31.9	34
Phase 3			
Bd	29.6	27.4—31.8	11
BT	28.0	26.1—29.4	10

Table 23: Measurements on Anglo-Saxon Sheep Radii

Phase 1	Mean	Range	No.measured
Bp	30.9	27.7—35.6	17
BFp	28.1	24.5—32.1	18
Phase 2			
Bp	30.1	27.0—35.9	17
BFp	27.3	21.8—32.0	17
Phase 3			
Bp	30.5	27.5—33.3	5
BFp	27.4	25.2—29.7	5

Table 24: Measurements on Anglo-Saxon Sheep Metacarpi

Phase 1	Mean	Range	No.measured
Bp	23.0	20.5—26.4	45
Bd	24.8	22.7—27.0	16
Phase 2			
Bp	22.9	17.4—26.2	42
Bd	24.9	22.3—27.1	19
Phase 3			
Bp	23.4	20.6—25.3	4
Bd		26.2	1

Table 25: Measurements on Anglo-Saxon Sheep Femora

Phase 1	Mean	Range	No.measured
DC	19.9	19.4—20.4	3
Phase 2			
DC	—	19.5—19.7	2
Phase 3			
DC		18.7	1

Table 26: Measurements on Anglo-Saxon Sheep and Goat Tibiae

Phase 1	Mean	Range	No.measured
Bd	26.2	22.4—29.4	35
Dd	20.2	17.8—22.5	25
Phase 2			
Bd	26.4	23.8—29.5	56
Dd	20.6	18.1—22.1	27
Phase 3			
Bd	26.3	23.6—29.0	9
Dd	20.9	19.4—23.2	4

Table 27: Measurements on Anglo-Saxon Sheep Astragali

Phase 1	Mean	Range	No.measured
GLl	28.0	26.0—29.9	24
GLm	27.1	24.8—30.8	24
Bd	18.7	16.9—21.0	23
Dl	15.7	14.0—17.0	24
Phase 2			
GLl	28.1	25.3—31.3	39
GLm	26.7	24.3—29.7	41
Bd	18.2	16.0—20.2	37
Dl	15.6	13.4—17.9	41
Phase 3			
GLl	27.9	26.6—29.6	5
GLm	26.8	25.0—27.9	5
Bd	17.8	16.6—18.8	5
Dl	15.5	14.3—16.8	5

Table 28: Measurements on Anglo-Saxon Sheep Metatarsi

Phase 1	Mean	Range	No.measured
Bp	20.2	18.1—23.6	27
Bd	23.1	21.6—24.7	10
Phase 2			
Bp	20.6	17.5—24.7	40
Bd	24.2	22.3—26.4	14
Phase 3			
Bp	—	—	—
Bd	23.6	20.0—25.7	3

Table 29: Lengths of Pig M_3

	Mean	Range	No.measured
Phase 1	32.9	30.0—37.0	9
Phase 2	31.2	28.4—33.2	6
Phase 3		none measured	

Table 30: Measurements on Anglo-Saxon Pig Scapulae

Phase 1	Mean	Range	No.measured
SLC	22.3	19.6—25.6	22
GLP	34.7	32.0—37.6	9
BG	24.4	22.3—26.8	11
Phase 2			
SLC	23.3	19.5—27.3	11
GLP	36.1	33.6—38.5	7
BG	26.8	24.4—28.9	5
Phase 3			
SLC	23.9	20.3—27.8	9
GLP	35.0	30.8—40.5	5
BG	23.4	20.7—26.9	6

Table 31: Measurements on Anglo-Saxon Pig Humeri

Phase 1	Mean	Range	No.measured
Bd	38.6	34.1—43.6	12
Phase 2			
Bd	40.0	38.3—41.8	5
Phase 3			
Bd	—	39.7	1

Table 32: Measurements on Anglo-Saxon Pig Radii

Phase 1	Mean	Range	No.measured
Bp	28.8	25.5—31.0	11
Phase 2			
Bp	28.6	26.4—30.8	3
Phase 3			
Bp		29.7—30.3	2

Table 33: Measurements on Anglo-Saxon Pig Tibiae

Phase 1	Mean	Range	No.measured
Bd	29.7	27.6—31.7	8
Phase 2			
Bd	28.6	27.2—30.7	4
Phase 3			
Bd		none measured	

KILL PATTERNS

A pilot study of ages at death was carried out on the West Stow sheep/goat mandibles and maxillae. The West Stow faunal sample was ideally suited to this type of study for in the entire faunal sample only 55 bones could be clearly identified as goat while over 5000 were sheep. It is therefore likely that most, if not all, of the 1817 sheep/goat mandibles and maxillae included in this study were in fact sheep.

Although previous large scale studies of sheep/goat dental material have emphasized mandibles rather than maxillae, the West Stow faunal sample produced large numbers of both upper and lower jaws. Therefore a system of recording dental eruption and wear on sheep/goat maxillae was developed in the course of the West Stow faunal analysis. The details of this system have been described elsewhere and will not be presented in full here. The method is an adaption of the system used by Payne (1973) to record dental eruption and wear on sheep/goat mandibles and employs 22 stages to record the state of eruption or wear on each tooth.

After scoring each tooth in the West Stow maxillae for eruption or wear, it was necessary to provide an age-wear estimate for the complete or near complete maxillae. A variant of the system used by Payne (1973; 293) to score entire mandibles was found to be most successful. Nine classes were defined as shown in Table 1, and each maxilla was given a single score (A-I). Those incomplete maxillae which could not be assigned to a specific category were eliminated from this portion of the study. A total of 506 maxillae could be assigned to specific classes, and the distribution of these is shown in Table 34. The modal kill-off stage for the site as a whole is Stage C (M1 in wear, but M2 unworn).

The results obtained for the West Stow maxillae were compared with those for the West Stow mandibles. Initially each tooth in each Saxon mandible was recorded using Payne's stages of eruption and wear. After each tooth was scored, the jaw as a whole was assigned to one of the nine (A-I) age-wear classes defined by Payne (1973: 293) for mandibles as a whole. A total of 1311 mandibles could be assigned to specific stages (see Table 35), and, once again, those jaws which could not be so assigned were eliminated from this portion of the study. As can be seen in Fig.280, the results agree remarkably well with the maxillary results. Slight differences can be attributed to the later eruption of the maxillary than the mandibular first molar. The results shown in Fig.280 have been depicted in proportion to the ages suggested for these categories by Payne (1973) following Silver (1969). This kill-pattern will now be considered in detail.

The total number of jaws (mandibles plus maxillae) falling into each of the classes has been calculated, and the proportion of the sample killed-off at each stage has been determined (see Table 36). It is apparent that more than one-third of the West Stow sheep were killed between the ages of six and twelve months (stage C). Nearly one-half were dead before the age of one year, and nearly two-thirds (64%) had been killed by the end of two years. A small but relatively consistent proportion (8-9%) of the sheep were killed in the following age groups E-F), and a secondary mode of mortality is seen at stage G (4-6 years). Only a very small proportion (6%) of the sheep survive to more than six years (stages H and I).

Turning now to the interpretation, we see that when this pattern is compared with the possible patterns suggested by Payne (1973: 282-284) for meat, milk, and wool production, the West Stow pattern of mortality shows some differences from all three idealized patterns. It is closer in configuration to the meat and milk schema than it is to the pattern Payne hypothesizes for wool production, as the West Stow pattern shows a high mortality in the first year of life (comparable with the milk pattern), but mortality in the second year is also quite high (more comparable with the meat pattern). On the other hand, in the West Stow case we see a higher kill-off in the 4 to 6 year age group than is evident in either the meat or milk model, possibly indicating some wool production for domestic use. We should not, however, expect the West Stow data to match exactly Payne's idealized patterns: sheep may be used for all of these purposes. In brief, comparison of the West Stow sheep mortality with Payne's patterns of use suggests that sheep were used for a combination of meat production and dairying. A small amount of wool may have been produced for domestic uses, but the data are incompatable with large scale wool production.

The kill-pattern described here pertains to the West Stow site as a whole. Completion of the computer runs will allow us to determine whether there are any changes through time in this pattern of mortality. The forthcoming summary report will also include kill-pattern data for cattle and pigs.

Table 34: Wear stages on sheep/goat maxillae

Stage	Description	Number
A	DP4 unworn	3
B	DP4 in wear but M1 unworn	56
C	M1 in wear; M2 unworn	184
D	M2 in wear; M3 unworn	119
E	M3 in wear but less than stage 9[a]	43
F	M3 between stages 9 and 16[b]	37
G	M3 stage 17; M2 stage 17[c]	54
H	M3 stage 17; M2 stage 18 or more[d]	8
I	M3 stage 18 or more	2
	Total:	506

[a] At stag 9 dentine is exposed on all cusps.

[b] Maxillary Stage F: dentine is exposed on all cusps, but tooth has not reached 'Mature-wear'.

[c] At stage 17 dentine completely surrounds 2 enamel-cementum islands. This is analogous to Payne's 'mature-wear' phase.

[d] At stage 18 the anterior enamel island is reduced in size.

Table 35: Wear stages on sheep/goat mandibles

Stage	Description*	Suggested Age**	Number of Jaws
A	DP4 unworn	0—2 months	11
B	DP4 in wear; M1 unworn	2—6 months	93
C	M1 in wear; M2 unworn	6—12 months	504
D	M2 in wear; M3 unworn	1—2 years	187
E	M3 in wear; third cusp unworn	2—3 years	129
F	M3 in wear but less than stage 	3—4 years	110
G	M3 stage  ; M2 stage 	4—6 years	172
H	M3 stage  ; M2 more than 	6—8 years	86
I	M3 more than stage 	8—10 years	19
	Total		1311

* After Payne (1973).
** After Silver (1964).

Table 36: Proportion of Sheep killed at each stage.

Stage	Number of Jaws*	Proportion
A	14	0.77%
B	149	8.20%
C	688	37.83%
D	306	16.84%
E	172	9.47%
F	147	8.09%
G	226	12.44%
H	96	5.28%
I	21	1.16%

* Mandibles plus maxillae (N = 1817).

BIRD BONES

All bird bones were kindly identified by Jennie Coy of the Faunal Remains Unit, Department of Archaeology, University of Southampton. This discussion is based on her analyses.

The Anglo-Saxon bird bones were mostly of domestic fowl and a large domestic goose comparable in size to the greylag goose, *Anser anser*. The few fragments of wild birds were mostly from edible species of water birds or waders (see below). The relative importance of domestic birds in relation to other domestic animals was comparable at West Stow and Hamwih. A total of 431 fragments of domestic fowl and goose could be assigned to Phases 1-3 at West Stow. These contexts produced a total of 15,988 fragments of cattle, sheep/goat, and pig. Melbourne Street, Hamwih produced 1183 fragments of fowl and goose and 45,455 fragments of the major domestic mammals. The relative importance of fowl and goose at West Stow is also roughly comparable with other Saxon sites, although geese are somewhat more numerous at West Stow. The Anglo-Saxon levels at West Stow included a total of 233 fragments of domestic fowl and 198 fragments of goose. At Melbourne Street, the ratio of fowl to goose fragments was 2:1, while at North Elmham (Bramwell 1980) the ratio was a minimum of 37 fowl to a minimum of 18 geese, or approximately 2:1 also. A more detailed breakdown of the domestic birds into the three Anglo-Saxon phases will be included in the forthcoming summary report.

Fowl:

The West Stow fowl were measured following von den Driesch's guidelines (1977), and a complete metrical study will be included in the summary report. Preliminary analysis shows that the means of the West Stow domestic fowl measurements are somewhat larger than those from Melbourne Street, Hamwih. The means of the total lengths of West Stow humeri, radii and femora are 71.6, 61.8, and 77.5mm respectively. All three means are significantly larger (at $p = 0.05$ using a test of the significance of the difference between two means) than their Melbourne Street counterparts. This difference must be due, at least in part, to the presence of a number of smaller individuals at Melbourne Street. This small "tail" in the size distribution at Melbourne Street represents small bantams which may have been selectively bred there. West Stow lacks this small tail.

Despite the absence of these very small bantams, the West Stow fowl are often small and comparable in size to some modern bantam breeds. However, the range in size of the West Stow fowl is very large with birds ranging from modern bantam size, through game fowl size, to occasional larger specimens which compare with some modern breeds in total bone lengths. The general build of these large West Stow fowl is lighter than modern specimens, however. Capons or castrated birds were also kept.

The variability in size of the West Stow fowl makes the *mean* a poor statistic to use in comparisons with other sites. Comparisons of the *model size classes* at West Stow and Melbourne Street shows that the distributions were similar and usually bimodal. This bimodality is probably due to sexual dimorphism and may represent hens and capons. Bones of the latter would probably show delayed maturation and reach a greater length before bone growth was complete. Only mature bones were measured, and a discussion of the role of young birds must be left to the summary report.

Nevertheless, in humerus and radius there is an indication that the modal classes for total lengths are larger at West Stow than at Hamwih (see Table 37). This might suggest that the West Stow birds were stronger in the wing than the Middle Saxon birds from Melbourne Street, but further statistical studies are needed to substantiate this assertion.

Table 37: Comparisons of humeri and radii of fowls.

	Melbourne Street	West Stow
Humerus	60.65mm	65-70mm
Radius	55-60mm	65-70mm

Geese:

Most goose bones were from a large species of goose which compares closely in all its measurements and anatomical characters with Mid-Saxon geese from Melbourne Street. No goose skulls were preserved at Melbourne Street, but one was found at West Stow (in SFB 2, Saxon Phase 3) showing a distinctive slight inflation of the cranial area adjoining the upper beak. This feature may be distinctive of domestication and needs further study.

Two sterna found in Phase 1 (in SFBs 27 and 37) show considerable depth of keel on the breast compared with wild greylags, greylags in captivity, and later medieval material from Wessex. This would suggest selection for meat production as would be expected.

There were occasional fragments from smaller geese, presumably from a smaller wild species, perhaps a migrant such as *Anser brachyrhynchos,* the pink-footed goose, or *Anser albifrons,* the white-front. As the measurement ranges of wild and domestic geese overlap, it would be unwise at this stage to attempt a metrical comparison of West Stow and 'Hamwih' geese.

Ducks:

It is not possible to say whether the larger duck bones were from wild mallard, *Anas platyrhynchos,* tamed mallard, or true domestic ducks not interbreeding with their wild counter-part. Anatomically there is no indication that they were domestic. The smaller duck bones were of wild species: a medium-sized species comparable with widgeon, and the small teal.

Wild species:

The wild species are shown in Table 2 with an indication of the phases in which they were found. Apart from the crane, all these birds are breeding or migrant species for East Anglia today. A species of crane bred in East Anglia until c.1600 (British Ornithologists' Union 1971). Details of the butchery observed on this species and other birds will be included in the summary report together with an account of the pathologically altered bones.

Table 38: Anglo-Saxon Birds.

Anglo-Saxon Birds	Phase I	Phase II	Phase III	Layer 2
Domestic fowl	X	X	X	X
Domestic goose	X	X	X	X
Domestic duck or mallard, *Anas platyrhynchos*	X	X	X	X
Heron, *Ardea cinerea*			X	
Swan, *Cygnus* sp.		X		
Wild goose, *Anser* sp.		X		
Wild duck, *Anas* sp. (wigeon-size)	X	X		
Teal, *Anas crecca*		X		
Goshawk, *Accipiter gentilis* +				
Hen harrier ?, *Circus cyaneus*		X		
Crane, *Grus* sp.	X	X	X	X
Moorhen, *Gallinula chloropus**				
Lapwing, *Vanellus vanellus*		X		
Golden plover, *Pluvialis apricaria*		X		
Greenshank, *Tringa nebularia*		X		
Woodcock, *Scolopax rusticola*		X		
Snipe, *Gallinago gallinago*	X			
Common gull, *Larus canus*		X		
Herring/lesser black-backed gull, *Larus fuscus/argentatus*		X		
Thrushes, *Turdus* sp.	X	X	X	
Starling, *Sturnus vulgaris* +				

* Anglo-Saxon but not phased.
\+ Anglo-Saxon context not proven.

PROSPECT

The complete West Stow faunal study and the resultant archive will have important implications for zooarchaeological research. The use of the computer coding system and the size and well-preserved nature of the West Stow faunal sample will allow for an unusually detailed reconstruction of paleoeconomy. Use of the computer will facilitate analyses of butchery and kill patterns, calculations of the relative importance of the animal species, and documentation of changing animal sizes through time. In addition, West Stow will provide detailed osteometric and descriptive information, recorded in a standardized way, which will allow for future comparisons with other sites. Inter-site comparisons are necessary if we are to trace changes and continuity in animal economy through time and space.

WORKED BONES FROM THE FAUNAL COLLECTION

by Pamela Crabtree

Although finished bone and antler objects are discussed in detail elsewhere in this report, the West Stow faunal assemblage also provides valuable evidence for bone working at the site. The worked pieces in the faunal sample probably represent incomplete stages in the various bone object manufacturing processes. Bone working may be distinguished from butchery in that butchery entails the dismemberment of and removal of meat from the animal carcass, while bone working involves the intentional modification of bone for the production of bone tools and other objects. While chop and knife cut marks commonly appear on bone surfaces as a result of butchery; perforations, incised lines, surface polish, and shave marks are nearly always the results of bone working. Splitting and sawing may be involved in both butchery and bone working. However a study of the species/anatomy combinations on which saw and split marks appear may allow us to determine whether these marks are the result of bone working or butchery or both.

The West Stow faunal assemblage produced at least 97 bones and fragments evincing traces of bone working. Of these 80 could be identified to species and included 22 fragments of roe and red deer antler, 18 metatarsals of cattle, and 8 sheep/goat metatarsals. Other worked bones include horse metapodials, pig fibulae, sheep/goat tibiae, and sheep horn cores. The frequent use of ungulate metapodials and tibiae is to be expected as these bones have 'straight shafts, and consequently maximal areas of parallel grain' (Campana 1980) and are therefore ideally suited to bone working. The large number of worked antler fragments (27.5% of the bone objects which were identifiable to species) is especially striking since less than 1% of the identifiable bones in the West Stow faunal assemblage were of deer. The different types of worked bones (deer antlers, cattle metatarsals, etc.) will be discussed in turn.

Deer antlers.

Antlers represent the largest single group of worked bone fragments in the West Stow faunal assemblage. Both red and roe deer antler fragments — 17 and 5 fragments, respectively — were worked. Of the 22 modified deer antlers, 17 were worked by sawing, including all but one of the red deer antlers. Objects made of sawn antler are common among the West Stow small finds (see p.177.). Moreover, it is significant that, with the exception of a few sawn horn cores, sawing is almost entirely restricted to antler. Almost no sawn bones were recovered from the site, suggesting that sawing was used in bone working but not in butchery. Most of the worked antlers in the faunal sample are sawn red deer antler sections, however, two of the roe deer antlers were shaved and three were incised. No finished antler objects were recovered from the faunal sample.

Cattle metatarsals.

The second major group of worked bones, cattle metatarsals, were worked using the "groove-and-splinter" technique. The groove-and-splinter technique is a process used to produce long, narrow bone blanks by cutting parallel lengthwise grooves in a long bone shaft and removing the resultant long slices. Seventeen of the eighteen worked cattle metatarsals showed incised parallel grooves on at least one face. On the anterior and posterior surfaces of the bone, grooves were cut along the fusion point between the third and fourth metatarsal. Grooves were also incised axially along the medial and lateral faces. Although the majority of axial incised grooves appear on cattle metatarsals, horse cannon bones were also grooved-and-splintered.

Pig fibulae.

Modified pig fibulae are common among the West Stow small finds (see pp.392,513), and the faunal assemblage produced four more examples. Three are distal portions, two of which show polish along the shaft — possibly from use as pins or needles. The third was perforated near the distal end, as are many of the small finds. The fourth pig fibula is a midshaft fragment and shows marks of shaving, probably from shaving the bone shaft to a point.

Miscellaneous.

A variety of other modified bones were recovered including perforated sheep/goat cannon bones and tibiae. These objects are similar to the large numbers of perforated sheep and goat cannon bones seen among the small finds. Several sawn sections of sheep horn core were recovered. These are generally from rams, and may have been discarded when the horn was removed for working. In addition, a number of worked bones were recovered from the site which could not be identified to species. A complete table of bone objects recovered from the faunal sample will be included in my thesis.

THE COPROLITES

by Michael J Walker

The examination of the West Stow coprolites for evidence of parasitic infections.

SUMMARY

A collection of coprolites from West Stow, found in sunken-featured buildings (SFBs) and pits dating from the fifth and sixth centuries, were examined for the presence of parasite ova or oocysts. A new method was devised to break down the faecal material and a flotation technique was used to separate the parasitic organisms. Several coprolites contained *Trichuris* or ascarid ova and many contained protozoal oocysts, probably belonging to the genus *Isospora*. One sample contained a mite, identified as *Steneotarsonemus* sp. Many pollen grains, a grass seed and several unidentified objects were also observed, in addition to large numbers of bone fragments.

INTRODUCTION

The examination of faecal material can reveal a great deal of information about the diet and health of an animal. This report describes a study of the coprolites recovered from pits and SFBs during excavation of the Anglo-Saxon settlement at West Stow. Previous published reports have been confined to the examination of dried coprolites or peat-like layers of infected faecal material (Moodie 1923; Pizzi and Schenone 1955; Taylor 1955; Callen and Cameron 1960; Biddle 1965; Samuels 1965; Biddle 1967; Fry and Moore 1970). The coprolites recovered from West Stow were all mineralised to some degree, however, and although many of them were still completely formed, others were broken down, occasionally into a fine gravel-like consistency.

The shape and size of the samples suggested that they may have been of human origin, but other possibilities were not ruled out. It was hoped that the identification of any parasitic species found, and evidence of the host's diet, might indicate the animal involved and show if parasitic infection was related to the distribution of coprolites on the site.

MATERIALS AND METHODS

Owing to the partially mineralised nature of the coprolites standard parasitological diagnostic methods could not be used. In order to render the material suitable for standard extraction procedures to be carried out it had first to be physically broken down and most of the mineral component removed.

About 10 grams of each sample was gently pulverised by mortar and pestle and was then immersed in about 25 mls of 5% hydrochloric acid solution. Other acid or alkaline solutions were also considered, including sulphuric acid and sodium hydroxide, at various concentrations. A chelating agent (2% w/v sodium hydroxide + 0.5% EDTA) was also tried, as described by Samuels (1965) but most satisfactory results were obtained with hydrochloric acid, as described.

Samples were allowed to stand in the acid for twenty-four to forty-eight hours at room temperature, then the suspension was centrifuged for 10 minutes at 3000 rpm. The supernatant was discarded and the sediment was resuspended in nearly-saturated sucrose solution, as described by Nansen and Jørgensen (1977). After allowing to stand for a few minutes 2 mls of water was added carefully so that it formed a layer on top of the sugar suspension. Following centrifugation for 2 minutes at 1000 rpm this water layer and the top 2 mls or so of sugar solution were pipetted into a conical tube and a portion of the sediment was taken for examination. The conical tube was filled with water, shaken thoroughly, and centrifuged for 5 minutes at 2500 rpm. The supernatant was discarded and the sediment examined microscopically. The numbers of parasitic eggs or oocysts found were expressed per 10 grams of untreated coprolite material.

In order to confirm that the extraction method described above did not cause undue damage to the parasite eggs present, suspensions of fresh *Ascaris suum* (the large round worm of pigs) and *Fasciola hepatica* (the liver fluke) eggs were subjected to the same procedure. Recovery was almost 100% and there was no visible evidence of any damage.

RESULTS

The numbers of parasite eggs or oocysts recovered are shown in Table 39. It can be seen that in many of the samples examined nothing of parasitological importance was found, but in others the two dominant types were *Trichuris* (the whipworms) and ascarid (the large round worm). For a brief description of these worms, see the following appendix. In most coprolites the number of eggs recovered was small, indicating that infections were probably light, but in one coprolite (Sample No.12 from SFB 49) eighteen *Trichuris* eggs were counted (Plate 3a).

Many coprolites also contained protozoal oocysts, possibly belonging to the genus *Isospora* (Plate 3b). Because numbers were often too great to count exactly, results are expressed in the following notation:

0	no oocysts observed
+	up to 10 oocysts/10 gram sample
+ +	10 to 100 oocysts/10 gram sample

A single mite was recovered from one sample (No.5 from SFB 34/35). This was identified, by Mr. Hyatt at the British Museum (Natural History), as a member of the genus *Steneotarsonemus,* which live mainly on oats and other grasses (Plate 3c). Its good state of preservation suggested that the mite had not passed along the digestive tract of an animal but had come into contact with the faecal material later, perhaps accidentally.

Bone fragments were found in many samples, as shown in Table 39A. These were identified where possible by Mr. R. Jones, Ancient Monument Laboratory, Department of the Environment. Unlike the typically rounded fragments of bone usually

Table 39: Number of parasitic eggs/oocysts found in West Stow coprolites.

Dating	Site Sample No.	Parasite eggs/10 gms		Oocysts
		Trichuris	*ascarid*	
Phase 1				
5th century	SFB 16	0	3	0
	SFB 17	0	0	+
	SFB 36 NW1	0	0	0
	SE spit 2	0	0	0
	SFB 63 1	0	0	0
	2	0	0	0
Phase 2				
6th century	SFB 19	0	0	0
	SFB 23 1	0	8	0
	2	0	0	+
	3	0	0	+
	4	0	0	0
	5	0	0	+
	6	0	1	0
	7	0	0	0
	SFB 34/35			
	1	0	0	+ +
	2	3	0	+
	3	0	0	0
	4	0	1	0
	5	0	0	0
	6	0	0	0
	7	0	0	0
	8	0	0	+
	9	0	0	0
	10	0	0	0
	11	0	0	0
	12	0	0	+
	13	0	4	0
	14	0	0	+
	15	0	0	0
	16	0	0	+
	SFB 35	0	0	0
	SFB 44 NW1	0	1	0
	SE3	0	3	+
	SFB 45 1	0	0	0
	2	0	2	0
	SFB 47 SW3	0	0	0
	NW1	0	0	0
	SFB 49 1	0	0	0
	2	0	0	0
	3	0	0	+ +
	4	2	0	+ +
	5	0	0	+
	6	0	0	+
	7	0	0	+
	8	0	8	+
	9	0	0	+
	10	0	0	+
	11	0	0	+
	12	18	0	0
	13	0	0	0
	14	0	1	+ +
	15	0	0	+
	16	0	0	+
	17	3	0	+
	18	0	2	0
	SFB 50	0	2	0
	SFB 53	0	0	0
	SFB 56	0	0	+
	SFB 65	0	0	+ +
	Pit 63	0	0	0
Unstratified	SFB 59	0	0	0
	Hall 3	2	0	0
	Pit 64	0	0	+
	Pit 68	0	2	0
	*Misc. A/S	3	8	+ +

*Miscellaneous Anglo-Saxon material.

recovered from the faeces of carnivors, these coprolites yielded bones with sharp edges and showed little sign of the effects of digestion. Particles of charcoal were also found in one sample.

Many microscopic fragments of plant material were also observed and these included a number of pollen grains, which were not identified. The most common type is shown in Plate 3d.

Table 39A: Bone fragments found in West Stow Anglo-Saxon coprolites.

Site/Sample No.	No. of bone fragments found
SFB 19	7
SFB 23 3	3
4	7
6	4 + 1 ovicaprid vertebral centrum
SFB 34/35	
1	11
6	9
8	9 + 1 frag. small ungulate vertebra
9	3
12	8
14	2 + 1 frag. ovicaprid proximal metacarpal
15	1 + 3 frags. small ungulate vertebrae
16	22 + 1 frag. large ungulate vertebra + 1 frag. proximal rib (dog?)
SFB 35	18
SFB 36 SE spit 2	11 large + many small
NW1	6
SFB 45 1	5
2	15
SFB 47 SW3	30
NW1	25 + frag. astragalus immature ungulate
SFB 49 1	1
2	1
3	7
4	5
5	1 ovicaprid first phalanx (proximal)
6	8
8	2
9	7
11	2
13	1
16	4
17	(charcoal)
	5 + 2 frags. large ungulate rib + 1 small ungulate tooth
SFB 50	2
SFB 56	4 + 1 frag. small ungulate vertebra
SFB 59	9
SFB 63 1	30 + 1 centrum + 1 rib frag. + 4 vertebral epiphyses, all ovicaprid
2	3 + 1 frag. ovicaprid lumbar vertebra + 1 frag. ovicaprid radius (distal)
SFB 65	12
Hall 3	5
Pit 64	4
Pit 68	3 + 1 frag. ovicaprid distal tibia

DISCUSSION

Previous studies of this nature have involved the examination of material from cess pits (Taylor 1955; Biddle 1965) preserved in a soft peat-like layer, or of desiccated faecal samples which were subsequently reconstituted into something resembling their original condition (Callen and Cameron 1960; Samuels 1965). The West Stow coprolites, being partially mineralised, thus presented an additional problem. The method of extraction described in the present study allowed the separation of parasitic species from the faecal mass without undue disruption, permitting identification of the genera present. For example, Plate 3a shows a *Trichuris* egg found in a coprolite; compare this with a modern *Trichuris* egg, shown in Plate 3e.

Unfortunately, the information obtained about the parasitic infections present was not sufficiently detailed to allow identification of the host species involved. Although most coprolites were found in Sunken-Featured Buildings it is possible that they originated, not from man, but from an animal tethered in part of the building. A detailed record (Fig.286) of the positions in which coprolites were found in SFBs 34 and 35 showed a pattern of three groups, suggesting that either Anglo-Saxon man defaecated in strictly defined areas in the buildings or, alternatively, animals may have been tethered to posts, allowing only a limited degree of movement.

The size and shape of the intact coprolites (Plate 3f) suggested that, if the samples were not of human origin they may have been produced by a pig, bear or possibly dog. The condition of the bone fragments recovered, showing little of the evidence of digestion typically associated with fragments recovered from the faeces of carnivores, tends to rule out the latter possibility in many cases.

The size of the coprolites also indicated that the host animal was probably adult, which may also explain why relatively low numbers of parasite eggs were observed, since an age-related immunity to parasitic infections is likely to have developed. It is unlikely that any clinical signs would have been apparent with such low egg counts, although parasite egg output is notoriously variable from day to day and faecal egg counts do not provide a reliable means of diagnosis.

Despite the fact that most coprolites were recovered from the sites of buildings or pits, it is unlikely that these were the only places where defaecation occurred, because, if so, it is very unlikely for transmission of parasitic infections to occur. All the parasitic genera identified in these samples are transmitted by ingestion of the infective form present on the ground, usually near to the site where an infected animal previously defaecated. Thus, if infected faeces were deposited beneath the floor of a sunken-featured building, or in a pit, it is unlikely that the infective stages would be passed on to another host.

Examination of material from a medieval wood-lined cess-pit in Winchester revealed *Ascaris, Trichuris* and *Dicrocoelium* (a small species of liver fluke) eggs in concentrations of 450, 2300 and 216 eggs per gram, respectively (Taylor 1955; Biddle 1965; Biddle 1967). Assuming that the West Stow coprolites were of human origin a comparison with these results demonstrates the difference in levels of infection which may occur in urban and rural populations. Prior to the establishment of permanent settlements of any size it is likely that parasitic infections were even less common than appears to be the case at West Stow.

APPENDIX

Notes on Parasitic Genera found

Trichuris (the 'whipworms')

Trichuris spp. inhabit the caecum of many host species including man, sheep, pig, dog and cattle. The total length ranges from 3.5 to 8cm, with a long filamentous anterior part about twice as long as the thick posterior portion. The anterior end mainly lies buried in the mucosa, and the worm feeds on tissue fluids and some blood.

The female worms lay eggs which are typically lemon shaped, brown in colour and have a mucoid plug at each end. These pass out in the host's faeces and, in temperate climates, take about two months to reach infectivity. Infection of a new host is by ingestion of an egg containing a first stage larva; this infective form is highly resistant to climatic extremes and may last for several years on the ground in cool regions. After ingestion the egg hatches, the larva undergoes several moults until the adult stage is reached from six to twelve weeks later.

Although the clinical importance of *Trichuris* infections is generally slight, large numbers of worms can lead to a marked inflammation of the caecum (typhlitis) with moderate to severe diarrhoea.

Ascarids (the large roundworms of the small intestine)

The Ascarid group includes several genera: *Ascaris, Parascaris, Toxocara, Toxascaris* and *Ascaridia,* each species being more or less specific to one host species. The adult worms, ranging from 3 to 40cm long, inhabit the proximal small intestine and lay typical eggs (round or slightly oval, thick-walled, sometimes with a thick, sticky outer layer) which pass out in the host's faeces. The eggs are very resistant to extremes of temperature and may remain viable for more than four years. The eggs become infective after anything from two weeks to several months, depending on temperature, and when they are ingested by a new host the second stage larva is released and, in some genera, begins a migratory journey via the liver, lungs and back to the small intestine, where the adult form develops.

Adult ascarids cause little harm to the host unless large numbers are present and blockage occurs. Most damage is caused by the migrating larvae, which can lead to hepatitis and harm the lung tissues.

Isospora

The genus *Isospora* belongs to a large group of protozoal parasites which inhabit the small intestinal mucosa. After a series of asexual and sexual divisions oocysts are released into the lumen of the gastrointestinal tract and they pass out with the host's faeces. After a period of several days or weeks, depending on temperature, the oocysts become infective and, on ingestion by a new host, the parasite invades the intestinal mucosa.

Some species of Isopora are extremely **pathogenic,** since invasion of the mucosa may cause massive cellular disruption. Other species, however, appear to cause little harm.

THE CEREALS AND CROP WEEDS

by Peter Murphy

INTRODUCTION

The excavations at West Stow were carried out at a time when the recovery of botanical remains from archaeological sites was far from being a routine procedure. Nevertheless, during the 1972 season material was collected by flotation by the excavator for analysis by Dr. A.J. Legge. In the event Dr. Legge had insufficient time to complete this work, and the plant remains have now been identified by the writer. Further small samples collected during excavation have also been examined.

The sampling scheme adopted in 1972 involved the collection of very large samples from relatively few contexts. For example, the entire fill of SFB 63 was flotated. Such a scheme would probably not be applied nowadays: smaller samples from a larger number of contexts would be more likely to produce a fully representative collection of material. In order to supplement the 1972 samples two further groups of material are included in this report. These comprise cereal impressions from a sample of the pottery and fired clay from the site and a few cereal samples from Anglo-Saxon contexts at the nearby predominantly Iron Age settlement WSW 030.

Table 40: Details of the samples taken for cereals and cropweeds.

Feature	Period	Sample wt/volume	Type of material	Extraction method
Ditch 78	Iron Age	—	Nut-shells	Hand-collection
Pit 472	Roman	1. 24 buckets	Bulk soil	Machine flotation
Layers 1-3		2. 15 buckets	Bulk soil	Machine flotation
		3. 16 buckets	Bulk soil	Machine flotation
SFB 63	Anglo-Saxon	362 buckets	Bulk soil	Machine flotation
(1)	Mid 5th century			
Pit 59	Anglo-Saxon	500 g	Bulk soil	Flotation in lab.
(3)				
Post-hole 565	Anglo-Saxon	—	Inflorescences	Hand collection
	5th-6th century			
Hearth 3				
WE2/3	Anglo-Saxon?	—	Cereals	Hand collection
WSW 030	Anglo-Saxon	3 x 5kg	Bulk soil	Flotation in lab.
0026 (Pit)	C14: 1280± 70 bp			
20-40cm; 40-	or 670ad (HAR-3382)			
50cm; 50-60cm				
WSW 030	Anglo-Saxon	5kg	Bulk soil	Flotation in lab.
0101 (SFB)				
WSW 030	Anglo-Saxon	5kg	Bulk soil	Flotation in lab.
0143 (SFB)				

In the 1972 season the soil volume processed was recorded as numbers of buckets (approx. 2.5 gallon or 11.35 litre) of excavated soil.

SITE AND LABORATORY METHODS

In the 1972 season large bulk soil samples from Pit 472 and SFB 63 were processed on site in a froth flotation tank of the type described by Jarman *et al* (1972), collecting the flot in 1mm and 300 micron mesh sieves. Further small samples of miscellaneous, conspicuous charred plant remains were collected by hand from Ditch 78, Post-hole 565 and Hearth 3 WE2/3. Plant remains were extracted from a small soil sample of Pit 59 and from the samples from WSW 030 by water-flotation in the laboratory, using a 250 micron collecting mesh.

The dried flot was sorted under the low power of a binocular microscope. There was some contamination by modern plant remains, mainly fine roots, but contaminant weed seeds were rare. Most samples were completely sorted, but the largest were sub-divided (Pit 472 (2) and (3)). Charred plant remains identified are listed in Table 44.

Pottery and fired clay fragments from seven SFBs (3, 12, 15, 16, 21, 44 and 47) were inspected in detail for cereal impressions. Conspicuous impressions on Anglo-Saxon pottery from layer 2, noted during sorting, have also been studied. In addition, Iron Age pottery from securely-phased contexts was examined, along with large lumps of fired clay from the Roman Kiln V. Identifications were made from latex casts of these impressions. The impressions are listed and described in Table 45.

THE CHARRED CEREALS

Brief descriptions of the cereal remains are given here to supplement the illustrations in Fig.281. In general the material is too poorly preserved for measurement.

Wheats *(Triticum* spp.*)*

Glume bases, spikelet forks, rachis internodes and caryopses are present in the samples. In both Pit 472 and SFB 63 the wheat chaff is of a brittle-rachis form; no nodes of tough rachis wheat were seen. The glume bases, where well preserved, are robust and broad (over 1mm), generally having one prominent vein with subsidiary strong venation, though not infrequently showing less well-defined veins. Overall, these features are typical of spelt *(T. spelta)*. Spikelet forks are rare, and lack internodes, but the specimens present have spelt-type glume bases attached. Spikelet bases, lacking internodes and with only the extreme basal part of glumes still attached, are more common. The loose internodes are variable in size and thickness, but all have fairly clean basal and apical fractures. The caryopses from Pit 472 are almost all deformed as a result of germination before carbonisation, but nearly all are elongate forms, probably of spelt. There are a few shorter grains with maximum widths just above the embryo, but these show some signs of distortion. By contrast the grains from SFB 63, though again including a high proportion of distorted specimens, are mainly short and broad with steeply-placed embryos; these are identified as bread or club wheat *(T. aestivum sensu lato)*. There are a few poorly-preserved elongate grains in addition, though the separation of these from poorly-preserved rye presents some difficulties. WSW 030, Features 026 and 143 produced a small number of short grains apparently of a free-threshing wheat.

Rye *(Secale cereale)*

Rye is represented by grains and short sections of rachis. The grains are variable in size and form, but all are elongate, sharply keeled dorsally and pointed in the region of the embryo.

	Length (mm)	Breadth (mm)	Thickness (mm)	L/B x 100	T/B x 100
minimum	3.5	1.2	1.4	200	75
mean	5.07	2.07	1.94	248	94
maximum	6.5	2.6	2.5	300	117

Table 41: Measurements and indices of rye grains from WSW 030 Feature 026 (N = 30).

Fragments of rye rachis comprising up to three internodes are present. The specimen from Pit 59 retains slight traces of marginal pubescence toward the base of the central internode.

Barley *(Hordeum* spp*)*

Grains and rachis internode fragments were recovered. The grains from SFB 63 are the best preserved. These are clearly hulled specimens: several examples retain fragments of lemma and palea, but lemma bases and rachillas have not survived. There are several twisted lateral grains, which indicate the presence of six-row barley. The poorly-preserved grains from WSW 030 are also hulled. Those from Pit 472 are in a poor state, including many germinated specimens, though again only hulled grains appear to be present. The rachis internodes are fragmentary, and ear density cannot, therefore, be determined.

Oats *(Avena* spp.*)*

Small numbers of oat grains were identified, but floret bases are apparently absent. The large grain from WSW 030 Feature 143 (length 6.7mm) may be from a cultivated oat.

THE IMPRESSIONS.

The Iron Age pottery had impressions of hulled barley baryopses *(Hordeum* sp.*)*, of a glume possibly of spelt *(Triticum* c.f. *spelta)* and of probable brome grass caryoposes *(Bromus* sp.*)*. No impressions on the Roman Kiln debris were identified.

Almost all the cereal impressions on the Anglo-Saxon pottery are of hulled barley caryopses. Typical specimens are illustrated in Plate 4. The dorsal views clearly show the lemma nerves, though sharp impressions of lemma bases were not obtained. Indistinct impressions of rachillas are visible in a few

cases. There are several grains from lateral spikelets of six-row barley, though the majority of the specimens are symmetrical. The three impressions of barley rachis internodes are relatively short and broad (Plate 4d), and are thought to be from a dense-eared variety. Two lateral impressions of caryopses are tentatively identified as wheat and there is a single poor impression probably of an oat floret. In addition many sherds show impressions of finely-divided fragments of grass culm, leaves and spikelets — the so-called 'chaff-tempering'. These impressions were not identified since they show no clear diagnostic features.

COMPOSITION AND FORMATION OF THE SAMPLES.

The composition of the cereal samples is examined here with a view to understanding the ways in which they were formed. This is of intrinsic interest since it may give information about crop processing techniques and crop purity. It also helps to ensure that invalid comparisons between samples of quite different origin are avoided (Dennell 1974). The composition of the larger charred samples from West Stow is summarised in Table 42. The samples are listed in descending order of 'purity'.

The interpretation of the large 7th century deposit from WSW 030 Feature 026 is straightforward. Consisting almost entirely of rye grains, with very few impurities, it is clearly a fully-processed crop ready for consumption or sowing. Carbonisation presumably occurred either during drying prior to storage, or in a catastrophic granary fire. The sample from Pit 59, an unphased Anglo-Saxon feature, also consists largely of rye grains, but includes a significant number of corn-cockle seeds *(Agrostemma githago)* and small grass caryopses. Since seeds of corn-cockle are nearly as large as the rye grains themselves it would have been almost impossible to remove them by winnowing or sieving. These seeds have several unpleasant properties: they taint flour, and contain haemolytic toxins known as saponins (Forsyth 1968, 47). The charred moth larva from this sample (see Table 44) apparently indicates insect infestation in addition. It therefore seems plausible that this contaminated batch of rye was deliberately burnt as refuse, possibly in the adjacent hearth F50, and that the charred residue was dumped into Pit 59.

The three samples from the Roman Pit 472 are similar in composition to one another, although the proportion of cereal grains decreases towards the base of the pit. They are thought to derive largely from a common source though in this refuse deposit some mixing with material from other sources may have occurred. All three samples contain large numbers of weed seeds, moderate amounts of spikelet fragments, and relatively few cereal grains. They are thus comparable to Dennell's Type 3 deposits (1974, 280), which are interpreted as crop-cleaning waste. Opportunities for carbonisation would have occurred when such waste was burnt, either as refuse or fuel, the ash and charred remains subsequently being disposed of in this refuse pit.

The sample from the mid-5th century SFB 63 is more heterogeneous in composition. Compared with the samples from Pit 472 it has a higher cereal grain:weed seed ratio and no one cereal species is numerically predominant. The proportion of spikelet fragments in SFB 63 is lower than in Pit 472 and, although the grains in SFB 63 are mainly of bread/club wheat-type, the spikelet fragments are predominantly of spelt. The sample from SFB 63 thus appears to include cereal remains from several distinct sources, though from its composition a major component of crop-cleaning waste is clearly present. The fill of this hut-pit was not seen *in situ* by the writer, but from the separate bags of 'flot' it would appear that plant remains were not clustered in the fill, but fairly evenly distributed. This may be taken to indicate a slow accumulation of plant remains from a variety of sources rather than deliberate dumping.

The impressions of cereals on the Anglo-Saxon pottery are almost entirely of hulled barley grains. This contrasts with the samples of charred cereal remains examined, in which barley, though consistently present, is not the most abundant cereal. A predominance of hulled barley seems, on the present evidence, to be characteristic of grain impressions on Anglo-Saxon pottery from the Midlands and East Anglia (Table 43). Jessen and Helbaek (1944), working with pottery from a number of Saxon sites mainly in Oxfordshire, Suffolk and Cambridgeshire, reported eighty impressions of hulled barley, three of naked barley and fourteen of cultivated oats, besides a few impressions of wild oat, flax and woad. Impressions on cremation urns from the Saxon cemetery of Spong Hill, Norfolk were again mainly of hulled barley, though bread wheat

	Indeterminate cereal grains	*Triticum* (wheat) grains	*Hordeum* (barley) grains	*Secale* (rye) grains	*Avena* (oat) grains	Spikelet fragments	Weed seeds
WSW 030 Feature 026 (40-50cm)	*	—	5	385	2	—	3
Pit 59	11	—	—	290	—	4	191
SFB 63	144	25	21	24	5	62	1807
Pit 472 (1)	69	47	17	1	1	211	1618
Pit 472 (2)	53	23	6	—	—	440	2485
Pit 472 (3)	10	8	1	1	—	297	2389

Table 42: Numerical composition of the larger samples.* — indeterminate grain fragments not counted; 1.2 cc in volume.

grains and rachis internodes, cultivated oats and rye were also represented (Murphy, forthcoming). Thus there does seem to be a fairly clear and consistent pattern to these groups of impressions. However, this pattern is not likely to be related in any simple way to crop production.

	Triticum sp. (wheat)	*Hordeum* spp. (barley)	*Avena* spp. (oats)	*Secale cereale* (rye)
West Stow	cf. 2	33(32)	cf. 1	—
Spong Hill	7(5)	52(31)	6(4)	3(2)
Midlands + East Anglia (Jessen & Helbaek)	—	83	15	—

Table 43: Three groups of Anglo-Saxon grain impressions, 'corrected' totals, discounting multiple impressions, in brackets.

Dennell (1976) has discussed some problems associated with the interpretation of impressions. The first point to be considered is related to quantification: that multiple impressions of a crop species on a single vessel may bias the overall results. In the case of the West Stow impressions, where barley is virtually the only species represented, the 'correction' of totals to allow for multiple impressions on sherds has little effect on the overall picture. A second problem is that of possible transportation of the pottery after manufacture. At present most of the West Stow pottery, (with the exception of some very early forms), is believed to have been produced locally using the Chalky Lowestoft Till (Stanley West, pers. comm.) as a clay source. This being so it is assumed that the plant material in the pottery was of local origin. Consequently the apparent discrepancy between the evidence from charred plant remains and impressions is not thought to indicate a distinct cropping regime based on barley at some other locality.

A more probable explanation for this discrepancy can be inferred from a consideration of the process by which impressions were made in clay objects. Unlike the finely-divided fragments of grass in the 'chaff-tempered' pottery, (which was presumably mixed with the clay to improve firing qualities), included cereal grains would weaken the pot by creating relatively large voids after firing. For this reason it is generally assumed that such grains were accidental inclusions. Renfrew (1973,15) suggests that hand-made pots may have been made close to the domestic hearth, and that grains on the floor lost during food preparation would have become incorporated into the clay. Consequently, as Dennell notes, 'impressions ... are more likely to represent the diet of the inhabitants than the overall plant economy of the settlement'. A further point worth bearing in mind is the possibility that cereal crops which were utilised as a whole grain (e.g. in stews and soups, or for brewing) may be preferentially represented, compared with those eaten as flour or meal. This might, to some extent, explain the low frequencies of wheat and rye impressions on Saxon pottery. In conclusion, then, it appears that the impressions are an accidental by-product of a relatively small section of the overall cereal economy of the site, providing information primarily on consumption rather than production and processing.

Crop plants.

Little need to be said here about the Iron Age plant remains. Impressions of two cereals, spelt wheat *(Triticum spelta)* and hulled barley *(Hordeum* sp.*)*, were identified, and Ditch 78 produced charred hazelnut shell fragments *(Corylus avellana)*. However, much larger and more informative samples were recovered at the nearby Iron Age settlement WSW 030. These provide a fuller picture of Iron Age farming in the area, and will be published elsewhere.

The Roman samples from Pit 472 consist largely of remains of spelt together with some hulled barley and traces of rye *(Secale cereale)* and oats *(Avena* sp.*)*. Roman cereal samples of this general type, containing spelt and hulled barley sometimes with small quantities of other cereals including emmer, bread/club wheat, rye or oats, are common throughout East Anglia. The West Stow samples are thus quite typical.

Palaeobotanical evidence from East Anglian sites indicates a major shift at some time in the post-Roman period in the range of cereals cultivated, so that by early medieval times, spelt had been replaced by tough-rachis free-threshing hexaploid wheats, and rye apparently became a more important crop. The stages in this change are at present poorly understood, but the Anglo-Saxon samples from West Stow provide some useful evidence. Two features are of particular interest: the presence of spelt in SFB 63 and the earliest known large rye deposits from Pit 59 and WSW 030 Feature 026. SFB 63 was selected for sampling since it was isolated, and intersected with no other features. There is therefore no reason to believe that any of the plant remains from this hut could be derived from earlier deposits. Consequently the remains of spelt from the hut can be taken as firm evidence for the continuation of spelt cultivation until at least the mid-5th century at West Stow. The survival of this crop would seem to indicate some degree of agricultural continuity, (at least so far as wheat production is concerned), between the Roman and Anglo-Saxon periods. In the later samples from WSW 030, one of which is dated to the late 7th century, there is no trace of spelt: the few poorly-preserved wheat grains in these samples are short forms, probably of bread/club wheat-type. Nor has spelt been identified in Middle Saxon samples from Brandon, Suffolk and Ipswich (Murphy, forthcoming). On the present evidence, then, spelt cultivation seems to have ceased in East Anglia at some point between the mid-5th century and Middle-Saxon times.

The two large rye deposits from Anglo-Saxon contexts are the earliest known in this area at present. Rye occurs in the Roman samples from Pit 472 but in such small quantities as to suggest that it was no more than a minor contaminant of a spelt crop. However rye certainly was cultivated as a crop in its own right in Roman Britain: samples containing a large proportion of rye are known from Verulamium

(Helbaek 1952) and, less certainly, Caerleon (Helbaek 1964). The extensive root system of this crop, which is thought to enable it to exploit soil water not available to other cereals (Renfrew 1973, 85) makes it a particularly suitable crop for the dry sandy soils of Breckland. One would, therefore, expect that it would have become important during the Roman period in this area; and indeed pollen evidence from Hockham Mere in the Breckland indicates Roman rye cultivation (Sims 1978). However, it is only sparsely represented in Roman features at this site (and also at other Roman Breckland sites — Gallows Hill, Thetford; Weeting, Norfolk; Icklingham, Suffolk. Murphy, forthcoming) compared to its relative abundance in Anglo-Saxon features. Perhaps the most likely explanation for this is that there was a change in crop processing methods between the Roman and Anglo-Saxon periods which resulted in rye having a better chance of becoming carbonised. However, it seems possible that future work at Roman sites will produce better evidence for rye cultivation.

The remaining cereals from the Anglo-Saxon features are the free-threshing bread or club wheats, barley and oats. Free-threshing wheats are represented here only by grains: no chaff was seen. Charred remains of barley are reasonably common only in SFB 63, though barley accounts for almost all the impressions. As is noted above, however, the impressions probably relate to consumption rather than providing any evidence about the overall importance of barley as a crop. Oats are very sparsely represented; these samples provide no evidence for the cultivation of oats as a separate crop. Indeed, since oats are best adapted to damp climates, and the oat plant requires more water than other temperate cereals (Renfrew 1973, 98) its cultivation on any large scale would seem improbable in this area.

Of crops other than cereals there is very little information. SFB 63 produced a single pea-sized leguminous seed; however the features which would permit identification have not survived.

Weeds and other wild plants.

The seeds of wild plants associated with the cereals provide information about soil conditions in the arable fields. Hence it is possible to draw some inferences about the location of the arable area, and to some extent about cultivation methods. This depends upon the assumption that the weed seeds in these samples are truly representative of the weed flora in the arable fields as a whole. This is probable the case since crop processing waste is likely to include a 'randomised' sample of weed seeds, derived from a relatively large area.

The majority of the seeds are of common arable weeds having no particular soil requirements in terms of pH or drainage, but some of the weeds are more characteristic of specific edaphic conditions. In addition there are some seeds of plants more common in non-arable habitats. These must be derived from residual plants surviving from the vegetation of the area before cultivation, at the field margins and sporadically in the crop. The similarity of the weed seed assemblages from Roman and Anglo-Saxon features at West Stow is remarkable. There are a few minor differences, some of which will be referred to below, but overall the assemblages are so similar that separate consideration is unnecessary.

The more ecologically exacting species may be divided into five main groups, as follows: (Clapham, Tutin and Warburg 1962; Hind 1889; Petch and Swann 1968):

1. Weed plants, particularly characteristic of light, well-drained soils:
   Papaver argemone Long prickly-headed poppy.
   Raphanus raphanistrum Wild radish.
   Arenaria serpyllifolia Thyme-leaved sandwort.
   Spergula arvensis Corn-spurrey.
   Scleranthus c.f. *annuus* Knawel.
   Aphanes arvensis/microcarpa Parsley-piert.
   Rumex acetosella Sheeps sorrel.
2. Weed plants, particularly characteristic of heavy clay soils:
   Anthemis cotula Stinking mayweed.
3. Grassland plants of widespread distribution:
   Ranunculus acris/repens/bulbosus Buttercup.
   Prunella vulgaris Self-heal.
   Plantago lanceolata Ribwort plantain.
4. Dry grassland and heath plants:
   Stellaria graminea Lesser stitchwort.
   Calluna vulgaris Heather.
5. Damp grassland and marsh plants:
   Ranunculus c.f. *flammula* Lesser spearwort.
   Montia fontana subsp. *chondrosperma* Blinks.
   Polygonum c.f. *persicaria* Redshank.
   Ajuga c.f. *reptans* Bugle.
   Juncus spp. Rushes.
   Eleocharis sp. Spike-rush.
   Carex spp. Sedges.

Within a kilometre radius of the site a wide variety of soils occur (Corbett 1973). The settlement itself is located on a gravel terrace of the River Lark, partly overlain by blown sand deposits. The soils of the terrace are well-drained brown earths (Freckenham Series) and humus podzols. The main modern 'natural' vegetation is grass-heath and *Calluna*-heath with *Carex arenaria* on the blown sand. On the gentle slopes above the terrace, soils are mapped as the Methwold-Worlington complex and show marked small-scale lateral variations in pH. This is reflected in natural vegetation patterns, where *Calluna* develops on the Worlington series, and *Agrostis-Festuca* heath including some calcicoles is found on the Methwold Series. In the valley floor below the site poorly-drained gley podzols, ground-water gley soils and organic soils formed on peat occur.

The well-drained soils in the vicinity of the settlement would clearly have provided suitable conditions for weeds of light soils, and for dry grassland and heath plants (Groups 1 and 4 above). Seeds of plants in these two groups are relatively abundant in all the larger samples; *Arenaria serpyllifolia, Scleranthus* c.f. *annuus* and *Rumex acetosella* are particularly common. This suggests that the terrace soils were of primary importance for arable farming.

Seeds from plants of damp habitats (Group 5) are much less common and by no means all of them indicate permanently wet conditions. *Montia fontana* subsp. *chondrosperma* (blinks) requires a high water-table in the spring, preferably on light acid soils (Walters 1953). Some species of *Eleocharis* are likewise adapted to seasonally damp conditions. Not all the *Carex* (sedge) nutlets need necessarily be derived from species of damp habitats: it is probable that some specimens are of *C.arenaria* (sand-sedge), though poor preservation makes certainty impossible. Overall the seeds of wetland plants are thought to indicate that the arable area extended onto the more poorly drained soils at the edge of the terrace, where damp-ground plants were able to colonise the fields; but these damper areas apparently formed only a very minor part of the arable land. There are no obligate calcicoles amongst the wild plants identified, and there is thus no evidence that cultivation extended onto the more calcareous slope soils.

In the present context the achenes of *Anthemis cotula* (stinking mayweed) are quite anomalous. They occur in SFB 63, but the species has not been identified in any other cereal samples from the Breckland. Stinking mayweed is much more characteristic of heavy Boulder Clay soils in Norfolk and Suffolk (Petch and Swann 1968, 210). Its presence here may indicate the importation of seed-corn from Boulder Clay areas to the south. Whether it would persist for long as an arable weed on the light soils of the West Stow area is questionable.

The remaining common arable weeds provide little useful information. The small-seeded Leguminosae (probably *Medicago* and *Trifolium,* but not closely identified due to deformation during carbonisation) are, however, of interest by virtue of their abundance. They account for 19.8% of the weed seeds in Pit 472 (3), and 13.2% in SFB 63. These relatively high frequencies probably indicate nitrogen deficiencies at least in parts of the arable fields (cf. Warington 1924, 119).

From the samples examined it is difficult to discern any significant change in the wild flora through time. There are differences between the Roman and Anglo-Saxon samples, but these involve species occurring at very low frequencies. Comparison with the modern flora (Darrah, Musgrove and Radley 1980) shows some changes, but these are attributable almost entirely to the absence, until recently, of suitable arable areas open for colonisation by weeds.

LOCAL FACTORS.

For a number of reasons early farming in the West Stow area is unlikely to have been typical of East Anglia as a whole, but rather was adapted to particular and rather unusual local conditions. The Breckland has historically been marginal land so far as arable farming is concerned. The main factors limiting productivity are as follows (Corbett 1973):

1. Climate. Annual rainfall in the southern Breckland is very low, between 23-25 ins. (584-635mm).
2. Soil moisture deficits. Partly as a consequence of low rainfall, but also because the soils are coarse-textured, SMD's occur between June and October. This results in reduced transpiration and reduced crop yields (Sturdy and Eldridge 1976).
3. Soil instability. Wind-blowing of dry soil occurs

Table 44: Abbreviations and notes.

Abbreviations:

br	bract	gb	glumebase
bri	brittle-rachis internode	p	plumule + primary root fragments
bu	bulb	ri	rachis internode
ca	caryopsis	spb	spikelet base
cn	culmnode	spf	spikelet fork
fr	fragment		

Notes:

(a) Siliqua joints.
(b) Sepals normally missing. Some slender, slightly incurved sepal midribs survive. *S.perennis* cannot be excluded.
(c) Nutlet coats missing.
(d) These are all small seeds, generally badly distorted with radicles often missing. Distortion makes definite identification difficult but c.f. *Medicago* and *Trifolium*.
(e) All surface detail lost, but general shape matches *Potentilla*.
(f) Separation on size criteria impossible due to possible shrinkage in carbonisation.
(g) No perianths.
(h) Lacking testas or nutlet-coats; or immature specimens.
(i) Surface detail closely matches these taxa, but overall shape less slender than reference material. Possibly distorted in carbonisation.
(j) All one species.
(k) Capsules counted; shoot tips with imbricate leaves also present.
(l) Distortion makes identification using key of Nilsson and Hjelmqvist (1967) impossible: though some *C.cf. arenaria* are present.
(m) These are mostly small *Poa*-sized caryopses. Many are well-preserved, but insufficient time available for complete identification.
(n) Dr. H. Kenward comments 'The insect is undoubtedly a moth larva of some kind, and in all probability one of the species found in modern grain. However, it is much too distorted and damaged by charring to be firmly identified'.
(o) Spherical, ovate and elongated charred objects are common. These have not been counted, since it is not known whether all of these are the remnants of fruits or seeds.

Additional hand-collected material was identified as follows:

D78 (Iron Age ditch):	*Corylus avellana* charred nutshell fragments.	
WE 2/3 (Anglo-Saxon? hearth):	*Hordeum* sp. (hulled)	4 caryopses
	Triticum sp.	1 caryopses
	Indet. cereal	7 caryopses
PH 565 (Anglo-Saxon, 5th-6th century posthole):	2 charred inflorescences with woody bracts.	

Context		Main Site					WSW 030				
		Pit 472(1)	Pit 472(2)	Pit 472(3)	SFB 63	Pit 59(3)	Pit 026 20-40cm	Pit 026 40-50cm	Pit 026 50-60cm	SFB 101	SFB 143
		Roman			Anglo-Saxon		Anglo-Saxon				
Cereal indet.	ca	69	53	10	144	11	6	1.2cc	6cc	8	6
	cn	3	8	3	fr.	—	—	—	—	—	1
	p	+	+	+	+	—	—	—	—	—	—
Triticum sp.	ca	47	23	8	25	—	—	—	3	—	1
	bri	13	31	24	2+cf2	—	—	—	—	—	—
	gb	71	87	75	24	—	—	—	—	—	—
	spb	12	43	24	3	—	—	—	—	—	—
Triticum spelta L.	gb	111	270	170	29	—	—	—	—	—	—
	spf	—	2	—	1	—	—	—	—	—	—
Hordeum sp.	ca	17	6	1	21	—	2	5	25	3	3
	ri	1	6	1	—	—	—	—	1	—	—
Hordeum vulgare L.	ri	—	1	—	—	—	—	—	—	—	—
Secale cereale L.	ca	cf.1	—	1	24	290	4	385	78	—	—
	ri	3	—	3fr	cf.1	4	—	—	1	—	—
Avena sp.	ca	fr	—	—	5	—	—	2	4	—	1
Ranunculus acris/repens/bulbosus		20	25	30	5	—	—	—	—	—	—
Ranunculus c.f. *flammula* L.		—	3	—	—	—	—	—	—	—	—
Ranunculus sp.		3	—	—	1	—	—	—	—	—	—
Papaver argemone L.		—	2	—	—	4	—	—	—	—	—
Raphanus raphanistrum L.	(a)	13+fr	6	2	1+fr	—	—	—	—	—	—
Silene alba (Miller) Krause		8	16	14	8	—	—	—	—	—	—
Agrostemma githago L.		—	—	—	3	96	—	—	—	—	—
Stellaria media-type		7	30	26	9	—	—	—	—	—	—
Stellaria graminea L.		—	—	1	2	—	—	—	—	—	—
Stellaria/Cerastium		—	4	—	5	—	—	1	—	—	—
Arenaria serpyllifolia L.		—	34	24	1	—	—	—	—	—	—
Spergula arvensis L.		1	3	1	3	—	—	—	—	—	—
Scleranthus c.f. *annuus* L.	(b)	19	19	33	9	—	—	—	—	—	—
Caryophyllaceae indet.		6	9	16	4	—	—	—	—	—	—
Montia fontana subsp. *chondrosperma*		5	3	3	6	—	—	—	—	—	1
Chenopodium hybridum L.		—	—	—	3	—	—	—	—	—	—
Chenopodium album L.		47	87	75	278	—	—	—	—	—	—
Atriplex patula/hastata		292	502	406	215	—	—	—	2	—	—
Chenopodiaceae indet.	(h)	123	157	132	269	—	4	—	28	2	2
c.f. *Malva* sp.	(c)	1	2	3	2	—	—	—	—	1	—
Vicia sp.		—	—	—	2	—	—	—	—	—	—
Vicia/Pisum sp.		—	—	—	1	—	—	—	—	—	—
Leguminosae indet.	(d)	199	415	475	238	3	—	—	—	—	—
c.f. *Potentilla* sp.	(e)	8	—	42	13	—	—	—	—	—	—
Aphanes arvensis/microcarpa	(f)	—	1	2	3	—	—	—	—	—	—
c.f. *Euphorbia helioscopia* L.		—	—	—	—	—	—	—	—	—	1 fr.
Polygonum aviculare agg.		216	258	270	102	—	—	—	—	—	1
Polygonum cf. *persicaria* L.		4	—	2	7	—	—	—	—	—	—
Polygonum convolvulus L.		196	188	105	66	—	—	—	—	1	3
Rumex sp.	(g)	53	56	60	33	—	—	1	—	—	—
Rumex acetosella agg.		148	356	280	214	—	—	—	—	—	2
Polygonaceae indet.	(h)	75	60	71	44	—	—	—	1	1	2
c.f. *Urtica urens* L.		—	—	1	—	—	—	—	—	—	—
Urtica dioica L.		—	—	—	—	—	—	—	—	—	1
Corylus avellana L.		—	—	—	—	—	—	—	—	—	—
Calluna vulgaris (L) Hull	(k)	—	2	4	6	—	—	—	—	—	—
Anagallis sp.		—	1	—	—	—	—	—	—	—	—
Myosotis sp.		—	—	—	1	—	—	—	—	—	—
c.f. *Verbascum* sp.		—	—	—	1	—	—	—	—	—	—
Euphrasia/Odontites	(i)	—	—	—	7	—	—	—	—	—	—
Prunella vulgaris L.		1	8	2	4	—	—	—	—	—	—
c.f. *Lamium album*		—	—	1	—	—	—	—	—	—	—
Ajuga c.f. *reptans* L.		—	—	1	—	—	—	—	—	—	—
Labiatae indet.	(j)	45	30	63	49	—	—	—	—	—	—
Plantago lanceolata L.		6	10	4	10	1	—	—	—	—	—
Galium sp.		—	—	—	1	—	—	—	—	—	—
Galium aparine L.		—	1	—	—	—	—	—	—	—	—
Anthemis cotula L.		—	—	—	16	—	—	—	—	—	—
Tripleurospermum maritimum (L) Koch		3	3	—	—	—	—	—	—	—	—
Onopordum acanthium L.		—	—	—	—	—	—	—	—	2	—
Compositae indet.		2	—	5	1	—	—	—	—	—	—
Juncus sp.		—	—	—	—	+	—	—	—	—	—
Eleocharis sp.		10	16	15	7	—	—	—	—	—	—
Carex spp.	(l)	11	27	13	23	—	—	—	—	—	—
Cyperaceae indet.		—	—	1	—	—	—	—	—	—	—
Bromus mollis/secalinus		15	9	7	9	1	—	—	—	—	—
Gramineae indet	(m)	81	142	139	125	86	—	1	—	1	1
Indet (o)	br	—	—	1	—	—	—	—	—	—	—
	bu	fr	—	—	—	—	—	—	—	—	—
Insect (n)		—	—	—	—	+	—	—	—	—	—
% flot sorted		100	50	12.5	100	100	100	100	100	100	100

Table 44: Fruits, seeds etc. identified in the flotated samples.

Iron Age

Phase/Pit	Taxon	Plant part	View	Notes	Dimensions (mm) Length	Breadth	Thickness
1/244	cf. *Hordeum* sp.	Caryopsis	Ventral	—	6.0	3.2	—
1/246	Indet cereal	Caryopsis	Oblique ventral	—	—	—	—
1/265	cf. *Bromus* sp.	Caryopsis	Ventral	small	5.5	1.7	—
	cf. *Bromus* sp.	Caryopsis	Ventral	small	—	1.8	—
1/409	Indet cereal	Caryopsis	End view	—	—	—	—
11/414	Indet cereal	Caryopsis	Ventral	—	—	—	—
11/414	*Triticum cf.spelta*	Glume	—	—		width>1.5mm	
111/18	*Hordeum* sp.	Caryopsis	Ventral	Hulled	7.8	3.0	—
111/233	*Hordeum* sp.	Caryopsis	Dorsal	Hulled	8.0	3.8	—
111/233	Indet cereal	Caryopsis	Ventral	Distorted	—	—	—

Roman

Large fragments of fired clay from Kiln V were examined. No specifically identifiable impressions of plant material were seen, though the fragments did show some impressions of cereal straw and leaves.

Layer 2. (Saxon)

Bag No.	Taxon	Plant part	View	Notes	Dimensions (mm) Length	Breadth	Thickness
191	Indet cereal	Caryopsis	Oblique ventral	—	—	—	—
191	cf. *Triticum* sp.	Caryopsis	Lateral	—	5.9	—	3.0
217	*Hordeum* sp.	Caryopsis	Dorsal	Hulled	7.0	3.8	—
240	*Hordeum* sp.	Caryopsis	Partial dorsal	Hulled	—	—	—
240	*Hordeum* sp.	Caryopsis	Shallow ventral	Hulled	—	—	—
824	*Hordeum* sp.	Caryopsis	Oblique ventral	Hulled lateral(?)	6.9	—	—
3173	*Hordeum* sp.	Caryopsis	Lateral	Hulled	8.1	—	3.0
Unstrat.	*Hordeum* sp.	Caryopsis	Dorsal	Hulled	6.5	2.9	—

SFB 12. (Late 5th century)

Bag No.	Taxon	Plant part	View	Notes	Dimensions (mm) Length	Breadth	Thickness
135	*Hordeum* sp.	Caryopsis	Shallow dorsal	Hulled	—	4.0	—
135	*Hordeum* sp.	Caryopsis	Dorsal	Hulled, lateral(?)	7.0	3.2	—
135	Indet cereal	Caryopsis	Indistinct lateral	—	—	—	—
135	cf. *Triticum* sp.	Caryopsis	Lateral	—	6.8	—	3.0
135	cf. *Avena* sp.	Floret	Central	Lemma margins and rachilla indistinctly visible	—	—	—
655	*Hordeum* sp.	Caryopsis	Oblique ventral	Hulled, trace of rachilla	—	—	—
655	*Hordeum* sp.	Caryopsis	End view	Hulled	—	—	—

SFB 16. (Late 5th century)

Bag No.	Taxon	Plant part	View	Notes	Dimensions (mm) Length	Breadth	Thickness
203	*Hordeum* sp.	Caryopsis	Oblique ventral	Distorted	—	—	—
228	Indet cereal	Caryopsis	Lateral	—	—	—	—
223	Indet cereal	Caryopsis	Oblique ventral	—	—	—	—

SFB 21. (Mid 5th century)

Bag No.	Taxon	Plant part	View	Notes	Dimensions (mm) Length	Breadth	Thickness
237	*Hordeum* sp.	Rachis internode	—	Not complete	3.0	1.4	—
270	Gramineae indet	Two florets	Lateral	—	—	—	—
271	Indet cereal	Caryopsis	Lateral	—	—	—	—
326	*Hordeum* sp.	Caryopsis	Shallow dorsal	Hulled	—	—	—
342	cf. *Hordeum* sp.	Caryopsis	End view	—	—	—	—
342	*Hordeum* sp.	Caryopsis	End view	Hulled	—	—	—
361	*Hordeum sp.*	Caryopsis	Lateral	Hulled	—	—	—
361	Indet cereal	Caryopsis	End view	—	—	—	—

SFB 44. (Late 6th century)

Bag No.	Taxon	Plant part	View	Notes	Dimensions (mm)		
					Length	Breadth	Thickness
1360	*Hordeum* sp.	Caryopsis	Oblique ventral	Hulled	7.1	—	—
1360	*Hordeum* sp.	Caryopsis	Partial ventral	Hulled	—	—	—
1368	Indet cereal	Caryopsis	Lateral	—	—	—	—
1372	*Hordeum* sp.	Caryopsis	Dorsal	Hulled	9.0	2.8	—
1403	*Hordeum* sp.	Caryopsis	Ventral	Hulled	7.1	3.5	—
1403	*Hordeum* sp.	Rachis internode	—	—	3.2	1.6	—
1472	*Hordeum* sp.	Caryopsis	Ventral	? Hulled	7.4	3.4	—
1605	*Hordeum* sp.	Caryopsis	End view	Hulled	—	—	—
1763	*Hordeum* sp.	Caryopsis	Oblique ventral	Hulled, lateral?	8.0	—	—
1767	*Hordeum* sp.	Caryopsis	Shallow dorsal	Hulled	—	—	—
2354	*Hordeum* sp.	Caryopsis	Oblique ventral	Hulled	9.0	—	—

SFB 47. (Late 5th century)

Bag No.	Taxon	Plant part	View	Notes	Dimensions (mm)		
					Length	Breadth	Thickness
1629	*Hordeum* sp.	Caryopsis	Oblique ventral	?Hulled	7.3	3.0	—
1629	*Hordeum* sp.	Caryopsis	Dorsal	Hulled	8.0	3.3	—
1733	*Hordeum* sp.	Rachis internode	—	—	3.8	1.1	—
1733	Indet cereal	Caryopsis	End view	—	—	—	—
1733	Indet cereal	Caryopsis	Shallow ventral	—	—	—	—
1733	*Hordeum* sp.	Caryopsis	Shallow ventral	Hulled	—	—	—
1755	*Hordeum* sp.	Caryopsis	Dorsal	Hulled	6.5	3.0	—
1755	*Hordeum* sp.	Caryopsis	Oblique ventral	Hulled	7.0	—	—
1757	*Hordeum* sp.	Caryopsis	Ventral	Hulled	7.5	3.0	—
1781	Indet cereal	Caryopsis	?	—	—	—	—

The pottery from SFBs 3 and 15 (early 7th century) was also examined but no identifiable impressions were seen. There were overall few organic inclusions in this pottery.

Table 45: Description of the impressions.

in most springs sometimes making re-drilling necessary.

4. Soil nutrient deficiencies. These may further reduce yields within the constraints imposed by the moisture supply.

The conservation of soil moisture is thus of considerable importance. It seems probable that modern experimental 'minimum cultivation' was in practice, if not in intent, anticipated by early farmers in the Breckland since plough-types were less efficient than those of today. Manuring would have been of critical importance, however; the addition of organic material to the soil would increase its water capacity, thus helping to reduce soil moisture deficits and stabilising the soil surface, whilst adding nutrients to replace those lost by cropping and leaching. Successful cereal farming on these soils would have had to be closely linked with stock-rearing in order to ensure adequate supplies of manure. The site itself is located in a position to exploit both dry grassland areas on the slopes and terraces and also permanent pastures in the valley floor. The agricultural system must have involved folding on the arable areas and also probably the collection of manure from stalled animals, though the relatively high frequency of leguminous weeds in the samples does point to nitrogen deficiencies in some areas.

Local conditions must have had effects on the types of crops grown. Winter crops in general would probably have been favoured since the young plants would be relatively well developed before summer droughts (Limbrey 1978, 25). The effects of sand-blowing in the spring would likewise be minimised by autumn sowing; clearly the loss of a newly-sown spring crop could be disastrous to a peasant community. The cultivation of rye, an autumn-sown cereal, apparently attained some importance in this area at an early date. As has been noted, rye is a particularly suitable crop on dry sandy soils. Spelt, of which most varieties are autumn-sown, is also common in the samples.

In conclusion, then, the cereal remains from West Stow must be seen as the product of an agricultural system adapted to a specific set of quite extreme environmental conditions. It follows that the results should not be extrapolated to apply to other areas. Although the samples provide useful new information, about early Anglo-Saxon agriculture in particular, studies of sites on a wide variety of soil types will be necessary before any overall picture is gained of the earliest English farming.

PART 3. DISCUSSION

PART 3. DISCUSSION
THE POST-BUILT STRUCTURES

Traces of seven major post-built structures were found on the site. Of these, five were strung out in an east-west line along the axis of the hillock and two, (Nos 5 and 7) were on the south and north slopes respectively. These structures did not provide sealed contexts like the SFBs which could be used for dating purposes, but are assigned to the Anglo-Saxon period on the grounds that their distribution followed that of the Anglo-Saxon features and not those of the Romano-British kilns, that they overlapped both Iron Age and Roman pits and ditches and that there was no late Romano-British settlement on the site. A range of building techniques are incorporated in the series, which spans 250 years of Early Anglo-Saxon occupation. The simplest form, as evidenced most clearly by Building 1 (Hall 1, WE 2-WD 2), unencumbered by other features in the area, is of a rectangular structure, with 'weak' corners and outlined by a single row of post-holes, a central hearth and doorways to the south and east. Building 3 (Hall 3, WF 8-9) is clearly of the same type and Buildings 4 and 6, although much obscured, would also appear to fit into this pattern. The type compares very well with Chalton Building 2 (Addyman 1972A, 279), or Mucking (Buildings at 2320 x 790; 1610 x 790), (Jones, pers.comm.), which have 'weak' corners, although the first has opposed entrances in the long sides, a feature not apparent at West Stow.

West Stow, Building 2, (Hall 2, WF 6,7) is difficult to interpret, with apparently paired double posts in the long walls, which seem to be contemporary and not replacements or rebuilding. This is also the only building with a clear subdivision at one end and is the largest of the series. It should be noted that this building stands associated with a large group of early SFBs including Nos 8 and 27 which are both very unusual, if not unique forms. In the Interim Report (West 1969, 10) this building was compared with one excavated at Westick near Kamen in the Ruhr, but closer examination shows important differences, in that the Westick example has paired double posts along the entire length and an irregular line of middle posts; the theory advanced by Stiemen and Klein (Banfer *et al* 1936, 410-453) and accepted by Smith (1964, 134 is that this is an early form of cruck construction. Van Es (1967, 385-6) suggests that these may be two superimposed buildings. In the West Stow case it is unlikely that the entire inner line of posts can represent crucks as they would be unnecessarily close together at either end of the hall and absent in the middle. The paired double posts are also unlikely to be crucks as there would remain the problem of the intermediary inner posts. This arrangement does not compare with the widely spaced, double post-holes found in many continental structures where the purpose would appear to be to contain horizontal plank infilling; e.g. at Kablow, Kr. Königs, Wusterhausen (Behm-Blancke 1956, Abb.2, 1958, Abb.76; Trier 1969, Taf. 13). Overall, the outer posts must carry the wall plate, in two or three sections, along the entire length of the structure, with the end walls forming gables. The paired double posts would then take tie beams. The problem really lies with neatly opposed inner posts, at each end of the building and the wide spacing of outer posts at the west end. Unless the wall filling was between the inner posts, thus narrowing slightly the width of the central section, there is a difficulty in filling the spaces between the outer posts at the west end. As elsewhere on the site, apart from two SFBs, there is no evidence for the use of wattle and daub walling; such an infilling would have left considerable quantities of clay in the areas concerned, very noticeable on a sandy knoll. Evidence for upright timber infilling between posts can be seen at Thirlings, Northumberland, albeit at a distance from West Stow, where traces of vertical planking were found, (*Medieval Archaeol.*, 1974, 182-3; 1975, 226-7). The often erratic spaces between posts in buildings of this kind probably reflects the width of the timber available to the builder and further implies a measure of prefabrication before the placement of the timbers in the ground. The careful pairing of the inner posts at comparable intervals on both sides suggests the possibility of a loft resting on joists between these posts, at least at the west end. The absence of inner posts in the central area supports this possibility as the hearth is sited at this point. It is worth noting that the lengths of the western and central section of the structure are each approximately 12ft 6in (3.8m), the same as the average dimension between the main posts of the SFBs.

There is some comparability with Building A20 at Chalton (Addyman 1973; p.13, fig.8, p.14) where it is stated that 'A20 has particularly large post-holes, some of which are oval and have double centres'. The plan would indicate that the double posts are at the west and possibly at the east end and that the central area had only single posts, an arrangement apparently the same as Building 2 at West Stow, although slightly different in detail and in a building of the same size.

Whichever interpretation is followed for Building 5, the structure is unusual in the wide spacing of the posts, implying a different technique from any of the other halls, with the exception perhaps of Building 7 on the north slope. It should be noted that Building 5 is the last on that part of the site, overlying at least one other structure. It is likely that it is to be associated with Building 12, a square structure immediately to the west, sharing the same alignment. As with the other halls, there is a problem with the infilling between the posts, as no remains of wattle and daub were found, although it should have been, had it been used. The building is late in the series, belonging to the second half of the 6th century, and so may be employing a developed technique, possibly of interrupted ground skills with vertical planking.

Professor Evison has advanced (p.12) a series of interpretations for Building 7 on the north slope; the wide-spaced, large posts and the use, in part, at least, of a post-and-trench technique, makes this a unique building on the site.

The buildings are small by comparison to the post-built structures on the Continent; they are also markedly few in number, compared with the number of SFBs.

As Rahtz (1976, 60) has pointed out, there is a radical difference between the continental and English settlements with the apparent absence in England of the large longhouses of the Wijster type. The distinction goes further, for there are, as yet, no 'aisled' buildings in England of the kind found in the Frisian and Anglo-Saxon coastal regions from north Holland to Scandinavia, nor are there the classic bipartite and tripartite longhouses from inland Holland and Westphalia, which employed crucks (Van Es 1967, 384) and aisles. All seven of the West Stow buildings would, in the context of sites like Wijster or Feddersen Wierde, be relegated to the status of minor buildings. With the exception of Building 2 they are all simple, rectangular outlines of post-holes, Building 2 having a partition and the use of double posts. The nearest analogues to these are the 'living' ends of some of the Wijster buildings, for example, numbers: XXIX (House Type AIIb, 9m long); X (House Type BIIa, 9m long) and XLIX (House Type AIIa, 9m long). House XXIX, belongs to Period IIb and the House Type covers Period IIa to Period IIIb; House X belongs to Period IIIb and the house type, which is uncommon, is positively found in Periods IIIa and b, with possible outliers in each direction. House XLIX belongs to Period IIIb and the house type, AIIa (short), is confined to Period III. The date range, in terms of Van Es' absolute chronology, runs from the second half of the third century AD to the first half of the fifth. Type II are longhouses with distinct 'human' and 'cattle' ends; Type IIa is a bipartite house, there is use of pairs of double wall-posts as crucks and a narrow partition at the end, both recalling, but not precisely paralleling, West Stow Hall 2, without, of curse, the aisled cattle byre. Type IIb is a tripartite house, in one case (XXIX) with a partition at the end of the living quarters and the use of paired, double posts. Type BII is a 'short-house'; their front section the same as the 'living ends' of the Type AIIa houses, but shorter, with a barely distinct partition, single posts (no crucks) and weak corners. It is with these that most of the West Stow buildings should be compared. Van Es compares his Type AIIa and b houses to that from Westick, near Kamen, Westphalia, (Klein 1936) the double post-holes of which have been interpreted as representing cruck construction. Other sites with similar construction techniques are Milte, Kr. Warendorf (Winkelmann 1938): Haldern (Uslar 1949); Dalfsen, (Van Beek 1964) with incomplete plans; Rhee (Van Giffen 1958, Beilage 2) with at least two pairs of double-posts, and Gristede, (Zoller 1963). None of the sites are coastal, or *terps,* and no similar buildings are known from Denmark or Sweden. Van Es knows of no parallels to his Type B buildings.

What then was the status and function of these buildings? As will be discussed later, there are reasons for suggesting that these post-built structures were not all contemporary, but are, in fact, a sequence. However, even if that is not considered, all seven structures together do not form a very large area in terms of floor space. At least four of them are known to have had hearths, which would militate against their use as barns or cattle sheds. Cattle were an important factor in the economy; the post-built structures would not have housed the numbers involved and there is no evidence for internal stalls or any other arrangements. The warm dry climate of the 5th century (Lamb pers.comm.) would allow cattle to be over-wintered in England, removing the necessity for cattle sheds.

The comparative rarity of these structures on the site, their spatial relationships both with one another and with the SFBs and the initial alignment along the crest of the hill has lead me (West 1969, 8) to use the term 'Hall' for these buildings. This does not imply grandeur in any sense, but is used to demonstrate the essential function of these buildings, as the focal points of the family units that I believe can be discerned in the scatter of buildings in the settlement. In much the same way, in medieval buidings of quite humble status, the open 'hall' formed the focal point for the unit, which in that case, consisted of a number of rooms housed under one roof. The gap between the known aristocratic halls and the West Stow structures is indeed great (Rahtz 1976, 91); but it could equally be said that the Hall of Edwin at Yeavering (616-32), the only example anywhere near the date of West Stow, is only two and a half times longer (25.5m) than the longest at West Stow (10.5m) (Fig.282), with the possible exception of Hall 7, if the largest interpretations for that building are accepted. One would surely expect aristocratic halls of that status to be at least two or three times the size of anything found in a rural village or settlement. It is worth noting that the overall proportions of most buildings shown on Fig.282, including Yeavering are much the same, with the exception of Wijster and Warendorf.

If the byre end of Type IIa longhouses at Wijster are removed the overall measurements of the 'human' end are much the same as those at West Stow, although the greater long houses at Wijster are, of course, very much larger; it would appear that what was transmitted at the time of the migration were the important elements of the settlements; i.e. the 'Halls' and the SFBs, which were multi-purpose structures, indicating that the SFB was therefore a more important element in the homeland than has hitherto been suggested. There remains the very real problem that the post-built structures at West Stow have no obvious continental ancestry apart from four at Wijster.

THE SUNKEN-FEATURED BUILDINGS

CLASSIFICATION

The SFBs at West Stow present a varied arrangement of post-holes and pits, so that although forty-six of the seventy recorded fall into the two main classes of two- or six-post, the rest are either modifications of those, or totally different. In order to discuss the SFBs, some attempt at a classification is necessary, although it is recognised that those outside the main divisions of two- or six-post types may simply be structural modifications for convenience of repair, rather than reflecting any basic significant difference from the main types. The classification offered by Ahrens (Ahrens 1966, 205-234) is not followed here as a new interpretation of the structures is suggested. It must be stressed that other forms are known from elsewhere which are not represented at West Stow. In this discussion the SFBs are arranged in the following groups, based upon the visible archaeological evidence:

Table 46: Typological groups of SFBS.

Type A — Two-post:	1,10,15,16,19,20,23, 24,27,28,31,34,37, 39,40,41,42,46,48, 51,53?,57,58,60,62, 65,66,69.	
Type A1 — Two-post derivative:	2,3,8,26.	
Type B — Six-post:	9,21,22,35,36,38, 44,45A,45B,47,49, 50,52,56,59,63,64, 68.	
Type B1 — Six-post derivative:	5,6,12,18,55.	
Type C — Four-post:	17.	
Type D — No-posts, pit only:	7,13,14,25,29,30,67.	
Miscellaneous — details not recovered:	No. 61 obscured in R.B Kiln 4 stoke-hole; 4,32,33 destroyed by gravel pit and 11,43,54 incomplete.	
The totals for each type are:	Type A	— 28
	Type A1	— 4
	Type B	— 18
	Type B1	— 5
	Type C	— 1
	Type D	— 7
	Misc.	— 7
	Total	70

Type A, the two-post, outnumbered Type B (six-post) by thirty-two to twenty-three even when the derivative or modified types are added; the remaining individual types are all very much in the minority, although it should be noted that together they account for a quarter of the total number.

Type A: Two-post

In outline, the plan of the two-post SFB varies considerably in detail, ranging from a markedly oval form (SFBs 20, 65) to rectangular examples with sharp corners (SFB 15). The majority are, broadly speaking, rectangular with rounded corners (e.g. SFBs 16, 19, 41, 48, 51, 57, 66). Nos 60 and 62 are very irregular and three others are virtually square, the overall length and breadth being equal, (SFBs 23, 24, 58). The measurements between the post-centres (Length B) show a very wide range, from 6ft 9in (2.1m) for SFB 23 to 16ft (4.9m) for SFB 15. When plotted graphically, (Fig.283) Type A peaks at around 12ft 6in (3.8m), the same as does Type B, but the curve is much flatter showing the wider range of choice. In all, 42% lie between 11 + and 13ft (3.4 to 4m). The overall length of the pit (measurement A) also shows a considerable range, from 9 to 18ft (2.7 to 5.5m), peaking at *c.* 13 to 14ft. As with the post-hole distance, the range is more pronounced than for the six-post type. The depth factor shows a preference for *c.*1ft 6in (0.46m) from the top of the natural sand. The reconstructed depths, from the top of the old ground surface, were not used, as the conditions governing the movement of soil on the top and the north and south slopes of the hill could not be determined. The comparisons between the two basic types of SFB are valid however, although the actual depths are not. The two-post SFB has 20% below 1ft (0.3m) in depth and the peak is around 1ft 3in (0.38m).

The reconstructed depth, from the original ground surface, can be presumed to add about 1ft (0.3m) to the given depth, giving an original preference of 2ft 3in (0.76m) for 65% of the two-post type.

In the main, the post-holes were equally situated either at the junction of the pit wall and the floor, or midway in the slope; only in four cases was the post-hole clear of the slope in the base of the pit. In twenty-four SFBs the post-holes were in the lower part of the slope in such a position that the post must have stood in the slope itself. In one other case (SFB 28) the post-holes occurred virtually outside the pit as seen at the level of the natural, but would nevertheless have been at the top of the slope when first cut through the humus level (Level 2).

Only one of this type, SFB 27, had a hearth; this was a clay pad toward the north-west corner, partly on the edge of the pit, but cut by SFB 26.

Apart from Nos 8 and 26, the two-post SFBs showed little sign of modification of the type. No. 19 had two oddly placed post-holes and No. 46 had three at the east end, which may not have been contemporary.

Type A1: Two-post derivative.

Only four SFBs were classified under this group; Nos 2, 3, 8, 26. Of these, No. 2 had a large asymmetrical pit and four secondary posts in the south-west quadrant which could not be positively associated with the structure. As two of these posts lay along the south edge of the pit this building has been isolated from the rest of Type A.

SFB 3 was large, rectangular, and had been burnt down. The structure was markedly different to the other SFBs on the site, having posts apparently all round the edge, at the junction of the wall and the base of the pit. The relationships of the floor planks and these posts were not preserved by the burning of the building. This structure is unique at West Stow and comes close to Ahrens' 'Wall-post house' type, which has posts down the long sides, usually regularly spaced. Ahrens suggests an eight-to-eleventh-century date and a Saxon origin for the type (Ahrens 1966, 216-220). Although the pit, with reconstructed depth at *c.*2ft 3in (69cm), is not deep enough for a cellar, the plan recalls the cellared buildings at Thetford (Davison 1967, 192) and at Ipswich (Dunmore *et al* 1976, 137), both of which are of middle or late Saxon date. The West Stow example would appear to be part of that series; an early example of the development from the common two-post type.

SFB 8 had obvious similarities to SFB 26, discussed below; both had a shallow pit bordered with a trench, but in the case of SFB 8 there were four post-holes, one in the middle of each, all of which were large. Because of the similarities with SFB 26 and the possibility of the chronological succession suggested by the position of these two SFBs, No. 8 has been included in Type A1 rather than in an entirely separate class.

SFB No. 26, was very shallow, D: 1ft (or reconstructed depth: 2ft) with a shallow trench defining the outer limits of the pit. The plan shows a square pit with very rounded corners and a single post in each of the east and west sides. Although no evidence was found in the trench, it is possible that it once held turves to act as a retaining wall for the pit. This SFB is clearly allied to SFB 8 in general form, although the latter has two further post-holes, one in each of the north and south sides. The relationship is strengthened by the fact that both are part of the group surrounding Hall 2 and that SFB 26 is later than SFB 8 and so may well be a replacement for that building.

A comparable structure from Puddlehill, Bedfordshire (Matthews 1965, 2) Hut 5, shows an almost square pit with a large post in the middle of each side, but no shallow trench. The section shows a lower layer of 'dark greasy loam', sealed by a layer of chalk and loam regarded by the excavator as coming from the structure.

Type B: Six-post.

The eighteen SFBs which are classified as Type B, do not show the same degree of variability in the shape of the pit as Type A. They are all roughly rectangular with more or less rounded corners. SFB 47 is the sharpest rectangle and the form is most rounded in Nos 49 and 56.

For the ridge-post centres (length B) there is a range of between 7ft 9in (2.4m) and 13ft (4m), considerably less than for the two-post type. There was a pronounced preference for the 10 to 12ft + (3.1 to 3.7m) band, 76% lying within that group. The pits for Type B were slightly deeper than those for Type A, with a preference for *c.*1ft 9in (0.5m) — 2ft 9in (0.8m). Only one was less than 1ft (0.3m) deep, as opposed to six of Type A.

The posts were positioned in the lower part of the slope of the pit in 43 cases, in the floor at the foot of the slope in seven cases and in only one (No. 49), was there an example of the post-holes outside the limit of the hole and even here they must have been inside the limits of the pit as it was dug from the ground surface. The post-holes varied considerably in size, in six cases the ridge-post-hole was appreciably larger than the rest, particularly in SFBs 21 and 47; in SFB 52 the ridge-post-hole was smaller; in the rest the post-holes were roughly of equal size.

A clay hearth occurred in SFB 44, in the middle of the north side, on the very edge of the pit, and another in SFB 49 in the same position but overlapping the edge of the pit. SFB 6 was a third example with a clay hearth, in this case within the line of the pit edge, on the south side. In all three cases the hearths were stratified above the primary fill, at the junction with Layer 2.

Type B1: Six-post derivative.

There are five SFBs in this group, (Nos 5, 6, 12, 18 and 55) which is very clearly closely allied to Type B. In the case of Nos 5, 6 and 55 the only modification is the addition of a post-hole, in each case, on the south side. No. 6 is a larger version of No. 5; both are broadly contemporary and are part of the second phase of building around Hall 2. No. 12 has two extra posts, one each in the middle of the north and south sides and the additional evidence of slots along those sides.

No. 18, although the east ridge-post is very off-centre, should be considered in this class and has, as has No. 12, two additional post-holes in the north and south sides.

Three members of this group had hearths (Nos 6, 18 and 55), in SFB 55 a little south of the centre; in SFB 18 the evidence was sufficient to interpret the hearth as a form of clay oven placed on the main east to west axis to the west of centre. In SFB 6 the clay hearth lay on the south edge, to the west of the centre, on the primary fill.

Type C: Four-post.

One SFB, No. 17, was found to have only four posts. The sides of the pit were markedly steep, almost vertical, although no evidence was found for retaining walls of any kind. This was the deepest pit on the entire site, cut 3ft 4in (1m) into the natural sand, being approximately 4ft 4in (1.3m) from the old ground surface. There being no ridge-posts, the east/west axis has to be judged on Length A, the overall length of the pit, in this case being 3ft 3in (1m) which is not large compared to the main types.

Type D: No posts, pit only.

In seven cases, (SFBs 7, 13, 14, 25, 29, 30 and 67) no post-holes were found. The nature of the fill of these pits and their overall measurements point to the probability of their function as sunken-features of buildings of the same basic kind as those above. Although post-holes could not be found, there remains the possibility that if the posts had been withdrawn when the structures were abandoned, the soft sand of the sides of the post-holes could have collapsed, leaving

no trace, although this was tested by over-cutting, without result.

SFBs 7, 13, 25, 29 and 30 were all rounded in plan, three of them slightly longer in the north to south axis. All were closely associated with other SFBs, none occurred in an isolated position. Nos 7, 13 and 25 are very close in measurement, (SFB 7, the largest, being 14ft 4in (4.3m) north to south x 13ft (4m) east to west), with a depth range of only 1ft (0.3m); the profiles are very similiar, being a shallow bowl-shape ranging in depth from 1ft 6in to 2ft 9in (reconstructed). No. 29 is much smaller, being 11ft (3.4m) east to west x 10ft (3m) north to south.

The consistently rounded shape, in contrast to the more rectangular form of the other types, does suggest that this is a distinct variety of SFB, as has been noted on the Continent, and not merely a question of missing post-holes.

Miscellaneous:

This group includes incomplete, anomalous and destroyed SFBs. Seven SFBs (Nos 4, 11, 32, 33, 43, 54 and 61) fall into this category; Nos 11 and 54 are both incomplete; the positions of the post-holes in the undamaged areas make no intelligible pattern. In SFB 11 two pairs of posts occur in the north-west and south-west corners. No post-holes could be found in the south-east corner, although it was undamaged; the north-east corner was destroyed by a later ditch. In SFB 54 there was one post-hole in the centre of the east end and another in the south-east corner; the west end was destroyed by later ditch systems and no post-holes were found.

SFB 61 had been cut into the filled-in stoke hole of the Romano-British Kiln 4, which obscured all details of post-holes and the precise size and shape of the pit.

Three SFBs were seen in 1948-50 in the face of the small sand-pit then being worked in the north-east corner of the knoll and are included as Nos 4, 32, 33. These could not be excavated and only a generalised north to south section was made by Brown, showing a bowl shaped pit 7ft (2.1m) wide with long sloping sides with a depth of 2ft 7in (0.8m) marked as from the ground surface.

The remains of SFB 43 were excavated by Professor Evison in the face of extended gravel pit; no post-holes or complete measurements could be recovered, but the nature of the fill and the general appearance of the pit strongly suggests that it was an SFB.

SFB DIMENSIONS

There was a considerable range exhibited in the dimensions of the SFBs, not only between the types, but internally within the suggested classification. A problem remains, to some extent, with the measurements as the structures could only be identified at the level at which they were cut into the sandy subsoil. Whereas the original depth can reasonably be estimated from the top of the buried topsoil (General Layer 2), the length and breadth of each SFB is much more difficult. A projection of the slope of the pit to the top of Layer 2 would add an average of 9 to 12in (22 to 30cm) in depth to each side or *c.*18 to 24in (45 to 61cm) in length to measurements A (length of pit) and C (width of pit). The measurements, as analysed below, are taken at the point at which the 'pit' could first be defined. Measurement 'B', the distance between the ridge-posts, is not affected by the problem of Layer 2.

Measurement 'A' (length of pit). Fig.283.
SFB Type A exhibits greatest range, from 9 to 18ft (2.7 to 5.5m), the type peaking at 13 to 14ft (4 to 4.1m). The range is more pronounced than the six-post.
SFB Type B has a marked preference for a length between 14 to 15ft (4.1 to 4.6cm) and the range is less.

Measurement 'B' (ridge-post centres). Fig.283.
Type A again has the greatest range, from 6 + ft (1.8m) to 15 + ft (4.6m) with a lower peak at 12 to 13ft (*c.*4m). Type B has a pronouncd preference for the 10 to 12 + band, 76% lying within that group. Furthermore, there was only one example beyond that band, whereas the curve for the two-post, Type A, shows a much more gradual tail-off.

Measurement 'D' (Depth). Fig.283.
As with measurement A and C the depth considered here was the depth of the pit from the top of the natural sand. The comparison between the two basic types of SFB is valid, although the actual depths are not.

The values for the two types are very similar, but with the six-post, Type B, showing a preference for the greater depths, from *c.*1ft 9in (53cm) to *c.*2ft 9in (84cm). The two-post, Type A, has 20% below 1ft (30cm) in depth and the peak is around 1ft 3in (38cm). The reconstructed depths, from the original ground surface can be presumed to add about 1ft (30cm), giving original preferences of 65% of two-post SFBs with depths of up to 2ft 3in (68.6cm) compared with 15% of the six-post type.

A comparison of the two main types of SFB shows that although both are relatively close in basic sizes in both the length of the pit itself, and between the ridge-posts, SFB Type A has a wider range, with only 25% at the average length (A) of 13ft (4m) whereas SFB Type B has 40% at the preferred length of 14ft (4.1m). The post-centres (measurement B) show a similar situation, with SFB Type A showing a slightly wider range. The situation is reversed with the depth, whether 'reconstructed' or not, with Type 'B' being marginally deeper. The differences, although slight, mean that the two-post, Type A SFBs tend to be larger, but shallower than the six-post, Type B SFBs.

Sixty-nine per cent of the measurable SFBs had less than 100sq.ft (9.3sq.m) of 'floor' space at the base of the pit and 25% less than 60sq.ft (5.6sq.m). The majority, 44%, fall between 60 and 100sq.ft, peaking at 80sq.ft (7.4sq.m) (Fig.284). One, SFB 60, was trapezoidal and another, SFB 67, was so uneven as to suggest that the pit was unfinished although it had the same type of infilling as the others. Although it is not possible to give accurate figures for the floor areas of SFBs with suspended floors, it is estimated that such a reconstruction would increase the floor areas by between 100 and 200 sq.ft. The two smallest SFBs, Nos 23 and 30, with 30 to 40 sq.ft (2.8 to 3.7sq.m) of basal floor area i.e. a space, 6ft x 6ft (1.8 x 1.8m), would seem totally impracticable; however, a suspended floor would increase the functional area to *c.*100 to 120 sq.ft.

Table 47: Comparison of pit and basal floor areas of SFBs.

SFB No.	Area of pit		Floor area		SFB No.	Area of pit		Floor area		
	Sq.ft	Sq.m	Sq.ft	Sq.m		Sq.ft	Sq.m	Sq.ft	Sq.m	
1	204	18.95	54	5.02	36	c.150.15	13.95	53	4.92	
2	272	25.27	156	14.49	37	137.5	12.77	88	8.16	
3	229.5	21.32	197	18.30	38	82	7.62	45	4.18	
4	—	—	—	—	39	107.25	9.96	80.5	7.48	
5	110.25	10.24	40	3.72	40	110.25	10.24	60	5.57	
6	189.75	17.52	104	9.66	41	146.6	13.62	96	8.92	
7	182	16.91	80	7.43	42	100.63	9.35	42.75	3.97	
8	272	25.27	121	11.24	43	—	—	—	—	
9	100	9.29	76	7.06	44	153.19	14.23	88	8.16	
10	126.5	11.75	110	10.22	45	—	—	c.128	c.11.89	Superimposed
11	154	14.31	97.75	9.08	46	152.25	14.14	73.5	6.83	
12	234	21.74	135	12.54	47	158.63	14.74	137.5	12.77	
13	156	14.49	72	6.69	48	130.63	12.14	102	9.48	
14	136.5	12.68	80	7.43	49	165	15.31	118.75	11.03	
15	285	26.48	208	19.32	50	124.88	11.60	77	7.15	
16	206.25	19.16	162.5	15.10	51	96.06	8.92	60	5.57	
17	135.8	12.61	85.5	7.94	52	147.5	13.70	97.5	9.06	
18	163.13	15.15	54	5.02	53	73.5	6.83	47.25	4.39	
19	141.75	13.17	88	8.18	54	—	—	c.60	c.5.57	
20	182	16.91	58.5	5.43	55	187.5	17.42	96	89.18	
21	161.25	14.98	106.25	9.87	56	183.75	17.07	136.5	12.68	
22	147	13.66	97.75	9.08	57	74	6.87	4.5	4.18	
23	78.6	7.3	39	3.62	58	115.5	10.73	95	8.83	
24	177.6	16.50	115	10.68	59	—	—	—	—	
25	175.5	16.30	85.5	7.94	60	—	—	—	—	Trapezoidal
26	228.75	21.25	141	13.10	61	—	—	—	—	
27	174	16.16	120.75	11.22	62	85.75	7.97	50	4.65	
28	66.63	6.19	42.5	3.95	63	141.75	13.17	70	6.50	
29	110	10.22	56.25	5.23	64	146.25	13.59	108	10.03	
30	60	5.57	30	2.79	65	c.173.25	c.16.09	102	9.48	
31	161	14.96	88	8.16	66	144	13.38	87.5	8.13	
32	—	—	—	—	67	169.13	15.71	—	—	Unfinished
33	—	—	—	—	68	110.25	10.24	75	6.97	
34	111	10.31	78	7.25	69	111.63	10.37	59.5	5.53	
35	104.5	9.71	80	7.43						

INTERPRETATION AND RECONSTRUCTION

The interpretation of the roughly rectangular hollows associated with various combinations of post-holes, which are such a well known feature of Anglo-Saxon sites in Britain and on the Continent, has for long been that they represent some form of 'sunken hut' *(Grubenhaus),* in which the living floor was below ground level, and that the whole structure consisted of a simple, bivouac type of thatched roof, usually reaching the ground, as typified by the Warendorf reconstructions (Winklemann 1958, Abb.8.5), or with vertical walls standing within the pit as at Hambühren (Rudolph 1938, 92). Structures of this kind are known from the late La Tène times in the Rhineland (Hunsruck-Eifel-Kulture), in north and central Germany in the pre-Christian Iron Age and to continue into the late Middle Ages; in South Germany until Carolingian times. In the North Netherlands they occur from the second century onwards and in Friesland at Fochtelo, Tritsum and Ferwerd, and cannot therefore be considered to belong specifically to the Anglo-Saxons (Van Es 1956-66, p.45).

On the continent, on sites which have been excavated on a large scale, they are normally seen as minor buildings in complexes containing numbers of very large post-hole buildings. Overshadowed by these structures, the *Grubenhäuser* are usually assigned a very minor structural role as 'outhouses' (Van Es 1967, Ch.5). The apparently simple arrangement of post-holes and pits are, however, difficult to interpret in practial terms and a number of widely differing solutions have been offered (Fig.285). At Gleidingen a simple bivouac roof over the pit is shown reconstructed without ridge-posts, the door being central at one end and the thatch reaching down to ground level (Tackenburg 1931, 199; Guyan 1952, Abb.59). At Gladbach the six-post type is reconstructed with low side walls of woven wattles on upright stakes built inside the pit, and projecting for a short distance above ground level. The centre-posts support a ridge-pole and the 'corner-posts', purlins. An entrance is shown to the side of the ridge-posts which would necessitate stooping to enter and an internal stair, or steps (Mylius 1938, Abb.2, 188). House No. 7, on which the reconstruction is based, is shown with small stake-holes round the perimeter of the pit.

The reconstruction of a six-post *grubenhaus* at Hambühren (Asmus 1938, Abb.3, p.82) shows little detail, but depicts a structure standing in the pit, a high roof and a doorway beside the central post, approached by an unprotected external pit, not shown on the plan. The 'corner' posts cannot be seen in the reconstruction, but presumably support the purlins shown at wall-top level.

The interpretations so far put forward all involve the pit as the main element of the structure; the bottom

of the pit representing the floor area of the building and the material in it therefore as a post-hut fill.

There are two main considerations in the interpretations of these structures. Firstly the archaeological evidence and secondly the practicalities of this method of construction. The evidence is considered below with regard to structural topics.

In most reconstructions the doorway is shown to be in the gable end, the only feasible position if the roof is on low walls or carried down to ground level. If this opened immediately into the pit, internal provision must have been made for wooden steps and also for some form of weather protection to prevent rainwater flooding into the pit. In some cases external arrangements have been claimed as the entrance (Hambühren), but these carry the same objection and have little or no evidence for external protection. Evidence for internal steps are rarely noted and external pits are certainly not a common feature. In no case at West Stow was any evidence found for internal steps, which would have had to have been of timber anchored to the ground. The soft sand of the site, if unprotected, would have rapidly worn away, to leave an eroded area at the entrance. In a few cases (SFBs 22, 25, 27, 48) where an external entrance pit appeared to be a possibility, sections cut through the fill of the pits and the hut-pits in question clearly showed that the two features were not contemporary. Evidence for lining the walls of the pits has been noted on a number of continental sites, notably at Wijster, (Van Es 1967, 80-1) where vertical, butted planks and wattling was used in some of the six-post types and where there was some evidence for wattling in the two-post type.

Some continental sites have produced indisputable evidence for wooden floors of heavy planks at the bottom of the pit, vertical, butted planks for walls as lining to the pits; e.g. Wijster, Nos 68, 86, (Van Es 1967, fig.37) and Eggerstedt, Haus 3 (Richthofen 1939, 45). However, it is clear that for the majority of structures of the *Grubenhaus* class, there is no remaining evidence for floors at the base of the pit, or for retaining walls, either of wood or wattles. At Wijster there were 140 *Grubenhäuser* or 'out-houses', of which 118 were of the six-post type and sixteen of the two-post type. Only the six-post type had lined pits; of the 118, eighty-seven had evidence of lining with vertical wooden planks. The planks were set in a foundation trench, behind the posts, which was found to continue beneath the floor of the pit. It is significant that the foundation trench for the walls was found to continue below the level of the floor of the hut. Although no sections are published in the Wijster Report, the posts and plank walls are clearly at the foot of the pit walls and the evidence would be consistent with the view that these were lined cellars, the superstructure of which cannot be deduced. The position of so many of the post-holes at West Stow, midway in the slope of the pit wall, or at the top, is, therefore, significant (Fig.287). If the floor of the pit was used as the floor of the house, some of them would have had a ridiculously restricted floor area due to the slope of the sides, e.g. West Stow Nos 5, 20, 38, 40, 63, 67, 69. It could be argued that the sloping sides of the pit were caused by erosion or collapse during the lifetime of the hut and that the evidence of fallen sand has been removed by periodical clearing of the floor. However, the positions of the post-holes, so often in the slope of the wall of the pit, denies this as it would imply that the posts were inserted from ground level, which would have been impossible without causing a collapse on the side if they had been vertical, or nearly so. The post-holes were noticably dug to arms' length; the implication being that they were dug through the sloping side wall of the pit and that the basic shape of the pits had changed little during their lifetime.

In Britain there is little evidence for lining. At Colchester (Crummy 1974) one six-post hut had a complicated series of stake-holes forming a lining to the pit and an internal series suggesting some form of staging or racking. The curious trapezoidal structure (Hut 1) excavated by Lethbridge at Waterbeach had evidence for wattle walls (Lethbridge 1927, 141-146) as had a few at New Wintles Farm, Eynsham, (Hawkes 1969, 1-4). At West Stow, only one, No. 12 (six-post) had evidence of a lining; a narrow slot along the north and south sides only. Two others, numbers 8 and 26 had a shallow trench surrounding the sunken area which may have had a turf wall, but both these structures are unusual and not characteristic of the site. At West Stow the walls of the 'hut-pits', being of soft sand, would have required some form of revetment to prevent the considerable falls that would occur in a situation of continual wear, as in the case of the early Iron Age and Romano-British rubbish pits on the site. There is evidence of weathering of the sites resulting in sand trickling into the fill but not in significant wedges as in the case of the rubbish pits. In spite of some distortion of the profile by rodents, it was remarkable how clean the junction was between the fill of the hut-pits and the natural sand of the walls and floor. If the floor of the pit had been trampled for any length of time, an amorphous layer containing rubbish should have developed, which was not the case in any of the West Stow huts, where the definition between the fill and the natural sand was always sharp and distinct on both floor and sides. The sides of the hut-pits were never vertical at West Stow and normally sloped gently into the floor, making the effective construction of a retaining wall difficult to achieve. The positions of the post-holes were also important in this respect. (see below, p.119). The fill of the hut-pits were noticeably similar in all those found and consisted of a fine-grained, compact, grey-brown material with little evidence of stratigraphy. Flecks of charcoal were common, thin lenses of ash occurred, and trickles of sand were occasionally observed at the edges, apparently resulting from the drying out and dusting from the surface of the walls. The nature of the fill was unlike that of any rubbish pit; it was extraordinarily compact and tough, sections left standing for long periods showed little deterioration. This material often completely filled the pit, although in some cases there was a distinct change, often occurring about half way up and continuing to the very edge of the pit.

The presence of 'two layers' is often noted in descriptions of the fills of SFBs. At West Stow it was clearly demonstrated by excavation through the overlying 'Layer 2' that the upper fill, so different in character to the lower, was part of that Layer 2. At the

junction of the two layers, hearths (SFBs 18, 21, 27, 44, 49) wattle and daub (SFBs 12, 50) and groups of clay loomweights occurred (SFB 21). The lower fill often contained considerable quantities of pottery, objects and animal bones, usually distributed in a haphazard way throughout the fill. In SFB 57 however, a pile of animal bones occurred in the centre of the pit and seemed to be a single deposition from above and not from the side. Furthermore, the lower, or primary fill, was always uncontaminated by residual matter; those SFBs with early fifth century pottery for instance could be confidently identified, and equally those of the later sixth and seventh centuries, where the material, particularly the pottery, is sufficiently characteristic. In cases where SFBs were found to overlap, the stratigraphic evidence produced by the excavation was confirmed by the material culture. The evidence of the hearths in SFBs 44 and 49 further militates against the deposition of the primary fill as post-hut rubbish, as it is clear that the hearths collapsed over that fill, lying on the junction between it and the upper layer (Layer 2). It has already been stated that the primary deposit, below the general cultural Layer 2, in the pit can range from a thin layer to one that filled the pit to the brim. The mechanics of its deposition are not easy to determine, but in order to try to understand the nature of this fill one SFB site was excavated in two-inch horizontal spits and the position of every fragment of bone, charcoal, potsherd and small find carefully recorded. In the event the feature turned out to be not one, but two overlying SFBs; Nos 34 and 35. The whole exercise was recorded by Hugo Blake and took almost the entire excavation season of three months for part of the team and so could not, regrettably, be repeated.

The accompanying Fig. 286 shows the plot-out of bone, pottery, small finds and coprolites for both SFBs 34 and 35. Fortunately SFB 34 was slightly deeper than SFB 35, by which it was cut, enabling us to disentangle the lowest levels. Inevitably there must be some redeposited material in the later SFB, but nevertheless the exercise produced worthwhile results. The 'spits' have been amalgamated into groups of two and three from the lowest levels of SFB 34 where six are grouped together as there is no change in the distribution. The SFBs were excavated in quadrants, which can be discerned in the plots, as the standing baulks were not so accurately recorded.

SFB 34.

One of the four plots for SFB 34, the first group of six amalgamated spits all underlie SFB 35 and give complete coverage for the pit; the other three were all cut by SFB 35 and are therefore incomplete in the western half. There is sufficient data, however, to demonstrate that in this case the north-west received material in the early stages of the development of the fill and that this continued, gradually spreading over much of the north half of the pit until the final stages. The top six inches of the deposit show a thinning out of the deposited bone, with a heavy concentration of potsherds in the inner part of the south-east quadrant.

The small finds increase toward the upper part of the fill but do not add much to the distribution pattern. Three iron nails were found close together in Spit 2 in the upper part of the fill in the north-east quadrant and coins were recovered from both the lowest and highest levels.

SFB 35.

The distribution of bone fragments in the lowest six inches of the fill is concentrated toward the middle of the pit. The potsherds are widespread, with rather less in the north-east quadrant. Of the small finds; a comb fragment, a spindle-whorl fragment and two pieces of scrap bronze, three are in a group in the middle of the southern half of the pit. The middle group shows an overall distribution of bone fragments and a grouping of small finds and potsherds at the east end, along the southern half and in the north-west, even allowing for the distoration caused by the baulks. The upper group shows a thinning out of bone fragments and the pottery and small finds mainly in the east half of the pit.

The distribution of coprolites, however, in both SFBs show marked groupings; in SFB 35 there was a south-west group extending from Spit 8 almost on the base of the pit to Spit 4, six inches below the top of the primary fill. Two more in the north-west quadrant, in Spits 3 and 6 suggest a second 'group'. In SFB 34, three of the four coprolites are in a close group in the north-west quadrant with another a little way to the east. These discreet groupings of coprolites, in both SFBs suggest the continued use of certain areas of the building. In general, however, the small size of objects in the deposit, suggests that they simply sifted through cracks in the floor boards. As such, this may explain the concentration of finds at certain levels, and can be taken to reflect the areas of use within the SFBs, whereas areas with fewer or no finds represent dead areas, perhaps occupied by fixed furniture.

The overall picture presented by the distribution of finds from both SFBs suggests strongly that the material filling these pits has come from above, not from the sides and, moreover, that it occurred slowly throughout the lifetime of the building. This last point is supported by the environmentalist who concluded in his seed report for the SFBs, that the material represented a slow accumulation. In some cases it can be demonstrated that comparatively large deposits of material were made at one time, perhaps facilitated by the removal of a floor plank, this would seem to be the case in SFB 57 where there was a conical heap of large bones, two ox skulls and a cat skeleton in the middle of the pit, stratified within the final levels of the primary fill and apparently protruding above it, and in SFB 63 where a more scattered heap was found in the upper levels of the primary fill in the south-west quadrant, well away from the edge.

From the experience gained at West Stow; the absolute lack of stratigraphy and the nature of the fill itself, it appeared that the primary fill did not represent, as had been supposed, the use of the pit as a refuse dump after the hut became ruinous. Practical considerations must also be borne in mind if the deposit represents the gradual building up of rubbish on the floor in that many of the pits are entirely filled, thereby greatly reducing the headroom in the

interpretation of these structures as bivouacs.

The interpretation of the six-post type centres on the function of the so-called 'corner-posts'. It is difficult to see how these could be used as anchors for a low retaining wall, especially as some are not even in the corners of the pit, e.g. SFB 9, or indeed for side walls of the kind envisaged by the reconstructions of Hambühren, Burgdorf, or the Warendorf type bivouac hut. If the ends of the rafters came down to ground level, they would not be necessary even to carry a purlin. If there had been low walls, these 'corner' posts could well have carried the weight of the roof with purlins, but the evidence of the hearths from the West Stow SFBs 44 and 49 make a low roof line at the side impossible. To contain the entire structure within the limits of the pit would surely require a sharp angle between the base of the wall and the floor of the pit. The position of both the 'corner-posts' and the ridge-posts in relation to the edge of the pit clearly becomes important in this respect (Fig. 287). Yet the relationship of the post-holes to the pit is noticeably inconsistent; at West Stow there are no cases where all the posts are sunk into the floor of the pit, within the area defined by the slopes of the pit walls; in seven cases such posts are mixed with others in the slopes of the pit wall and in thirty-two cases the posts are set into the slope making it impossible for walls to be effectively inserted behind them. The 'corner-posts' are often not situated in the corners at all precisely. On other sites the posts are sometimes external to the limits of the pit, for example Brebières (Demolon 1972, cabines: 6, 14, 15, 16) Gladbach (Mylius 1938, plan, nos 10, 67) and Gielde (Niquet 1969, no. 46/63). The published ground plans presumably show the extent of the pit as it is first seen, cutting into the subsoil. The pits were therefore originally larger, which could mean that the posts were in fact incorporated into the upper edges of the pit. Nevertheless this emphasises the point that the posts supported a structure larger than the pit itself and that in most cases the pits were not lined. A further complication is suggested by the *Grubenhaus* from Steenberg (Boe 1977, 42, fig. 24), dated to the late 2nd or early 3rd century. There a six-post SFB (Fig. 288) was found with the posts markedly in the north half of the pit, with a post clearly external to the pit at each corner, in line with the internal posts. This raises the possibility of similar associations not being noticed elsewhere particularly on sites with a complex series of features. At West Stow, four SFBs have external posts close by which could be associated; SFB 21, with single posts at each end; SFB 49, with several posts surrounding it; SFB 57 with single posts centrally placed to each long side, and SFB 65 which is situated inside a small post-built structure, the date of which cannot be certain, but could be Romano-British. In spite of the difficulty of dating the post-built structure, it should be noted, at least, that the SFB sits squarely inside it. It has been suggested by Dannheimer (1973, 159) that the corner-posts at Kirchheim, *Grubenhütte* 'G', were supports for one massive purlin on each side for rafters that reached down to the ground. The size of the post-holes in the corners, often as large as those of the ridge-posts, may also be reasonably taken to mean that the actual posts were large and reached to the roof.

The Kircheim (Fig. 285,2) reconstruction is relevant as it embodies some of the principal factors independently arrived at with the West Stow reconstruction. Firstly, the corner posts support purlins which project beyond the edges of the hole; the gable ends have vertical planks in some way associated with a horizontal sill and, most importantly, the internal area is shown as extending well beyond the limits of the pit. The reconstruction based on the West Stow evidence agrees with this function for the corner posts, although differing in other respects, particularly with the earth-fast rafters. The roof is another problem. In the simpler reconstructions the roof is supported by the ridge-piece and thatched to ground level, not requiring the difficult fixing of walls. Both rafters and thatch could, however, be very susceptible to rot as the drainage from the entire roof would collect at this point, a fact found by practical experiment at West Stow; not only does the thatch rot at this point, but water flows under the thatch into the pit. In the absence of evidence for load-bearing walls, the weight of a roof not reaching to the ground would have to be transmitted through the posts within the structure. It is noticeable that the pit shapes range from strongly rectangular, to oval or irregular; the roof structure in any case would produce a rectangular area, leaving dead space in the corners of any but the most rectangular structures. Practical experiment has shown that there would be considerable wear and distortion in these areas, particularly at the entrances, which was not detectable in the excavated houses. At Bourton-on-the-Water, Gloucestershire (Dunning 1932, pl.LVI), a large oval pit, 20ft (6.1m) long x 12ft 6in (3.81m) wide and 3ft (0.91m) deep was apparently surrounded by inward sloping post-holes 6in (15cm) in diameter and 7in (18cm) deep. It is worth noting that the fill of the pit was of 'loose', powdery brown earth and pebbles', unlike the tough material noted at West Stow and elsewhere. This evidence, and the presence of a hearth in operation at the base of the pit is a strong case for the 'sunken-hut' interpretation. It is, however, important to note that the surrounding post-holes were sunk seven inches into the natural gravel and it is therefore surprising that similar evidence is not forthcoming from elsewhere, particularly at West Stow where the conditions were ideal. The Burton-on-the-Water hut is unusual, not only in its size, but for the complete absence of structural post-holes within the pit itself, unless the supports in the centre, regarded as loom-posts by the excavator, were in fact structural, the roof was presumably of sloping rafters apparently self supporting, without a ridge-piece. This structure is not, then, within the range of buildings generally understood by the term *Grubenhaus.* At West Stow the concept of 'sunken huts' presented a number of problems in connection with the nature of the site itself and with the archaeological evidence. The interpretation of these structures as presented here developed throughout the course of the excavation.

The early discovery of two burnt SFBs (Nos 3 and 15) at West Stow, provided important, if incomplete, evidence for the nature and status of these structures. In both cases the analysis of the mass of charred fragments of planks, timbers, wattles from the roof and thatch, give corroborating evidence. The configuration

caused the roof to collapse onto the looms and floors of the buildings. Charred planks, which can only have come from the walls, fell on top of the pile. These were substantial, in SFB 15, where they were best preserved, they measured 8 to 10in (20 to 25cm) wide and at least 2½in (6.35cm) thick. Some allowance must be made for shrinkage during the fire and the thickness is only that shown by the charcoal remaining. The lower parts of the walls and the extremities of the floor planks were not burnt and so were not preserved, leaving critical areas still in doubt. An important fact had, nevertheless, emerged; that in two types of two-post SFBs, there were plank walls and a plank floor, so that even for the simplest form of *Grubenhaus* (SFB 15) the bivouac type ridge-to-ground roof was questionable.

The discovery of the skeletons of the two dogs in SFB 16 and the possible explanation regarding the decay of the uppermost in a protected, hollow space suggested that some kind of suspended floor was possible. Subsequently, during the 1968-9 seasons, clay hearths were found in SFBs 44 and 49 in such a position they they must have been supported over the pit, to account for their subsequent partial collapse on to the top of the primary fill. Hearths were also found in SFBs 24, 27 and possibly 15 (two-post); numbers 6, 12 (six-post) and numbers 18, 25 and 61 (other types), making ten in all. In particular, the hearths in 44 and 49 demonstrated the true significance of these features, which are all found at the junction of the two fills in the 'hut-pits', the level in relation to the pit dependant upon the extent to which the pit had been filled. If these hearths were contemporary with the structures, not only do they provide evidence for suspended floors but also for the positions of the walls, for vertical walls must be supposed beyond the hearths, outside the limits of the pit itself. Both SFB 44 and 49 were six-post huts, so that the walls could not have been in any way associated with the outer or 'corner' posts. A similar situation occurred in SFB 6, with the remains of a small hearth on the south side, on the edge of the pit and between the primary fill and the general Layer 2. The nature of the primary fill is of considerable importance, not only for the consideration of the structures but also for the dating or phasing of the settlement. The interpretation advanced here is that the primary fill is contemporary with the life of the SFBs; apart from the evidence of the artifacts, already discussed, the collapsed clay in SFBs 12 and 50 is important in this respect. In both cases it would appear to represent the internal covering of the gable end, as a backing for a hearth, as both had evidence of burning. There was no evidence of nearby structures of any kind which could have been a secondary source for this material; in both cases it occurred at the east end and included recognisable traces of wattles. This collapsed material occurred at the junction of the upper and lower fill, effectively sealing the lower deposit. If the lower deposit represented a post-occupation deposit of rubbish it would be reasonable to expect the clay to have been incorporated into it.

Conclusions.

The observations on the nature of the fill of the 'hut-pits'; the general lack of evidence for linings, the untrampled condition of the bases of the pits and the lack of slumping from the sides, plus the dog skeletons in SFB 16, lead to the suggestions in the Interim Report (West 1969, 8), that some at least, of the so-called *Grubenhäuser* had suspended floors above the pit. The later, critical, discoveries of not one, but two, hearths overlapping the edges of hut-pits and the other hearths, strengthened the case for floors. If the pit was completely floored over, many problems are resolved (and some created) and differences in individual cases can be seen as details rather than fundamentals. The shape of the pit, rectangular or rounded, oval or trapezoid or just irregular (SFB 67) really becomes irrelevant; the lining or lack of lining of the pit will depend upon the use to which it was put and is much less important to the understanding of the practicalities of living in a pit. The relationship of the post-holes to the pit has always been difficult to understand if the walls of the pit were really important to the rest of the structure. As with the shape of the pit, a suspended floor makes the positions of the posts less significant if it is no longer necessary to fit some sort of retaining wall between the posts and the pit wall. The problem of the entrance is also resolved; the distinctly preferred east to west alignment of SFBs at West Stow and elsewhere would be justified by a door in the south side, allowing the longest period of direct light into the interior.

This is not to claim that all *Grubenhäuser* were so floored. There is good evidence from Eggerstedt, for example, (Kr. Pinneberg, Holstein) that both House 3 and 6 had hearths of stone on planked floors at the base of the pit and that the pit itself was lined (Richtofen 1939, 45, 48), albeit a type dated by Ahrens to the 8th-10th centuries (Ahrens 1966, 229, 231). Van Es notes others at Wijster, eleven in six-post types and possibly two in the two-post type, but is not precise about the level, although one assumes they are on the floor of the pit. It is worth noting that a 'rest phase' was recorded at Wijster when some of the huts had become partially filled. This corresponds with the level at which the hearths at West Stow can be seen to have collapsed on to the fill.

In England, the Bourton-on-the-Water structure had a hearth on the floor of the pit, but is otherwise clearly not typical of the SFB series. Hearths are reasonably attested at Linford, Hut 1, (Barton 1962, 68-73), although the author suggests that it could belong to a post-hut phase. At Sutton Courtenay, in Hut 3 there was a hearth on the floor of the pit with a partial clay wall (Leeds 1923, 156-7). Leeds claimed that the hearth high up in hut 21 represented an upper floor in a specialised potters' hut (Leeds 1947, 81-84), and it is worth noting another hearth 1ft 6in (47cm) above the floor of hut 17 (Leeds 1927, 71, fig. 8). However, in many cases, the presence of a 'hearth' may be recorded but its position not specifically stated.

If the hearths on the basal floors of some SFB pits in Britain and on the continent are indisputable, then there must be two traditions represented. The West Stow evidence clearly demonstrates hearths at a higher level, which in turn dictates vertical walls beyond the pit. At West Stow, the sum total of the evidence for suspended floors and external positioning of the walls

lifts some of the *Grubenhäuser* out of the 'shed', 'outhouse' or 'dog kennel' class to a much more significant structure than has hitherto been considered. This surely is reflected in the fact that in the migration from the continent to Britain, the *Grubenhaus* is one of the two recognisable structures along with the 'halls' which were brought over. One further point is worth making; at West Stow there are two main types of SFB, with additional varieties, including some with apparently no posts. The six-post type is at present restricted to West Stow, Suffolk; Witton, Norfolk and Mucking, Essex. Elsewhere in England the main type is two-post, or anomalous structures like Bourton-on-the-Water or Puddlehill. There were no six-post SFBs recorded at Sutton Courtenay or New Wintles Farm, Eynsham, where the sample is large enough to expect them if they had been there. It remains to be seen if this relates in any way to basic cultural differences between the regions.

The Reconstructions.

With the accumulated archaeological evidence for the use of planks for walls and floors and for suspended floors it is possible to attempt reconstructions of the two main types of SFB. The six-post, Type B proved to be the most easily answered problem. With an angle of not less than 45° for the thatched roof, walls not less than 5ft 6in (1.68m) high and the siting of the walls outside the limits of the hut-pit, given by the position of the hearths in 44 and 49, the end elevation (Figs. 289 & 290) presents a workable hypothesis. The 'corner-posts' are carried up to roof level to support purlins and, in so doing, the purlin is midway down the rafters. To counteract the pressure from the roof, the 'purlin-posts' are stabilised by tie-beams. For historical reasons, the tie-beams are placed below the purlins, in 'reversed assembly'. The lower ends of the rafters are secured by a lower purlin, again supported on a tie-beam; not, in this case, supported on a post at its extremities, but half-lapped onto the two existing purlin-posts and the ridge-post. The ridge-beam, and the purlins, are carried beyond the line of the vertical posts in order to cover the ends of the pit, which would be necessary in the simplest reconstruction of a gable-ended sunken hut with a bivouac roof. Even with thick planks, a suspended floor requires a central joist, here half-lapped to the ridge-posts and stabilised by lapping on to the frame at the foot of the walls. The ends of the floor planks equally require support and this is achieved by resting them on a joist at the foot of the wall at ground level. In order to overcome the objections to the use of a proper sill-beam at this date the wall planks are not slotted into, or stood upon this beam in any way, but simply placed in a shallow trench of some 4in (10cm) in depth beside this 'outer-joist', with their upper ends lashed to the lower purlin. Although the wall remains essentially non-load bearing, it nevertheless adds considerably to the overall stability of the structure. Although this technique of securing the walls has been used in the reconstructions, I suspect that they could have been slotted and pegged to the joists and the lower purlin.

The two-post, Type A SFB is more difficult to reconstruct. The solution offered here became apparent after building the first SFB at West Stow on the principles outlined above. The purlin-posts are essential to bear the main weight of the roof and without them, some other method of support must be devised. It is suggested that this could be achieved simply by moving the purlin-posts from the pit to stand upon the outer joists, thus supporting the lower 'purlin' (Fig. 289). Outwardly the appearance of both types would be the same.

In 1972 the Borough of Bury St. Edmunds began to promote the site as an integral part of their proposed Country Park and the author was invited to put forward a scheme for the reconstruction of part of the settlement. Arising from these discussions the West Stow Anglo-Saxon Village Trust was established with the aid of generous financial aid from the Borough in 1974 to enable a controlled series of building experiments to be undertaken. This continuing experiment has, since 1973, built one six- post SFB, two two-post SFBs, all with floors, one traditional 'sunken-house' and one hall.

The reconstructions have been built using the lowest possible level of technology which would enable them to stand. Only the simpler joints, half laps and mortice and tenons, have been used. Wooden pegs would be an advantage, and may indeed have been used, as the spoon bits from the settlement would allow, but the structures are viable, even without pegs.

THE MATERIAL CULTURE

A. ROMAN OBJECTS IN THE ANGLO-SAXON CONTEXT

A number of objects of Romano-British origin, other than coins, were found in the general 'Layer 2' as well as in distinct Anglo-Saxon contexts. Here, only those which are clearly from such contexts, or are chronologically late, are included. All those from Layer 2 of the late first and second centuries will be discussed in the second volume as pertaining to the Romano-British occupation.

Bracelets and finger rings:

Bracelets and rings are not common in Anglo-Saxon graves, many of those found from the West Stow settlement are of Romano-British origin and include those of twisted wire, jet, flat decorated bands, and narrow bands with serrated edges. The jet fragment (SFB 18), six twisted wire fragments and one with simple rouletted ornament, come from SFBs (SFB 6, 12, 15, 44, 49, 65, 66); either they were being used or were simply scrap metal. Of the finger rings, four were clearly of Romano-British origin, one in bronze with simple paste bezel (Fig. 238;28) and three of glass, the central pellet of one from SFB 46 (Fig. 158;2).

Brooches:

Three Romano-British brooches from SFBs and one from Layer 2 above Hall 3 and one brooch spring from an SFB.

SFB 19: Fig. 85,3; SF 583. Catchplate, Camulodunum Type III, mid 1st century.
SFB 20: Fig. 88,1; SF 515. 'Dolphin' Brooch, Camulodunum Type V, mid 1st century.
SFB 45: Fig. 154,2; SF 1479. 'Dolphin' Brooch, Camulodunum Type V, mid 1st century.
SFB 52: Fig. 176,1; SF 1681. Bronze spring from brooch, on iron core. ?RB/AS.
Hall 3: Fig. 13,2; SF 849. 'Dolphin' Brooch, Camulodunum Type V, mid 1st century.

All these are consistent with the late Iron Age settlement (SF 515) or with the early phase of the activity of the Romano-British pottery industry on the site and could, therefore, have been picked up in the area of the settlement. Eleven others were recovered from Romano-British features (8) or from Layer 2 (3).

Spoons:

Seven fragmentary bronze spoons were found, five from Layer 2 and two from SFBs. Five are of the 'rat-tailed' type, of which three have faceted ornament.

SFB 34: Fig. 121,4; SF 1041. Spoon bowl, tinned bronze.
SFB 42: Fig. 144,2; SF 1100. Plain.
Hall 6: Fig. 19,2; SF 1883, WG 12. Faceted handle.
Layer 2: Fig. 237,1; SF 341. Spoon bowl.
Layer 2: Fig. 237,3; SF 921. Plain.
Layer 2: Fig. 237,4; SF 1676. Faceted ornament.
Layer 2: Fig. 237,5; SF 1949, WG 12. Faceted handle.

Bronze Pins:

The pins with small knobbed head from SFB 9 (Fig. 52,1) and SFB 66 (Fig. 216,3) are probably strays from the earlier Romano-British occupation, as the others were stratified in pits of the late 1st to mid 2nd century on the site. A pin with a triangular grooved head from SFB 57 (Fig. 191,2) may well be Roman.

Toilet articles:

Three bronze 'scoops' and one 'unguent' spoon were found. One 'scoop' came from D.254 (WF 14), a 7th century ditch (Fig. 229,25); one from SFB 36 (Fig. 126,2) and one from SFB 16 (Fig. 76,1) and the unguent spoon from Layer 2 above Hall 3 (Fig. 13,1). That from SFB 36 is precisely paralleled from the West Stow cemetery (Fig. 268,9) and is comparable to that from Grave 50, Holywell Row, (Lethbridge 1931, Fig. 12,2) and from Castle Acre, Urn 48 (Norwich Castle Museum), associated with faceted tweezers.

Miscellaneous articles:

The bronze balance beam (Fig. 237,2) from Layer 2 above SFB 16 is worth noting as it is beyond the area of the Romano-British pottery industry and stratified above an Anglo-Saxon hut.

The miniature axe (Fig. 60,3) from SFB 12 is paralleled by stray finds from a number of local sites, Stonham Aspal (Villa); Hacheston and Hockwold, all of which have Romano-British occupation. They also occur in late Roman contexts on the continent; e.g. Köln, Körpergrab Hofergasse (Böhme 1974, Taf. 75, 14-15). Note also the iron stylus (Fig. 94,6) from SFB 22, a 5th century context.

B. ANGLO-SAXON OBJECTS.

1. Brooches:

Six brooches are represented in the settlement material; one iron upturned-foot brooch, one cruciform, one knob from a cruciform and three small-long brooches. Four of the brooches came from SFBs, one from a pit and the cruciform knob from Layer 2.

The iron brooch with upturned-foot from SFB 61 (Fig. 201,3) is of considerable interest, especially when added to the two bronze ones from the cemetery.

Two early cruciforms are represented by one complete example with full round knobs from SFB 6 (Fig. 42,2) and a full round knob from Layer 2 in WG 3, (Fig. 237,8). To these should be added the single Åberg Group 1 and three of Åberg Group 2 from the cemetery, all of which are classified by Reichstein (1975, 155) as his *Typ* West Stow Heath.

In common with many of the cemeteries in the Lark Valley, the small-long brooch series is the most numerous, there being twenty in all from the settlement

and cemetery. Of the three from the settlement, the example from SFB 39 (Fig. 135,3), with three knobs and a rhomboidal foot, is paralleled precisely with one from Rahmsdorf, Kr. Harburg. (Wegewitz 1960, 35, Taf.1) which was found in a *Buckelurne* of the latter half of the fifth century. A second small-long brooch with good continental parallels is that from Pit 64 (WG 5, fig. 231,7), again with a rhomboidal foot, but with a 'cross potent' head; matched with one from the Liebenau cemetery (Genrich 1964, 29), which is of a type distributed in Thuringia, (Schmidt 1961, 126) Mecklenburg, Ostholstein and Nordniedersachsen (Böhme 1974). The group is dated to the second half of the fifth century and the early years of the sixth. The third, from Layer 2 (SF 614, fig. 237,7) is a square-headed type with panelled effect which Leeds (1945, fig. 21) showed is concentrated in the Cambridgeshire and Lark Valley cemeteries.

2. Bracelets and finger rings:

A bronze wire bracelet with slip knot was found in Grave 1 on the site, with no other accompanying grave goods.

Spiral rings were found in SFBs 12, 53 and 69 which range in date from the late fifth to the late sixth century. Two rings were found in SFB 39, a slip knot and a simple over-lapping band, both of silver, (Fig. 135,1-2) belonging to the late fifth century.

A number of fragments were found with serrated edges, which appear to be finger rings or fragments of bracelets, including one from SFB 61 (Fig. 201,1). A fragment of another has come from the Roman villa site at Rougham, just east of Bury St. Edmunds (Miss M. Baker, surface find) and another is illustrated from Shakenoak from a late third century context (Brodribb et al 1971, fig. 29,104).

A small lead ring with wound knot was found in WF 7.

3. Articles of dress:

Three wrist clasps, two of bronze and one of iron were recorded from Layer 2 and all in the south-east corner of the site, one from SFBs.

Of the five belt ends, one from SFB 35 (Fig. 123,1) is of early fifth century date although its context is a late sixth century building. In general form there are parallels from Damery, Dept. Marne, although plain; or from Perlberg (Böhme 1974, Taf. 121,9 and Taf. 33,1), both with a single rivet hole. The long, parallel-sided example from Layer 2 (Fig. 237,14) may be related to that from Ramsbury, reported on by Evison (1980, 35); although the Ramsbury example is of iron inlaid with silver and thought to be ninth century. There is no other material of that date from West Stow.

The dress pins form an interesting series of silver, bronze, iron and bone. Most of them can be assigned to the 'late' phase of the settlement, i.e. the late sixth and early seventh centuries, and compare with Shudy Camps Grave 95, bronze (Lethbridge 1936, fig. 4b) and Holborough Grave 15, (Evison 1956). Two silver pins and one of bronze have knob heads with mouldings beneath. One (Fig. 72,1) comes from SFB 15, the other two from Layer 2 (Fig. 246, 1,2). There are five cheese-headed pins, one of bronze, from SFB3 (Fig. 36,1), one of iron, from Layer 2 (Fig. 246,4), and three of bone (SFB 15: Fig. 73,1; Pit 158: Fig. 231,18; Layer 2: Fig. 246,3), all in the 'late' quarter of the site. Three more in bone, two with perforated heads, came from the cemetery (Fig. 266,5,6,7). They are well known from the Dover cemetery in similar contexts (Evison, personal comment) and from local sites; Shudy Camps and Lakenheath (C).

At West Stow the two SFBs 3 and 15 are both clearly of early seventh century date, with a silver shield pendant in SFB 3 and a low, single-sided comb in SFB 15. SFB 3 also contained a bone pin with a spherical head with dots on both head and shaft (Fig. 36,9).

Two other characteristically 'late' pins, of bone with spherical heads and a swelling of the lower shaft came from SFB 41 (Fig. 141,4) and from Layer 2 over Hall 2 (Fig. 11,7). Locally they are to be compared with that from Grave 5, of a child, at Little Wilbraham (Lethbridge 1931, fig. 38,2). On the Continent they are known from the Frisian terps (Roes 1963, Pl.LIII,65), and are generally accepted as of the seventh century date. A bone pin from Layer 2 (Fig. 246,11) could be related.

The iron pin with the faceted head (Fig. 246,5) from Layer 2 in WF 12 is not so easy to categorise. Locally others are known from the Stanton Roman villa (Balkwill, personal comment), where the example could be associated with Anglo-Saxon 'squatter' debris; Grimstone End, Pakenham; (unpub.) Lackford, in a vertically bossed urn (Lethbridge 1951, Fig. 28, No. 49,17) and Stoke, Ipswich, where the pin was excavated in an Ipswich ware context of the seventh-eighth century (Wade, personal comment). The Stoke pin however, had impressed dots in each face. A bronze example, from Shudy Camps Grave 65 (Lethbridge 1936, fig. 4,C) has a faceted, but more rectangular, head. Others, in bone and bronze are known from Southampton (Addyman 1969, fig. 26,11), Portchester, disc headed, (Cunliffe 1976, fig. 139,54); Whitby, (Peers 1943) Maxey, (Addyman 1964, fig. 17,2) and Sedgeford, Norfolk (unpub.).

On the Continent similar pins are found with tutulus brooches at Oudenburg, Grave 67; Vert-la-Gravelle, Grave 7 and at Feddersen Wierde (Böhme 1974, Taf. 94,4, Taf. 144,15, Taf. 18,9). These may be simplified versions of the decorative *Typ Cortrat* pins with faceted heads and moulded stems, found with tutulus brooches and a zoomorphic triangular bone comb in Grave 6 at Cortrat. *Typ Cortrat* pins, in silver or bronze are not common, but belong with Germanic graves of the fourth to fifth century from the Rhineland (1), North German coast (1), North France (2), South Germany (1). It is not possible to place the West Stow pin in either series, as it is unstratified.

Eight pairs of tweezers were recovered from the settlement, seven more survive among the cemetery material. There is little to add to what has already been said in the discussion of the cemetery material; only one of the settlement examples came from an SFB: (Fig.97,1 SFB 23) and that two pairs from Layer 2 (Fig. 238,24,25) are paralleled with late ones at Shudy Camps, Grave 3 (Lethbridge 1936, fig. 1,F) and a

similar pair from Lakenheath with ring-and-dot stamps (M.A.A. Cambridge).

A fragment of rolled bronze from SFB 49, (Fig. 167,7) may be the ferrule from a small cosmetic brush, as suggested by Brown (1974, 151-154). Although this piece is smaller, the transverse lines recall those from Cassington, Oxon., and Barrington, Cambs (Brown 1974, fig. 53).

One 'D' shaped strap-separator was recovered, from SFB 12 (Fig. 60,5). Threaded through it were two iron loops, suggesting the suspension for a small knife. Two similar iron suspension loops were also found in Layer 2 (Fig. 243,3,4).

The decorated fragment of silver-gilt from SFB 12 (Fig. 60,1) may be part of a belt-slide, not unlike that from Tournai, Grab D (Böhme 1974, Taf. 109,4). The lozenge-shaped bronze plate with perforated corners from SFB 49 (Fig. 167,1) and another from Hollow 2 (Fig. 227,17), compare with others illustated by Böhme (1974, Taf. 27,8 and 11) from Liebenau.

One 'shield pendant', of silver, was found in SFB 2 (Fig. 33,1) and is important dating evidence for another of the SFBs in the north-east quarter of the site to the late sixth early seventh century. The type is further examined in the discussion on the cemetery (p.145).

The bronze catch or fastener from Layer 2 (Fig. 237,25, SF 3036) is similar to others, for example, from Burwell, Graves 3, 6 and 83 (Lethbridge 1931, figs. 22,3,4, 33,6); Holywell Row (Lethbridge 1931, Grave 85, fig. 18, B.4); Shudy Camps (Lethbridge 1936, Grave 11, fig. 2,6) and Holborough, Kent (Evison 1956, Grave 11, fig. 18, 2C) and are associated with seventh-century objects.

4. Iron implements:

Sixty-six knives were found, many of them broken or heavily worn. All were relatively small, none exceeding 11cm in blade length and rather narrow. Many had traces of wooden handles, but only one was riveted.

Group A, with straight backs and cutting edges curving to meet the point were all around 7 to 7.5cm blade length;

Group B, with both blade and edge curving to meet, ranged from 5 to 9cm;

Group C, with straight cutting edge and curved back were less common, with a wide range of blade lengths, from 5 to 11cm;

Group D, with angled backs again ranged from 4 to 9.4cm, tending to be around 7cm in length.

Small blades and miscellaneous fragments accounted for the majority.

Four iron arrowheads (Fig. 241, 1-4) attest the use of the bow, probably for hunting. One small iron spear (Fig. 241,5) is of Swanton's Type E1, suggested by him to be of fifth century date (Swanton 1974, 13).

Three small iron reaping hooks were found, two from SFBs, (SFB 1, Fig. 30,4, SFB 8, Fig. 48,1) and one from Layer 2 above SFB 52 (Fig. 242,2) and only one pair of shears (SFB 2, Fig. 33,2).

No large tools survived, the axes, adzes and any other large metal fragments were presumably carefully kept and reused as raw material. Much of the iron-work consists of small, unrecognisable fragments and nails. Few tools can be identified, but one must suspect that others survive which have lost their cutting edges, points or teeth. The evidence for the manufacturing of bone combs on the site indicates a high level of craftsmanship and the use of fine saws, small drills, hammers and scribing tools. What appear to be two small adzes are illustrated on Fig. 241,21 and 23, together with a curious, adze-like tool with coarse, toothed edges, possibly for removing hair from hides, (Fig. 241,22). Two fragments of spoon-bits (Fig. 241,25,26) illustrate the ability, and necessity, for drilling sizeable holes, 2.8cm and 2cm across; a suitable size for the use of wooden pegs in house construction, for instance, although this cannot be proved.

One iron awl, complete with handle, from SFB 56 (Fig. 188,1) gives one suggestion of the use of some of the 'spikes' that occur on the site, certainly Fig. 242,20 and Fig. 242,33 for example. Awls have a multitude of uses, among which leather working would be an important factor. The series of iron 'spikes' illustrated in Fig. 242,17-19, found singly, are difficult to assess. Those about 8-10cm in length, with a round section (Fig. 242,18,20,21,24,35) and possibly some of the fragments compare well with others found at Shakenoak (Brodribb et al 1972, fig. 51, pp 115-116) where it is suggested that they were concerned with wool preparation. The use of 'heckles' or wool carding combs, consisting of iron points in a wooden board sheathed in iron is well attested in the middle Saxon period at Wicken Bonhunt where a complete specimen was found (Wade, personal comment). The Shakenoak and West Stow examples, if they are from similar objects, are a little different in that they are straight; the Wickam Bonhunt spikes have a bend or curve toward the end mounted in the handle. Iron joiners 'dogs' (Fig. 242,6-8) recall the small bronze or iron ones frequently found in inhumations, placed by the head, presumably from small boxes.

An analysis of the frequency and distribution of iron nails in the SFBs failed to suggest any pattern, other than they do not appear to be connected with the building, but rather perhaps, with internal fittings or furniture.

Some kind of turning device, probably a pole-lathe; must be inferred from the turned bone and chalk spindle-whorls, although there is no other evidence for it.

The iron tripod bowl from SFB 26 (Fig. 105,4) is an exceptional piece, the nearest equivalents being the lamps from Sutton Hoo and Broomfield (Essex); but both of these are supported by a central stem with feet and are of a later date.

5. Bone working and bone objects other than combs

Fragments of bone and antler, bearing saw marks are common and bear witness to craftsmanship in those materials, ranging from simple pins for dress and weaving to complex bone combs requiring a considerable degree and range of skills. There are also spindle-whorls turned from bone and presumably therefore, there were similar objects in wood which have left no trace. One technique of bone working which is present in secure Anglo-Saxon contexts, for example in SFB 45, is the use of the groove and splinter

technique for securing long fragments for the manufacture of pins or 'pin-beaters' (Fig. 155,5, Layer 2, Fig. 247,9,10).

Pin-Beaters

There were ten complete, double-ended points, commonly called 'pin-beaters', for use in weaving; all were highly polished from much use. Ten fragments of pointed bone can probably be added to this total on general proportions or shape. They range in length from 8.7 to 14.5cm; all are rounded in section, in some the points are slightly flattened.

Needles

More common are the 'triangular-headed' pierced bone needles, usually made from the fibula of pig but occasionally on splinters from other bones. Thirty-seven of these were found, plus two more ornate ones from SFB 12 (Fig. 61,8,9).

There seems little correlation in the incidence of 'weaving' implements and SFBs with loom weights. This may, in part, be due to the mobility of the looms, in that being free standing structures which were leant against the walls of the building, they could easily be dismantled and moved to another house, whereas the other weaving implements should represent material which had been lost. However, a closer correlation might have been expected with the two SFBs which had been burnt down, Nos 3 and 15 where concentrations of loomweights suggest the sites of several looms. In SFB 3 there were two spindle-whorls but no 'pin-beaters' or 'thread-pickers'; in SFB 15 there was but one spindle-whorl and one 'pin-beater'.

Pierced bones:

No function can be put forward for the twelve bones pierced either in the centre of the shaft or at the distal end. All are from sheep, five are metacarpals, six are metatarsals and one is a tibia. Of the metacarpals, three are pierced centrally and two at the distal end; five of the metatarsals are pierced at the distal end and only one centrally. The tibia is incomplete, but pierced at the distal end. The holes are not drilled, but are irregular, in some cases quite ragged, probably made with the point of a knife. There are no signs of wear in the holes but in each case the shaft of the bone has the same polish that well-used bone implements acquire, but the ends have not. The distribution of the bones on the site is also interesting. One came from SFB 37 (WG 9), one from Hall 5, three from SFB 45 and one from Pit 90. The rest were all found in the general Layer 2, in WG 2(1), WG 3(1), WG 4(1) and WH 3(3). Ten of the bones therefore, came from the extreme south-east corner of the site, only those from Pit 90 (WG 6/7) and SFB 37 (WG 9) being outside this area. Both Pit 90 and SFB 37 are of early fifth century date; the south-east corner of the site is predominantly associated with the late sixth century material.

Pottery stamps:

Five stamps made from antler tines attest pottery making on the site. Three are short stubs from the ends of tines with the stamp carved on the sawn-off end. The fourth is a longer piece of tine and the fifth part of the main beam of a roe deer antler with a simple stamp on the stub of a tine. One of the stamps, a simple cross (Fig. 254,1) has been considered to be one of the repertoire of the Illington/Lackford potter (Myres 1969, 133), but a close confrontation with an impression from this stamp and the stamps on proven Illington/Lackford vessels show this not to be so. The arms of the cross are relatively longer and, more significantly, the lobes surrounding the crossed members give a rounded or pointed impression, depending upon the depth, whereas those attributable to the Illington/Lackford potter are squared. The figure-of-eight stamp from SFB 12 (Fig. 61,14) has distinct, isolated roundels in the centre of each arm which distinguishes it from other similar stamps from Lackford (Lethbridge 1951, fig. 32, Myres 1977, fig. 325, Cat. Nos 2849,2850); Urn 151 from Illington where the central roundel is much smaller (Myres 1977, Cat. No. 2251, fig. 327) and Caistor, W75 (Myres 1973, fig. 37).

The cross-hatched stamp (Fig. 254,2) is unfortunately very badly damaged but was probably a 4 x 4 or 4 x 3 division. Of the remaining stamps the antler tine from Hall 7 (Fig. 21B,1) produces a small, double V, but without parallels on the site and the other, from SFB 12 (Fig. 61,13) on a roe deer antler, a double bar, which may be that on the hollow-bossed fragment from WH 8 Layer 2 (Fig. 255,10). The section of goose ulna from SFB 45 (Fig. 155,4) may well be a stamp for circular impressions, and is included with the stamps, although some doubt must remain. Other pottery stamps may well have been made from hardwood, although there are more problems with clogging as the wood swells with moisture from the clay. It should be noted that the majority of the stamps are clearly specially made, with the emphasis on those which could be carved on the end of an antler tine or wooden peg; there is little use of 'natural' objects such as the epiphyses of animal or bird bones, except for a few possibilities in Group 9, or for the use of other objects, such as brooches.

There is no doubt that pottery making was carried on in the settlement as the stamps indicate, supported by the 'clay reserve' in WF 2. Other evidence, in the form of kilns, firing places, or wasters, is lacking.

Bone keys: Fig. 249,1-3.

Antler tines with rotating bone plates are known from the Frisian terps, and it has been suggested that they could have been used as keys (Roes 1963). Although the movable plate looks too slender for such a purpose, a key of precisely the same pattern was used in the reconstructed Hedeby house in the Viking Exhibition at the British Museum to engage in botches in a sliding wooden bar. The roughed out piece, No. 1 in the illustration, from WG 2, indicates they were made on the site; another cut tine, of the same length, but without the slot, also came from WG 2 (not illustrated); Nos 2 and 3 were from WG 5 and WF 4 respectively, all in the south-east corner of the site; c.f. Portchester, Fig. 140,71 (Cunliffe 1976).

Boars' tusk amulet:

A boars' tusk, pierced at the root end, was found in SFB 52 (Fig. 176,10). This was possibly one of a pair,

of the type found at North Wroxall, Wiltshire and compared by Hawkes (1961, 29ff) to others from Richborough and the Continent of late Roman date and considered to represent Germanic soldiers; c.f. also Shakenoak, late third or fourth century date (Brodribb et al 1968, fig. 37,2) where there was also a Germanic presence.

6. The Combs.

A well preserved group of 106 bone or antler combs or fragments, and one bone comb case were recovered from the site. Of these, fifty-five were double-sided and fifty-one single-sided, of several varieties. It is possible that wooden combs were also used as they are known in the Roman period (Roes 1963, Pl.1,1, p.6).

Combs have been discussed at length by Thomas (1960) and Böhme (1974) and many examples from the Dutch terpes illustrated by Roes (1963), which provide a useful background to our material.

Single-Sided Combs.

Thomas' division of the single-sided combs into three types is taken further by Böhme with his division of the triangular backed Type 2 into Forms A-E.

The fifty-one single-sided combs from West Stow can be sub-divided into a number of different types.

1. Single piece combs.

These are known from cemeteries, for example locally at Lackford (Lethbridge 1951, figs. 1,11,15, 27,28,35) and Caistor-by-Norwich (Myres and Green 1973, Pl.XXIIIc,e) and have been thought to have been especially made for funerary purposes. The West Stow settlement produced three; one from the fifth century SFB 39 and two from the general Layer 2. That from SFB 39 (Fig. 135,4) is triangular, with a suspension hold and decorated with dot and ring incisions. It compares well with one from Urn 49, 177A from Lackford (Lethbridge 1951, fig. 27). The second, a thicker, coarser piece from Layer 2 (Fig. 251,5), is again matched with Lackford, from Urn 49, 25A (Lethbridge 1951, fig. 28). The third, (Fig. 251,4) has a notched back.

2. Composite, round-backed combs.

Although round-backed, this small group from West Stow has a flatter profile than most from Scandinavia and Eastern Europe, and the two from Caistor-by-Norwich (Myres and Green 1976, P.1.XXII,a,b). They are better matched with some from the Dutch terps, illustrated by Roes (1963, P1.IV,1,3,4). One of the West Stow examples (Fig. 52,4), from SFB 9, has a rather arched back but is well stratified, as SFB 9 is cut by both fifth and sixth century SFBs, so an early fifth century date can be suggested. The second, from SFB 12, (Fig. 61,4), is paralleled by one recorded from Little Wilbraham, Cambridgeshire (Neville 1852, P1.XXIII). The round-backed comb from SFB 50 (Fig. 170,7) has long projecting end tooth plates, continuing the line of the back. This may be compared with a comb from *Grab* 4, Reuden, Kr. Zeitz, (Schmidt 1970, Taf. 39) and another from *Grab* 6 (Taf. 55,a) with two brooches, a buckle and a pot attributed by him to his *Gruppe* 2b (*c.*480-525 AD). SFB 50 also contained a fragment of a claw beaker of mid to late sixth century date. The round-backed comb from SFB 45 (Fig. 154,12) is very plain and is almost triangular in form. The context is poor as SFB 45 was rebuilt on the same site and material in it could have been derived from the earlier stage.

2B. Composite, round-backed combs with projections.

The first, from SFB 22 (Fig. 94,16), has a very low profile and is distinguished by the projection of the end tooth-plates beyond the back, each with a deep notch, and the concave shape to the downward sweep of the end tooth-plates. The rearward projection of end tooth-plates is a well known style in the early seventh century (c.f. SFB 15, Fig. 73, 2), but the character of the comb shape here is really quite different. A fifth century date is confirmed by the other material in the primary fill; a fragment of a frilly-edged comb, faceted-angled pottery and a fifth century *Buckelurne.*

Two further fragments may be added to this Group. One is a small tooth-plate of a low-backed, single-edged comb from SFB 61 (Fig. 201,9), associated with early fifth century pottery and an iron brooch with up-turned foot; the other a tooth plate from SFB 12 (Fig. 61,3), with a similar notch to that from SFB 22, although it is not the end plate. The dating of this SFB is considered to be early sixth century.

3. Frilly-edged comb.

Only one fragment was found of Böhme's Type D; a simplified, unpierced version of the decoration above the connecting plate. The fragment came from SFB 22 (Fig. 94,12) associated with faceted-angled pottery and a *Buckelurne.* It is worth noting that the finest examples of this type, from the late Roman cemetery at Furfooz are very small and technically very superior to many in this class. The dating of SFB 22 confirms the consensus that these combs begin in the late fourth century and continue well into the fifth century.

4. Triangular combs.

Triangular combs form the largest group of single-sided combs at West Stow and occur in SFBs throughout the fifth and sixth centuries. Attempts to discern a chronological development have not met with success at West Stow (Table 48). Plain and complex decorative schemes occur throughout and measurements of the angles of the connecting plate do not demonstrate a clear movement from steep-sided earlier specimens to flatter, later, varieties, but merely a tendency to a lowering of the profile by the late sixth century. Of the twenty-four examples of fragmentary and complete connecting plates, twenty-two are decorated with dot-and-ring ornament, one is plain and one has a cable ornament based on inscribed semi-circles. All have lined borders, of which only two include dot-and-ring ornament.

The typology suggested by Böhme as a refinement of Thomas' does not seem to be relevant to the combs from West Stow. The origins of the type would seem to be in the fourth century, perhaps in the middle Rhine area but spreading out to the Elbe-Weser; Thomas' 'Varient I' being confined mainly to the Middle Rhine and the lower reaches of the Elbe-Weser, 'Varient II'

to the upper reaches of the Elbe. Both occur in the middle area of the Elbe. There are a number of undated examples from the Dutch terps, which extends the distribution to the west.

5. Hump-backed form.

Part of a connecting plate, from the rebuilt SFB 45 (Fig. 154,11), a hut with Illington/Lackford pottery, may be derived from the earlier structure. This unusual form has a number of parallels; Trier in the late fourth century; Ferwerd in the Netherlands in the fifth (Boeles 1951, P1.XXVII,7); Cathedral Square, Utrecht (Roes 1963, 11, fig. 3); Rommersheim (Kessler 1933, 122, Abb 8); Warffum (Roes 1963, pl.x 5); in England at Grimstone End, Pakenham (Ipswich Museum) and York (York Museum, 656,48). The Rommersheim specimen, published with suggested projecting animal heads, was found in a grave with a sword and jewelry which links with the grave furniture from the tomb of Childeric, buried in 481 at Tournai. The examples are all so closely allied in shape, size and ornament as to suggest that they have a common origin.

6. Single-sided comb with low arch and straight ends.

The only example comes from the undated SFB 45, which by its position in the north-east quarter of the site, could be late sixth, or early seventh century. Parallels, however, could point to an earlier date, for similar combs, without border lines, are to be found with *Gruppe* IIb material from Rathewitz (Schmidt 1961, Taf. 18,19). Flat, square-ended combs, rather like these, also occur in his later periods, into the seventh century, but these are usually larger and finer examples.

7. Flattened profile with end tooth plates extended behind.

A form well known from late cemeteries like Burwell (Lethbridge 1931). Two examples come from the settlement, SFB 15, (Fig. 73,2); Ditch 77, (Fig. 229,8) and two from the cemetery (Fig. 272,1,2).

Double-sided combs.

Fifty-five whole or fragmentary double-sided combs were recovered from the site; a simple visual appreciation of those which were reasonably complete suggested that various styles were present by the decorative treatment of the connecting plates and the shaping of the end tooth plates. The following types were defined by these criteria:

Type 1A: Plain connecting plates with edges nicked by saw cuts only; the end tooth plates square ended with large blank areas, with the teeth cut down almost to the connecting plates, e.g. SFB 15, (Fig. 73,4).

Type 1B: Connecting plate with areas of cross-hatching at each end, otherwise plain apart from edge nicks; square ended with blank areas, e.g. SFB 2, (Fig. 33,9).

Type 2A: End tooth plates with rounded corners and small space before start of teeth. Teeth grading from very small to full size on straight line.

Type 2Ai: Plain connecting plate with edge nicks only, e.g. Layer 2, (Fig. 252,5).

Type 2Aii: Connecting plate with parallel edge lines plus ring-and-dot, e.g. Hall 5 area, (Fig. 252,4).

Type 2B: End tooth plates with rounded corners and small space before start of teeth. Teeth graded on distinct convex line.

Type 2Bi: Plain connecting plate with edge nicks only, e.g. SFB 19, (Fig. 85,6).

Type 2Bii: Connecting plate with parallel edge lines, e.g. SFB 44, (Fig. 150,15).

Type 2C: End tooth plates with graded teeth on convex line, no space at end, e.g. SFB 21 (Fig. 91,12).

Twenty-eight combs were typed in this way, of which nineteen were from phased SFBs. The following table shows the distribution of these in those phases.

Table 48:
Apex angle and date of triangular bone combs.

Fig.	SF No.	Origin	Apex angle	Date
135,4	854	SFB 39	108	5th C.
161,11	1274	SFB 47	108	c.6th C.
91,9	670	SFB 21	114	L.5th C.
167,13	1371	SFB 49	114	L.6th C.
216,17	2130	SFB 66	114	L.6th C.
167,13	1393	SFB 49	116	L.6th C.
154,10	1422	SFB 45	122	L.6th C.
164,4	1378	SFB 48	124	E.5th C.
154,12	1475	SFB 45	124	L.6th C.
188,6	1822	SFB 56	c.128	5/6th C.
170,5	1366	SFB 50	128	6th C.
21A,33	3026	Hall 7	128	L.6-7th C.
201,9	1935	SFB 61	130	E.5th C.
150,14	1178	SFB 44	130	L.6th C.
185,6	1797	SFB 55	130	E.5th C.
207,9	2133	SFB 63	130	L.5th C.
132,6	1118	SFB 38	132	L.6-7th C.
210,12	2132	SFB 64	134	E.5th C.
94,12	592	SFB 22	136	5th C.
13,8	841	Hall 3	137	5/6th C.
61,5	236	SFB 12	c.138	L.5th C.

Table 49:
Classification of single-sided bone combs.

Type	Small Find Number and Origin
1	854/H39; 74/L2; 1255/42.
2	1458/H50; 320/H12; 157/H9; 1475/H45.
2B	853/H22; 357/H12; ?1908/H61.
3	592/H22.
4	600/H22; 1797/H55; 2153/H64; 2132/H64; 3026/Hall 7; 1861/H59; 1889/H59; 1935/H61; 2130/H66; 1700/Pit 322; 1211/L2; 841/Hall 3; 670/H21; 181/H22; 73/L2; 1274/H47; 1118/H38; 61/12; 236/H12; 1366/H50; 1378/H48; 1178/H44; 1371/H49; 1422/H45; 911/L2; 1802/D162; 801/L2; 1293/F75; 249/H12; 1022/H56.
5	1423/H45.
6	E21/H43.
7	294/H15; 857/D77.
Cas	2012/H63.

Table 50: Chronological distribution of double-sided comb types;

Type	5th C	E 6th C	6th C	L 6th C	7th C	Unphased
1					SFB3, SF 353.	SFB16, SF434.
1A		SFB8, (SF120)			SFB1, SF36; SFB2, SF185; SFB2, SF190; SFB15, SF295; SFB15, SF318.	WF6, L2, SF133; Pit 68, SF 696.
1B		SFB8, (SF134)			SFB2, SF317.	WE6, L2, SF92; WF3, L2, SF400.
2Ai	SFB22, (SF612)					
2Aii				SFB66, SF2189; Hall 5, SF1251.		
2B			SFB12, (SF237)			
2Bi			SFB47, (SF1278)	SFB19, SF574		WE5, L2, SF168.
2Bii		SFB18, (SF480)	SFB43, (SF3011)	SFB45, SF1481; SFB45, SF1495; SFB44; SF459; SFB66; SF2131.		WG3, L2, SF1567; SFB51, SF1402.
2C	SFB21, (SF783)					

Further confrontation of the combs suggest that some groups were made by the same craftsmen, for instance Type 1A, from SFB 2 (Fig. 33,7,8); SFB 8 (Fig. 49,1); SFB 15 (Fig. 73, 3,4). Four of these come from the same group of late sixth to early seventh century SFBs; SF 120, from SFB 8 looks as if it is by the same hand, but the SFB is early sixth.

Two more of Type 1A may well be by another craftsman, from WF 6, L2 (Fig. 252,2); Pit 68 (Fig. 252,1), again, both were from the same area of the site. Type 2Bi has two probably by the same hand; SFB 19 (Fig. 85,6); WE 5, L2 (Fig. 253,1). In Type 2Bii three combs: SFB 45 (Fig. 154,14); WG 3, L2 (Fig. 253,3); SFB 51 (Fig. 173,2) are linked by technique, as are two other pairs: SFB 66 (Fig. 216,18) with SFB 43 (Fig. 147,4) and SFB 45 (Fig. 154,15) with SFB 44 (Fig. 150,15), the last pair closely associated on the site.

Apart from the three single-piece combs, all the rest are composite, made from flat plates of bone arranged in series and secured by connecting plates of antler, in the case of the triangular combs, or bone in the case of the double-sided varieties. The evidence for local craftsmen is supported by the unfinished connecting plates and tooth plates found on the site:

SF 986, Ditch 87, WG 9 (Fig. 229,11)
SF 1033, WF 9, L2 (Fig. 251,1)
SF 464, WF 4, L2 (Fig. 251,2)
SF 394, WE 4, L2 (Fig. 251,3)
SF 513, Pit 65 (Fig. 231,10)

It is a measure of the technical skills and confidence of the craftsmen involved that the teeth were not sawn until the comb had been assembled; fresh bone and antler are difficult materials to handle, even with modern tools.

7. Querns:

Thirteen SFBs contained fragments of niedermendig lava querns and four SFBs fragments of pudding stone querns likely to have been derived from the earlier Iron Age contexts. No complete lava querns were found. Although the Anglo-Saxons must have been using querns, it is not clear that the lava querns were being used for that purpose or how they had been obtained.

SFBs with lava querns: Nos 10, 13, 18, 22, 23, 27, 31, 34, 36, 37, 39, 50, 69.

THE POTTERY:

To judge by the large number of potsherds recovered from the site, pottery was a common feature of everyday life; of the 53,570 sherds, 11,570 were collected from the general Layer 2 and 42,000 from the SFBs. A mere 2% was decorated, with stamps (463), or more commonly, with rustication (618).

It is important to note that not one single sherd of the so-called 'Romano-Saxon' pottery was found, although it is known from the major Romano-British site nearby at Icklingham.

Only one example was found of anything which really suggested Romano-British influence in the pottery, namely the two joining sherds of a cordoned vessel from SFB 52 (Fig. 177,3), significantly an early structure with fragments of 'Anglian' pottery. These sherds are comparable to those vessels discussed by Myres (1977, 18, fig. 92), to which he ascribes a sub-Roman origin.

Manufacturing Processes:

Most of the pottery was very hard by prehistoric standards and all of it hand-made. The presence of what appears to have been a reserved area of clay (WD 2) and the antler pottery stamps is an indication that pottery was made on the site; although there is no evidence for the firing of pottery. This could, however, have been accomplished under small bonfires which would leave little trace and no 'wasters' that could be recognised.

The smallest vessels were clearly 'pinched' pots; the larger sizes were coiled, with flat strips luted together with the surfaces smeared. Bases were normally flat, with little or no definition from the sides, except in specific forms with foot-rings. Rims were occasionally flattened but usually left rounded, in many cases showing the pinching and fingering of the clay during their formation. Various surface treatments were employed once the basic shape had been achieved. A minority of vessels were left with untreated surfaces apart from simple hand-wiping; the majority were smoothed or burnished to varying degrees. Some pots exhibited traces of being wiped with a cloth or brushed, leaving fine grained marks, others were clearly pared or, more often, scraped, to clean up the surface or thin down the walls of the vessel, often dragging the inclusions in the clay. Most of these marks were then normally removed, at least from the outside, by the final treatment of smoothing or burnishing. Smoothing and burnishing are closely related processes, the degree of 'burnish' may depend upon the state of dryness of the clay at the time. Certainly there is a considerable variation in the care with which pottery was burnished, from a careless, thin scribble which still displays the strokes, to an all-over burnish which left no tool marks and produced a high sheen or 'close' burnish.

In many cases, both inner and outer surfaces were burnished, particularly on the finer pieces and most of the rusticated bowls. Stamped decoration was normally applied after burnishing, rusticated surfaces usually simply smoothed, probably with a wet hand before being decorated. Although most of the pottery is of simple forms and often rather poorly finished, some of the pieces are clearly the work of very competent potters, particularly the faceted-angled pottery, the *Buckelurnen,* the furrowed 'Anglian' vessel from SFB 52, some of the rusticated pots and many of the later, sixth century decorated vessels, including those of the Illington/Lackford potter.

A curious technique, noticed mainly on large cooking pots or storage vessels, was the application of a thin layer of raw clay to the outer surface after the pot had been fired. This is sometimes slightly reddened, indicating partial firing. This was found on vessels from six SFBs, in four cases on large vessels, on one rusticated bowl and two bowls.

SFB 7. bowl.
SFB 9. open globular bowl.
SFB 12. large vessel.
SFB 12. rusticated bowl.
SFB 39. large vessel.
SFB 52. large vessel.
SFB 64. large vessel.

In contrast to much prehistoric pottery, the pottery is fired hard. Differential firing is rare but noticed in one case, SFB 63.1, which is hard at the base, but soft at the rim. Most of the pottery is reduced, in the dark brown to black range, lighter browns and reds are much less common. As has already been mentioned, there is no evidence for firing on the site, although this could have been achieved under bonfire conditions, a practice known to have been employed, on a very large scale, as late as the thirteenth century. The laminated effect noted on a number of sherds suggests some control during firing, alternating from an oxidising to a reduction atmosphere.

Fabrics:

With a collection of potsherds as large as that presented by the West Stow site, the problem of the isolation and typing of fabrics is enormous. The main difficulty is that it is not possible to maintain accurate descriptions of fabrics other than on fresh fractures, even on washed material. In particular, pottery with 'chaff' backing may not be identifiable unless the sherd is split, rather than broken. Therefore, the visual analysis, with the aid of a hand lens, that is presented here can only be in broad terms.

Seven main fabric classes were 'identified', with subdivisions. Many of the sub-divisions may merge into one another, on the basis of the frequency of the inclusions. The distinctions of 'much', 'some' and 'rare' must remain subjective until detailed statistical studies can be done.

Table 51: Early Anglo-Saxon pottery: fabric analysis.

1. Fine: A prepared clay with little or no inclusions.
   a. Fine — no inclusions.
   b. Fine, sandy.
   c. Fine with some quartz.
2. Sandy: Clays with added sand.
   a. Sandy.
   b. Close fabric with small rounded quartz grains.
   c. Close fabric with occasional rounded quartz.
   d. Common rounded quartz.
   e. 'Open' fabric with rounded quartz.
   f. Sparse angular quartz.
   g. Common angular quartz.
   h. Coarse fabric with much angular quartz.
   i. Close fabric with rare large quartz or flint.
   j. Some sub-angular quartz.
   k. Common, sub-angular quartz.
3. Micaceous: Visible white or yellow mica.
   a. Sparse tiny white mica flecks.
   b. Coarse, with quartz and white mica.
   c. Some quartz, with white mica.
   d. Sparse white mica, some small quartz and chaff.
   e. Rounded quartz and yellow mica.
   f. Angular quartz and yellow mica.
4. Chalky: Possibly not added, but present due to the use of boulder clay.
   a. Some chalk.
   b. Much chalk.
5. Shelly: ? Added or fossiliferous clay used.
   a. Much shell.
   b. Some shell.
6. Chaffy: Probably added in the form of cow or horse dung.
   a. Chaff.
   b. Rounded quartz and chaff.
   c. Angular quartz and chaff.
7. Reg grog: Fragmented pottery or ? tile added.
   a. Some.
   b. Plentiful.

Subsequently a series of sherds were submitted for petrological analysis to Andrew Russel at Southampton University, who confirmed that the difficulties encountered by simple visual techniques produced a distorted view of the pottery fabrics.

It is felt that both examinations of the material are worth presenting, in order to underline the problems of fabric analysis. The pottery descriptions used elsewhere in the report simply record what could be seen by examination with a hand lens on washed sherds; but are not put into classes.

Petrological report on the West Stow Saxon pottery

by Andrew D. Russel

A sample of fifty-nine sherds was selected from the excavator's thirty-one fabric sub-groups, thin-sectioned, and examined under the petrological microscope. For comparison, Roman kiln material from the site, Anglo-Saxon loom-weights, and the nearest known clay source, were also analysed.

A presence-absence table of inclusions was drawn up (Table 52), which did not show any great difference between the groups, except for their macroscopic inclusions, and even then the groups were not exclusive. There were, however, considerable differences in the quartz component of the samples, and a textural analysis was therefore carried out on fifty-nine of the sixty-five samples, to see if groups could be distinguished on that basis.

160 quartz grains were randomly selected using a Swift point counter, their longest axes were measured and recorded in twelve size classes, and a cumulative frequency was calculated for each sample. The frequency tables were then processed by computer to assess the difference between samples, and the resulting matrix was analysed using the Clustan package (Wishart 1978). The matrix was also processed by hand, and Ward's method in the Clustan programme was found to give very similar results to the application of the Kolmogorov-Smirnov test at the .1 significance level. This (Siegel 1956) is a powerful test designed to compare cumulative frequencies. The resulting dendrogram and the relationship of the clusters at coefficient 38 are shown in **Figs. 291A and B.**

Groups 1, 4, 5 and 8, comprising thirty-eight samples, probably represent the local clay; 1 and 8 being closest texturally, while 5 and 4 are the coarser and finer ends of the spectrum.

Groups 2 and 6 are a separate clay with a more sorted quartz component.

Groups 3 and 7 include three separate clays, all with a fine quartz component. 1B2 is a fine, well sorted clay, while 5A1 and 5A2 are a fine clay characterised by abundant angular inclusions of shelly limestone. A clay of a similar nature exists at Lakenheath, 15km to the north-west, and was used by Roman potters, but it is not the source of the West Stow material. The rest of the group is a fine, sorted clay which is very similar to two samples taken from the clay-pit 0.75km to the north of the site.

Group 9 is an even finer clay, possibly a river silt, that would not normally be considered suitable for pottery making due to its high plasticity. This quality would not cause problems when making loom-weights, but temper, here organic, would need to be added for pottery manufacturing.

The presence of fragments of igneous rock in the pottery in an area of glacial till raised the problem of whether these are natural or humanly added. Local clays do contain feldspars and muscovite mica, but only as single crystals, and the large fragments in the pottery, often with biotite mica, point to them being added deliberately. Further confirmation is perhaps to be found in samples 3F1 and 3F3 which could not be included in the textural analysis programme because they contained almost no quartz grains of the relevant sizes. Both samples were tempered with quartz and igneous rock particles of coarse sand grade. The weathered appearance of the biotites and the rounding of some particles, facts which argue for a natural origin, could be due to the potters selecting badly weathered material from the drift.

Any conclusions must remain tentative until more is known about the local geology, and sources for all the clays used on the site have been tracked down, a task that is difficult in an area of mixed glacial deposits, and may well prove impossible if riverine deposits, long since eroded, were sources for clays or temper.

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Stamped Decoration:

A total of 463 stamped sherds were found, of which 150 were identifiable as the work of the Illington/Lackford workshop, forty-six are unclassifiable and 267 have been allocated to ten broad groups. Apart from the Illington/Lackford material the majority are sherds with a single stamp represented; there are only fifteen pairs and three triple associated stamps. The incompleteness of the decorative schemes is a considerable drawback, as most of the examples can therefore only be 'dated' by their associations, if any.

The stamps have been set out in broad groups based upon the basic shape, except in the case of the cross-hatched stamps which are better grouped together (Figs. 292-294). The Illington/Lackford stamps have been the subject of a separate study and are brought together in a classification outside these groupings (Green *et al* 1981). The Illington/Lackford stamps have a separate notation of classes, A-Q, encompassing all the sites known to produce Illington/Lackford pottery. The other West Stow stamps, are grouped, from 1-10. The description of the Illington/Lackford stamps and the discussion of the associated workshop is not repeated here. The study of pot stamps generally is

Table 52: Presence/Absence table of inclusions in Anglo-Saxon pottery.

	Iron	Mica	Chalk	Chaff	Shell	Grog	Quartzite	Feldspar	Granite
1 Ai		X						X	X
1 Aii	X	X							
1 Bi	X					X			
1 Bii	X	X							
1 Ci		X	X				X		
1 Cii	X	X					X		
2 Ai		X					X		
2 Aii		X					X		
2 Aiii		X						X	X
2 Bi	X	X							
2 Ci	X	X							
2 Cii	X	X					X		
2 Ciii	X	X					X		
2 Di	X	X	X				X		X
2 Ei	X	X	X			X	X		
2 Eii	X						X		
2 Eiii	X	X	X				X		
2 Fi		X	X						
2 Fii	X		X				X		
2 Gii	X					X			
2 Hi	X	X	X						
2 Hii		X	X						
2 Ii							X		
2 Iii	X	X							
2 Ji			X				X	X	
2 Jii	X						X		
2 Ki		X	X				X		
2 Kii							X		
2 Kiii	X	X		X					
3 Ai	X	X					X	X	
3 Aii	X	X					X	X	
3 Bi		X	X	X			X	X	
3 Bii	X	X						X	
3 Ci	X	X					X	X	
3 Cii	X	X					X	X	
3 Di		X		X			X	X	X
3 Dii	X	X					X	X	X
3 Ei	X	X		X			X	X	
3 Fi		X	X				X	X	X
3 Fii	X	X	X			X	X	X	X
3 Fiii	X	X	X	X			X	X	X
3 Fiv	X	X					X	X	
4 Ai			X						
4 Ci		X	X	X					
4 Di		X			X		X		
4 Dii	X	X	X	X			X		
5 Ai	X	X			X				
5 Aii	X	X		X	X				
5 Bi	X	X			X		X		
5 Bii	X	X			X				
6 Ai	X	X		X				X	
6 Aii		X		X			X	X	
6 Ci	X	X		X			X		
6 Cii	X	X		X			X		
7 Ai	X					X	X		
7 Aii	X	X	X	X		X	X	X	X
7 Bi	X	X	X			X	X		
7 Bii	X	X				X			
KD Roman 1	X	X	X				X	X	
KD Roman 2	X	X	X					X	
KD Roman 3	X		X				X		
LW i	X	X							
LW ii	X	X	X	X				X	
Clay 1	X	X					X	X	
Clay 2	X	X	X				X	X	

fraught with difficulties, not only in matters of identification, but also with recording and publication. Outline drawings and photographs create problems of light and shade; the technique adopted here, of filling in the low areas on the stamped impression, may obscure some minute details, but in practice is the most satisfactory method overall. However, it should be emphasised that the catalogue of stamps should not be used to identify die copies elsewhere, but only as a general guide. Other factors such as depth of impression, differential shrinkage due to clay mixes and degrees of firing, can all obscure the relationships between stamps.

Group 1: Pits:

From 3 to 5mm in diameter, simple, rounded impressions used in horizontal rows between lines or grouped in chevrons. Only two examples, both Group 1.3, were found in conjunction with other stamps; Illington/Lackford, AII and Group 3B.15. The wider spaced lines on the shoulder of the three Group 1.1 fragments from SFB 64, of early fifth century date, is the only distinctive difference between the two examples from SFB 44, of the late sixth century and that from the post-hut fill of SFB 50, likely also to be sixth century. The date-range is therefore considerable, as suggested by Myres (1977, 50-51), throughout the fifth and sixth centuries. The use of chevrons, with or without ornament is certainly strong in the Illington/Lackford phase.

Group 2: Annular:

Annual stamps are simple to make from bird bones or vegetable stems, but are not as common as might be expected.

Where they occur in stratified contexts, most are fifth and probably sixth century; Group 2.1, with slashed collar and filled triangle of stamps not outlined, is from the post-hut fill of SFB 22 and therefore stratigraphically likely to be sixth century, agreeing with Myres' dating of the more complex pieces into the later sixth century (Myres 1977, 56). The minute stamps on Group 2.3 are on a miniature pot from SFB 51, in association with a crude line drawing (Fig. 174,4). This SFB cannot be dated by its contents, but is closely associated with others of fifth century date. The only other stratified specimen, Group 2.12 is from SFB 44 on a sherd with a fragment of a long boss in a later sixth century context (Illington/Lackford). One example of 2.7 was found associated with one of Group 8.5 on a sherd from WE.4, Layer 2.

Group 3: Circular:

3A. Concentric circles: Only one example had two rings plus central dot (3A.3); commonly only one ring and central dot or simply the central dot was used.

Five examples of 3A.3 were found from the same area; SFB 6, SFB 12, WC.6, L.2, WD.4, L.2, WE.4, L.2, with out outlier in WB.5; one, from SFB 12 was associated with a vertical boss. One other, 3A.6, was with a slashed vertical boss. A complete profile from SFB 46 has a single horizontal row of dot and circle stamps (3A.2) above divided pendant triangles, recalling, on a smaller scale, Myres' Lackford potter VII (Myres 1977, fig. 321, Nos 2777, 2864).

3B. Divided circles: The largest single group of stamps from the site, mainly rosettes or radiating lines. Of those found in SFBs, three, (3B.2, 3B.3, 3B.4) come from earlier phase huts (SFBs 6 and 8) and one of the star type which is found throughout the sixth century SFBs. One, 3B.24, from SFB 63, is a large stamp, found on a biconical pot (Fig. 208,1) in a single horizontal band between lines on the shoulder, associated with a Group 1 *Buckelurne* exactly comparable to that found at Lackford with a Group 1 cruciform brooch (Myres 1977, fig. 188,852), of the second half of the fifth century. Of the others, five were found in SFBs of the Illington/Lackford phase, (3B.4 — SFB 45, 3B.5 — SFB 34/5, 44, 3B.6 — SFB 45, 3B.7 — SFB 66), the rest from Layer 2. The distribution in Layer 2 suggests the later sixth century for most of the pieces.

3C. Cross in circle stamps: The second largst group at West Stow, with twenty-two examples, of which the stratified pieces are mainly from late sixth century SFBs. The exceptions are 3C.2 from SFB 21, 3C.5 from SFB 17; 3C.10 from SFB 37, all probably late fifth century. Those found in SFBs with Illington/Lackford sherds are 3C.3:— SFBs 19, 53; 3C.4 from SFB 57, 3C.8 from SFB 44 with a Group 5.2 and 3C.9 from SFB 66. Number 3C.8 has two rows of stamps above triangles with a 'T' shaped arrangement of the 3C.8 stamps, closely paralleled with Lackford (Myres 1977, Cat. No. 894, fig. 316), but with different stamps. The context is a later half of the sixth century, associated with Illington/Lackford pottery. Number 3C.22 is a cross with dots in each quadrant, from a late sixth century hearth in WH.3.

Associations: 3A.1: 6.1, 3A.9: 4.4; 6.9. 3B.5: 6.4. 3B.25: 3B.26. 3C.8: 5.2 3C.13: 7. 3C.20: 7B. 3C.21: 7C.5.

Group 4: 'U' shaped:

One 'U' shaped type is a known Illington/Lackford stamp, the only other stratified example is 4.3, from SFB 47, an undated hut, and appears to have been used as an 'open running scroll'.

Associations: 4.4: 6.9; 3A.9.

Group 5: Triangular:

There is a considerable variation in these, basically triangular stamps; open 'V's are included with the closed triangles as there is little real difference between 5.11 and 5.12. Stamp 5.2 occurs on a late sixth century sherd from SFB 44 and is mentioned aboive under 3C.8. Group 5.3, from the same SFB at 5.4 (SFB 56) appears to have ben made with the point of a knife: 5.4 is a composite triangular stamp; both should be *c.*500 from the date of the SFB. Numbers 5.1, 5.10, 5.11 and 5.12 are fan shaped and large compared to the rest of the group. No. 5.1, from SFB 6 is on the same sherd as 7A.5, a barred triangle, and 5.12 from WB.5, Layer 2 with a fragment of a Group 3 with at least ten rays.

Associations: 5.1: 7A.5.

Group 6: 'S' shapes:

The majority of those in stratified contexts were found in SFBs of the latter half of the sixth century, in association with Illington/Lackford pottery. Those from SFBs 11 (x 2), 13, 22 and 24 are thought to be

late fifth to early sixth century. Of the unstratified examples there is a concentration in the late sixth to seventh century area of Hall 5 and another group centering around WE/WF.4, not really associated with any partcular group of SFBs. The double 'S' of 6.12 may well be a copy of the Illington/Lackford style 'S' as it was found in SFB 66. No. 6.13 has a clear beaked head at one end, similar, but not identical, to those on an urn from Lackford (Myres 1977, fig. 176,993).
Associations: 6.5: 8.4; 6.8: 7C.6; 9.2.

Group 7: Cross-hatched:

This is a large group, divided into three sub-groups by shape, but brought together because of the similarity of the treatment.
Group 7A: Triangular, cross-hatched: One, 7A.1 from SFB 5, can be considered to be late fifth or early sixth century on an urn with vertical outlined bosses. Those from the post-hut fill of SFB 17, with 7B.5 are on a large urn with neck rings and filled pendants, suggesting a copy of Illington/Lackford style arrangements. No. 7 A.4 from SFB 19 is another from a sixth century context, while A.7, from SFB 15, a very clear stamp, is in a SFB assigned by small finds to the early seventh century. The distribution of these stamps from Layer 2 has a distinct preference for the south east quadrant of the site.

Group 7B: Circular, cross-hatched: A small fragment of one of these, 7B.7, from the contemporary levels of SFB 21 is found on a faceted-angled pot immediately above the facets. Unfortunately no more survives, but the facets and defined base (Fig. 91,1) puts the pot in the fifth century. Group 7B.1 is a fragment with a vertical boss and part of a panel; Group 7B.2 has six examples, one from SFB 44, late sixth century, the others from Layer 2; but five would appear to be filling swags or triangles in the Illington/Lackford manner.

Group 7C: Squared, cross-hatched: Circular and squared cross-hatched stamps are by far the commonest stamps occurring on the hand-made wares of the sixth century, and on Middle Saxon stamped pitchers. Group 7C forms occur with multiple necklines and raised, slashed collars (7C.2, SFB 28), in panels, (7C.4) or simple horizontal lines with other stamps (7C.6, SFB 36/5).
Associations: 7A.1: 8.7; 7A.1: 9.6; 7A.2: 7B.5; 7B.2: 10.7; 7C.8: 10.1.

Group 8: Square stamps:

This small group includes some of the most complex and difficult stamps to make. One of the most eleborate, Group 8.4 is a large stamp found with a Group 6.5 on a vessel of Myres' 11.6 Grouping, with stamped neckline above grouped vertical lines, (Myres 1977, figs. 233,234) which he puts into the sixth century.

The 'Union Jack' of 8.2 appears to be scattered loosely on the sherd, while the smaller version, 8.5 appears 'a high shouldered' vessel with vertical bosses (SFB 11). This type of 'Union Jack' stamp also occurs on Ipswich ware (West 1964, fig. 51, pit 16). The tiny, neat stamp, 8.3; from SFB 47 is associated with grooves in an apparently random fashion.
Associations: 8.4: 6.5; 8.7: 7A.1, (7A.1: 9.6).

Group 9:

A miscellaneous group of stamps including a tiny, neatly located three lobed shape and a number of rather flat impressions, possibly made with the ends of small long-bones. One, 9.2, occurs with Group 6.7 stamps but the remainder are unassociated, on small sherds.
Associations: 9.6: 7A.1 (7A.1: 8.7).

Group 10:

A small group of dotted, or barred stamps; 10.1 occurs with 7C.8 in rows on the neck; 10.3, large hyphenated lines, possibly made with a comb fragment, and 10.5 as a single row on an otherwise plain pot from SFB 41. Group 10.6 occurs on a unique pot with a hollowed boss containing loose grits (Fig. 255,10).
Associations: 10.1: 7C.8; 10.7: 7B.2.

Table 53: Early Anglo-Saxon Pottery stamps.

Group	Nos.	Origins	Assoc. stamps
Group 1			
1.1	3	SFB 64	
1.2	2	SFB 44	
1.3	2	SFB 50(PHF)	+ I/L
		WG 8.L2	+ 3B.15
1.4	1	SFB 44	
Group 2			
2.1	1	SFB 22(PHF)	
2.2	1	SFB 22	
2.3	1	SFB 51	
2.4	1	SFB 60	
2.5	1	Unstrat.	
2.6	1	WE 4.L.2	
2.7	2	WD 4.L.2	Grp.8.5
		WE 4.L.2	
2.8	1	SFB 17(PHF)	
2.10	1	Unstrat.	
2.11	1	WA 5.L.2	
2.12	1	SFB 44	Boss
Group 3			
3A.1	5	SFB 13	Grp.6.1
		WB 5.L.2(x2)	
		WB 5x2	
3A.2	1	SFB 46	
3A.3	6	SFBs 6;12	+ boss
		WC 6.L.2	
		WD 4.L.2	
		WE 4.L.2	
		WB 5.L.2	
3A.4	2	SFB 12(PHF)	
		WC 5.L.2	
3A.5	1	Pit 421	
3A.6	2	WG 4.L.2	
		WH 4.L.2	
3A.7	1	WE 2.L.2	
3A.8	1	WA 5.L.2	
3A.9	1	US L.2	Grp.4, Grp.6.9
3B.1	1	SFB 50(PHF)	
3B.2	3	SFB 6	
		SFB 8	
		WD 6.L.2	
3B.3	1	SFB 6	
3B.4	3	SFB 6	
		SFB 45	
		WB 5.L.2	
3B.5	7	SFB 34	? Grp.6.4
		SFB 44	
		over SFB 63	
		WB 5.L.2(x4)	

Group	Nos.	Origins	Assoc. stamps
3B.6	2	WF 3.L.2	
		SFB 45	
3B.7	1	SFB 66	
3B.8	2	Hollow 2	
3B.9	1	SFB 12(PHF)	
3B.10	1	WG 8.L.2	
3B.11	2	WB 3.L.2	
		WD 3.L.2	
3B.12	3	WH 13.L.2	
		PH 540(x2)	
3B.13	1	Unstrat.	
3B.14	1	Unstrat.	
3B.15	1	WG 8.L.2	Grp.1.3
3B.16	2	SFB 56(PHF)	
		D.197	
3B.17	1	WC 5.L.2	
3B.18	1	WH 4.L.2	
3B.19	1	Pit 32	
3B.20	2	D.54	
		WG 4.L.2	
3B.21	1	WB 5.L.2	
3B.22	1	WA 5.L.2	
3B.23	1	WA 5.L.2	
3B.24	1	SFB 63	
3B.25	1	WG 8.L.2	3B.26
3B.26	1	WG 8.L.2	3B.25
3B.27	1	SFB 65	
3B.28	1	SFB 65	
3C.1	1	SFB 27	
3C.2	1	SFB 21.SW.3	
3C.3	4	SFBs19,53,23	
		WE 5	
3C.4	1	SFB 57,	
		?SFB 55	
3C.5	2	SFB 17	
3C.6	1	SFB 12	
	4	SFB 11,	
		Hollow 2(x2)	
3C.7	1	WB 5.L.2	
3C.8	1	SFB 44	+ Grp.5.2
3C.9	2	SFB 66	
3C.10	1	SFB 37	
3C.11	1	WG 6.L.2	
3C.12	1	Unstrat.	
3C.13	1	WH 5.L.2	+ frag.Grp.7
3C.14	2	WG 8.L.2	
3C.15	1	WF 4.L.2	
3C.16	1	WB 6.L.2	
3C.17	1	WD 3.L.2	
3C.18	1	WE 4.L.2	
3C.19	1	WE 4.L.2	
3C.20	1	SFB 11	+ Grp.7B
3C.21	1	WE 6.L.2	Grp.7.5
3C.22	1	WH 3 Hearth	
Group 4			
4.1	1	WG 4/5.L.2	
4.2	1	WE 4.L.2	
4.3	2	SFB 47	
		U/S.L.2	
4.4	2	Unstrat.	Grp.3A.9
			Grp.6.9
4.5	2	WF 4.L.2	
		D.25	
Group 5			
5.1	1	SFB 66	+ Grp.7A.5
5.2	2	SFB 44	+ 3C.8
		WG 2.L.2	
5.3	1	SFB 56	
5.4	1	SFB 56	
5.5	1	WE 7.L.2	
5.6	1	WF 8.L.2	
5.7	1	Ditch 3	
5.8	1	WF 7.L.2	
5.9	1	V.E.48	
5.10	1	SFB 31	
5.11	1	WB 5.L.2	
5.12	1	WB 5.L.2	
Group 6			
6.1	1	SFB 13	Grp.3A.1
6.2	7	WB 6.L.2	
		WF 3.L.2	
		SFB 21(PHF)	
		SFB 35	
		WB 5.L.2	
		SFB 31	
		WB 4.L.2	
6.3	7	SFB 12(PHF)	
		SFB 24(PHF)	
		SFB 35	
		D.67C	
		WB 6.L.2	
		WD 3.L.2	
		WE 3.L.2	
6.4	4	WF 5.L.2	
		WG 5.L.2	
		SFB 28	
		WB 5.L.2	
6.5	2	Unstrat.	
		SFB 22(PHF)	+ Grp.8.4
6.6	1	SFB 22(PHF)	
6.7	3	WC5.L.2	
		SFB 19	
		SFB 28	
6.8	2	SFB 34	
		SFB 34	+ Grp.7C.6,
			+ 9.2
6.9	1	Unstrat.	Grp.4.4,
			Grp.3A.9
6.10	4	SFB 11(x2)	
		WE 7.L.2	
		WC 6.L.2	
6.11	1	WF 4.L.2	
6.12	1	SFB 66	
6.13	1	SFB 45	
6.14	2	WE 5.L.2	
		WE 4.L.2	
Group 7			
7A.1	4	WG 5.L.2	Grp.8.7
		SFB 5	
		WF 3.L.2	
		WG 5.L.2	+ Grp.9.6
7A.2	5	SFB 17(PHFx3)	+ Grp.7B.5
		Pit 58	+ Grp.7B.5
		WF 4.L.2	
7A.3	1	Unstrat.	
7A.4	1	SFB 19	
7A.5	1	SFB 6	+ Grp.5.1
7A.6	1	D.54 in SFB 18	
7A.7	2	WD 2.L.2	
		SFB 15	
7A.8	1	Unstrat.	
7B.1	1	WF 7.L.2	
7B.2	2	WB 5.L.2	+ Grp.9.17
		SFB 24(PHF)	
7B.3	7	WC 5.L.2	
		WG 5.L.2	
		WF 4.L.2	
		SFB 44	
		SFB 49	
		PH 269	
		WB 5.L.2	
7B.4	2	WC 5.L.2	
		WB5.L.2	
7B.5	2	SFB 17	+ Grp.7A.2
		Unstrat.	
7B.6	1	WB 5.L.2	
7B.7	1	SFB 21	
7C.1	1	SFB 19	

Group	Nos.	Origins	Assoc. stamps
7C.2	3	SFB 28;	
		Unstrat.	
		WA 5.L.2	
7C.3	2	SFB 6,	
		WG 9.L.2	
7C.4	1	PH 173	
7C.5	3	WG 5.L.2	+ Grp.3C.21
		WE 6.L.2	+ Grp.3C.21
		WF 6.L.2	
7C.6	3	SFB 34	+ Grp.9.2
		Unstrat.	
		SFB 40	
7C.7	3	WB 6.L.2	
		WD 4.L.2	
		Unstrat.	
7C.8	2	D.197	+ Grp.10.1
		SFB 59	Incomplete
7C.9	3	PH 640	
		WB 5.L.2	
		SFB 31	
7C.10	1	SFB 18	
7C.11	1	WD 3.L.2	
7C.12	1	WB 5.L.2	
Group 8			
8.1	1	Unstrat.	
8.2	1	SFB 6	
8.3	1	SFB 47	
8.4	1	SFB 22(PHF)	+ Grp.6.5
8.5	2	SFB 11	
		WE 4.L.2	+ Grp.2.7
8.6	2	WA 5.L.2	
		WB 5.L.2	
8.7	2	WG 5.L.2	+ Grp.7A.1
		WC 3.L.2	
8.8	1	SFB 60	
Group 9			
9.1	2	SFB 6	
		WA 5.L.2	
9.2	2	WB 6.L.2	+ Grp.6.7
		SFB 34/5	
9.3	1	SFB 44	
9.4	1	SFB 47	
9.5	1	WG 3.L.2	
9.6	1	D.204	
9.7	1	WH 4.L.2	
9.8	1	WF 8.L.2	
9.9	1	Hall 5	
9.10	1	WG 11.L.2	
Group 10			
10.1	1	D.197	+ Grp.7C.8
10.2	1	WG 13.L.2	
10.3	1	SFB 50	
10.4	1	SFB 45	
10.5	1	SFB 41	
10.6	1	WH 8.L.2	
10.7	2	WE 3.L.2	
		WB 8.L.2	+ Grp.7B.2
10.8	1	SFB 64	

Of the 159 stamps, other than Illington/Lackford, found on the site, it is remarkable that 100, or 64%, occur only once.

Table 54: stamp occurrences: totals:

Stamps with	1 example	104	65%
	2 examples	33	21%
	3 examples	11	7%
	4 examples	4	2.5%
	5 examples	3	1.9%
	6 examples	1	0.6%
	7 examples	3	1.9%

The problem of parallels must be the subject of a separate study; as the survey of the evidence of the Illington/Lackford potter has recently shown the author (Green *et al* 1981), only by direct confrontation, stamp to stamp, can certain direct links be ascertained. There is, however, value in parallels, even if the stamps are not die copies, but again, it is remarkable that only some twenty-two of the less common stamps can be paralleled elsewhere. Some stamps, such as many of the 3B and 3C types, are very widespread and little use for parallels. A very real problem therefore exists with the stamped pottery, for which there are a number of possible answers. It could be argued that not all the stamped sherds were recovered but in a sample of 54,000 sherds, the duplication rate could be expected to be much higher, if it existed. The degree to which trade played a part in the pottery market is not yet understood for the pagan period, but certainly by the latter half of the sixth century it is demonstrable on pot-styles and stamps. Detailed work on fabric analysis and clay sources, still in its infancy, may well help to clarify the matter. However, to suggest that the lack of duplication at West Stow is the result of trade dispersal must be balanced by the relative shortage of parallels with other sites, although this is in turn tempered by the lack of settlement excavations and large-scale cemetery groups. It is possible that the stamped pots were being withdrawn from use in the settlements when required for use in the cemeteries, but this also seems unlikely to have had any real effect on the situation, although there are a few parallels in the West Stow cemetery itself and in the Lackford cremation cemetery. There remains the real possibility that the majority of the pot-stamps were made of hard wood, used once or twice and then discarded, and that only a few were carved in antler or bone. This could well be the case, for many of the designs are easily carved in wood, but the antler stamps that have survived have acquired the polish that comes from much use. The problem is highlighted by the fact that the distinctive 'figure of eight' antler stamp has no pottery equivalents on the West Stow site, or indeed, on any other. The solution might well be part of all these arguments, with perhaps more emphasis upon trade and use of wooden stamps.

Rusticated pottery:

Some 618 sherds of rusticated pottery were recovered from the site, including 251 from SFBs. The date range covers the entire life of the settlement, beginning with twenty-six pieces from early fifth century SFBs, increasing steadily to 131 from late sixth century SFBs, particularly associated with Illington/Lackford pottery.

Such forms as can be determined from the fragments are all of open bowls with vertical or out-turned rims, with plain zone below the rim. One unusually fine example from SFB 48, associated with faceted-angled pottery has an incurving neck and a suggestion of a modelled base. Examples of upright, pierced lugs occur, similar to Lackford (Myres 1977, Corpus No. 2640).

Eight methods or types of rustication are recognised at West Stow (Fig. 295):

Table 55: Rusticated pottery in SFBs.

	Type 1		Type 2		Type 3		Type 4		Type 5		Type 6		Type 7		Type 8	
SFB	Sherds	Rim	Sherds	Rim	Sherds	Rim	Sherds	Rim	Sherds	Rim	Sherds	Rim	Sherds	Rim	Sherds	Rim
1	1															
2		1														
3			1													
6	4		7	3												
8	4	1														
10	2		1													
11		1														
12	5	3		1												
13	4															
15	3			?1												
16																
17					1											
18			3													
19			7		2											
20	1		2													
21	1															
22	5	1	3		2		1	1	2							
23	3															
24							1									
26			2													
27			1													
28	2															
31	4															
34	1	1		3												
35	4		1													
34/35	10		4				1								1	
36	1															
37			1													
38	1		4	2					1		1					
39	1										1					
40	5	3	3													
41					1											
42									5				1			
43																
44	22	3	4		1		2		13		1					
45	14	2	2								1					
47																
48															1	
49	17	3									1			1		
51	1															
52													1			
53	5	2											1			
54					2											
57			1													
64											4	1				
65			1													
66					1											
68												1				
	121	21	48	10	10	—	5	1	21	—	9	2	3	1	2	—

Total fragments 254

Notes:

SFB 12: 4 bowls with out-turned rims.
15: Type 2: *vertical.*
16: x 1.
34: Type 2: 3 rims (same pot).
47: 3 rims, 6 fragments of unusual bowl, unclassified.
48: Type 8 vertical version of Type 1.
53: 1 sherd Type 7 with reg grog.
64: Note Type 6 tim has random scatter.

Type 1:
Thumb stuck in, clay dragged by forefinger to meet thumb. Next impression close, thumb nail cuts through previous forefinger cut, moving to right. Horizontal rows, upright stance, usually deep. A rare vertical version occurs.

Type 2:
Thumb nail at angle, stationary; forefinger in, moves to left, cutting previous thumb nail impression, with movement to left. But angle of thumb nail can only be achieved if pot on side, being turned by left hand away from potter. Horizontal rows, deep. Main impressions upright.

Type 3:
Shallow, upright thumb and forefinger impressions, both drawn together, slight upcast. Space between impressions.

Type 4:
Similar to Type 3 but deeper; larger upcasts and close together.

Type 5:
Single impressions of forefinger, with nail and depression caused by finger-tip. Usually spaced apart.

Type 6:
Single impressions of nail only.

Type 7:
Thumb-nail and forefinger closed together at top to give inverted V. Shallow, with small upcast.

Type 8:
Spaced horizontals, both thumb-nail and forefinger impressions separate.

Type 1 is by far the most common, followed by Type 2, both tending to be close packed and complicated; the simplest, Types 6 and 8 are rare. There is no evidence to suggest a chronological sequence.

Pierced vessels:

Fragments of small, rounded vessels, pierced all over with holes, have been found at Sutton Courtenay, Bourton-on-the-Water, Shakenoak, Mucking and West Stow and have been reported by M.U. Jones (1975, 411) who suggested that they were used for warming wool-combs. West Stow produced seven fragments, all from SFBs; Nos 12, 20, 40(2), 44 and 45. All the SFBs represented contained weaving equipment (see Table 60) but only SFBs 44 and 45 held the whole range of spindle-whorls, pin-beaters, triangular-headed pins and loom-weights. The fragments confirm the observation that the vessels were small, some seven cm in diameter, with a narrow neck. SFB 44 had a well-defined hearth and possibly also SFB 12, the others not. There remains the practical problem of how these small vessels were used to heat iron wool-combs, as presumably the combs could only have been leant against them, which, in view of the small size of these vessels, seems rather inefficient. No other explanation of these interesting pots can, however, be advanced.

Ipswich ware:

The final phase of the occupation of the Anglo-Saxon settlement is marked by the introduction of Ipswich ware, of which 381 fragments were found. As field-walking rarely produces more than a few sherds from the surface, this amount from one rural settlement seems surprisingly large, with implications concerning the economics and marketing of this pottery, still, apparently, to be regarded as a product of Ipswich itself.

Of the quantity of fragments, sixty-nine were found stratified in or above SFBs (6), ditches (42) and Hall 7 (21). The remaining 312 sherds were found scattered in Layer 2, the general culture layer covering the entire site. The distribution pattern in Layer 2, as shown on Fig. 296, conforms with the general distribution of building areas on the site.

Table 56: Ipswich ware analysis.

Rims	Bases	Sherds	Sandy	Pimply	
78	49	254	165	216	1 spout, 1 handle

Table 56 shows the breakdown of the potsherds into rims, bases and body sherds, together with the numbers of 'sandy' and 'pimply' fabrics. The incidence of 43.3% 'sandy' wares to 56.7% of 'pimply' wares reverses the result from the Cox Lane, Ipswich excavations, where the 'pimply' fabric formed only 30% (West 1964, 246-249). The typology of Ipswich ware rims, as set out in the Cox Lane report, requires no modification to accommodate the West Stow material. The predominant rim form at West Stow is the upright rim of Group 1, which forms 85% of the total; Groups 2 and 3 having 8.9% and 5.1% respectively. Within Group 1 the majority (50) of the rims are Types C and E, both employing an external facet to the rim or a flattened top as the characteristic feature.

Table 57: Ipswich ware rim forms.

Group		Nos	Features
Group 1	A	14	SFB 1, D.191:1; D.204:1; P.141:1; P.149:1.
	B	3	
	C	31	SFB 38:1; D.76:2; P.437:1.
	D	Nil	
	E	19	D.193:1; P.329:1.
Group 2	F	3	P.141:1.
	G	1	
	H	3	D.193:1; P.149:1.
Group 3	I	Nil	
	J	4	P.142:2.

All the rims are from cooking pots, with the exception of one 'D' spout. There are no examples of stamped, lugged pitchers, pots of any other form, or imported continental vessels.

The distribution on the site showed a marked relationship to Hall 7 on the north slope, with a single sherd from SFB 1 and three from SFB 3, both SFBs in close proximity to the Hall. SFBs 2, 3 and 15 all had seventh century objects from the fill so the relatively small quantity of Ipswich ware from the group as compared to the Hall itself (4:21) is surprising and suggests that either the Ipswich ware was confined to the Hall and the site came to an end before it could spread to the out-houses, or the use of SFBs was already declining, a view possibly supported by evidence from the area of Hall 5. Here there was no Ipswich ware from the surrounding SFBs but a considerable quantity spread around the Hall itself. The mass of post-holes and associated hearths has been seen as representing a rebuilding of a Hall, and possibly other post-built structures as well, but significantly not using the big post and sill beam construction of Hall 7.

A third major concentration of thirty-one sherds was associated with Hollow 1 (WD 3-4) either in it (4) or possibly above it (27) in Layer 2, but not with the adjacent Hall 1. The other 'hollows' on the site did not produce any Ipswich ware.

The Ipswich ware in the boundary or enclosure ditches in the north west quadrant of the site confirms their stratigraphic position as late features; apparently associated with Hall 7. The one opposing ditch (D.256) in the south-west quadrant had one sherd of Ipswich ware, suggesting that it was contemporary with one phase of the Hall 7 ditches although Ipswich ware was scanty in that quadrant as a whole.

Ipswich ware had a long life of at least two centuries with little apparent change, so that it cannot be used to determine a close date for the desertion of the settlement. However, the seventh century artefacts from both the cemetery and the settlement, and in particular those from the area of Hall 7, suggests that the settlement continued well into the seventh century.

The Ipswich ware from West Stow is of considerable importance to the study of Middle Saxon pottery in East Anglia. As there is nothing to suggest a cultural hiatus in the settlement itself or between the hand-made pagan Saxon wares and the introduction of Ipswich ware to the site, there is no support for any suggestion of an aceramic phase in the seventh century.

There is nothing to indicate that West Stow is an unusual or important settlement in any way, either socially, economically or strategically, so that the occurrence there of what may be called a fair quantity of Ipswich ware may be supposed to represent the level of penetration and use of this pottery in that general area. The distribution may well have been achieved by river transport up the River Gipping to Rattlesden and then overland to the Lark Valley.

WEAVING:

In the interim report (West 1969) it was suggested, on the evidence then available, that weaving was an important factor in the economy of the village. While this is still basically true, now that the site has been completely examined, the importance of weaving can be seen less as the main economic support of the community and more as a general factor, alongside meat and leather production.

The evidence from the two burnt SFBs is of major importance, showing the looms to have been free-standing and not on posts sunk into the floor. Further, there were three looms in SFB 15, two large and one small; unless the heaps of loomweights represent stored weights and not burnt looms. The weights were in three groups, having eighteen, sixty and ninety weights respectively. In both burnt SFBs the loomweights were fired only on the exposed upper surfaces, showing that they were used in an unfired or 'green' state. The positioning of the weights recalls those found at Grimstone End, Pakenham, where sixty-two were found in two lines, some close together, as at West Stow (Brown *et al* 1954, 198). It was suggested at the time that these were abandoned after an attempt at firing, but it now seems more likely that they do, in fact, represent a loom. The partial firing of the Pakenham weights can be explained by the same reason as those from SFBs 3 and 15, as there was substantial quantities of burnt material found with them. The Pakenham weights were almost certainly in an SFB, not recognised at the time as it had been cut into the filling of the barrow ditch.

Twenty-two SFBs contained loomweights, but only seven had more than ten and four of these are in double figures by counting fragments. If the looms were on suspended floors, as has been suggested in this report, the likelihood of sufficient quantities remaining to demonstrate to what extent weaving was carried out in the SFBs, is much reduced. Looms could well have been moved from one SFB to another, further complicating the issue. The presence or absence of loomweights cannot therefore be used as more than an indication of the extent of weaving in the settlement.

A selection of loomweights is shown on Fig. 296. Basically they are all annular, with a fairly small, central, hole and rounded, 'D' shaped section. There is little evidence to suggest any real chronological difference; except that those from SFBs 3 and 15 tend to be slightly larger.

Fig. 296,1, SFB 55.	Unfired boulder clay.
Fig. 296,2, SFB 16.	Part fired fine brown clay.
Fig. 296,3, SFB 12.	Fired, fine clay.
Fig. 296,4, SFB 12.	Unfired boulder clay.
Fig. 296,5, SFB 50.	Unfired boulder clay.
Fig. 296,6, SFB 65.	Unfired boulder clay.
Fig. 296,7, SFB 50.	Fine, fired clay. Unusually thick.
Fig. 296,8, SFB 66.	Unfired brown clay.
Fig. 296,9, SFB 45.	Unfired boulder clay.
Fig. 296,10, SFB 50.	Unfired boulder clay.
Fig. 296,11, SFB 35.	Fired, fine clay, smoothed.
Fig. 296,12, SFB 45.	Unfired boulder clay.
Fig. 296,13, SFB 15.	Part fired boulder clay. String marks.
Fig. 296,14, SFB 15.	Part fired boulder clay. Comb impressions.
Fig. 296,15, SFB 1.	Unfired boulder clay.

It is surprising that, in the two burnt SFBs the evidence for looms is not supported by weaving implements. Each SFB produced one spindle whorl and SFB 15 a single 'pin-beater'. A similar situation can

be seen in SFBs 21 and 47. Otherwise the spindle-whorls, triangular-headed needles and pin-beaters are fairly evenly distributed among the SFBs. Spindle-whorls occur as singles or up to four in some SFBs and are more common than either of the pins.

In terms of Hall groups; Hall 1 is incomplete but the Hall 2 group has good evidence for spinning and weaving, the latter possibly in several SFBs. If Hall 5 is the later siting for this group then the evidence for both spinning and weaving is lessening. Hall group 3 has strong evidence for spinning but substantial quantities of loom-weights in only SFB 47. If Hall group 7 is the replacement for the earlier Hall group 3, there is a marked increase in the weaving evidence, with both SFBs 3 and 15 belonging to this later group and including the weaving sword from the Hall itself, commented upon by Miss Crowfoot at the end of this section. Hall group 6 and its presumed replacement, Hall group 4, have very little evidence for weaving, although spindle-whorls are common in Hall group 6. However, presumably the three fragments of loomweights shared among these two groups is at least a hint that weaving was done in some of the SFBs of these groups.

This evidence could be used to suggest that although spinning seems to have been a universal practice in the settlement, weaving was predominantly the practise of only two of the groups and further, that weaving declined with Hall group 2/5 and increased with Hall group 3/7. At the least it would seem clear that not all the SFBs were 'weaving sheds' and that a number have no evidence for spinning and weaving at all. Further, weaving was not consistant throughout the community.

The ? weaving batten from Hall 7

by Elisabeth Crowfoot

Coming not from a grave, but from a hall, it seems probable that this was an unbated blade used as a weaving tool, that is, a weaving batten or sword beater (Fig. 21A, 13); the broken off fragments may include the characteristic blunted projection at the end of the blade. Lumps in certain areas, which might possible be the remains of textile in contact with (perhaps wrapping) the blade, are too far replaced by contact with the iron to be identified.

This tool was always used for beating up the warp on the warp-weighted loom. Many iron examples have been found in the North; these vary from c.20-50cm in length, and have a tang for the wooden handle and a projecting tongue-like tip (Hoffman 1964, 279ff.) Eight Anglo-Saxon examples of this type found previous to 1958 (lengths from 24-58cm) are listed by Sonia Chadwick (Hawkes) when discussing the pattern-welded example from Grave D.3 at Finglesham, Kent (Chadwick 1958, 30-35).

The normal position for a loom, when set up inside a house, seems to have been near the doorway, to obtain a good working light; in the Olavius drawing of the Icelandic loom the sword beater is shown leaning against one of the loom-posts (Hoffman 1964, figs. 53,54). When not in use it seems likely that such a heavy tool would be stored, perhaps with the dismantled loom, against a wall.

The weaving batten

by V.I. Evison

The total length is 63cm, but it is no doubt deficient at the end, and the projection normal on a weaving batten would have made it a few centimetres longer. The find spot was just outside the corner of Hall 7. A radiograph shows very slight indications of short diagonal lines which may be traces of pattern welding. Although the width of the blade (5cm) would be quite normal for an early Anglo-Saxon sword, a tang as long as this one, 16.8cm, would be very unusual. A longer grip does, however, occur on weaving battens, many of which are pattern-welded (Koch 1977, 93-4, Taf. 31,12). The length of over 63cm seems to be the longest yet recorded, but Anglo-Saxon weaving battens are sometimes longer than those of continental origin, one from grave 49 at Mitcham, Surrey, being 58cm long (Chadwick 1958, 31) and one at Dover, Kent, grave 46 is 62.3cm long (Excavation V.I. Evison, report in preparation).

Spindle-whorls:

Next to combs, spindle-whorls were the commonest object from the site, numbering eighty-eight in all, in a variety of materials: pottery (45), re-used Roman pottery (16), chalk (10), bone (7), shale (6), stone (3) and lead (1).

Eleven distinct shapes can be discerned, although the styles seem to mean nothing chronologically, as they occurred in thirty-seven SFBs; the larger groups spanning the fifth and sixth centuries.

Table 58: Spindle-whorl types:

1. Re-used R.B. pottery	9 from SFBs: 8,9,16,34/5,39, 40,45,58,66.
2. Annular	SFBs: 3,6(2),9,12(2),13,22,36, 44,45,47,52,62 and WE 4(2), WC 8, WG 4, WE 5; Hall 3.
3. Thick annular	SFBs: 34/5,36,45,56,64,65(2), 68 and Ditch 111.
4. Double convex	SFBs: 1,5,12,22,43,47(2), 52(2),63,68(2) and WC 5, WD 2, WH 8.
5. Concave-convex	SFBs: 22(2),39,44,49 and WG 12.
6. Plano-convex	SFBs: 1,7,12,21,54 and WC 6, WE 5.
7. Double concave	WE 4, WE 9.
8. Biconical	SFBs: 44,63(2) and WF 4, WG 6.
9. Hollow centre	SFBs: 37,51.
10. Beehive	SFBs: 48,64.
11. Irregular	SFBs: 23,34/5 and WG 9.

Table 59: Weaving implements in SFBs and Hall groups.

	Spindle-whorls	Triang. headed pins	Pin-beaters	Loom-weights
Hall 1				
16	1	—	—	—
17	—	—	—	—
41	1	—	—	—
Hall 2				
7	1	1	—	—
9	1?	—	—	1(3)
12	4	—	1	—
21	2	1	—	50+
20	—	—	—	3(10)
22	3	2	1	1(1)
25	—	—	—	—
26	—	1?2	—	1(2)
27	—	—	1	2(8)
11	—	—	—	—
23	—	1	—	—
13	1	1	1	—
24	—	1	—	5(2)
Hall 5				
18	—	—	—	—
19	—	1	—	(3)
29	—	—	—	—
44	3	1	—	(2)
45	3	2	1	1(26)
49	1	—	—	(10)
28	—	—	—	—
Hall 3				
36	3	1	2	8(13)
48	1	—	1	—
39	2	1	—	—
42	—	—	—	—
52	3	—	—	(1)
46	1	—	—	(1)
47	3	3	—	16(45)

	Spindle-whorls	Triang. headed pins	Pin-beaters	Loom-weights
Hall 3				
50	1	—	1	—
53	1	—	—	—
51	—	—	—	2
54	1	—	—	—
Hall 7				
30	—	—	—	—
31	—	—	—	—
34	1	—	—	—
35	2	—	—	—
1	4	1	—	—
2	—	1	—	—
3	1	—	—	73
15	1	—	1	c.170
40	1	—	—	1
43	—	—	—	—
Hall 6				
55	—	—	—	—
61	—	—	—	—
63	2	—	1	—
64	4	1	1	—
65	3	1	1	—
67	—	—	—	1
68	2	—	1	—
69	—	—	—	1
Hall 4				
55	—	—	—	—
56	1	—	—	—
58	1	—	—	—
59	—	—	—	—
60	—	—	—	—
62	1	—	—	—
57	—	2	1	—
66	1	1	—	1
38	—	—	—	—

THE EVIDENCE FROM THE CEMETERY

In the 1840s and '50s at least 100 graves were discovered behind Wideham Cottages in the course of gravel digging. Only one cemetery was found; its proximity to the settlement must surely mean the two are connected. The rite was mainly by inhumation; although the account by Tymms (1853) mentions cremations but does not record the number, and refers only to one specifically within a pot. Although 'about two acres' were 'turned over' there is no certainty that the entire cemetery was excavated. Nor is it certain that this was the only place of burial for the West Stow settlement. This cemetery has much in common with the other cemeteries in the Lark Valley, with the exception of the very large cremation cemetery at Lackford, barely one mile away. Lackford, a site with an older religious ancestry, was partially excavated in 1947 (Lethbridge 1951) and over 500 urns were found, with no trace of inhumations. However, there may yet be associated inhumations as well, to judge from the more complete excavation of the similar major cremation cemetery at Spong Hill, North Elmham, Norfolk (Hills 1977). Whether there are or not, Lackford is, nevertheless, seemingly out of place in the context of the rest of the Lark Valley cemeteries. Although there is an adjacent settlement to the north of the cemetery towards the river, there is no reason to suppose, from surface indications, that this is any larger than that at West Stow, so that it is likely that the Lackford cemetery, with its predominate cremation rite, had a special significance, perhaps drawing on a wide area, rather than a single settlement, for its interments. If this is the case, some of those are likely to have come from West Stow.

The catalogue of objects from the West Stow cemetery draws together all the existing material from museums, together with references to some objects now lost. Excluding the beads, there are 151 objects, of which five may well have come from the settlement site itself, as three are unfinished bone tools and two are bone pin-beaters, which are more likely to be some of the objects referred to in Prigg's notes on the second site on the heath (Prigg 1901).

None of the grave groups can be reconstructed from existing material, although Tymm's account (Tymms 1853) described a sword having been found with a shield boss, a spearhead, fragments of two coffers or

pails, two elongated fibulae, two clasps, two flat rings and some beads. Two graves must be represented by this list of objects; the 'coffers' or 'pails' possibly from the sword burial, as at Westgarth Gardens Cemetery, Bury St. Edmunds. Warren's Journal refers in fact, to two swords in Moyses' Hall Museum, but neither is now extant. The burial in the stone coffin is also recorded by Tymms in some detail, who noted that it was lidless and partly embedded in the gravel, and was only fifteen inches under the surface. It contained a 'few bones of small size, probably those of a youth or a female, with half of a small bronze clasp and a few fragments of iron'. A lidless stone coffin in this context must be a reused piece, the three stone coffins from the late Roman cemetery at Icklingham suggest an obvious source. The missing lid is interesting, and may provide another link with the settlement in that a large block of the same shelly limestone was found at the west end of the settlement and could well be a fragment of the original cover.

Overall, the cemetery covers the whole range of the pagan Anglo-Saxon period, with early objects such as the brooch (or brooches) with upturned-foot and the Group I cruciform, to early seventh century objects; buckles, combs and silver pendants, complementing the material from the settlement.

SPEARS: FIG. 271.

Five survive; one of Swanton's Type E1 and two of Type E2; both types are relatively common in Suffolk, with E2 by far the most numerous; forming 22% of the total of eighty-seven spearheads from the county. Swanton (1973, 79), suggests, tentatively, that the E1 type may be identified as a 'Saxon' element, again emphasising the mixed nature of the material from this site. The other two spears, of Types D1 and J are unique in Suffolk; D1 has six examples from Cambridgeshire with an additional Midlands and North Kent distribution, and none from Norfolk and Type J, one from Norfolk, but otherwise a widespread distribution in southern England.

ARROW HEADS:

Tymms' account mentions two; four more were found in the settlement. They are normally unusual objects in cemeteries.

SHIELD BOSSES: FIG. 270.

Only three survive; it is not possible to relate any one of them to the now missing swords. No. 1 is the carinated form common in East Anglia in the late fifth and early sixth century; No. 2, a low cone with an almost indiscernible carination, closely resembles the boss from Holborough, Grave 7 (Evison 1956, 96, fig. 15), assigned to the early seventh century; Holywell Row Grave 38, and another from the Hadleigh Road cemetery, Ipswich. No. 3 is a low, curved cone with the button missing, again of the seventh century (Evison 1963, 40).

KNIVES: FIG. 270.

Knives are mentioned in all the early accounts of the cemetery and Tymms' account mentions one in Warren's collection as unusually long, i.e. 25-25cm, but not now extant. The two surviving knives are small, the second (Fig. 270,5) having a distinctly straight back.

BUCKLES: FIG. 263.

Of the five surviving buckles, two (Fig. 263,8,9) are simple oval or 'D' shaped pieces without buckle plates. The third (Fig. 263,10) is the well-known Frankish 'shield on tongue' type. Some doubt exists concerning the origin and relationship of this piece (Evison 1965, 23-24) with the early brooch with upturned foot. However, the buckle is of fifth to sixth century date, (Böhner 1958, 11, 181-2) paralleled at Bifrons and elsewhere, (Baldwin Brown 1915, 347). The fourth (Fig. 263,11) with a rectangular buckle plate and three rivets; a common type in the Lark Valley, is paralleled at Lakenheath; Grave 56, Holywell Row, Mildenhall (Lethbridge 1931, fig. 31) and Grave 2, Northumberland Avenue, Bury St. Edmunds, where one was found with a seventh century shield boss. The fifth, (Fig. 263,12) is a much more elaborate buckle, with an open triangular plate with a gilt foil backing piece, and three rivet holes: a seventh century piece.

BROOCHES: FIGS. 256-262.

The forty-nine brooches from this cemetery form a remarkable series covering a wide range of types.

Two bronze brooches of the upturned-foot type are listed, (Fig. 256,1,2). There is some doubt about the provenance of the second brooch (Evison 1965, 23-24), as it was acquired by the Museum of Archaeology and Ethnology in Cambridge in 1892 as part of the Foster Bequest (Fox 1923, 281). The brooch was fixed to a card with the Frankish shield on tongue buckle (Fig. 263,10) above and labelled, 'Fibula and buckle from a Roman Grave at Icklingham, Suffolk'. The attribution may be correct, as an Anglo-Saxon cemetery was partially excavated at Icklingham (Mitchell's Hill) *c.*1888 and a Frankish type buckle is mentioned (Page 1911, 343) although the brooch is not. Icklingham and West Stow are neighbouring parishes and some of the workmen engaged in 'raising gravel' on the site of the West Stow cemetery in the 1850s are known to have lived in Icklingham (Warren 19th century, 108) and to have sold antiquities to Gwilt. This John Gwilt, in fact, acquired the other brooch of this type, which was illustrated by Smith (1852, 165-172) and subsequently bought by the Ashmolean, Oxford in 1949. John Gwilt was dead before the Mitchell's Hill cemetery was discoverd, so the authenticity of the first brooch is probably correct. As the origin of the objects in the Foster bequest at Cambridge are often obscure, the second could have come, via workmen living in Icklingham, from either cemetery.

Both brooches are published by Evison (1965, 23-24) who ascribes a Frankish origin to them, quoting Werner (1958, 109-12) for similar continental examples.

The presence of two examples at West Stow, (or West Stow and the neighbouring cemetery at Icklingham) and the related iron brooch (Fig. 201,3) from SFB 61 in the settlement, emphasises the early Frankish element in the Lark Valley.

CRUCIFORM BROOCHES:

Twelve brooches of this type are represented in the cemetery, of which two are a pair. There is one of Åberg Group 1, (Fig. 256,3), Reichstein *Typ* West Stow Heath, with very small wings on the head plate; three of Åberg Group 2 (Fig. 256,4,5,6), all very similar in aspect, with rounded, heart-shaped nostrils, poorly represented eyes and a complex series of transverse bands, facets and nicks above the animal head. These are very close to Little Eriswell, Grave 28, (Hutchinson 1966, pl.II,a) and Holywell Row, Grave 48 (Lethbridge 1931, fig.12) particularly for the double 'V' on the muzzle, and are classified by Reichstein as his *Typ* West Stow Heath. There are two examples of Group 3, rather stouter brooches with development of the nostrils, in one case a scrolled effect (Fig. 257,1), Reichstein's *Typ* Krefeld Gellep, and in the other, a flattening (Fig. 257,2). The flattened nostrils cannot be matched elsewhere, but the bar-like terminal on the surviving knob occurs at Corbridge (Brown 1915, 4, fig. 158,9), Reichstein *Typ* Corbridge (1975, Taf.95,1), but the bow and foot are different; at Brixworth (in Northampton Museum), but with a narrow muzzle, (Reichstein unclassified, Taf.118-3) and closer to home, at Mitchell's Hill, Icklingham, but with scroll nostrils (Ashmolean Museum, 1909,466), classified by Reichstein as *Typ* Holywell Row (Taf.99,1). There is a possibility that the nostrils on the West Stow example were flattened as there is a slight nick on one side would could be the start of a scroll. In that case there would be a marked similarity to the Mitchell's Hill brooch, so the brooch could be included in Reichstein's *Typ* Holywell Row. Leeds (1945,70) pointed out that the simple knob on Group III brooches is confined to the Cambridgeshire region, his distribution map (Leeds 1945, fig.38) suggests the Lark Valley in particular.

The only pair represented (Fig. 257,3,4) are Åberg's Group 4; one is damaged, but the similarities are such as to be certain that they were designed as a pair, if not actually out of the same mould. The heart-shaped nostrils of the earlier form have here developed side scrolls and similar simple scrolls appear as lappets higher on the foot. No real parallels are known but there are some similarities to a pair from the St. John's College cemetery, Cambridge, (Reichstein Taf.109,3,5) but without the scrolls on the nostrils. A more developed form is seen in Fig. 258,1, which, although there are no side lappets, the nostrils are flattened scrolls above a spreading muzzle and the end terminal has sprouted two outward-turning bird masks. A brooch from Exning (Åberg 1926, 187) and another from Brooke, Norfolk (Kennett 1976, fig.3, p.97) are the closest parallels, but there is also clearly a relationship with Holywell Row grave 58 (Lethbridge 1931, fig.15) which has decorated lappets, but the flared wings to the head plate and the cleft forehead reflect both the West Stow and the Brooke examples.

Åberg's Group 5 is represented by two very different pieces, which have both been discussed by Leeds & Pocock (1971, 13-36). Fig. 259,1 (Leeds Type V.f.) is a remarkably successful, decorative piece, with a flowing, rounded design of masks and bird heads. Fig. 259,2, (Leeds Type V.g(1)), however, is more devolved, the ornament beginning to lose its meaning and the whole effect rather angular and disjointed.

As Leeds observed (Leeds and Pocock 1971, 19), this brooch is from the same workshop as another from Mitchell's Hill, Icklingham, with which it is almost identical; there is a similar one from Mitchell's Hill and another from Kenninghall (Norfolk). A fifth, from Lakenheath, was also probably from the same, and likely local, source (Fox 1923, pl.XXIX,2.).

SQUARE-HEADED BROOCHES:

Four square-headed brooches are represented in the material, of which one is a small fragment. Two of the brooches are of poor workmanship; the second (Fig. 258,4) described by Leeds (1949,29) as 'a miserable piece'; both are ascribed by him to an origin in the Lark Valley. The third, (Fig. 258,3) however, is a splendid example of the Little Wilbraham type, related to Nassington, Northants and Rushington, Lincolnshire. The design has already lost much of its meaning, the great down-curving beaks of the bird heads below the bow are barely discernable for what they are and the small panel above the bow cannot clearly be understood. The fragment (Fig. 258,5), is the serrated neck of a downward looking beast as seen on an A5 type (Leeds 1949, No.39, unknown site) and on B1 types from Ipswich; but is closest to B4 types from Linton Heath (Leeds 1949, 86) and Duston (Leeds 1949, 85).

SMALL-LONG BROOCHES:

Seventeen examples survive, of which two are a pair (Fig. 260,1,2). The trefoil-headed classes of Leeds' types 1, b, and f are all common in the Lark Valley and Cambridgeshire cemeteries, with affinities reaching into the Midlands and Lincolnshire, as have most of the other categories. The square-headed, panelled type, from Leeds' paper the most clearly defined Lark Valley type, is represented by four pieces, a relatively low proportion of the small-long brooches from this cemetery.

In general, the small-long brooches demonstrate the affinities of this cemetery and the Lark Valley with those of Cambridgeshire, rather than with other parts of East Anglia.

ANNULAR BROOCHES:

Of the fourteen annular brooches, six are cast; three, (Fig. 262,7,8,9) probably from the same mould. The three identical pieces are the most interesting of the whole group, having at the opposite side to the hinge, a protruding serrated piece, and a slot with two raised stops. The parallel to this arrangement can be seen at Brooke, Norfolk, where the workmanship is however, much cruder. Kennet (1976, 95) has suggested for these that they represent a stylised attempt at two biting jaws.

The notch and the raised stops on the West Stow examples strengthens the case for supposing a development from a penannular form and the derivation of both groups from opposed animal heads. Baldwin Brown, who illustrates one of the West Stow brooches (Brown 1915, vol.3, pl.LI,3) suggests a late Roman connection with the faceting, an opinion echoed by Leeds (1945,48), who suggests further, that they persisted throughout the early Anglo-Saxon period.

Three (Fig. 261,8,9; Fig. 262,1) are flattened rings riveted together. All are broken but it seems likely that they orignally had been made in one piece and held with a single rivet. In two of them the pins were hinged through a hole. Annular brooches are a very common feature of Lark Valley cemeteries, particularly at Holywell Row, where that from Grave 45 compares closely with West Stow Fig. 262,2 and those from Graves 43 and 98 with Fig. 262,4.

BRACELETS AND RINGS:

The three dimensional, knobbed bracelet (Fig. 263,3) is paralleled at Holywell Row, Grave 12 (Lethbridge 1931, fig.4) where a very similar, but not identical, piece was accompanied by a silver 'shield' pendant, a silver finger ring with twisted spiral ornament and beads suggesting an early seventh-century date. A very similar brooch, although only half the size from Osengall, Ramsgate, is illustrated by Akerman (1855, pl.XXVIII) as supporting a bronze ring and three functional, not skeuomorphic, keys. Another, in the National Museum, Copenhagen, is figured in Brown (1915, vol.IV, pl.LXXXVIII, no.2) with six keys.

GIRDLE HANGERS:

Two bronze examples survive; a third, of iron, is not now extant. Fig. 264,2 compares closely with one from Grave 3, Little Wilbraham, Cambridgeshire (Lethbridge 1931, 74, fig.39) which was found with a crystal ball, two annular brooches, a Roman type spoon, three Roman coins, a bronze pendant and a bronze clip and ascribed a sixth century date.

TWEEZERS:

Seven pairs of tweezers survive, of which one (Fig. 264,9), has strong transverse mouldings and facets. The tweezers from Caistor-by-Norwich have been discussed by Green (Myres and Green 1973, 105-108) and four types identified, of which two are of bronze and two of iron. Her first, Type 1, is described as Roman, but she states that 'it is difficult to be certain if any of these tweezers were actually of provincial Roman workmanship, acquired by purchase or picked up on a Roman site'. The list of German sites could usefully be expanded to include those illustrated by Genrich (1954) from Borgstedt (Taf.5,A, Nr.181 with an early brooch; Taf.8, F, Nr.215 with a fifth century pot), Bordesholm (Taf.3,A, with fifth century pot) and Suderbrarup (Taf.26,A, with a plain globular pot with upright rim) and by Schmidt (1970) from Stossen, Grave 12, (Taf.9), simply to illustrate that there are more continental parallels; this, together with the common usage of facets on other articles, including cruciform brooches, makes a stronger case for some of them, at least, to be of non-Roman manufacture. The fifth century continental material, together with that from English sites, points to the fifth and sixth centuries, perhaps more commonly the fifth for their main period of manufacture. It is not possible, however, to use these factors therefore as anything more than general indicators, noting that they occur on many other objects as well, including early brooches; e.g. brooches with upturned-foot, Group I and II cruciforms, and tend to die out in the later sixth century.

Three other pairs of tweezers are worthy of special note, Fig. 264,9,11 and 12, which all employ a sliding collar. No. 9 is a long, narrow pair, with two collars; the others both have wide, flat plates; both pairs decorated with the same pattern of punched dot ornament. An example from Grave 2162, Krefeld-Gellep (Pirling 1974, Band 8, Taf.86, 4a) has the same enlarged end but is not otherwise a good parallel; another from Whitby (Peers 1943, fig.13,9) was considered to be 'Frankish'.

WRIST-CLASPS:

Nine sets or part sets survive, of which Fig. 265,1 and 2; 6a and b. 7a and b and 9a and b should be pairs. A simple typology (Fig. 298) has been devised to assist the discussion of these objects, which are, as Baldwin Brown pointed out (Brown 1915, 364), a feature of the East Midlands, Cambridgeshire and East Anglia. Nevertheless, they are hardly a common feature; with the exception of Bergh Apton, Norfolk where there are sixteen suites represented, most sites in the area have six to eight only. Holywell Row, with 100 graves, produced seven sets or part sets; Westgarth Gardens, with fifty-nine graves, eight sets, and West Stow with approximately 100 graves, eight sets. Wrist-clasps are normally found in graves with other grave goods; in Norfolk, at Bergh Apton for instance, they occurred with annular brooches in fourteen out of sixteen graves, in the Lark Valley those with cruciforms or small-long brooches are slightly more common; three cruciforms to four annular at Little Eriswell, and six cruciforms to four annular at Holywell Row. In each of the three cemeteries mentioned there is one grave with both annular and cruciform brooches with wrist-clasps. Those of spiral wire (Type 7) may not, in fact be wrist-clasps in the true sense, but some other form of dress fastening. Three other comparable examples are known to me; one, unprovenanced in the Ipswich Museum, another from Eriswell (private collection), also unassociated and more elaborate and the third from Kenninghall, Norfolk (Smith 1923, fig. 97, p.83). The type recalls the simpler hook and eye fasteners from Holywell Row, Graves 17, 20, 79 (Lethbridge 1931, fig.7,A and B), for which Lethbridge suggested a Scandinavian origin. Parallels to the Holywell Row type can be found at Gjone, Hedrum, Norway and fragments at Foss, Lyngdal, Norway (Reichstein 1975, Taf.132,9,10; Taf.136,5).

Table 60: WEST STOW: Incidence of main categories of material culture in SFBs.

Fig. No.	SFB No.	Romano-British objects: Coins	Brooches	Toilet obj.	Bracelets	Spoons	Keys	Hairpins	Pins, Needles	Anglo-Saxon objects: Brooches	Pins: Ag	Pins: Ae	Pins: Fe	Pins: Bone	Strap ends	Finger-rings: Ag	Finger-rings: Ae	Finger-rings: Fe	Tweezers	Toilet brushes	Bracelets: Ae	Buckles: Ae	Buckles: Fe	Keys	Knives	Tools	Glass: R.B.	Glass: A.S.	Glass: R.B./A.S.	Beads: A.S.	Spindle-Whorls: Stone	Spindle-Whorls: Shale	Spindle-Whorls: Chalk	Spindle-Whorls: Fired Clay	Spindle-Whorls: Pot Sherd	Spindle-Whorls: Bone	Pin-Beaters	Needles with triangular head	Needles: Ae	Needles: Bone	Awls	D/S Bone Combs	Single-Sided Bone Combs: Round Back	Single-Sided Bone Combs: Triangular	Single-Sided Bone Combs: 'Late'	Single-Sided Bone Combs: Single-piece	Pottery: Late Roman	Pottery: A-S Plain	Pottery: A-S Stamped	Pottery: A-S Rustic	Pottery: A-S Ips. Ware	Other objects
30	1	1																							1							1	3	1			1	1		1	2					1	109	1	2	1	Lead plumb bob.
33	2	1												1																							1				3						55		1		Silver shield pendant. Fe shears.
36	3	2			1							1		1										3									1								1				1	118	3	2	2	2 bone gaming counters.
—	4																																																	Destroyed, no finds
39	5																																		1												31	1	2		
42	6	4			1					1																	1							1	1			1		3					4	290	4	4		
45	7																																	1			1									111				
48,49	8	2																							1	1	1							1		2	2			4					7	378	1	8		
52	9							1																																1	1				1	25				
55	10	1												2										1								1			1	1			1											
57	11													1																																1	141				
60,61	12	8																				1			1		2			5	1			2		1	1		1	2	2	2	2			712	6	15		Silver-gilt frag., mini-axe, girdle-hanger)
66	13																																1												1	87		4		strike-a-light, 2 pot stamps.)
69	14	2																						1					1				1							1										
72,73	15				1						1			1											1				1	4			1		1				2				1	3	105		2		
76	16	4		1																										2				1					1	1				2	108		2		
79	17																1																												2	8				
82	18	2							1					1		1														1						?1				2					4	36				Frag. stone axe.
85	19	2	1									1														1										1				2		1			2	169	1	9		
88	20	1	1																																										3	103	1	3		
91	21													1											1		1		1	1			1	1				2			1	1	1			9	232	22	13		
94	22	2															1								1	1					1		3		1	2					1	1			7	223	4	13		
97	23	3																	1							1						1													2	66	1	6		Iron spike.
100	24	2					1		1																1				1							1										157		3		
—	25	1																										1											1	1	1				4	73				
105	26	2								1																				1	1														1	110		2		Iron tripod bowl, gaming pieces.
108	27	1																							2				2						1					1	1					299	3	1		
111	28																							1		1																			2	1		1		
—	29																																																		
115	30																																															3	69	1	1		
118	31	2																							?1				2																	1	97	2	7		Neolithic axe.
—	32																																																		Destroyed, no finds.
—	33																																																		Destroyed, no finds.
121	34	3																			1	1					4		1	1			1													2	102	7	5		Amethyst. Coin mould?
123	35	1													1							1					1																					218	3	10		
126	36	3		1										1												1					1	2			3	1									8	814	2			
129	37								1			1													1				2		1				2										3	94	1	3		Quartzite macehead.
132	38	2																							1		1		1												2					98			1	
135	39									1					2												2		4			1		1									1		1	347		1		
138	40	4							1				1	1	1												1		1					1											3	210	7	20		
141	41	2												1								1																							2	93		2		
144	42	1				1			1																				2																2	175		5		
147	43																																1													1	37				
150	44	10			1				1	1																1			1	2			3				1			1	1		1				511	40	71		
154,5	45	4	1																		1				2	2			1	3	1		1	1	1	1	2			3	2	1			11	436	34	29		?Bone pot stamp.
158	46	2		1										1															2					1		3			1		1			2	107	1			
161	47	1			1																						4			4			1	2		1				1				3	449	1			
164	48																												2	1			1									1		4	149	3			
167	49	6			1																				1					1		1									1	1			12	367				Gaming counter (bone).
170	50													1														1					1							1					1	50	18	3		
173	51																																															78		1		
176	52	3																											6				2		1										6	412		1		Boars tusk amulet.
179	53																				1											1													2	92		1		
182	54	2																								1				2			1												65	4	8		
185	55	1												1							1								3																2	385		2		
188	56	2																								1				1	1		1												2	279	6			
191	57	3							1																					2							1	2								326	3			Gaming counter (Pot).
194	58														?1										1										1											2	83	2			Iron mount from drinking horn.
197	59											1										1								1																5	111	2			
—	60	1																																														2	63	5			
201	61	2								1							1								1					2																	371	1			
204	62																										1							1												51				
207	63																								2					1				2			1						1			4	281	6			Bone comb case.
210	64	6			?1									1										1			5						3		1	1	1					1			3	861	6	6		
213	65	7			3										1	1		1							1		3						3				1								4	192	2	2		
216	66	10			1			1																1	1	?1	1		1	2					1		2			1	1				8	579	10	1		
219	67																																															173				Ten misc. fragments.
222	68																													1				2			1									3	146				Brooch spring. Handle.
225	69																1																														25				
		119	3	3	11	1	1	2	7	5	1	5	2	15	3	3	4	1	1	2	8	3	1	3	23	9	29	2	27	48	3	4	13	37	10	5	19	27	2	4	12	36	11	23	2	1						

Wrist-clasp Typology: (Fig. 271).

Type 1: Straight cast bar with three projecting loops.
Type 2a: Straight bar with developing plate behind.
Type 2b: The 'bar' here is reduced to a flat, thickened edge with a wider plate behind.
Type 3a: Flat plates, often curved with simple slot and hook, plate decorated with stamped design usually round the edge.
Type 3b: Flat plates, but decorated with repoussé dots.
Type 3c: Flat plates, as Type 3b, with thin applied sheets decorated with repoussé stamped ornament.
Type 3d: Plain flat plates.
Type 4: Cast plates with elaborate ornament.
Type 5: Cast plates, one side of each pair with elongated triangular projection.
Type 6: Each set consists of two plates and detached triangular piece.
Type 7: Paired 'hook and eye' sets of spiralled wire.

The wrist-clasp is very much a late fifth and sixth century item, Type 1 occurring with early cruciforms at Holywell Row (Grave 48) and at Girton (Fox 1923, pl. XXXIV,1 and XXXIII,6); Type 2a with both sixth century cruciform and annular brooches from Eriswell, Holywell Row, Westgarth Gardens and Bergh Apton. From there on in the typology, cruciforms are rarely associated, a group of three with the applied plate Type 3c from Westgarth Gardens, one with a Type 4 from Holywell Row and two of the spiral Type 7, from Eriswell and Holywell Row associated with cruciforms. All are sixth century. The annular brooch is common with Type 2 wrist-clasps, particularly those with repoussé dots, as at Holywell Row (2), Bergh Apton (9) and Swaffham (1). Type 3c, with applied, stamped plates is rare, known only from Westgarth Gardens in this area, but this may, in part, be due to the ease with which the plate can become detached. The decorative cast Types are covered with Style 1 ornament and must be late in the series. Type 2a is the most widespread; covering the whole of the western area of East Anglia, closely followed by 2b and 3b the commonest form of all, though this is weighted by the frequency at Bergh Apton (10).

Necklet:

(Fig. 266,1). Necklets are rare in Anglo-Saxon contexts; Evison (1979, 17) records five: West Stow; Market Overton, Leicestershire (Brown 1915, vol.4, pl.CL,1) of silver; Emscote, Warwickshire (unpublished); Wakerley Northamptonshire, and Caistor-by-Norwich (Myres and Green 1973, fig. 61, p.233), a flat bronze ring (diam. 8.8cm) with a similar panelled ornament to that from West Stow and thought to be part of a chatelaine. Another is known from Bergh Apton (Green and Rogerson 1978, 35; fig. 91) from Grave 50, with two spears.

Buckets and bucket mounts:

Fragments of two 'coffers or pails' are recorded by Tymms as having been found with a sword. It cannot be certain if this refers to the two major fragments of Fig. 267,1 or if one of the others was a second. The purpose of these objects is in some doubt. Clearly some had simple bucket-type handles, but seem far too small and too ornate for ordinary purposes. Similar, larger, iron-bound buckets are known from 'late' graves; locally at Westgarth Gardens, Bury St. Edmunds, Grave 66 (unpub.) with a sword, spear and shield of seventh century type. The simple bird heads on Fig. 268,1 are paralleled at Nassington, Northamptonshire, Grave 32 (Leeds 1944, pl.XXX) and at Little Wilbraham, Cambridgeshire (Neville 1852, pl.17, bottom); the second bucket from the same source (pl.17, top) recalls our Fig. 268,2, but is more developed, with a double 'beak' to each head. A simpler version can be seen in Grave 68, Holywell Row (Lethbridge 1931, fig.21).

Fig. 268,4, an open work bronze mount, is of considerable interest, providing another Frankish link in the late six-seventh century. These mounts have been discussed by Pirling (1974, 111-114) in relation to those from the Krefeld-Gellep cemetery (Grave 1782), and their distribution in the Rhine and Maas districts, with outliers in the Thuringian and Alammanic region. She repeats earlier opinions by Ament (Ament 1967, 190) that the decoration recalls late Roman bronze work and that a late classical skilled workshop tradition persisted in the Rhine-Maas region, as inferred from the distribution of these buckets.

Table 61: Frequency of wrist-clasp types in East Anglia.

Site	Type 1	2a	2b	3a	3b	3c	3d	4	5	6	7
ERISWELL		2	2				1				1
HOLYWELL ROW	1	2	2		2			2			3
TUDDENHAM			1	1							
LACKFORD		1	1	1			1	1			
WEST STOW		1	2					1	1	1	
W.G GARDENS	1	2	2	3a/b		1	1				
BERGH APTON		4	2		10				1		
SWAFFHAM				1	2				1		
SPONG HILL								1			
NEWNHAM	1	1									
WORTH RUNCTON	1										
MILDENHALL		1									
L. WILBRAHAM		1									

Note: Each total represents the number of times each type is represented in separate graves. Half a clasp therefore counts as one, as do pairs of identical clasps from the same grave.

The date range of these objects is long, almost a hundred years; throughout the sixth century. They are rare in England and occur in Grave 28 in the Gilton Town, Kent cemetery (Fausett 1856, fig. on p.13) and at Newport Pagnell, Buckinghamshire (C. Morris, pers.comm.) The small bronze mount, (Fig. 266,11), has a sharply inclined end and a very narrow space between the body of the piece and the turned-over proximal end. There are no rivet holes to indicate the nature of the object to which it was fastened, but the narrowness of the gap and the inclination of the distal end suggests that it may have come from a metal vessel. The two bronze mounts, (Fig. 266,12) have traces of iron through the transverse holes at the top end. The purpose of these is not clear, but they could have come from the ends of a pair of girdle-hangers instead.

Silver pendants:

The 'shield' pendant, (Fig. 266,2) has lost its suspension loop, but is otherwise a typical piece. There is a close parallel in Holywell Row, Grave 11, associated with girdle hangers, a great square-headed brooch and a spiral bangle; another from Grave 12 in the same cemetery and others from Girton; St. Johns Cricket Field, Cambridge; Barrington, Cambridgeshire; Kempston, Bedfordshire, and Burwell, Cambridgeshire (Lethbridge 1931, fig. 2,4, p.5). More recent discoveries have spread the distribution into Norfolk with examples from Bergh Apton, Grave 21 (Green and Rogerson 1978, fig. 77c), Swaffham, Grave 16, (Hills 1976, fig. 9) and Field Dalling (Green, unpub.). This is a further Kentish connection, where silver pendants are numerous in cemeteries (e.g. Faussett pl.LIV, nos. 20,24) and, from their associations are late sixth to seventh century in date.

The second object (Fig. 266,3) is more unusual; it was probably a pendant, but the suspension loop has been lost. The garbled animal decoration, of which elements of the head and limbs can be discerned, has apparently been stamped from the reverse and is clearly a silver version of a gold 'D' bracteate.

Pins:

The three bronze pins with flattened heads, two of which are perforated, are of a type also known from the settlement, where one occurred in association with a hog-backed comb in SFB 15, and another in SFB 3, both belonging to the early seventh century. Parallels to the pins do not appear in other local cemeteries, but the type is very common in the Dover cemetery, again in 'late' contexts (Evison pers.comm.). The fourth pin, (Fig. 266,4) a folded tube with a bifurcated head, is a type discussed by Mrs Hawkes (Detsicas and Hawkes 1973, 283-5) and the discussion rehearsed by Cunliffe in the Portchester Report (Cunliffe 1976,212-214).The silver pins from Eccles (Kent), Grave 12, are dated to the late seventh century (Detsicas and Hawkes 1973, fig.4) and a pair of bronze pins from Grave 62, Worthy Park, Kingsworthy, Hampshire (unpub.) are dated stratigraphically to the seventh century. Two more from Broadwell, Stow-on-the-Wold, Gloucestershire (Donovan and Dunning 1936, 163, fig.9) and Bourton-on-the-Water, Gloucestershire Grave 7, (O'Neill 1960, 167-8, fig.1) are assigned to the second half of the seventh century from the humped-back knives found with them. Mrs. Pretty (Pretty 1972, 85) has suggested a native British, sub-Roman origin for these pins, which is refuted by Cunliffe (Cunliffe 1976, 214) with reference to Hawkes, who points out that nearly half the total of spiral-headed pins in England and Wales have been found in Anglo-Saxon graves of certain or probable seventh century date. The West Stow pin is interesting in that it is made from a rolled sheet rather than with a solid shank, as is the pin from Castlemartin, Pembrokeshire (Mathias 1927, 192,195, fig.4). If these pins date entirely from the second half of the seventh century, then this is the latest object from the West Stow cemetery; an important indicator of the life of the settlement. It should, however, be borne in mind that of the twenty-four known pins, only twelve come from closed Anglo-Saxon contexts and of these, only three contexts (five pins) can be assigned a late seventh century date, so that there is room for a slightly earlier date.

Combs:

Two combs exist (Fig. 272,1,2); both are of the seventh century 'hog-backed' type, comparable to that from the SFB 15 in the settlement and the three from the cemetery at Burwell, Cambridgeshire (Lethbridge 1931, figs. 25,34,36). Combs are not found in inhumation cemeteries in our area until the seventh century, as at Burwell and Melbourne, Cambridgeshire (Wilson 1956, 31) although not in them all; Lethbridge found none at Shudy Camps, Cambridgeshire (Lethbridge 1936). The survival rate of bone is often, but not always, poor in East Anglia, but this does not, I believe, account for the lack of combs in the entire inhumations, as there are plenty of cemeteries or parts of cemeteries where skeletal material is good. The chances of all the earlier combs having been destroyed by chemical action seems unrealistic. Combs are much more frequent in cremations, notably at sites like Spong Hill, North Elmham but also close at hand at Lackford, and in one of the cremations at Westgarth Gardens (Grave 65). The unfinished piece of a hog-backed comb (Fig. 272,3) is more likely to have come from the settlement area. The *comb case* is particularly well preserved, but is not mentioned in the records of the cemetery. If it had been found with a comb, it would surely have been recorded. This suggests that its purpose was not understood at the time, because no comb was found with it; so either it was buried without a comb in the cemetery, or it is yet another object from Prigg's diggings on the settlement, where another comb case was found in 1972 (Fig. 207,8, SFB 63).

The pottery from the cemetery:

Eighteen vessels are distributed among the various museums holding West Stow material. References by Tymms and Warren suggest that some were cremation urns and others were food vessels in graves. Only one (Fig. 273,11), can now be identified as a cremation urn as it is so recorded in Tymms' account (Tymms 1853, 328).

Two of the vessels are small rusticated bowls, with finger-tip ornament; of the rest, eleven are plain, one plain with small bosses and four are decorated. All are illustrated in Myres' Corpus (Myres 1977) and are here arranged in that order.

Table 62: Pottery drawings co-ordinated with Myres' Corpus.

Our Fig.	Myres' Corpus No.	Myres' Fig.	Group
Plain:			
Fig.273,1	2065	33	1.1 Sub-biconical, wide-mouthed form.
Fig.273,2	2066	41	1.1 Globular, wide-mouthed, rounded base.
Fig.273,3	3738	42	1.1 Globular, wide-mouthed. Everted rim.
Fig.273,4	3161	51	1.1 Globular and related forms with tall upright rim.
Fig.273,5	3159	53	1.1 Related globular form.
Fig.273,6	2061	66	1.1 Hemispherical cup with inturned rim.
Fig.273,7	2062	68	1.1 Splay-sided bowl.
Fig.273,8	2064	69	1.1 Splay-sided bowl.
Fig.273,9	2067	70	1.1 Small bowl with tall, everted rim.
Fig.273,10	3160	71	1.1 Straight sided form.
Fig.273,11	3737	73	1.1 Small cup.
Fig.273,12	3162	85	1.2 Bossed bowl.
Decorated:			
Fig.273,13	2063	112	11.1 Rusticated bowl.
Fig.273,14	3158	112	11.1 Rusticated bowl.
Fig.273,15	1006	169	11.2 Globular, with linear enclosed zone ornament.
Fig.274,1	1021	99	11.1 Small beaker with simple stamped design.
Fig.274,2	2060	351	11.10 Illington Lackford potter.
Fig.274,3	1005	352	11.10 Illington Lackford potter.

Of the twelve plain pots seven are simple bowls, one of them (Fig. 273,12) bossed. As a group they are unremarkable, and fit easily into the sixth century, the bossed bowl perhaps late in the century. Bowls are frequent in local cemeteries, accounting for a third of the vessels.

The practice of placing food vessels in graves in East Anglia is well known, but varies a great deal from cemetery to cemetery. Unfortunately, as with West Stow, detailed records have rarely been kept until relatively recent times, so that it is not often possible to be certain which of the surviving pots were cremation urns, and which were inhumations. However, the eighteen pots from West Stow form a group comparable in size to those from Holywell Row (10), Westgarth Gardens (13) and Bergh Apton (12). Some observations may usefully be made. The practice was, in the Lark Valley area, rather uneven, for only one pot was found in the thirty-three graves of the Little Eriswell cemetery that were excavated (Hutchinson 1966), possibly accounted for by the small sample. The practice extended from the early sixth to the seventh century, to judge from the exceptional sword Grave 51 at Westgarth Gardens, which contained a large urn with empty chevrons and a line of stamps on the shoulder, (c.f. Myres 1977; Lackford, Corpus No.2799) and those in Shudy Camps cemetery (Lethbridge 1936). The distribution of pots in male, female, infant and unsexed graves slightly favours male graves, but the sample is too small for positive conclusions to be drawn, other than to say that in the three cemeteries, where sufficient records exist, the division between male, female and juvenile is almost equal, i.e. male thirteen, female eleven, juvenile six, unsexed five; some of the latter probably juvenile. Distribution with wealth or grave goods is also widespread, with three adults (two female, one male) and one child having rich assemblages with pots; seven males with spears, five with knives; five females with brooches or beads and six with little or nothing other than the pot. Juvenile graves, apart from Grave 69, Holywell Row, had simple bowls or plain urns. Four of the five unsexed were unaccompanied burials, the fifth had only a knife. On the whole, it can be said that the more elaborate pots *tend* to be found in the more wealthy graves; i.e. those with swords; shield and spear; or the richer female graves with several brooches and other objects. There are exceptions, such as the stamped Illington/Lackford bowl unaccompanied in Grave 31, Westgarth Gardens (unpublished).

Finally it is worth noting that of the five graves with pots at Shudy Camps, the only other grave goods were the bone playing pieces in Grave 85 (Lethbridge 1936).

The two rusticated bowls from West Stow both use horizontal lines of finger tipping, but of different types. Both are well known from settlement area, where rustication occurs on about 5% of the sherds. The large, globular urn (Fig. 273,15, Corpus No. 1006), with enclosed zone linear ornament is the most interesting pot of the group and would appear to be fifth century, possibly derived from central or south Germany rather than the north (Myres 1977, 30 and 1970, 1-32).

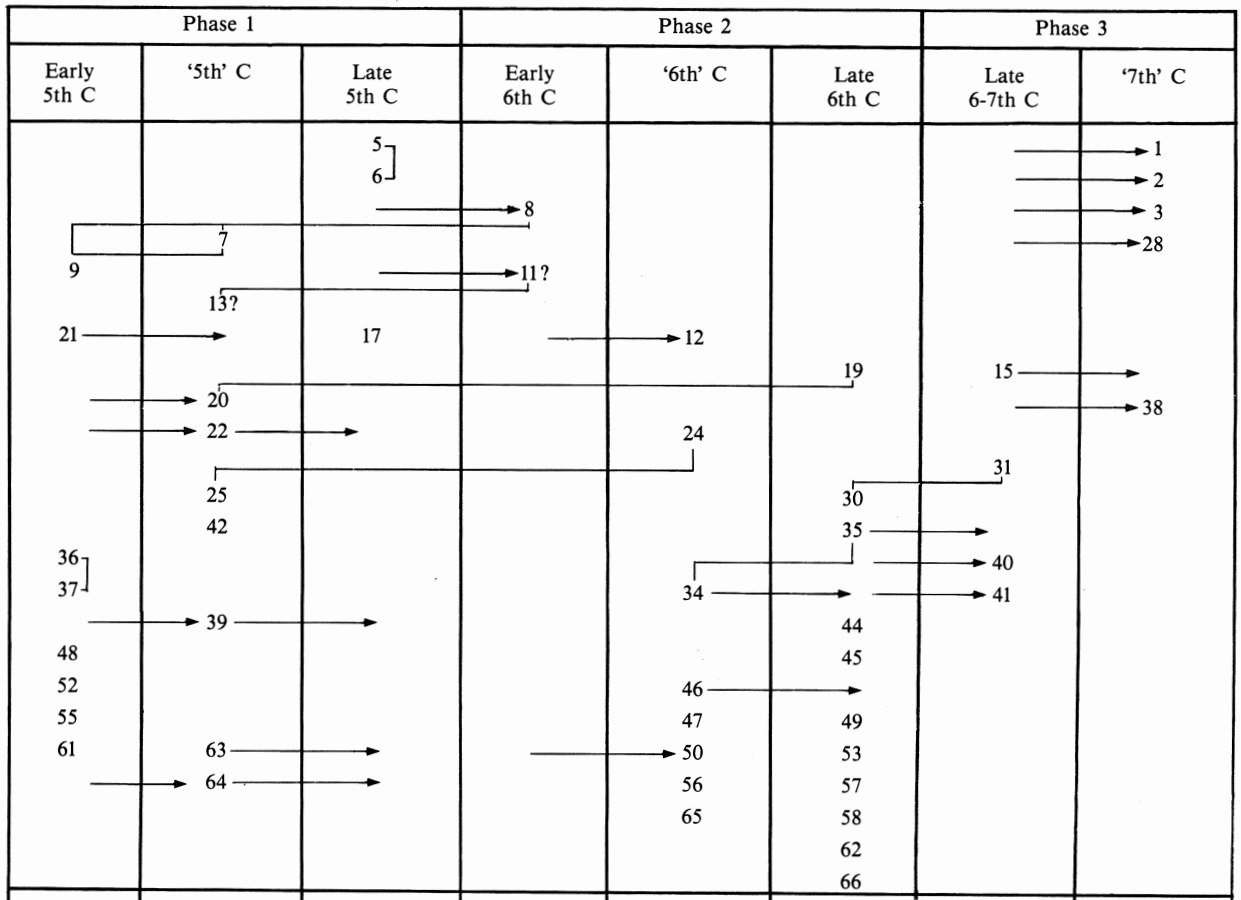
Of the stamped vessels, two are the products of the Illington/Lackford potter. The third, with a rather weak profile and a single, widely spaced row of square, cross-hatched stamps, set diagonally, could be early sixth century, although that type of stamp is often used on more developed sixth century forms.

PERIODISATION AND THE SETTLEMENT PATTERN; ESTABLISHMENT, MATURITY AND DECAY

The West Stow settlement covers the whole range of the pagan Anglo-Saxon period, overlapping at either end with the Romano-British and the Christian, middle Saxon period, from *c.*AD400 to *c.*AD650. With the recognition of two levels in the infill of the SFBs and the subsequent analysis of their contents, it became clear that an attempt could be made to establish a framework for the settlement history of this site; to see the ebb and flow and final decay, of a community which occupied the same site over some 250 years.

The contemperaneity of the material forming the primary fill of the SFBs, was then, of absolute importance. That this is so can be demonstrated particularly in those of very early fifth century date; in those producing Illington/Lackford pottery of the latter half of the sixth century and those of the early seventh. There was nothing in the remainder to suggest that the primary fill was different in any way, so that it may be assumed that the contents of those can also be assessed with the same level of confidence, if not so easily, owing to the difficulty of 'dating' pottery of the late fifth and early sixth century.

Table 63: Suggested Phasing of SFBs.



	Early 5th C	'5th' C	Late 5th C	Early 6th C	'6th' C	Late 6th C	Late 6-7th C	'7th' C
A	8	8	3	1	6	11	4	5
B		1	6	3	2	1	2	1
C	8	9	9	4	8	12	6	6

A: positive phasing; B: possible phasing; C: possible maximum.

Notes: Horizontal connections indicate cases of stratigraphy, of one SFB overlying another; the arrows suggest the possible chronological spread. The 7th century column is reserved for those SFBs with Ipswich ware; the L. 6th-7th group for those with 7th century objects but with late 6th century connections. The '5th' century column carries four stratified SFBs and those to which a 5th century date can be safely ascribed. The length of the arrows indicate the strength of 'early' or 'late' indicators. The '6th' century column carries those which for stratigraphical reasons are '6th', and those which have stamped pottery but not Illington/Lackford wares. Broadly speaking, this group should represent the first half of the 6th century.

Table 64: Unphased SFBs.

SFB No.	Comments	Possible phase
SFB 16	One Illington/Lackford sherd in post-hut fill	? c.500
SFB 18	No stamps on pottery.	? early 6th
SFB 23	No stamps on pottery.	? early 6th
SFB **24**	Late stamps in post-hut fill. Over 25	? early 6th
SFB 25	Under 24	'5th'
SFB **26**	Over 27	—
SFB 27	Under 26	—
SFB 29	No pottery or small finds	—
SFB 32,33	Destroyed before excavation	—
SFB 43	—	—
SFB 51	—	—
SFB 54	—	—
SFB 59	—	—
SFB **62**	Over 60	Later 6th
SFB 60	Stamps	? '6th'
SFB 67	—	—
SFB 68	—	—
SFB 69	—	—

The detailed phasing as set out in the table is made possible by the three main dating factors:

1. the distinctly early fifth century material, i.e. the faceted-angled pottery, the iron brooch with upturned foot and the 'Anglian' type wares;
2. the Illington/Lackford pottery of the second half of the sixth century;
3. the Ipswich ware and seventh century objects.

However, many of the SFBs could be phased on other, less precise grounds and to accommodate these it was found necessary to employ a mixture of broad terms ('fifth', 'sixth') and narrower bands (late fifth, early sixth). Pottery of this period cannot be precisely dated; some of the important artefacts may have a long life, and wooden houses are subject to decay. It is also unlikely that all the 'early' houses were built at the same time, so one must suppose an overlapping of the life-spans of the SFBs. Nevertheless, an attempt must be made to understand the settlement pattern with these factors borne in mind. On to the acceptable basic framework provided by the three dating factors outlined above, secondary level phasing can be added by the use of *Buckelurnen* and sixth century stamped designs, e.g. the Lackford Potter VII. Superimposed SFBs have also been reasonably employed in four groups, supported by other evidence (Fig. 300).

On a slightly lower level, the absence of stamped sherds among a large group of pottery can be used to suggest an early phase and the presence of Illington/Lackford sherds in post-hut fills, on a site which has produced such a quantity of it, can reasonably be argued as an indication of an earlier date than the mid sixth century. In presenting the table as a reasonable basis for the analysis of the settlement, the following factors have been considered:—

Early Fifth:

The 'Anglian' grooved sherds and the possible sub-Roman fragment from SFB 52 and the Frankish iron brooch from SFB 61 are good indicators for early fifth century phasing for these SFBs.

Faceted-angled pottery was found in SFB 36 which gave connections with SFBs 37 and 39; in SFB 48 and SFB 55. The faceted-angled pot from SFB 21 had traces of a row of stamps above the facets, and may be considered 'late' in the series, but the SFB also contained three sherds of corrugated 'Anglian' ware. An early to middle fifth century phase can be postulated. SFB 39, with its connections with SFB 36 can be phased in the earlier part of the century but the 'small-long' brooch, paralleled at Rahmsdorf suggests survival into the second half of the fifth.

The phasing of SFBs 9, 7 and 8 depends upon the dating of SFB 8 as it is superimposed upon both 9 and 7. SFB 9 is the earliest in the sequence, as it is further cut by SFB 7. SFB 9 contained a globular pot which could well be early fifth century; SFB 7 a slashed cordon. The last in the sequence, SFB 8, a unique structure, had 378 potsherds, but only one stamped sherd, five with lines, eight rusticated and one moulded base. Two faceted-angled sherds from this SFB may be derived from a shallow pit which contained another similar sherd, cut by the SFB on the south side. An early sixth century phase is suggested for SFB 8 on the grounds that a hut rich in both pottery and small finds (18) could have been expected to have had a higher proportion of decorated pottery if it were later in the sixth century. In the other direction, allowing for a normal decay rate for the earlier structures in the absence of any signs of destruction, it would be difficult to push SFB 8 further back than the closing years of the fifth century.

'Fifth Century':

Here are grouped those SFBs with good fifth century connections but with enough evidence to suggest a continuation into the middle or later part of it.

SFB 13 is included in this group as it is overlaid by SFB 11, to which is ascribed a 'sixth century' general phase. SFB 25 is another placed in the fifth century by stratigraphy, as it is beneath SFB 24 and contained a fragment of heavily grooved pottery. Apart from these, SFB 20 yielded a fragment of faceted-angled pottery (Fig. 89,6), SFB 22 a frilly-edged comb, a faceted-angled sherd, fragments of a large *Buckelurne* and a shoulder-boss urn similar to those from Lackford (Myres 1977, 127, 917-918), with chevron zones above, but different fabrics, all suggesting a firm fifth century span with early and later elements.

SFB 42 contained a large portion of a pot likely to be of fifth century date with lines and no stamps (Fig. 145,4) and an Illington/Lackford sherd in the post-hut fill.

SFB 63 had a bone comb case and a fine Group I *Buckelurne* indicative of a 450-500 phase. The *Buckelurne* from SFB 64 suggests the same phase but the presence of faceted-angled sherds suggests a beginning in the earlier half of the century.

Late Fifth Century:

SFBs 5 and 6 share fragments of the same *Buckelurne;* SFB 6 has an early, well worn cruciform. Another *Buckelurne* with a foot from SFB 17 indicates a similar phase. The brooch from SFB 39 has already been mentioned, the phasing for this building should, then, be solidly fifth century.

Early Sixth Century:

The phasing of SFB 8 has already been discussed with relation to SFBs 7 and 9; it is a reasonable assumption therefore to place this in the earlier part of the sixth century. The presence of five stamped sherds and the absence of Illington/Lackford pottery suggests that SFB 11 should be assigned to this general phase.

Sixth Century:

Seven SFBs are assigned to this general group, of which SFB 12, a very 'rich' assemblage, could have a slightly earlier origin, with the fragment of gilt chip-carved silver. The low count of stamps, six in total of 712 sherds also suggests an earlier phase. However, the antler pottery stamp with figure of 8 design (Fig. 61,14) is so like that on the Illington Urn 151 of elaborate sixth century design (Myres 1977, fig. 347,2251), which Myres' places with the Sancton-Baston workshop, that, although it is not the same stamp, it ought to be considered as sixth century. SFB 12 is therefore placed in the general 'sixth' century group with the reservation

that it belongs firmly in the sixth century but may have slightly earlier origins. An early sixth century phase could be argued for SFB 24 on the dual grounds that it overlies SFB 13 and contains later sixth century stamped material in the post-hut fill. However, both SFBs 11 and 13 could be moved to slightly earlier positions, but there must be some time span between them.

A similar problem exists with SFB 35 which is cut by SFB 34. Both contain Illington/Lackford sherds, although those in SFB 34 could be derived from the earlier SFB 35. A middle to late sixth century would seem reasonable for SFB 35 and a later sixth century phase for SFB 34. A fragment of a sixth century glass claw beaker and fragments of a pot comparable to Lackford potter VII (Myres 1977, fig. 321, 2777, 2864 and p.326) place SFB 46 firmly in the sixth century. SFB 47 contained a pot with part empty panels and bosses and no Illington/Lackford pottery.

A claw from a sixth century claw beaker sealed by collapsed wattle and daub is good evidence for SFB 50, the lack of the later sixth century pottery suggests an early to middle phase. SFB 56, with advanced *'hängende bogen'* design on a potsherd, again suggests a sixth century phase, as do the stamps in SFB 65. The large bone comb (SF 1458) compares well with others from the cemetery at Reuden, Kr. Zeitz (Schmidt 1961, Taf.55a), and placed in his *Gruppe* 2b phase, 480-525 AD.

Late Sixth Century:

Ten SFBs are placed in this late phase by the occurrence of Illington/Lackford sherds in the primary fill; SFB 19, 30, 34 (? derived), 35, 44, 45, 49, 53, 57, 58 and 66. SFB 34 is probably later, as 35 had Illington/Lackford pottery in a primary context; SFB 58 also had an angled-back knife. To this list might be added SFB 31 with late-looking stamped pottery and possibly SFB 62 which overlay SFB 60, which had stamps.

Late Sixth-Seventh Century and Seventh Century:

Eight SFBs covering both columns are considered.

SFB1 had one sherd of Ipswich ware; SFB 2 a silver shield pendant; SFB 3 two sherds of Ipswich ware, bone and bronze pins of the seventh century. SFB 15 had a late, hog-backed bone comb and a silver pin; one Illington/Lackford sherd but no Ipswich ware. SFB 28 had one Ipswich ware sherd and was situated close to D.54, also of the seventh century. SFB 38 had one Ipswich ware sherd; SFB 40 a seventh century linked pin and two Illington/Lackford sherds. Finally, SFB 41 had a late bone pin and one Illington/Lackford sherd.

In the broadest terms the SFBs can be divided into:

	5th century	6th century	7th century
Phased	19	18	9
Possible maximum	26	24	12

An attempt can now be made to examine the settlement pattern in terms of the broad chronological groups of the SFBs in relation to the post-built 'halls'. In most cases the SFBs can be seen to form discrete groups round each individual 'Hall'. In some cases, for instance between Halls 6 and 4, the relationship of specific SFBs to either Hall can be argued in terms of relative phasing. In each case reasons are outlined.

Table 65: Halls and related SFBs.

Hall 1:		
SFB 16	Possibly	late 5th/6th
SFB 17	Phased	late 5th
SFB 41	Phased	late 6th/7th
SFBs 32,32	Destroyed	no date
Hall 2:		
SFB 5	Phased	late 5th
SFB 6	Phased	late 5th
SFB 8	Phased	early 6th
SFB 12	Phased	6th
SFB 7	Phased	5th
SFB 9	Phased	early 5th
SFB 21	Phased	early 5th
SFB 20	Phased	5th
SFB 22	Phased	5th
SFB 25	Possibly	5th
SFB 26	—	?
SFB 27	—	?
SFB 13	—	5th?
SFB 23	Possibly	5th/early 6th
SFB 11	—	6th?
SFB 24	Possibly	early 6th?
SFB 25	Possibly	5th?
Hall 3:		
SFB 36	Phased	early 5th
SFB 48	Phased	early 5th
SFB 39	Phased	mid-late 5th
SFB 42	Phased	5th
SFB 52	Phased	early 5th
SFB 46	Phased	6th
SFB 47	Phased	6th
SFB 50	Phased	6th
SFB 53	Phased	late 6th
(SFB 38	Phased	late 6th-7th) ? associated with Hall 4
SFB 51	—	
SFB 54	—	
Hall 4:		
?SFB 55	Phased	early 5th (see below)
SFB 56	Phased	6th
SFB 58	Phased	late 6th
SFB 59	No phasing	—
SFB 60	Possibly	6th
SFB 62	No phasing	(later than 60)
SFB 57	Phased	late 6th
SFB 66	Phased	late 6th
?SFB 38	Phased	late 6th-7th

SFB 55 is clearly much earlier than the rest in this group and should probably be included with the Hall 6 group, with which it has chronological links. Equally SFB 38 has stronger chronological links with Hall 4 than with Hall 3, although geographically it is closer to Hall 3.

Hall 6: (Placed in this order because of location close to Hall 4)		
SFB 55	Phased	early 5th
SFB 61	Phased	early 5th
SFB 63	Phased	5th
SFB 64	Phased	5th
SFB 65	Phased	'6th'
SFB 67	No phasing	?
SFB 68	No phasing	?
SFB 69	No phasing	?

The three unphased SFBs in this group are on the

extreme western edge of the knoll and are included by virtue of their geographical location with Hall 6.

Hall 5:

SFB 18	Possibly	early 6th
SFB 19	Phased	late 6th
SFB 29	No phasing	?
SFB 44	Phased	late 6th
SFB 45	Phased	late 6th
SFB 49	Phased	late 6th
SFB 28	Phased	late 6th-7th

SFB 21 although lying close to this group is clearly nearer to the Hall 2 group chronologically and is therefore included in that group.

Hall 7:

SFB 30	Phased	late 6th
SFB 31	Phased	later than 30
SFB 34	Phased	late 6th
SFB 35	Phased	later than 30. Late 6th-7th
SFB 1	Phased	late 6th-7th
SFB 2	Phased	late 6th-7th
SFB 3	Phased	late 6th-7th
SFB 15	Phased	late 6th-7th
SFB 40	Phased	late 6th
SFB 43	No phasing	?

SFB 43 produced no dating evidence but is placed with Hall 7 by its location.

Table 66: Halls and numbers of associated SFBs.

	Associated SFBs	Possibles	Max. Total
Hall 1	5	—	5
Hall 2	13	—	13
Hall 3	12	(38)	12
Hall 4	7(inc.38)	1(57)	8
Hall 5	7	—	7
Hall 6	8	1(57)	9
Hall 7	9	1	10

From the phasing and location tables it has been shown that the SFBs form discrete groupings through both time and space, without any real manipulation of the evidence, and that the groupings of the SFBs are related in the same way to the 'halls', so that the functions and status of the two types of buildings must be complementary.

Table 68: Hall group phasing and relationships:

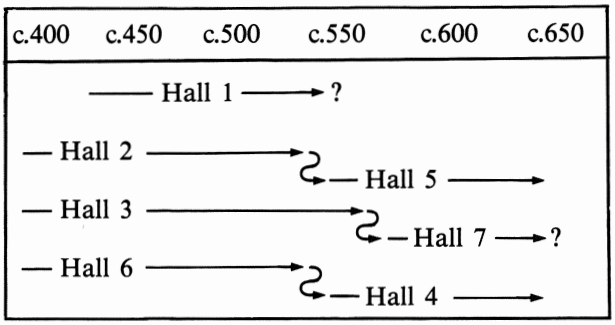


Table 67: Halls and associated SFB phasing.

	Associated SFBs	Possibles	Max.total	SFB PHASING								
				E5	5	L5	E6	6	L6	6-7	7	Undated
Hall 1	5	—	5			*	0			*(41)		+ +
Hall 2	13	—	13	**	**** 00	0	0	0				+ +
Hall 3	12	(38)	12	****	*	*		***	*(53)			+ +
Hall 4	7 + (38)	(57)	8					*0	***			+ +
Hall 5	7	—	7					0	****	*		+
Hall 6	8	(57)	9	**	**			*				+ + +
Hall 7	9	1	10						***	**** *0(31)		+

* Phased. 0 possibles.

Bracketed numbers:

38. Included in Hall 4 group.
57. Included in Hall 6 group.
53. Included in Hall 3 but possibly Hall 4 group.
31. Later than SFB 30.
41. Included with Hall 1 but probably an outlier from Hall 7 group.

MOVEMENT OF HALL GROUPS WITHIN THE SITE:

It is suggested that the groupings of SFBs in relation to the Halls is close enough to make the following evaluation of the development of the settlement pattern tenable (Fig. 301). In the western half of the site the Hall 6 group moves steadily to the east, with a rebuilding of the Hall close by, to become the Hall 4 group. In the centre, the Hall 2 group appears to move to the south-east to become the Hall 5 group; apparently with two phases of building in Hall 5 itself. Hall 3, also in the centre, tends to be squeezed from either side; the phasing of the SFBs would suggest a greater move to the area of Hall 7. The phasing and subsequent history of Hall 1 is in doubt due to the loss of at least three SFBs in the gravel pit in the north-east corner of the site.

The status of the two SFBs off the knoll, in the low area to the east of the site cannot be ascertained, but the lack of other SFBs in that area suggests that these were outliers, rather than an extension of the main site.

There are clearly problems with the relative survival rate of buildings; the post-built halls appear to have survived longer than the SFBs for reasons which cannot at present be determined. It may be that the functions of the pits in some way shortened their desirable occupancy and that these tended to be replaced more frequently than the Halls where the only problem would have been the decay of the earth-fast posts. This analysis of the settlement shows that the initial occupation of the site began in the early fifth century with the certain establishment of three Halls and attendant SFBs. Hall 1 cannot be securely phased, but may also have belonged to this original settlement. Subsequently there was movement on the site as buildings had to be replaced and this movement can be traced through the succeeding fifth and sixth centuries.

The final phases of the settlement show a gradual withdrawal from the site; first by Hall group 5 where, although there is a strong scatter of Ipswich ware in the Layer 2 over the area of the Hall 2 complex, there is a distinct lack of seventh century objects or pottery in any of the structures, apart from one sherd of Ipswich ware in SFB 28. Further, there is little evidence for the development of any kind of boundaries, as can be seen for Hall groups 4 and 7, unless the short section of linear ditch (D.54) in WF.4 and WG.3 can be taken to be some kind of division developing around Hall 5. With Hall 4 the evidence for a seventh century occupation is similar in terms of Ipswich ware, with one sherd in SFB 38 and a thin scatter elsewhere. Here, however, there is evidence of the development of a boundary, opposing one from the north-east, to provide an entrance or lane (Fig. 302). Again there is a lack of seventh century objects.

The Hall 7 group is the strongest seventh century context, with both seventh century objects and Ipswich ware from SFBs 1, 2, 3 and 15 and a dense scatter of Ipswich ware from the Hall area. The development of boundaries, first of recut ditches simply facing the Hall 4 group, but not Hall 5; replaced by the opposing entrance or 'lane' and finally, after the Hall 4 group had presumably left the site, the recutting of the ditches many times in that area without relation to the earlier layout. The lack of a boundary to the south, in the direction of Hall 5 suggests that that Hall group was no longer there when the practice of boundaries had developed, an added argument to the suggestions that the Hall 5 group left the site first, followed by Hall 4, thus leaving the knoll in the possession of the Hall 7 group. How long into the seventh century that group remained on the site is not known.

The boundaries, as such, are irregular and undeveloped, unlike those at Chalton, Catholme or indeed continental sites like Wijster where a regular pattern is clear.

Comparisons with other settlements:

That the West Stow settlement should be compared with both continental and English sites is self-evident; however, in terms of meaningful comparisons of settlement organisation and development, contemporary sites with sufficient excavated areas are rare. There are a number of fragmentary sites which can be compared in terms of building styles, and provide tantalising glimpses of the whole, but even these have not been phased in detail. The evidence from Sutton Courtenay is partial and Brebières may not be complete; there is limited evidence for post-hole buildings at Sutton Courtenay; the Brebières site was excavated under extreme difficulties which may well have precluded the discovery of post-hole structures. Both New Wintles Farm (Oxon) and Mucking (Essex) appear to be different in character from West Stow; New Wintles is widely dispersed and Mucking a much larger settlement, having two cemeteries and possibly more than one focal point, and for which the specialised functions of a military base and a centre for immigrants have been suggested (Jones 1979, 35).

In southern England Chalton is totally different in overall planning and in the relationships of the numbers of post-hole buildings and SFBs, with distinct 'plots' and boundaries, and may well reflect a different origin as well as a rather later date.

The boundaries at West Stow appear to be a development in the last phase of the settlement, likewise unknown on other Early Saxon sites in England, and apparently a development of the early seventh century. The West Stow boundaries are irregular and undeveloped, unlike those at Chalton or Catholme, or, nearer to home, at North Elmham Park or Wicken Bonhunt, where a regulated pattern is clear in the Middle Saxon period.

On the Continent the well-known sites of Feddersen Wierde (Haarnagel 1961) near Bremerhaven on the Weser and Wijster in the Netherlands, both large scale excavations, demonstrate essential differences in layout and scale between some continental sites and the early English settlements. Feddersen Wierde was radially planned, with large, aisled houses, subsidiary buildings and workshops. Wijster, by the fourth century, was again a planned village with fenced enclosures, trackways, and groups of associated buidings. Between these and West Stow there are important differences in building styles, particularly in the absence of the aisled buildings, the lack of planning and the obvious role of the SFB at West Stow. At Ezinge the apparent

dramatic changes in the early fifth century from three aisled houses to *Grubenhäuser* was thought by Boeles (1951, 216,218, fig.446) to represent the Anglo-Saxon invasion. This has been questioned by Van Es (1967, 564) who points out that the *Grubenhaus* is not necessarily an Anglo-Saxon phenomenom and that he suspects that the grouping of the sixty odd huts implies post-hole structures which could not be identified in the burnt layer at Ezinge. From all of these sites, however, there emerges one underlying, important fact; that groups of associated buildings can be identified. The point can be taken further; at West Stow the Hall/SFB relationships range from 7-13, at Warendorf (Fig. 303) there is a remarkable stability both spatially and in the number of related buildings through time. The first and last phases of the one published farmstead group are reproduced here to emphasise that stability and tabulated below:

There are many other, less complete, sites in some of which similar groupings may be discerned, or suspected. At Bremen-Grambke I there are SFBs plus post-hole buildings, but an incomplete plan. (Brandt 1965, 395-401.) Bremen-Grambke II has fifteen SFBs only, some rebuilt on the same sites and otherwise in a close group. There is a suggestion in the plan of an open area to the north-west of this group which could have contained post-hole buildings (Brandt 1958, 205-219).

Sites from the seventh century onward are rather more informative; at Gladbach, a seventh century settlement near Cologne, an incomplete plan shows groupings of SFBs around post-hole and post-in-trench structures, although the plans of the post-built structures are by no means clear (Mylius 1938). Riedisheim on the Haut Rhin in Alsace has two-, four- and six-post SFBs but no post-hole buildings, and is dated from the sixth to the eighth century (Petry 1976, 379-380). Kircheim, Wadkr. Munchen, Obermayen, again is a large, partially excavated site over 180m in length, with post-built houses and SFBs, apparently without boundaries, but not complete enough to suggest relationships. (Dannheimer 1973.)

There appears to be two distinct kinds of continental settlement in the area that concerns us, firstly the organised, generally larger sites like Wijster, Feddersen Wierde, or Warendorf with many large buildings and few *'Grubenhäuser'* and the loose-knit sites such as Bremen-Grambke or Gladbach where there were large numbers of *Grubenhäuser,* and, apparently, few post-built structures. It is with the second group that English settlements like West Stow would seem to lie and it is unfortunate that more is not known about them in terms of their overall size, post-hole buildings and particularly the relative internal phasing and development.

Table 69: Warendorf, rebuilding pattern on one site.

	Long House	Middle Sized Building	Smaller Buildings	Other	Granaries	SFBs	
PERIOD 1	1	1	4	2	3	4	Middle sized longhouse
PERIOD 2	1	1	3		2	5	Largest longhouse
PERIOD 2A	1						
PERIOD 3	1	1	2	1	2	4	Smallest longhouse
PERIOD 3A		1					
PERIOD 4	1	2	2	1	2	4	Middle sized longhouse

PART 4.
THE ANGLO-SAXON SETTLEMENT OF THE LARK VALLEY

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THE KNOWN SETTLEMENTS AND CEMETERIES

So far no Anglo-Saxon sites are known higher up the Lark valley than the southern edge of Bury St Edmunds, although gravel terraces suitable for occupation continue to Sicklesmere, in Great Whelnetham. The Lark valley sites ae enumerated here from Bury St Edmunds down river, including those in the valleys feeding into the Lark. Not all the sites are settlements; most are, in fact, cemeteries; but cemeteries imply settlements, which must be close by, if the known local relationships are a guide (Fig. 304).

1. Hardwick Lane, Bury St Edmunds. Site No. BSE 007, TL 852 629

Fragments of a cemetery examined by A.R. Edwardson, Moyse's Hall Museum, during the building of a housing estate, *c.*1958. Three male skeletons were found in building trenches at the Hardwick Lane end of the estate and were reported as 'casual, hurried, interments'. A split-socketed spearhead, a shield boss, and an iron knife were associated (Meaney 1964, 226). In 1970 one male and one female grave were excavated by the author in Baron's Road, some 150 metres to the east (Site No. BSE 028). The male grave contained a shield and a spear and the female grave a fine square headed brooch of Leeds' Type A3; ten to twelve amber beads and two pairs of wrist-clasps of plain sheets of bronze with repoussé dots (Unpublished). The brooch compares well with others from St John's College, Linton Heath, Barrington and Market Overton. The Hardwick Lane and Baron's skeletons are close enought to be considered as part of the same cemetery. The site lies high on the hill on the south side of the valley of the Linnet, a tributary of the Lark. No settlement is known.

2. Westgarth Gardens, Bury St Edmunds. Site No. BSE 030, TL 845 633

Fifty-nine graves were excavated or recorded on a building estate in 1972 by the author; the cemetery clearly extended beyond the permitted bounds of the excavation. That part of the cemetery that was examined included four cremations and sixty-two inhumations of adult males, females and juveniles. A wide range of associated grave goods was recovered, from the fifth to the seventh centuries; including two sword graves, a decorated, equal-armed brooch, two glass vessels and a wooden bowl with decorated bronze mounts. In contrast to the Hardwick Lane cemetery, a mile away, this site is low down, close to the flood plain of the same stream, the Linnet. No trace of an accompanying settlement was found. A full account of this cemetery is in course of preparation and will follow the publication of the West Stow settlement.

The unique glass 'bucket' is included in the recent review of Anglo-Saxon glass by Harden (Harden 1979).

3. Northumberland Avenue, Bury St Edmunds. Site No. BSE 005, TL 846 658

Between 1955 and *c.*1960 nine skeletons were found in Northumberland Avenue during building operations, over a distance of at least 30 metres.

Two skeletons, reportedly in the same grave, were buried with a bronze bracelet, a silver penannular ring, a green glass bead and a bronze toilet set. A sugar-loaf shield boss, a spear and two bronze buckles were found with another grave; four others found thirty metres away had no associated grave goods. The site is high on sloping land to the west of the River Lark; its extent and relationship to any settlement is not known. A few hundred yards to the south of the burials, on the same slope, is the site of the Thing, the meeting place of Thingoe Hundred. (Meaney 1964, 226; Edwardson 1955, 51.)

4. Fornham St Genevieve. TL 83 68

At some time before 1888 a cemetery was discovered near the Culford boundary, close to the evocatively named 'Kingsbury Hill', but the precise position is unknown. The only certain surviving grave goods are a number of large amber beads given to the Society of Antiquaries by Sir T. Gage (Prigg 1888, 53; Page 1911, 1,338).

5. Fornham St Martin. TL 85 66

In Moyse's Hall Museum there are three socketed iron spear-heads and one shield boss, said to have been found 1888-9 'with many skeletons at Fornham St Martins'. Meaney (1964, 227) considers that there has been a confusion with Fornham St Genevieve, but the dates do not conform; the St Genevieve reference in 1888 refers to 'many years ago', the St Martin reference, presumably from Museum records, now lost, stated 1888-9.

6. Hengrave. Site No. HNV 001-2, TL 829 686.

An aerial photograph (St Joseph, BJI,63) of a field immediately above the flood plain shows a series of

dark patches of a size to suggest that they are sunken-featured buildings. The field is flat, sloping gently to the edge of the flood plain, without any natural definition. The site does not appear to extend into the field to the north-west nor into the area of the much photographed cursus to the south-east; beyond the south edge the area is obscured by small paddocks and gardens, although this is farther from the river and the cropmarks seem to be petering out towards this edge of the field.

The pattern of suspected SFB sites is remarkably similar to that at West Stow, although on a larger site, with a scatter of SFBs in discernible clusters. There are a large number of smaller dark spots of varying sizes, which may be pits or even post-holes, but no post-hole buildings are discernible. Fieldwalking has not produced any distinctive Anglo-Saxon pottery, but the field is not deep ploughed, thus reducing the chances of discovery of pottery in the plough soil.

7. Culford.

The Ipswich Museum has one cremation urn from this parish, found some time before 1911 (I.M. 1920-85-4, Page 1911,338). Described by Myres (Myres 1977, Corpus No. 3148, p.235, fig.184) as 'a shouldered *Buckleurne*', it has a raised, dotted collar under the rim and another at the base of the neck and ten bosses on the shoulder (Page 1911,338).

8. West Stow. Site No. WSW 002, TL 797 713.

The settlement and associated cemetery, the subject of this report.

9. West Stow. Site No. WSW 030, TL 791 713.

The secondary pagan site at the extreme west end of the parish immediately above the fording of the Icknield Way and the River Lark. Two SFBs and part of a possible post-hole building were excavated by the Suffolk Archaeological Unit in 1979. The lack of Anglo-Saxon debris in the topsoil and the general paucity of material in the SFBs suggests a short-lived site, an outlier of the main site, 550 metres away (unpublished).

10. West Stow. Site No. WSW 005, TL 811 707.

Known only from surface finds, the site begins with Ipswich ware, continues with Thetford ware and moves to the east, developing into an extensive medieval site. Anglo-Saxon sceatta, identified by the late S.E. Rigold:

Diam. 12mm, wt. 0.855 gm. Surface pitted, with ? copper corrosion products, but not encrusted, leaving much of the finer detail visible. This and the low weight suggest that it is of exceptionally base alloy and would loose much of its surface if electrolysed or treated chemically.

Obv. Bearded head facing, with long moustache and staring hair; pupils apparently not marked; lines of small pellets extending on each side from hair to beard; pellets in border (the 'Woden' type).

Rev. Beast regardant moving l.; small pellets along back; small pellets in border and, perhaps, larger pellets in an outer border.

This is one of three combinations of three often-associated types: A, 'Woden' head; B, beast regardant; C, two standing figures, facing each other or facing the viewer, and in the latter case sometimes with long moustaches like 'Woden's'. The combinations are: AB, *BMC* type 31 (i.e. this one); AC, *BMC* type 30 (a or b); BC, *BMC* type 41 (a or b). Exceptionally a single figure (from the London-associated series) may take the place of type C, making *BMC* type 40, or a head in a guilloche, as on *BMC* type 38 (which has the normal bird reverse) may take the place of Type A (Hunterian Sylloge, no.118).

The type 31 combination is best known from the large numbers of roughly executed examples found in late Frisian hoards (e.g. Hallum and especially, Terwispel), all with crosses left and right on the shoulders, not lines of pellets. These are certainly of Frisian make and of variable weight, but on average fairly typical of late, light sceattas (about 10.5 gm). The type was so popular across the North Sea that it was copied on early Scandinavian broad pennies. But it almost certainly had an English prototype which is hard to place. Certain associations of the types in combination might point to Kent. A version of the Woden head appears as an aberrant obverse to derivatives of the 'Primary type B' (*BMC* 27) as early as the essentially 'Primary' Aston Rowant hoard (?*c.*715) and *BMC* 38 seems to be an equally Kentish successor of the primary type B (see above). Furthermore, the two standing figures *might* be meant for the two rulers in Kent after 725, as the single figure might be meant for Aethelbald. In general these combining types are 'secondary' (say, after 725-30) and there are uncouth derivatives of them, not necessarily all Frisian, some of which occasionally combine with East Anglian motifs, while the distribution of the better ones goes up the Thames and north of it with one reported from Framlingham (a *BMC* type 40, Shepherd coll., Sotheby's 22, vii, 1885).

This one, however, is of fine execution and not like that of the coarse 'East Anglian Runic' pieces, nor of the finer 'East Anglian animal type'. It would seem to be near the supposed archetype (which would be expected to be of good 'secondary' weight and metal) in technique, but as bad, or worse than the late East Anglian runics in its own weights and alloy. It is therefore an anomaly, but probably of earlyish 'secondary' date, perhaps 730s or 740s at latest.

11. West Stow. Site No. WSW 032, TL 811 719.

Single sherd of Ipswich ware from overgrown pit in Forestry Commission area.

12. Lackford.
Site No. LKD 001, TL 776 713.

(i) Large cremation cemetery known since 1874; subsequent discoveries and excavations continued until 1947 when the site was extensively, but not entirely, excavated by Lethbridge (Lethbridge 1951). The two Roman bronze crowns and the head-dress, sometimes referred to as the 'Cavenham Crowns', now in the Ipswich Museum, were found on this site before 1914. A further suggestion of an earlier ritual or burial use of this site was suggested by Lethbridge's discovery of two small rectangular Romano-British buildings, thought by him to be rifled burial vaults.

No inhumations have yet been recorded from this cemetery. The stated total of c.500 urns could well be less than half the total, to judge by the plan of Lethbridge's excavation and the surface scatter of potsherds. (Page 1911,1,344; Brown 1915,IV,791; *Proc. Suffolk Inst. Archaeol.*, XVI, 1918, 181-182; Fox 1923, 265; Lethbridge 1951.)

(ii) To the north of the cemetery, on the long slope to the flood plain of the Lark there is an extensive scatter of Romano-British and Anglo-Saxon potsherds. Fieldwork and reports by local people clearly indicate that this is a domestic site and not an extension of the cemetery (Author's records).

13. Cavenham.

No Anglo-Saxon sites are known along the frontage with the river Lark, but a strong local story concerns the discovery, 'behind Park Farm' before 1900, of two skeletons, associated with iron shears, pottery and glassware. Recent discoveries and field work suggest that the site is seven hundred metres to the north of the church. The situation is an interesting one; a small stream originating on the chalk belt to the south forms the boundary between Cavenham and Lackford before joining the Lark. The medieval village of Cavenham is situated nearly two miles up this stream, just south of a low area which was clearly a mere; the fields now there are known to have a layer of peat above blue clay. The suspected Anglo-Saxon cemetery is adjacent to this; the accompanying settlement must be close by, overlooking the mere or the stream (Lady Briscoe, pers.comm).

The Black Ditches cross Cavenham Heath, from the edge of the flood plain of the Lark. This, northern section, is partially destroyed in its southern part but can just be traced towards the deep stream bed of the tributary just described. The mere would lie just outside the line. The southern section of the Black Ditches does not appear in the field on the immediate opposite bank of this stream in Lackford, but starts again as the parish boundary between Lackford and a curious extension of Cavenham on the west side of the stream, high up on the break of the hill above the valley. The earthwork continues across Risby Poor's Hath toward the chalk ascarpment on Twenty Acre Hill. There is no dating evidence for this earthwork; an Anglo-Saxon secondary burial with a sixth century urn came from a barrow close behind the earthwork at Risby (Fox 1923, 265; Edwardson 1960, 153-160).

16. Icklingham, All Saints.
Site No. IKL 033, TL 782 719.

A single sherd of the Illington/Lackford potter was recovered from the plough soil on the site of the Romano-British church (West 1976, 102). No other indications of a settlement were found.

17. Icklingham, All Saints.
Site No. IKL 026, TL 778 722.

An inhumation cemetery at Mitchell's Hill has been known since the 1850s, when Warren (Warren 19th century) first records visiting the site. At least one burial as a secondary in a barrow and a possible horse burial, slightly adjacent and to the north of the cemetery are known. Cruciform brooches, a square headed brooch set with garnets (missing), a buckle with Style 1 ornament, a buckle of possible Frankish origin, a Roman spoon, girdle hangrs, tweezers, a pair of 'horned' brooches and other objects, including a so-called 'Romano-Saxon' pot are recorded (Prigg 1888, 67,70,71; Page 1911, 343).

A buckle and a belt end of the fifth century are also recorded from Icklingham, unfortuntely without any find-spots. Both are illustrated and described by Hawkes (Hawkes 1961, fig.20d, p.60; fig.23h, p.65).

18. Icklingham, St James.
Site No. IKL 006, TL 743 739.

The second, westerly parish of Icklingham. At the extreme west end of the parish, a settlement is known from the scatter of potsherds on the surface. The situation is similar to West Stow, being on a slight rise above the flood plain of the river. The size and chronological span is unknown; although no middle Saxon pottery has, so far, been picked up.

The Warren Hill cemetery is some 300 metres to the north, and although the two sites are separated by the parish boundary with Mildenhall, the two must surely be related. The settlement lies in a curious, elongated tract of riverside frontage in Icklingham; Mildenhall has an extension eastward from its main area, inserted between Icklingham and Cocclesworth, now the southern part of Eriswell.

19. Tuddenham, St Mary.
Site No. TDD 001, TL 741 703.

Between 1894 and 1897 a number of objects from this cemetery found their way into the Museum of Archaeology and Ethnology, Cambridge. One grave group has been reconstucted and the surviving fifty-four objects published (Kennett 1977, 39-61). Approximately a dozen graves appear to be represented, ranging from the late sixth century into the seventh. Such a small sample does not, of course, preclude an earlier date. Among the objects are two square-headed brooches (Leeds 1949, nos 10 and 25), three cruciforms, one disc brooch, one small-long and one annular. Early accounts (Ridgeway 1901, 587; Page 1911, 344) mention a sword, shield boss and an axe (Fox

1923, pl.XXXVI, 8A). A pyramidal sword-jewel and spearheads survive; the sword-jewel providing the early seventh century context. The site lies a few hundred yards beyond the headwaters of a small stream which feeds into the Lark in much the same situation as that at Cavenham, even to the proximity of a small mere. No settlement site has yet been located.

20. Mildenhall, Warren Hill. Site No. MNL 001, TL 744 742.

This inhumation cemetery, of which some of the graves were secondaries in a group of three Bronze Age barrows, was investigated at various times from 1820 to 1881. Eleven graves were recorded and others were evidently found.

The site, now quarried away, lay on the slope above the flood plain, very close to the parish boundary with Icklingham, and must be considered likely to be the cemetery of the settlement close by in that parish.

As the information is dispersed and requires some sorting, the graves are listed below:

1875. Secondary in central barrow; a toilet set, a volute handle (? R.B.), one of several graves mentioned in connection with the barrow.
1875. Shield boss and spear.
1875. Cruciform brooch and two circular brooches.
1876. Cruciform brooch and one circular brooch, *c.*100 amber beads and four silver 'shield' pendants.
1877. Three small-long brooches, two wrist clasps, small urn.
1877. Pair of spiral silver bracelets, two silver rings.
1881. Shield boss and fragments of wooden vessels with bronze binding pieces, probably a small pail.
1881. Iron spear.
1881. Iron knife, iron girdle-hanger, cruciform brooch, penannular brooch, a necklace with a crystal bead. Traces of a coffin.
1881. Cruciform with broken wings, sewn on to cloth; description suggests 'florid' type with masks.
1881. Small inverted black urn with six amber beads and half a gilt wrist-clasp.
?1877. Horse burial with small iron buckle.

(Prigg 1874, 287-299; 1888, 57-72; Page 1911, 341-3; Brown 1915, Vol.IV, 791; Fox 1923, 277).

Fenton, one of the collectors concerned with this site, had a tinned bronze fish in his collection, possibly a shield ornament. Meaney suggests that it might have come from this site. The same collector had a bronze swastika brooch with animal head terminals, discussed by Lady Briscoe, who considers it to be probably of mid sixth century date (Briscoe 1968, 53). Although there is no information concerning the site of its discovery, this brooch may have come from the Warren Hill cemetery, as some of the notes that are published appear fragmentary.

A cremation urn, reputedly from Warren Hill, was sold at Sotheby's in 1956; if the record is correct, this is the only evidence for cremations from the site. Two small urns, found at 'Three Hills' were sold at Sotheby's in 1963 and may, with some reservations, be related to this cemetery.

21. West Row.

A single sunken-featured building published by Lethbridge as from West Row, was, in fact in Freckenham, see below (Lethbridge 1933, 133).

22. Barton Mills. TL 71 74.

An inhumation burial was reported in the 1960s close to the old railway station at the east end of the parish and believed to be Anglo-Saxon (B. Green, Norwich Castle Museum, pers.commun.).

23. Herringswell.

An unsited, undated, Anglo-Saxon sword from here is noted by Fox (Fox 1923, 265) as being in the British Museum. Herringswell is on a branch of the same stream as Tuddenham, already noted, but without frontage onto the Lark.

24. Freckenham.

In the Museum of Archaeology and Anthropology, Cambridge, there is a pair of small, gilt bronze brooches, of a type normally confined to Kent and the Isle of Wight, as well as one and a half small-long brooches, probably also a pair. Nothing is known of the circumstances of the finds (*c.*1892), but the medieval village of Freckenham lis some two miles back from the Lark, on a major tributary, the Kennett. Nothing else of this period has been recorded on the Kennett valley which cuts across the chalk escarpment, rising in the clay belt well to the south (Page 1911, 344).

25. Freckenham. Site No. FRK 011. TL 67 74.

A single Anglo-Saxon SFB was excavated on flat ground overlooking the Lark by Lethbridge in 1930. Finds included sherds, bone pins, chalk spindle-whorls. The plan shows a pit, twelve feet long, without post-holes. Published as being in West Row, Mildenhall (Lethbridge 1933, 133). Ipswich ware is recorded from the area close to the motte and bailey castle.

The string of sites along the north-flowing stream through Mildenhall and Lakenheath should also be considered:

26. Holywell Row, Mildenhall. Site No. MNL 84. TL 714 765.

Finds from 1851 to the present, reported by Banks (1853, 305) included beads, three brooches and two pairs of clasps. Excavations by Lethbridge (1931) uncovered *c.*100 graves, but cemetery was clearly much larger, partly destroyed by chalk pit and more recently by metal-detector users. Date range covers fifth and sixth centuries, with wide range of grave goods.

27. Eriswell (Little). Site No. ERL 008. TL 731 802.

An inhumation cemetery, partially excavated in 1957, yielded thirty-three inhumations (Hutchinson 1966, 1-32). The annular, cruciform and rare square headed brooches, wrist-clasps and girdle-hangers fit into the local pattern of cemeteries; the fine sword and textile suggests some social distinctions. The site is in the original parish of Eriswell, which has now taken in Cocclesworth, a former parish to the south (see Foxhole Heath).

28. Eriswell (Foxhole Heath). Site No. ERL 003. TL 733 778.

Originally the parish of Cocclesworth. Inhumation cemetery finds from 1901-31, in Cambridge Museum of Archaeology and Anthropology: glass bead, two bronze finger rings a disc brooch and part of a cruciform, Lethbridge believed these were from Holywell Row. Elveden Estate Museum has two cruciforms, two small-long brooches, four annual and four pairs of wrist-clasps (Page 1911, 345), including a fine suite of Type 4 clasps of gilt bronze.

29. Lakenheath. Site No. LKH 010. TL 733 833.

On the north-east slope of Maid's Cross hill a confusion of finds can be equated with a mixed cremation and inhumation cemetery of the fifth and sixth centuries and some evidence for a domestic site some 400 yards to the north-east with potsherds, bronze tweezers, a cruciform brooch, an iron comb and a bone comb fragment. Both this site and that at Eriswell are at the head of small streams flowing into the fen.

Undley. Undley is now part of Lakenheath parish but was clearly originally a separate settlement. An unsited cruciform brooch is in Cambridge Museum of Archaeology and Anthropology, 35.540, (Reichstein 1975, Taf.119,2), and an iron sword and spearhead from Undley Fen.

30. Wangford. TL 75 83.

Some evidence for an Anglo-Saxon cemetery 'just south of the church', with beads, and a cast bronze 'handle'. A large cruciform brooch is in the Birmingham Museum (Meaney 1964, 235).

THE DISTRIBUTION AND SITING OF THE SETTLEMENTS AND CEMETERIES

The known distribution starts at the south side of Bury St Edmunds; three cemeteries ring the town, all are well outside the later Saxon and medieval site, as were, presumably, their settlements. Although the Ashmolean has a sixth century cruciform brooch from Bury and there are three spearheads in the Museum of Archaeology and Ethnology, Cambridge, there are no other records or reasons to suppose that they came from the town centre. So far the earliest material from the medieval core has been a few sherds of middle Saxon Ipswich ware from the site of the recent excavations within the monastic site itself (T. Fleming, pers.comm.). Trial excavations by the Suffolk Archaeological Unit on the Square House Hotel site at the southern edge of the medieval core in 1978-9 have failed to confirm the suggestion (Lobel 1935,8) that this was the original Saxon burgh before the construction of the Norman town. Only the Westgarth Gardens cemetery has sufficient material to suggest a date range: from the fifth to the mid-seventh century. The Northumberland Avenue material has a seventh century shield boss but is not a sufficiently large group to suggest a beginning date. From Bury St Edmunds to Mildenhall there are only two parishes which have not yet produced pagan Saxon material. For Flempton, this is hardly surprising as much of the parish bordering the river is occupied by a golf course; Fornham All Saints, on the west bank of the river, has more arable land by the river and might have been expected to produce material if it had been there; but the spread of post-war housing may have obscured any possible sites before organised observations were begun. The Fornham St Martin cemetery is slightly suspect; but although Meaney (Meaney 1964, 227) has suggested that the grave goods in Moyse's Hall really belong to the Fornham St Genevieve cemetery, the dating of the records however, strongly favour a cemetery in both parishes.

Where the sites are known with reasonable accuracy, those on the east bank can be seen to favour the land bordering the flood plain of the Lark valley. On the west bank, the cemeteries of Baron's Road and Westgarth Gardens, together with the adjoining parishes of Cavenham and Tuddenham, indicate settlements lying back from the main stream on small tributaries; followed in the last two cases by the medieval settlements on nearby sites.

The secondary burials in the tumuli at the north and south extremities of Risby are unsupported by any other Anglo-Saxon finds from the parish. There is a possibility that these are related to the Black Ditches; the first immediately behind the earthwork, the second just beyond the southern known limit but on a possible Roman road on the line of the A45 from Newmarket (Scarfe 1972, 63). This is the only Anglo-Saxon site to have been found on the chalk escarpment, on the north edge of the forested area.

THE RELATIONSHIP TO THE ROMANO-BRITISH SETTLEMENTS

The Romano-British settlement of the Lark valley is dominated by three large sites; Sicklesmere to the south of Bury St. Edmunds, where the Lark leaves the clay belt; Icklingham, in the central area and the Mildenhall fen edge complex of sites, centred perhaps around Thistley Green, the reputed site of the discovery of the Mildenhall Treasure. There is a continuous chain of small sites between these, particularly along the river valley, but spreading out also along the Roman road from Icklingham to Pakenham on the Black Bourn to the east. Icklingham is the best known site, with recent, large scale excavations and a long history of discoveries (West and Plouviez 1976, 63-125). Certainly the site continued until the latest recognisable Romano-British phase, sometime in the early fifth century, with a coin hoard containing coins of Honorius and Acadius. The site also had an important Christian connection; a free standing church and baptistery within its own cemetery. Icklingham was both large and important, if not wealthy, to judge from the three pewter hoards, five coin hoards and the use of stone and lead coffins in the cemetery. On the hill on the opposite bank of the river, two bronze crowns and a bronze head dress of discs and chains, were found on Cavenham Heath, on the site later occupied by the large Anglo-Saxon cremation cemetery. It is possible that there is some connection here with the Mildenhall Treasure. Icklingham would appear to be one of the 'open' major sites already noted in the preliminary section and therefore controlling in one way or another, a large area of the Breckland. In view of the Christian church in the late period it is possible that this was the centre of a Roman estate rather than simply a market centre serving a convenient area.

The dense concentration of Romano-British settlements along the Fen edge is not followed in the Anglo-Saxon period. Where there had been virtually continuous strips of closely related settlement and farmsteads from Mildenhall to Hockwold, the Anglo-Saxon pattern remains noticeably related to the river terraces and not the fen edge. It would seem likely that this is directly related to the evidence for high sea levels around AD 400 and the ensuing wetter winters and colder summers of the fifth and sixth centuries (Lamb pers.comm.).

THE RELATIONSHIP OF THE LARK VALLEY TO THE WIDER AREA

The immediately related group of sites are those which virtually physically connect the Lark valley with the Ouse by way of Holywell Row, Mildenhall; Eriswell (Foxhole Heath and Little Eriswell), Lakenheath and Wangford. A long arm of fen reaches south from the Ouse at Hockwold-cum-Wilton to within a mile and a half of the Lark at Mildenhall. The Holywell Row cemetery lies on the west bank, at the southern extremity, all the remainder on the east. Eriswell now embodies the older parish of Cocclesworth, in which the Foxhole Heath cemetery is situated; the Little Eriswell cemetery. on Caudle Common, is in the original parish. In Lakenheath there is a confused situation, but there appears to be a settlement with burials on each site. At Wangford a single inhumation is recorded. The physical situation of these sites is rather different from that in the Lark valley. With one exception all the sites are close to the headwaters of small streams well back from the main area of low-lying land. The exception is Foxhole Heath where there is no surviving watercourse. The placing of these sites reflects the conditions pertaining in the main valley, where there was a broad, low-lying expanse of fen with a slow-moving series of streams, the course of which are difficult now to follow, after the construction of the cut-off channel. The sites on the small feeding streams would have had the benefit of a clean water supply rather than the brackish water of the fen area.

Few of the sites have sufficient material to give a confident date range, but the following observations may be made. The 'Sahara Field' site at Lakenheath begins in the early fifth with a rare, round-backed iron comb (unpublished), Holywell Row had fifth century material and 'Little Eriswell' and Holywell Row continue into the seventh. (Note: Meaney places the Little Eriswell cemetery in Lakenheath, but Hutchinson (1966,1), makes the distinction quite clear.) The 'Sahara Field' site, which has produced settlement material (West, pers.obs.) is the only settlement site in the group, but has not been excavated.

The Foxhole Heath cemetery, now in Eriswell parish, but originally in the lost parish of Cocclesworth, has too few finds to suggest a date range, but nevertheless has good sixth century material. Wangford, from a site just south of the church, produced, ante 1915, glass and amber beads and a cast bronze 'hinged handle', taken by R.A. Smith of the British Museum to be evidence of an inhumation. Supporting evidence for an Anglo-Saxon site at Wangford is a large cruciform brooch in Birmingham Museum (Meaney 1964, 235; Page 1911, 345; Brown 1915, 111,105,pl.IX,1.) The Black Bourn valley, the next watercourse to the east of the Lark, flows from the central clay lands to the valley of the Ouse at Thetford. Strung out along it is a series of sites, from Badwell Ash to Brandon. The Badwell Ash site is on a long spur of river terrace gravel; the records in Ipswich Museum state that six shield bosses, spears, one ferrule and three knives were found. Local tradition (West, pers.records 1977) suggests two iron swords as well. There is then a long gap of nearly four miles before the next recorded site, at Grimstone End, Pakenham.

This site is now totally quarried away, but was originally a small spur confined by two streams. There was a long history of occupation, including an extension of the major Romano-British settlement around the crossing of the river further to the west. Between 1946 and the middle 1950s a number of Anglo-Saxon inhumations and 'hut' sites were found in the quarrying operations and recorded by Basil Brown and the Ipswich Museum. The material ranged from the early fifth to the sixth century, including a Frisian barred comb and a fragment of faceted-angled pottery (Brown *et al* 1954, 197-207; Owles & Smedley 1965, 194, comb fig.12). On the opposite bank of the river, an inhumation cemetery in a meadow near Cross House is suggested by the discoveries, in 1868-1871, of a pair of cruciform brooches, an iron sword, a spear, a knife and three shield bosses (*J.Brit.Archaeol.Ass.*, XXVII, pl.12, fig.2; Page 1911, 336-7). This cemetery may well be connected with the settlement on the site of the villa, a few hundred yards to the east (Page 1911, 311-12; Warren 19th century, 77; Maynard 1950, 213).

In 1943, at Ixworth Thorpe, close to the boundary with Ixworth, a bronze bowl with upright triangular lugs, a spear, a shield boss and an iron sword are indications of another inhumation cemetery; on the opposing, east bank, traces of another at Bardwell (Warren 19th century) include a shield boss (Page 1911, 336; *J.Brit.Archaeol.Ass.* ii,345).

At Honington, two sunken-featured buildings, both two-post type, were excavated in 1938-9 (Fell 1952, 41-42) just above the flood plain of the river. In Fakenham a settlement in a similar position was examined by Basil Brown in the early 1950s and a number of 'huts' recorded (unpublished). A second site in this parish, on the southern border, was recorded in 1978 when sherds from a single vessel were found in the edge of an old gravel pit, without any associated material.

In Barnham, where there were, originally, two medieval parishes, there are two sites which have produced settlement material and one burial, a secondary in a barrow, with a sword, knife, spear and shield boss (Caton 1914-15, 35-8).

The Black Bourn and its main tributary from Badwell Ash, is a twisting watercourse, in many places with a narrow flood plain, opening out into broader stretches of fen or low, wet meadows. The cemetery at Badwell Ash is well up the slope above the stream, as is that at Bardwell and the secondary site at Fakenham. For the rest, however, the settlements and cemeteries lie close to the edge of the flood plain, with evidence of only one in each parish represented.

An interesting contrast to the West Stow settlement has recently been examined at Witton in north-east Norfolk. Intensive fieldwork has revealed four separate areas of early Anglian occupation. The sites are not in a river valley location, but the main site is situated on a sand and gravel knoll. Excavation on the main site revealed a series of sunken-featured buildings which the excavator interpreted as a single farm. Occupation spans the fifth and sixth centuries on the main site and of the outlying associated sites one is sixth century, one is fifth century and one undated. The excavator suggests that these outlying buildings may well be associated with the expansion of cultivated land.

Although artefactual and ecofactual evidence is poor, weaving and iron working were important activities and cereals and livestock are represented (K. Wade, pers.comm.).

It is possible that this represents a contrasting form of settlement to West Stow with origins in a single farm rather than a proto-village.

MIDDLE SAXON SITES AND THE SEVENTH CENTURY

The distribution of Middle Saxon sites, as defined by the presence of Ipswich ware, is, as yet, completely distorted by the imbalance of the evidence. The Ipswich ware from the excavated site at West Stow is therefore of considerable significance in that it can be seen to form a continuum with the late pagan pottery in the early seventh century. Furthermore, the presence of this pottery in an unpretentious settlement of this kind demonstrates the long range connections with Ipswich at an early stage of its development. The importance, both political and economic, of Ipswich as a probable royal foundation with strong continental links can be seen more clearly if small settlements in the remoter parts of the kingdom were in receipt of Ipswich ware in some quantity. Other settlements in the Lark valley and elsewhere in West Suffolk can reasonably be expected to be in a similar relationship. The extensive field work, engendered by the excavation in the parish of West Stow, has shown two further Ipswich ware sites. The first, close by the river, 1600 metres to the east of the pagan settlement, has produced Ipswich ware sherds and a sceatta of c.730-740 at the latest (Rigold). This site spreads to the east with a range of Thetford to medieval wares, suggesting a continuous occupation. Just to the north is the present West Stow Hall, on the site of Jenney's, the second manor in West Stow. The second middle Saxon 'site' is a single sherd of Ipswich ware from a gravel pit well back from the river, on its tributary, running back towards Wordwell.

The only other site in the Lark valley to produce Middle Saxon pottery is Bury St Edmunds, from the north side of the monastic buildings. It is not known whether this represents material from the early monastic site or from a civil settlement fronting a road originally joining Northgate and Southgate streets, crossing the monatic site in line with the west front of the later Abbey church.

The West Stow settlement and some of the cemeteries in the Lark valley can be seen to continue into the seventh century, but none of them can be shown to have an extensive life into the Christian period, even allowing for the possibility of some of the unaccompanied inhumations representing Christian burials. Movement away from the West Stow settlement

has been shown to have taken place over a period of time, from before the introduction of Ipswich ware, and it seems likely, even from the available evidence, that a similar shift occurred from the other settlements. In the case of West Stow and a number of others, including Icklingham St James, Lackford and Mildenhall, the shift involved a considerable distance at one move. The reasons for such a radical change of sites are not easy to understand. The evidence from West Stow suggests that it was not only gradual, but was not necessarily concerned with the siting of a church after the conversion. It is noticeable that the earlier, pagan settlements have no suggestion of internal property divisions and that these only begin to appear at the last phase at West Stow and in full blown Middle Saxon settlements. The 'shift' may then be the result of a whole series of changes taking place, including the political consolidation of the Wuffingas; trade with the Continent; economic changes brought about by the establishment of towns and the reorganisation of production with the development of specialist industries; the Christian conversion and the development of 'property' on a personal or family basis. Nevertheless, the movement of settlements in the seventh century marks a dramatic change in the ordering of the settlement pattern, and hence in the life of the people.

THE LARK VALLEY PARISHES
(Fig. 305)

As the Lark progresses from Bury St Edmunds to the Fen edge at Mildenhall the parishes become increasingly long tracts with a river frontage backed by higher, dryer land. The three pagan cemeteries within the bounds of Bury itself suggest that the Beodericsworth of the seventh century was previously a number of settlements; two of the cemeteries concerned lie on the south side of the Linnet, with the main portion of the town to the north. Of the threee Fornhams, two have pagan Saxon remains and the third, all Saints, on the west bank of the Lark is at present, a blank. Hengrave, (Hemegretham, D.B.), may well be a *'hamm'* rather than a *'ham'* name, but has an apparent pagan settlement. Flempton, one of the few *'tons'* in the valley, is likely to be a late naming, meaning 'ton of the Flemmings', either replacing an earlier name or representing a splitting off from Lackford or Hengrave. Culford and West Stow, on the opposite bank, are long, narrow rectangles, with Wordwell on a small tributary of the Lark, between them. The configuration of the boundaries of Wordwell suggests that it had been carved out of both West Stow and Culford; Wordwell is mentioned in the will of Thurketle as a gift, along with Culford, to the Abbey of St Edmund in (958 or 1042) and in the Domesday Survey is recorded as doing service in Culford. Extensive fieldwalking of the parish has produced late Saxon Thetford-type ware between the church and the stream, but no pagan or middle Saxon pottery. The results of the fieldwalking supports the suggestion that the parish of Wordwell is a later insertion into an older pattern of land division. The establishment of Wordwell in the late Saxon period may suggest some relationship between West Stow and Culford. Scarfe (1972, 77) suggests that the 'West' in West Stow, first recorded in 1250, may simply have been to distinguish it from Stowlangtoft, some nine miles to the east; a suggestion which may be supported by the fact that both parishes were in the same double hundred of Bradmere/Black Bourn. The 'Stow', meaning 'place' or 'holy place' may refer to the church, which is in an interesting relationship to both West Stow and Culford as it is situated on a small gravel spur cut off from the main part of West Stow and the middle Saxon site some 800m to the west, by a marshy stream from the north.

Field work and recent building on the north side of the church has failed to produce pottery of any period although much of the area to the west of the church is under the gardens of the old rectory. The relationship of the church site to Culford is emphasised by the fact that the parish boundary is only some eighty metres to the east of the church.

It seems possible that some special relationship existed between the people of West Stow and Culford which resulted, ultimately, in the establishment of a new community of Wordwell, (*Wridewellan c.*1025, Ekwall 1966, 534). Ekwall states that *Wridewella* is an old name of the Lark, without giving the authority, meaning 'winding brook', and draws attention to Worlington, also on the Lark, but further downstream, with the same derivation.

Some connection must have existed between West Stow and Lackford in the pagan period, if the Lackford cremation cemetery was, as it appears, drawing on a wide area. A further connection with Lackford was recorded in the time of the Domesday Survey by the 'socage' services of the twenty-one 'freemen' of West Stow that they performed in Lackford, by then in a different hundred, and the statement relating to the church 'with twelve acres of free land in alms', reckoned as 'lying in a different hundred'. It is arguable whether this means the church and the free land, or just the free land that lay in another hundred, but Scarfe (1972, 78) suggests that this statement also relates to a connection with Lackford.

The 'West holy place' could then, simply mean that West Stow was the western part of a larger area, related perhaps by kinship but with distinct settlements. The position of the church, as possibly being shared initially, and the development of Wordwell, strengthens this view.

The two parishes of Icklingham, like West Stow and Culford, ran from a river frontage to the high, dry area of the central watershed of the breckland, to form a border with Elvedon. Whatever the derivation of the place-name (Scarfe 1972, 127-131; Martin 1976, 133) it remains a 'ham' name and there is a pagan background for both Icklingham parishes. The settlement for St James, the western half, lies at the extreme point of the parish, on a narrow tongue of land backed by an extension of Mildenhall. The accompanying cemetery of Warren Hill is now just inside the Mildenhall boundary but must surely have belonged to the adjacent settlement.

Lackford, a square block backing on to the large parish of Risby, has a long river frontage, and includes the great cremation cemetery at the west end. The Icknield Way bisects the parish, to cross the Lark to

form the boundary between West Stow and Icklingham All Saints.

Cavenham and Tuddenham are both long narrow rectangles running back from river frontages; both have cemeteries on small tributaries, well back from the Lark. Barton Mills is backed by Herringswell; both the shape of the parish and the late name suggests that the original territory was a long narrow block conforming with the others. Worlington derives from 'Wridewella', an old name for the Lark (Ekwall 1966, 534) and would seem to have been developed out of Freckenham, the next parish with which it makes a large square block, on the edge of the fen.

Mildenhall is the largest parish in Suffolk, incorporating a number of minor settlements and a large area of fenland. A Coldham and a Bagsham are included.

The Lark valley place names are, at first glance, a mixture; there are three 'tons', Flempton, Barton Mills and Worlington, all of which can be excluded from a possible 'early' pattern. Barton Mills and Worlington are both demonstrable partitions of other parishes and Flempton as the 'ton' of the Flemmings is clearly a late name. The place names that are left include those connected with water; Culford, Lackford and Herringswell and the 'hams'. Of the two remaining, Mildenhall includes one 'ham' name on the north bank of the Lark (Bagsham) and West Stow. There is a suggestive locality in West Stow called 'Wideham' which covers the area of the cemetery, now applied to the nearby cottages and an unassociated barn. Although this name cannot be traced beyond the nineteenth century, there must remain the possibility that this unusual name has a greater antiquity, in which case West Stow could be grouped among the *ham* names.

It would be tempting to equate the *ham* names with the early settlement pattern of the Lark valley, but when the spectrum is widened to include the rest of Suffolk, a very different pattern emerges. Taking the county as a whole, only 15% of the *ham* settlements have pagan Saxon sites and the majority of those are in the Lark valley. Furthermore, the distribution of *hams* show a heavy concentration on the clay soils in central Suffolk and on the heavier gravels and loams inland from the east coast, bordering the clay. Although some of these occur on Roman roads, particularly the Colchester to Caistor-by-Norwich route, there are many which are not so related. The overall impression is that although the pattern of 'ham' names equates very well with the pagan settlements in the Lark valley, it clearly does not do so elsewhere, which suggests that either 'ham' names continue to be applied over a long period and to new settlements as they developed beyond the areas of primary settlement, or they all belong to a secondary phase, possibly in connection with the settlement shift of the seventh century.

PART 5. CONCLUSIONS

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The virtually total excavation of the West Stow settlement, coupled with the re-assembled material from the adjacent cemetery provides an unusually complete basis for the analysis of an early Anglo-Saxon community. This, in turn, is examined against the background of late Romano-British settlement in the Lark valley and the evidence for Anglo-Saxon colonisation.

Romano-British exploitation of the Lark valley was extensive, beginning with a settlement of some size at Sicklesmere, where the Lark first emerges from the clay belt and continuing with scattered farmsteads along both banks of the river, normally situated just above the flood plain. At Icklingham a major centre was linked by road to Pakenham and is known to have had a Christian church and cemetery in the last phases of Romano-British occupation. The imported stone coffins, coins and pewter hoards, the lead cisterns and the evidence for a baptistery lend support to the suggestion that this may have been the focal point for the Christian church locally.

It is worth noting that not a single sherd of the so-called 'Romano-Saxon' pottery was recovered from the West Stow site, and the association of the well known vessel from Mitchell's Hill with an early Anglo-Saxon context is questionable. Two late Roman coin hoards from Icklingham contain Honorian issues and could have been deposited at any time after *c.*395, which, together with the pewter hoards and the Christian church, suggest that Icklingham remained an important centre until the end of effective Romano-British local administration. From Icklingham to the fen edge the settlement thickens; the fen edge sites forming an almost continuous band from Cambridgeshire to Hockwold and beyond in Norfolk.

The early Anglo-Saxon settlement at West Stow was founded on an unoccupied site; the Romano-British potters having abandoned the knoll in the mid second century and there is no evidence of late Romano-British settlement in the immediate vicinity.

Two main problems are identified with the earliest phases of the Anglo-Saxon settlement in the Lark valley. The first concerns the dating of the initial settlements. At West Stow there are faceted-angled vessels, Anglian corrugated wares and the cordoned vessel from SFB 52 which is related to Myres' early group of hollow-necked and biconical forms with horizontal, linear designs (Myres 1977, fig.88), together with the boars' tusk amulet from the same SFB. The iron upturned-foot brooch from SFB 61 and the one, or possibly two, bronze examples from the cemetery, point to an 'early' fifth century phase.

There is, however, a lack of distinctive late Roman military equipment; apart from one strap end from SFB 35, a late sixth century SFB, and the boars' tusk amulet from SFB 52; from either the settlement, where such material would perhaps be less likely to have been lost, or from the cemetery. The cemetery was not apparently completely excavated in the nineteenth century, which could, perhaps, account for this, but the record mentions two acres as having been 'turned over', so there is a fair chance that a representative collection of material is represented by the surviving finds.

A thin scatter of late Roman military equipment has been found in the Lark valley, however, and the adjacent areas. From Icklingham, presumably the local adminstrative centre, there is a bronze buckle of Hawkes' Type IIIA and a strap end of her Type VA (Hawkes 1961, figs. 20d, 23h). At Ixworth there is a strap end of Type VA (Hawkes fig.23g) and a Type IIA buckle from Lakenheath (Hawkes fig.18j). A little to the north, at Croxton, Norfolk, there is a disc attachment of Type VI (Hawkes fig. 24f). There are no known contexts for any of these objects.

It is noticeable that the early Anglo-Saxon settlement pattern is marginal to the Romano-British sites; West Stow is on an unoccupied site; Mitchell's Hill, although a cemetery, is outside the main area at Icklingham; the second Icklingham site at the west end of St Mary's is outside the main spread of Romano-British settlement.

A similar situation can be seen at Grimston End, Pakenham, where there is evidence of early Anglo-Saxon settlement on an earlier Romano-British site, but Grimston End is the marginal, industrial area of the main site further to the west, close to the crossing of the river. The real extent and nature of the late Roman site at Grimston End is also not very clear.

There is some evidence of Anglo-Saxon squatting in local Roman villas, as at Redcastle Farm, Pakenham; Ixworth and Stanton, but these cannot be dated to provide real evidence for continuity.

The preponderance of bases in the late Romano-British pottery from West Stow demonstrates that a selective process was in progress rather than trade from viable communities. The coins further suggest that they were acquired by gleaning; together the pottery and the coin evidence, over the two centuries of Anglo-Saxon occupation, strengthen the view that late Romano-British material on the site was the result of salvaging useful material, presumably from the nearby site at Icklingham. It is worth recalling the collection of nails, hinges and other iron objects found in the lead tank in the ruinous late Roman Christian church at Icklingham, which suggests a methodical search for raw materials (West and Plouviez 1976; 74, 122).

The cultivation of spelt, as evidenced from the mid fifth century SFB 63, is an interesting part of the agricultural history of the Lark valley, and suggests some degree of agricultural continuity with the preceding Roman period, and, because of the specialised methods necessary to process the grain, suggests that the continuity included the technology, as well as the seed. This could be an important factor in the consideration of the ultimate fate of the local Romano-British peasantry. It is interesting to note that the production of spelt as a crop seems to have disappeared by middle Saxon times.

In all, the case for a real overlap of cultures is weak and there is more evidence to suggest that the early Anglo-Saxon settlers were exploiting a situation of a

declining economy coupled with severe political instability. The precise dating of this take-over cannot, on present evidence, be ascertained, but could be eventually forthcoming from a large series of carbon 14 dates, particularly from late Romano-British sites as well as from Anglo-Saxon settlements.

The second problem associated with the early Anglo-Saxon settlement of the Lark valley concerns the survival, or otherwise, of the local Romano-British population, both in the Breckland and the central clay belt. We know that during the Romano-British period many settlements were established in the clay areas, supported by the extensive road system which traversed it, but very little is known about the status or date range of these settlements. In many cases, fieldwalking suggests that they were scattered farmsteads rather than communities. Nevertheless, as the distribution of these small sites is becoming increasingly known, the evidence is beginning to suggest that there was a considerable Romano-British population on the clay, with larger groups on the lighter soils, along the fen edge and in open centres often of some considerable size.

If West Stow is, as it appears to be, a normal sized Anglo-Saxon settlement for the Breckland area, the size and number of these early settlements in relation to the Romano-British population seems very small and hardly able to accommodate both populations. The distribution of early Anglo-Saxon sites shows a consistent preference for the light soils and gravels, particularly along the river valleys, with not a single site on the clay. There is, to date, no archaeological evidence for the survival of Romano-British communities in the clay belt; there the post-Roman occupation appears to begin with a thin scatter of middle Saxon sites, typified by Ipswich ware, and not necessarily associated with the parish church. There remains a considerable problem: did they survive somehow, perhaps in a basically aceramic condition, or were they, in the main, drawn to the new settlements on the lighter soils to become slaves or some subordinate stratum of society, as indicated by later documentary evidence, or was the population drastically reduced by pestilence or genocide?

By the time of the Domesday Survey most of the parishes of Suffolk were already in existence, implying recognisable communities. How many of these were of middle Saxon origin, is unknown. The problem then is that from the available evidence there appears to have been a considerable contraction in the population in the fifth century, followed by what must be supposed to be a population explosion beginning in the seventh century to provide the settlements of the late Saxon period. Some evidence for possible British survival is provided by the small number of place names with British elements in East Anglia (Jackson 1953, 236). One further possibility is suggested by the presence of traces of *themis cotula* (stinking mayweed) in SFB 63. As Murphy points out, this plant is much more characteristic of the heavy boulder clay soils and its presence in the West Stow material may indicate the importation of seed corn from the clay region. There are substantial quantities of pig bones in the faunal collection from West Stow, which could suggest the necessity for pannage in a more wooded area; which, together with the evidence for spelt, may begin to be used for the recognition of the survival of British elements in the forested areas. So far, none of the small Romano-British sites on the boulder clay have been examined by excavation, so we have little idea of their date range or economic basis. It is evident, however, from the surface collections of material, that they tend to be relatively poor, with little Samian or later imports. Clearly, the full scale excavation of some of these sites should be a priority, provided they can be identified before they are totally destroyed by modern agriculture.

The question of the origins of the settlers at West Stow is not straightforward. The faceted-angle pottery is sufficiently widespread in the settlement to suggest real connections with the Elbe-Weser area, but other elements are also apparent. There is a limited amount of 'Anglian' type pottery which is more common in the Norfolk cemeteries, but whether this indicates direct continental, or more local connections, cannot at this stage be ascertained until more work is undertaken on local cemeteries and settlements.

The round-backed combs from the earlier SFBs are more at home with the Frisian terps than in the series from further north on the continent, but the large group of triangular combs would appear to have affinities or origins in the late Roman series of the middle Rhine and their developments into the upper Elbe-Weser area. Another important element is the presence of early Frankish material in the form of three brooches with up-turned feet, one of iron and two of bronze, the latter from the cemetery. To this mixture must presumably be added a proportion of subsumed local Romano-British population, but in what numbers and of what status cannot be known.

The major structures and the pattern of the settlement itself are not easily paralleled on the Continent. The SFBs cannot be simply equated with an Anglo-Saxon invasion; for, as Van Es has shown, these have wider cultural connections with non-Anglo-Saxon areas; the larger, post-built structures, or 'halls', as far as parallels can be drawn, seem to be more related to the domestic ends of Wijster type houses. The aisled hall, which one might expect in an Anglo-Saxon context, is entirely lacking, at least in the early phases. The physical migration from the Continent would appear to have been a great leveller; not only are various cultural elements clearly mixed in the earliest phase at West Stow, but the establishment of new settlements seems to have involved a drastic reduction in settlement size and layout with the emphasis on two main structures, the halls and the SFBs. The West Stow settlement is close to Bremen-Grambke in the sense of a loose-knit arrangement, with an emphasis on SFBs, but, so far as the plan of Bremen-Grambke goes, without comparable post-built halls. At a later date, Gladbach, near Cologne, is a seventh-century site of a similar nature.

It has been argued in this report that there is a discernible pattern of development in the West Stow settlement. At the outset there appears to have been three main units of groupings of halls with attendant SFBs. This arrangement can be seen to have continued throughout the lifetime of the settlement, with the exception of the Hall 1 group which is incomplete, but may represent a failed group as an offshoot from one

of the others, or an intermediate stage. The pattern of halls and SFBs and their replacement through time is remarkably consistent and can be compared both with Wijster and particularly with Warendorf, although at West Stow the replacements are not restricted by property boundaries in the early stages. Furthermore, it demonstrates the stability and success of the settlement both from the economic and social view points.

In terms of specific buildings, it is worth noting that at West Stow there are a number of varieties of 'sunken-featured buildings', but that in England as a whole, the six-post type is confined, so far, to East Anglia. The concept of SFBs being above ground structures as opposed to sunken-houses is advanced here on the basis of considerable detailed study and has, furthermore, been the subject of a long term experiment by reconstruction on the site since the close of the excavation. There remains the possibility that more than one type of building could leave behind similar traces in the soil and that not all structures grouped under the term SFB are the same; clearly they are not, as some, at least, are demonstrably cellared buildings and others have hearths claimed to be on the floor of the pit. The reconstructions at West Stow, showing the SFBs with floored-over pits demonstrate one important fact, however, that the structures postulated from the evidence found in the excavation are viable even on the lowest level of technology, using only the simplest joints and entirely without nails or pegs of any kind; a level of technology well below that which we believe these people to have had.

The size of the community at West Stow in terms of population cannot be determined, although *c.* 100 graves are mentioned in the nineteenth century account of the cemetery excavation. To the incomplete cemetery evidence must be added the problem of the Lackford cremation cemetery and the probability of that cemetery drawing on a wide range of local settlements, in contrast to the other Lark valley cemeteries, which are basically inhumations with a few cremations. Nevertheless it is suggested that the West Stow community consisted of three, possibly four, extended families, probably with a number of slaves.

As to the status of the community, the spears in the cemetery suggest warriors, some of whom had shields. The rarity of swords in this and the local cemeteries suggests that these objects were of particular significance and that it is likely that only one person in such a community at any one time might have had the right to bear a sword, either new or as an heirloom, as a symbol of rank. This may be reflected in the settlement at West Stow by Hall 2, with its central position, internal division and different structural composition. If this is so, that status is not reflected in terms of the material possessions from Hall 2 and its attendant SFBs. Each family group has SFBs which are rich in objects and others which are not. The material from the Hall 2 group is not noticeably different from the rest, with the exception of the iron tripod lamp.

The economy of the settlement was based on mixed arable and animal farming, taking over land already under cultivation and land management generally, in terms of woodland and coppicing. The faunal evidence points to considerable flocks of sheep, run on the high, dry areas of the Breckland backing the arable belt along the valley slopes. The numbers of cattle are interesting in that it is suggested by Mrs Crabtree that cattle were a more important source of meat than the more numerous sheep. By the time of the Domesday Survey, sheep were the predominant animal, cattle are not mentioned, although it must be remembered that the Domesday Survey had, for Suffolk generally, a remarkably low record for cattle. Pigs are also an important component in the faunal record but it remains to be seen whether the numbers are such as to suggest that they must either have originated in the forest zone or have been driven there from the Lark valley settlements; or whether they could have been supported locally. The faunal evidence shows that there was some hunting of red and roe deer, supported by the evidence for the bow in the settlement and that wild fowling and fishing supplemented the diet, along with the domesticated fowls and geese.

The large numbers of cattle support the view that the post-built structures were not cattle sheds as there would not have been sufficient space to house them. The climatic evidence for the period, suggests that overwintering of cattle would have been quite feasible at that time.

The evidence for arable farming is not so complete as that for animal husbandry, but there is sufficient material for some interesting observations. The presence of spelt has already been mentioned in relation to the survival of the local Romano-British population, and hence, their technology. Barley, rye and bread/club wheats were all cultivated; oats occur but are thought to represent contamination rather than a crop. The one unidentifiable, pea-sized leguminous seed from SFB 63 is the sole representative of other vegetable crops.

In other ways the settlement shows a considerable degree of self-sufficiency with a number of crafts being practised. The large quantities of pottery, together with antler pot stamps, fairly establishes pottery making in the community; the wide variety of styles and the apparent individuality of many of the stamps suggest that pottery making was practised by a number of people rather than one or two specialists at any time, except perhaps in the case of the Illington/Lackford potter.

Spinning and weaving are well attested by the numbers of implements and loom weights although there is some distribution evidence to suggest that weaving at least was a more restricted practice, although it should be remembered that looms are moveable and may have been installed in one or two of the SFBs in each family group at any one time.

There is considerable evidence for bone working; of splitting, paring, sawing and drilling to produce a wide variety of bone tools and combs. A number of combs can be reasonably grouped as the products of single craftsmen, suggesting some specialisation. Iron working on a relatively small scale is evidenced by the slags, while the paucity of large iron objects suggests recycling of worn-out implements.

Traded items are difficult to identify in the earlier phases of the settlement as some of the foreign material could well have been brought over with the early

settlers, but by the late sixth century the trading patterns in potters, pots or their contents are evidenced by the Illington/Lackford pottery, for example. The fine brooches in the cemetery, the glass and the beads of glass and amber are indicative of trade surplus. In the late phases the silver shield-pendants and the cowrie shell (Pit 87, Fig. 231,15) must reflect the growth of trade in expensive items, as does the quantity of the more mundane Ipswich ware. The economy of the settlement was clearly buoyant; agricultural surplus in the form of crops, wool, hides and by-products and also possibly slaves forming the basis of exchange.

In the seventh century the settlement decayed as, one by one, the family groups moved away from the knoll. One new site was established at this time to the east, near, but not adjacent to, the church site (Fig.4). A second, apparently short-lived site, (Fig.5,H) probably an outlying farm, has been found in the west, close to the crossing of the Icknield way over the Lark. The main site, nearer the church seems to have continued into the medieval period. A solitary fragment of Ipswich ware found high up the minor tributary may indicate a shifting development toward the foundation of the Wordwell settlement in the late Saxon period.

Throughout the Lark valley there is evidence of the movement of population centres in the seventh century. The West Stow evidence would suggest that it was a gradual process over a generation or so rather than a single event. It is not clear, nor can it be, unless large scale excavations are undertaken, whether or not the new site at West Stow accommodated all, or only some, of the original groups, or whether it developed into one of the manorial sites.

The settlement pattern of the Lark valley, as evidenced by the cemeteries and such settlement evidence as there is, demonstrates that the division of the land took place in the early Anglo-Saxon period and that the parishes as we see them today still largely reflect that division, with the exception of the late 'ton' names, Flempton, Barton Mills and Worlington, and the Late Saxon insertion of Wordwell. The status of the Romano-British settlement at Icklingham is not known, apart from the suggestion, from its size and Christian church, that it was at least a local administrative centre, if not an episcopal one. There is nothing, however, to suggest that it was an estate, to which the early Anglo-Saxon settlement might have conformed. The Anglo-Saxon land division looks purely functional and economic, with river frontages, water meadows and arable land, backing on to extensive high, dryer sheep walks, at least in the central area of the Lark. All four tributaries to the south have settlements on those instead of the Lark itself. With the exceptions noted above, the basic pattern of land division can be seen to belong to the early Anglo-Saxon period and, although occupying land already exploited and managed, apparently masking any earlier pattern of ownership.

The cemetery evidence does not suggest that the undated earthwork known as the 'Black Ditches', running from the flood plain of the Lark to the edge of the forest, marks any kind of local division in the early Anglo-Saxon period, as the funerary material is consistent all down the valley. The early Anglo-Saxon settlement at West Stow would appear to be typical of such communities in the Lark valley and in the neighbouring Black Bourn. As a community of three or four families, having some inter-relationships of craftmanship and independent movement, both on the site and eventually by moving away from it, the settlement should be considered to be a 'village' in a general sense. The presence of swords suggests a degree of rank which is echoed in the surrounding cemeteries, although in this, early, phase of Anglo-Saxon development caution should prevail over the close identification of rank in what might be seen as 'proto-villages'. Settlements of the West Stow pattern may well be seen as typical for the river valleys in north-west Suffolk, but should not be used as the norm for elsewhere in East Anglia. The first indication that this is not so is the analysis by Keith Wade of the remarkable work of John Owles in Witton on the north-east coast of Norfolk, where limited excavation and intensive fieldwork have revealed an interesting contrast to the West Stow settlement. There, the main occupation site, although not in a river valley, was situated on a sand and gravel knoll. Settlement spanned the fifth and sixth centuries and there were three further areas of Anglian occupation in the parish. The excavator interprets the main site as a farm with outlying houses which might be associated with the extension of arable land under cultivation. The site is poor in ecofactual and artefactual evidence, but weaving and iron-working were clearly important activities and crops and livestock are represented. Sunken-featured buildings only were excavated, but the excavations were small scale (Wade, forthcoming).

The wealth and supremacy of the Wuffingas in the early seventh century and the development of the Middle Saxon port of Ipswich surely implies a considerable supporting rural population; West Stow is but one village in a particular environment in the western half of East Anglia and needs now to be augmented by settlement studies on the east coast if the foundations of Anglo-Saxon and medieval East Anglia are to be understood.

BIBLIOGRAPHY

Åberg, N., 1926 — *The Anglo Saxons in England,* (Cambridge and Uppsala).

Addyman, P.V., 1964 — 'A Dark-Age settlement at Maxey, Northants', *Medieval Archaeol.,* VIII, 20-73.

Addyman, P.V., 1969 — 'Saxon Southampton: a review of the evidence. Part II, Industry, trade and everyday life', *Proc. Hampshire Fld. Club Archaeol. Soc.,* XXVI, 61-96.

Addyman, P.V., 1972A — 'The Anglo-Saxon house, a new review', *Anglo-Saxon England,* I, 273-307.

Addyman, P.V., 1972B — 'Anglo-Saxon houses at Chalton, Hampshire', *Medieval Archaeol.,* XVI, 13-31.

Addyman, P.V., and Leigh, D., 1973 — 'The Anglo-Saxon Village at Chalton, Hampshire: second interim report', *Medieval Archaeol.,* XVII, 1-25.

Ahrens, C., 1966 — 'Vorgeschichte des Kreises Pinneberg und der Insel Helgoland', *Die Vor- und frühgeschichtlichen Denkmäler und Funde in Schleswig-Holstein,* Band VII.

Akerman, J.Y., 1855 — *Remains of Pagan Saxondom,* (London).

Aldsworth, F., 1978 — 'The Droxford Anglo-Saxon cemetery, Soberton, Hampshire', *Proc. Hampshire Fld. Club Archaeol. Soc.,* 35, 93-182.

Ament, 1967 — 'Flonheim 78- Ders.', *Germania,* 45, 190.

Asmus, W.D., and Rudolph, M.V., 1938 — 'Das Flechtwerkhaus von Hambühren, Kr. Celle', *Nachrichten aus Niedersachsens Urgeschichte,* 12, 78-88.

Banks, Rev., S., 1853 — Note in 'Quarterly meetings', *Proc. Suffolk Inst. Archaeol.,* I, 305.

Banfer, L., Stieren, A., and Klein, A., 1936 — 'Eine germanische Siedlung in Westick bei Kamen, Kr. Unna, Westfalen', *Westfalen,* XXI, Heft 7, 410-453.

Barker, A.R., 1918 — 'Anglo-Saxon Urns found near Lackford', *Proc. Suffolk Inst. Archaeol.,* XVI, 181-2.

Barton, K.J., 1962 — 'Settlements of the Iron Age and pagan Saxon periods at Linford, Essex', *Trans. Essex Archaeol. Soc.,* 3rd ser., I, 57-104.

Beek, R. van and van Es, W.A., 1964 — 'Nederzettingssporen uit de Laat-Romeinse Keizertijd bij Dalfsen (Ov.)' *Westerheem,* 13, 13-28.

Behm-Blancke, G., 1956 — 'Die germanischen Dörfer von Kablow bei Königs Wusterhausen', *Ausgrabungen und Funde,* 1, 161-167.

Behm-Blanke, G., 1958 — 'Germanische Dörfer in Brandenburg', *Ausgrabungen und Funde,* 3, 266-269.

Biddle, M., 1965 — 'Excavations at Winchester, 1964', *Antiq. J.,* 45, 230-266.

Biddle, M., 1967 — 'Health in medieval Winchester. The evidence from excavation' in Cockburn, T.A.(ed.), *Infectious Diseases, Their Evolution and Eradication,* 58-60.

Boe, G.de., 1977 — 'De Romeinse Vicus op de Steenberg te Grabbendonk', *Archaeologia Belgica,* 197,42.

Boeles, P.C.J.A., 1951 — *Friesland tot de elfde Eeuw,* (S'Gravenhage).

Böhme, H.W., 1974 — *Germanische Grabfunde des 4 bis 5 Jahrhunderts zwischen unterer Elbe und Loire,* (Munich).

Böhner, K., 1958 — *Die fränkischen Altertümer des Trierer Landes,* (Berlin).

Boon, G.C., 1966 — 'Gilt glass beads from Caerleon and elsewhere', *Bull. Board Celtic Stud.,* 22, 104-9.

Bourdillon, J., and Coy, J., 1976 — *Statistical Appendix to Accompany the Animal Bone Report on Material from Melbourne Street (Sites I, IV, V, VI, and XX). Excavated by the Southampton Archaeological Research Committee between 1971 and 1976.* Available from S.A.R.C. 25A Oxford Street, Southampton.

Bourdillon, J., and Coy, J., 1980 — 'The Animal Bones' in *Excavations at Melbourne Street, Southampton, 1971-76',* (C.B.A. Research Report 33), 79-121.

Bramwell, D., 1980 — 'Identification and Interpretation of Bird Bones', in Wade-Martins, P., *Excavations at North Elmham Park 1967-72,* (E. Anglian Archaeol., 9), 409-412.

Brandt, K.H., 1958 — 'Eine völkerwanderungszeitliche Siedlung in Bremen-Grambke', *Germania,* 36, 205-215.

Brandt, K.H., 1965 — 'Stand der Untersuchung der völkerwanderungszeitlichen Siedlung Bremen-Grambke I', *Germania,* 43, 395-401.

Briscoe, T., 1968 — 'The Anglo-Saxon S-shaped brooch in England', *Proc. Cambridge Antiq. Soc.,* LXI, 45-53.

Brisson, A., Hatt, J., and Rouchet, P., 1969 — 'Les tombes gallo-rommaines de Damery', *Mem. Soc. d'Agriculture, Lettres et Arts de Chalons-sur-Marne,* 39-56, Taf. 1-3.

British Ornithologists Union, 1971 — *The Status of Birds in Britain and Ireland,* (Oxford: Blackwell Scientific Publications).

Britten, D., 1960 — 'The Isleham Hoard', *Antiquity,* XXXIV, 279-82.

Brodribb, A.C.C., Hands, A.R., and Walker, D.R., 1968 — *Excavations at Shakenoak, I,* (Oxford).

Brodribb, A.C.C., Hands, A.R., and Walker, D.R., 1971 — *Excavations at Shakenoak, II,* (Oxford).

Brodribb, A.C.C., Hands, A.R., and Walker, D.R., 1972 — *Excavations at Shakenoak, III,* (Oxford).

Brodribb, A.C.C., Hands, A.R., and Walker, D.R., 1973 — *Excavations at Shakenoak, IV,* (Oxford).

Brown, D.J.W., Knocker, G.M., Smedley, N., and West, S.E., 1954 — 'Excavations at Grimstone End, Pakenham', *Proc. Suffolk Inst. Archaeol.,* XXVI, 189-207.

Brown, D., 1974 — 'So-called 'needle-cases'', *Medieval Archaeol.,* XVIII, 151-154.

Brown, G. Baldwin, 1915 — *The Arts in Early England,* (London).

Brulet, R., 1970 — 'Catalogue du material Mérovingian conservée au Musée Archaeologique de Charleroi', *Repertoires Archaeologiques Oudheidkundige Repertoria,* (Brussels).

Callen, E.O., and Cameron, T.W.M., 1960 — 'A prehistoric diet revealed in coprolites', *New Sci.,* July 7th, 35-40.

Campana, Douglas V., 1980 — *An Analysis of the Use-Wear Patterns on Natufian and Protoneolithic Bone Implements* (Unpublished Ph.D. Thesis, Columbia University).

Caton, L.L.F., 1914-15 — 'Spadework in north west Suffolk', *Proc. Prehist. Soc. East Anglia,* 11, 35-38.

Chadwick, S.E., 1958 — 'The Anglo-Saxon cemetery at Finglesham, Kent: a reconsideration', *Medieval Archaeol.,* II, 1-71.

Clapham, A.R., Tutin, T.G., and Warburg, E.F., 1962 — *Flora of the British Isles,* 2nd Ed., (Cambridge).

Clark, J.G.D., Goodwin, H., and M.E., 1935 — 'Report on recent excavations at Peacock's Farm, Shippea Hill, Cambridgeshire, *Antiq. J.,* XV, 284-319.

Clark, J.G.D., Higgs, E.S. and Longworth, I.H., 1960 — 'Excavations at the Neolithic Site at Hurst Fen, Mildenhall, Suffolk, 1954, 1957, 1958', *Proc. Prehist. Soc.,* XXVI, 202-245.

Clarke, W.G., 1937 — *In Brecklands Wilds.* Revised and rewritten by R.R. Clarke, (Cambridge).

Clarke, R.R., 1940 — 'The Iron Age in Norfolk & Suffolk', *Proc. Roy. Archaeol. Inst. Gr. Brit. Ir.,* XCVI, 1-113.

Clough, T.H.McK., and Green, B., 1972 — 'The petrological identification of stone implements from East Anglia', *Proc. Prehist. Soc.,* XXXVIII, 151.

Cook, R.M., and Belshé, J.C., 1958 — 'Archaeomagnetism: A Preliminary Report on Britain', *Antiquity,* XXXII, 167-178.

Corbett, W.M., 1973 — *Breckland Forest Soils,* Soil Survey, Special Survey No. 7, (Harpenden).

Crabtree, P., 1980 — 'Animal Use and Culture Change'. Paper presented at the annual meeting of the Society for American Archaeology, Philadelphia, May 1980.

Creed, Rev., H., 1849 — 'Exhibits at Quarterly Meetings', *Proc. Suffolk Inst. Archaeol.,* I, 60.

Creed, Rev., H., 1859 — 'On the Castle and Honour of Eye', *Proc. Suffolk Inst. Archaeol.,* II, 117-124.

Crummy, P., 1974 — *Recent Excavations and Research at Colchester,* (Colchester).

Cunliffe, B., 1974 — *Iron Age Communities in Britain.*

Cunliffe, B., *1976* — *Excavations at Portchester Castle, vol.II, Saxon,* (Rep. Res. Com. Soc. Antiq. Lond., XXXIII).

Dannheimer, H., 1973 — 'Die frühmittelalterliche Siedlung bei Kircheim (Ldkr. München, Obermayen)', *Germania,* 51, 151-169.

Darrah, R., Musgrave, M., and Rudley, G., 1980 — *West Stow Country Park: Vascular Plant Check List.*

Davison, B.K., 1967 — 'The Late Saxon town of Thetford; an interim report on the 1964-6 excavations', *Medieval Archaeol.* XI, 189-208.

Déchelette, J., 1904 — *Les Vases Céramique ornés de la Gaule romaine.*

Demolon, P., 1972 — *'Le Village Mérovingien de Brebières', Mémoires de la Commission Départementale des Monuments Historiques du Pas-de-Calais,* Tome XIV.

Dennell, R.W., 1974 — 'Botanical Evidence for Prehistoric Crop Processing Activitites' *J. Archaeol. Sci.,* 1, 275-284.

Dennell, R.W., 1976 — 'Prehistoric Crop cultivation in Southern England: a reconsideration' *Antiq. J.,* 56, 11-23.

Detsicas, A.P., and Hawkes, S.C., 1973 — 'Finds from the Anglo-Saxon Cemetery at Eccles', *Antiq. J.,* LIII, 281-286.

Donovan, H.E., and Dunning, G.C., 1936 — 'Iron Age pottery and Saxon burials at Foxcote Manor, Andoversford, Gloucestershire', *Trans. Bristol and Gloucs. Archaeol. Soc.,* LVIII.

Driesch, A., von den, and Boessneck, J., 1974 — 'Kritische Anmerkungen zur Widerristhohenberechnung aus Längenmassen vor- und frühgeschichtlicher Tierknochen', *Säugertierkundliche Mitteilungen,* 22 (4), 325-348.

Driesch, A. von den, 1977 — *A Guide to the Measurement of Animal Bones from Archaeological Sites,* (Harvard University: Peabody Museum Bulletin no.1).

Dunmore, S., Loader, T., and Wade, K., 1976 — 'Ipswich Archaeological Survey: Second Interim Report', *E. Anglian Archaeol.,* 3, 135-140.

Dunning, G., 1932 — 'Bronze Age Settlements and a Saxon hut near Bourton-on-the-Water', *Antiq. J.,* XII, 279-293.

Edwardson, A.R., 1955 — Note in 'Archaeology in Suffolk', *Proc. Suffolk Inst. Archaeol.,* XXVII, 51.

Edwardson, A.R., 1960 — 'Further Excavations on Tumuli at Risby, 1959', *Proc. Suffolk Inst. Archaeol.,* XXVIII, 153-60.

Ekwall, E., 1966 — *The Concise Oxford Dictionary of English Place Names,* (Fourth Edition, Oxford).

Es, W.A. van., 1965-66 — 'Friesland in Roman Times', *Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek,* 15-16.

Es, W.A. van., 1967 — *Wijster, A native village beyond the Imperial Frontier, 150-425 A.D.,* (Groningen).

Evison, V.I. 1956 — 'An Anglo-Saxon Cemetery at Holborough, Kent', *Archaeol. Cantiana,* LXX, 84-141.

Evison, V.I., 1958, 1959, 1960, 1961 — Interim notes in *Medieval Archaeol.,* II, 189; III, 300; IV, 137; V, 310.

Evison, V.I., 1963 — 'Sugar Loaf Shield Bosses', *Antiq. J.,* XLIII, 38-96.

Evison, V.I., 1965 — *The Fifth Century Invasions South of the Thames,* (London).

Evison, V.I., 1978 — 'Early Anglo-Saxon applied disc brooches Part II: In England', *Antiq. J.,* 58, 260-78.

Evison, V.I., 1979 — *Wheel thrown pottery in Anglo-Saxon graves,* (Roy. Archaeol. Inst. monograph ser.).

Evison, V.I., 1980 — 'Iron objects', in Haslam, J., 'A Middle Saxon Iron Smelting Site at Ramsbury, Wiltshire', *Medieval Archaeol.,* XXIV, 35.

Evison, V.I., 1982 — 'Anglo-Saxon glass claw-beakers', *Archaeologia,* CVII, 43-76.

Faussett, B., 1856 — *Inventorium Sepulchrale,* (London).

Fell, C.I., 1952 — 'A Late Bronze Age Urnfield and Grooved Ware Occupation at Honington, Suffolk', *Proc. Cambridge Antiq. Soc.,* XLV, 30-43.

Fell, C.I., 1952 — 'An early Iron Age settlement at Linton, Cambs.', *Proc. Cambridge Antiq. Soc.,* XLV, 41-2.

Forsyth, A.A., 1968 — *British Poisonous Plants,* (Min. Ag. Fish. Food. Bulletin 161, London).

Fox C., 1923 — *The Archaeology of the Cambridge Region,* (Cambridge).

Fox C., 1949 — 'The Archaeology of the Cambridge Region', *Antiq. J.,* XXIX, 91.

Fry, G.F., and Moore, J.G., 1970 — 'Enterobius vermicularis: 10,000-year-old human infection', *Science,* 166, 1620.

Genrich, A., 1954 — *Formenkreise und Stammesgruppen in Schleswig-Holstein nach geschlossenen Funden des 3.bis 6. Jahrhunderts,* (Offa 10).

Genrich, A., 1964 — 'Uber einige Funde der Völkerwanderungszeit aus Brandgräbern des gemischtbelegten Friedhofes bei Liebenau, Landkreis Nienburg Weser', *Nachrichten aus Niedersachsens Urgeschichte,* 33, 24-34.

Giffen, A.E., van, 1958 — 'Prähistorische Hausformen auf Sandböden in den Niederlanden', *Germania,* 36, 35-71.

Gosch, G., 1973 — 'Ein Hausgrundris aus der frühen römischen Kaiserzeit von Magdeburg-Cracau', *Ausgrabungen und Funde,* 18, 41-46.

Grant, A., 1976 — 'The Animal Bones', in Cunliffe, B., *Excavations at Portchester Castle, vol.II, Saxon,* (Rep. Res. Comm. Soc. Antiq. Lond., 33), 262-287.

Green, B., and Rogerson, A., 1978 — *The Anglo-Saxon Cemetery at Bergh Apton, Norfolk: Catalogue,* (E. Anglian Archaeol., 7).

Green, B., Milligan, W., and West, S.E., 1981 — 'The Illington/Lackford Workshop', in Evison, V.I. (ed.), *Angles, Saxons and Jutes,* (Oxford).

Green, M., 1976 — *The Religions of Civilian Roman Britain,* (B.A.R. 24).

Guido, M., 1978 — *The Glass Beads of the Prehistoric and Roman Periods in Britain and Irland,* (Rep. Res. Com. Soc. Antiq. Lond., XXXV).

Guyan, Von. W.U., 1952 — 'Einige Karten zur Verbreitung des Grubenhäuses in Mitteleuropa im ersten nachchristlichen Jahrtausend und einige Hinweise auf das archäologische Problem der völkerwanderungszeitlichen Hausformen der Schweiz', *Jahrbuch der Schweizerischen Gesellschaft für Urgeschichte,* 42, 174 ff.

Haarnagel, W., 1961 — 'Zur Grabung auf der Feddersen-Wierde, 1955-1959', *Germania,* 39, 42-69.

Harcourt, R., 1979 — 'The Animal Bones' in *Gussage All Saints. An Iron Age Settlement in Dorset,* (Dept. of Environment. Archaeol. Rep. 10), 150-160.

Harden, D.B., 1969 — 'Ancient Glass, II: Roman', *Archaeol. J.,* CXXVI, 44-77.

Harden, D.B., 1971 — 'Glass', in Brodribb, A.C.C., Hands, A.R., and Walker, D.R. *Excavations at Shakenoak, II,* 98-108.

Harden, D.B., 1975 — 'The Glass', in Cunliffe, B., *Excavations at Portchester Castle, vol.I,* (Rep. Res. Comm. Soc. Antiq., XXXII), 368-374.

Harden, D.B., 1979 — 'Early Medieval Glass', *Bulletin de l'Association Internationale Pour L'Histoire du Verre,* VIII.

Hartley, B.R., 1972 — 'The Samian ware', in Frere, S., *Verulanium Excavations, I,* (Rep. Res. Comm. Soc. Antiq. Lond., XXVIII), 216-262.

Hawkes, S.C., and Dunning, G.C., 1961 — 'Soldiers and settlers in Britain, fourth to fifth century'. *Medieval Archaeol.* V, 1-70.

Hawkes, S.C., and Gray, I.M., 1969 — 'Preliminary note on the early Anglo-Saxon settlement at New Wintles Farm, Eynsham', *Oxoniensis,* XXIV, 1-4.

Helbaek, H., 1952 — 'Early Crops in Southern England' *Proc. Prehist. Soc.,* XVIII, 194.

Helbaek, H., 1964 — 'The Isca Grain: A Roman plant introduction in Britain' *New Phytologist,* 63, 158-164.

Henig, M., 1974 — *A Corpus of Roman Engraved Gemstones from British Sites, Parts i and ii,* (B.A.R. 8).

Hills, C., and Wade-Martins, P., 1976 — 'The Anglo-Saxon Cemetery at the Paddocks, Swaffham', *E. Anglian Archaeol.,* 2, 1-44.

Hills, C., 1977 — *The Anglo-Saxon Cemetery at Spong Hill, North Elmham,* (E. Anglian Archaeol., 6).

Hind, W.M., 1889 — *The Flora of Suffolk,* (London).

Hoffman, M., 1964 — 'The warp-weighted Loom', *Studia Norvegica,* 14, (Oslo).

Hunter, J., 1980 — 'The glass' in Holdsworth, P., *Excavations at Melbourne Street, Southampton, 1971-76,* (C.B.A. Research Report 33).

Hutchinson, P., 1966 — 'The Anglo-Saxon Cemetery at Little Eriswell, Suffolk', *Proc. Cambridge Antiq. Soc.,* LIX, 1-32.

Isings, C., 1957 — 'Roman Glass from Dated Finds', *Archaeologica Traiectina,* 2, (Groningen/ Djakarta).

Jackson, K., 1953 — *Language and History in Early Britain,* (Edinburgh).

Jackson, D.A., Harding, D.W., and Myres, J.N.L., 1969 — 'The Iron Age and Anglo-Saxon site at Upton, Northants', *Antiq. J.,* XLIX, 202-221.

Jarman, H.M., Legge, A.J. and Charles, J.A., 1972 — 'Retrieval of plant remains from archaeological sites by froth flotation' in Higgs, E.S. (ed.), *Papers in Economic Prehistory,* 39-48, (Cambridge).

Jessen, K., and Helbaek, H., 1944 — *Cereals in Great Britain and Ireland in Prehistoric and Early Historic Times,* (Kgl. Dan. Vidensk. Selsk. Biol. Skrifter, Copenhagen).

Jones, R., No Date — *Computer Based Osteometric Archaeozoology,* (Ancient Monuments Laboratory, D.o.E., Report no. 2333).

Jones, M.U., 1975 — '?Woolcomb Warmers from Mucking, Essex', *Antiq. J.,* LV, 411-413.

Kennett, D.H., 1976 — 'Anglo-Saxon Finds from Brooke, Norfolk, 1867-1869', *Proc. Cambridge Antiq. Soc.,* LXVI, 93-118.

Kennett, D.H., 1977 — 'Anglo-Saxon Cemetery at Tuddenham, Suffolk', *Proc. Cambridge Antiq. Soc.,* LXVII, 39-61.

Kent, J.P.C., 1961 — 'From Roman Britain to Anglo-Saxon England' in Dolley, R.H.M. (ed.), *Anglo-Saxon Coins,* 18, (London).

Kessler, P.T., and Schnellenkamp, W., 1933 — 'Ein früh Merowingisches Grab bei Rommersheim (Eichloch) in Rheinhessen', *Mainzer Zeitschrift,* 118-125.

Klein, A., 1936 — 'Die Rekonstruktion des germanischen Langbaues von Westick bei Kamen, Kr. Unna', *Westfalen, Hefte für Geschichte, Kunst und Volkskunde,* 21, 434-53. (Bodenaltertumer Westfalens, Bericht des Laudesmuseums für Vor-und Frühgeschichte, 5).

Knorr, R., 1952 — *Terra Sigillata, Gefässe des ersten Jahrhunderts mit Töpfernamen,* (Stuttgart).

Koch, U., 1977 — 'Das Reihengräberfeld bei Schretzheim', *Germanische Denkmäler der Völkerwanderungszeit Serie A,* Band XIII.

Leeds, E.T., 1923 — 'A Saxon village near Sutton Courtenay, Berkshire', *Archaeologia,* LXXII, 147-192.

Leeds, E.T., 1927 — 'A Saxon village near Sutton Courtenay, Berkshire', *Archaeologia,* LXXXVI, 59-79.

Leeds, E.T., and Harden, D.B., 1936 — *The Anglo-Saxon Cemetery at Abingdon, Berkshire,* (Ashmolean Museum, Oxford).

Leeds, E.T., and Atkinson, R.J.C., 1944 — 'An Anglo-Saxon Cemetery at Nassington, Northants', *Antiq. J.,* XXIV, 100-128.

Leeds, E.T., 1945 — 'The Distribution of the Angles and Saxons Archaeologically considered', *Archaeologia,* XCI, 1-106.

Leeds, E.T., 1947 — 'A Saxon village near Sutton Courtenay, Berkshire (3rd report)', *Archaeologia,* XCII, 79-93.

Leeds, E.T., 1949 — *A Corpus of Early Anglo-Saxon Great Square Headed Brooches,* (Oxford).

Leeds, E.T., and Pocock, M., 1971 — 'A Survey of the Anglo-Saxon Cruciform brooches of the florid type', *Medieval Archaeol.,* XV, 13-36.

Lethbridge, T.C., 1927 — 'An Anglo-Saxon hut on the Car Dyke at Waterbeach', *Antiq. J.,* VII, 141-6.

Lethbridge, T.C., 1931 — 'Recent Excavations in Anglo-Saxon Cemeteries in Cambridgeshire and Suffolk' *Cambridge Antiq. Soc., Quarto Pub.,* New Series, No. III.

Lethbridge, T.C., 1933 — 'Huts of the Anglo-Saxon Period', *Proc. Cambridge Antiq. Soc.,* XXXIII, 133-151.

Lethbridge, T.C., 1936 — 'A Cemetery at Shudy Camps, Cambridgeshire', *Cambridge Antiq. Soc., Quarto Pub.,* New Series, No. V.

Lethbridge, T.C., 1951 — 'A Cemetery at Lackford, Suffolk', *Cambridge Antiq. Soc. Quarto Pub.,* New Series, No. VI.

Limbrey, S., 1978 — 'Changes in quality and distribution of the soils of lowland Britain', in Limbrey, S. and Evans, J.G. (eds.), *The effect of man on the landscape: the Lowland Zone,* (C.B.A. Research Report 21), 21-26.

Liversidge, J., 1973 — *Britain in the Roman Empire,* (London).

Lobel, M.D., 1935 — *The Borough of Bury St. Edmunds,* (Oxford).

Longworth, I.A., 1972 — 'Two Gold Bracelets from Nowton, Bury St. Edmunds', *Proc. Suffolk Inst. Archaeol.,* XXXII, 271-2.

Maltby, J. Mark, No Date — 'Iron Age, Romano-British and Anglo- Saxon Animal Husbandry — A Review of the Faunal Evidence', (Unpublished manuscript forthcoming as part of a B.A.R.).

Martin, E.A., 1976 — ''Appendix: The Iclingas'', in Scarfe, N., 'The Place-name Icklingham: A Preliminary Re-examination', *E. Anglian Archaeol.,* 3, 127-134.

Matthews, C.L., 1965 — 'Excavation of Pagan Saxon Hut 5, Puddlehill, Dunstable, Bedfordshire', *The Manshead Magazine,* 15, 2-9.

Mathias, A.G.O., 1927 — 'South Pembrokeshire early Settlements', *Archaeol. Cambrensis.,* LXXXII.

Maynard, G., 1950 — 'Recent archaeological fieldwork in Suffolk', *Proc. Suffolk Inst. Archaeol.,* XXV.

Meaney, A., 1964 — *A Gazetteer of Early Anglo-Saxon Burial Sites,* (London).

Meaney, A.L., and Hawkes, S.C., 1970 — *Two Anglo-Saxon Cemeteries at Winnall,* (Medieval Archaeol. Monograph Series, 4).

Moodie, 1923 — 'Palaeopathology: An introduction to the study of ancient evidences for disease', *Urbana,* (University of Illinois Press).

Mylius, H., et al 1938 — 'Fränkische Siedlung bei Gladback, Kr. Neuwied', *Germania,* 22, 180-190.

Myres, J.N.L., 1969 — *Anglo-Saxon Pottery and the settlement of England,* (Oxford).

Myres, J.N.L., 1970 — 'Anglo-Saxon Pottery', *Proc. Brit. Acad.,* LVI, 1-32.

Myres, J.N.L., and Green, B., 1973 — *The Anglo-Saxon Cemeteries of Caistor-by-Norwich and Markshall, Norfolk,* (Rep. Res. Com. Soc. Antiq. Lond. XXX).

Myres, J.N.L., and Southern, W.H., 1973 — *Anglo-Saxon Cremation Cemetery at Sancton, East Yorkshire,* (Hull Museum Publications, No. 218).

Myres, J.N.L., 1977 — *A Corpus of Anglo-Saxon pottery,* (Cambridge).

Nansen, P., and Jørgensen, R.J., 1977 — 'Parasite eggs identified in material from archaeological excavations in Ribe (the Viking age)', *Nordisk Veterinaermedicin,* 29, 263-266 (English Summary).

Nenquin, J.A.E., 1953 — *La Nécropole de Furfooz,* (Dissertationes Archaeologicae Gandenses, I,Brugge).

Neville, R.C., 1852 — *Saxon Obsequies illustrated by Ornaments and Weapons,* (London).

Nilsson, O., and Hjelmqvist, H., 1967 — 'Studies on the nutlet structure of South Scandinavian Species of Carex' *Botaniska Notiser,* 120, 460-485.

Niquet, F., 1964 — 'Vorbericht über die erste Hauptgrabung auf der Siedlung Am Hetelberg bei Gielde vom 2 Mai bis 1, November 1963', *Nachrichten aus Niedersachsens Urgeschich,* 33, 117-122.

Niquet, F., 1969 — 'Walfenbüttel, Zweiter Vorberichtüber die Grabungen in Gielde, Kr. Goslar', *Neue Augsgrabungen und Forschungen in Niedersachsen,* 4, 1969.

Noddle, B., 1980 — 'The Animal Bones' in Wade-Martins, P., *Excavations at North Elmham Park, 1967-72,* (E. Anglian Archaeol., 9), 375-409.

O'Neil, H.E., 1960-1 — 'Saxon burials in the Fosse Way at Bourton-on-the-Water, Glos.', *Proc. Cotteswold Natur. Fld. Club.,* XXXIII.

Owles, E., and Smedley, N., 1965 — 'Archaeology in Suffolk', *Proc. Suffolk Inst. Archaeol.,* XXX, 194.

Page, W., (ed.) 1911 — *The Victoria History of the County of Suffolk,* (London).

Payne, S., 1973 — 'Kill off Patterns in Sheep and Goats: the Mandibles from Asvan Kale', *Anatolian Studies,* 23, 281-303.

Peers, C., and Radford, C.A.R., 1943 — 'The Saxon Monastery of Whitby', *Archaeologia,* LXXXIX, 27-88.

Petch, C.P., and Swann, E.L., 1968 — *Flora of Norfolk,* (Norwich).

Petry, F., 1976 — 'Circonscription d'Alsace', *Gallia,* 34, 379-380.

Philp, B., 1973 — *Excavations in West Kent 1960-70,* (Kent Archaeological Rescue Unit, Dover).

Pirling, R., 1974 — 'Das Römische — Fränkische Gräberfeld von Krefeld-Gellep', *Germanische Denkmäler der Völkerwanderungszeit,* Ser.B, Band 8.

Pizzi, and Schenone, 1955 — 'Trichuris in an Inca', *Tropical Medicine and Hygiene Notes,* 4, 6-7.

Pretty, K., 1972 — 'Two bronze spiral headed pins', in Brodribb, et al, *Excavations at Shakenoak, III.*

Prigg, H., 1874 — 'The Tumuli of Warren Hill, Mildenhall', *Proc. Suffolk Inst. Archaeol.* IV, 287-299.

Prigg, H., 1881 — 'Roman Pottery Kilns, West Stow Heath', *J. Brit. Archaeol. Ass.,* XXXVII, 152-155.

Prigg, H., 1888 — 'The Anglo-Saxon Graves, Warren Hill, Mildenhall', *Proc. Suffolk. Inst. Archaeol.,* VI, 57-72.

Prigg, H., 1888 — 'On a Roman British Cemetery at Ingham, near Bury St. Edmunds', *Proc. Suffolk Inst. Archaeol.,* VI, 41-54.

Prigg, H., 1889 — 'The Elvedon Tankard', *J. Brit. Archaeol. Ass.,* XLV, 81.

Prigg, H., 1891 — Note in *J. Brit. Archaeol. Ass.*, XLVII, 94.

Prigg, H., 1901 — *Icklingham Papers,* (Woodbridge).

Rahtz, P.A., 1976 — 'Buildings and Rural Settlement', in Wilson, D.M. (ed.), *Anglo-Saxon England,* 49-98.

Rahtz, P.A., 1979 — *The Saxon and Medieval Palaces at Cheddar,* (B.A.R. 65).

Reichstein, J., 1975 — 'Die kreuzförmigen Fibel, zur Chronologie der späten Römischen Kaiserzeit und der Völkerwanderungszeit in Scandinavien, auf dem Kontinent und in England', *Offa-Bücher,* Band 34.

Renfrew, J.M., 1973 — *Palaeoethnobotany. The prehistoric food plants of the Near East and Europe,* (London).

Richtofen, von B.J., 1939 — 'Eine spätsächsische Siedlung in Eggerstedt, Kreis Pinneberg in Holstein', *Nordelbingen,* 15, 41-49.

Ridgeway, W., 1901 — *The Early Age in Greece,* (Cambridge).

Roes, A., 1963 — *Bone and Antler Objects from the Frisian Terp Mounds,* (Haarlem).

Rogers, G.B., 1974 — *Poteries Sigillées de la Gaule Centrale, I- Les Motifs non figurés,* (XXVIIIe supplément à Gallia).

Rogerson, A., 1977 — 'Excavations at Scole, 1973', *E. Anglian Archaeol.,* 5, 97-224.

Roth, W. Ling, 1909 — *Bankfield Museum Notes,* No. 6.

Rudolph, M.V., 1938 — 'Die Flechtwerkbauweise des Hauses von Hambühren', *Nachrichten aus Niedersachsens Urgeschichte,* 12, 89-97.

Samuels, R., 1965 — 'Parasitological study of long-dried faecal samples', *Memoirs Soc. American Archaeol.,* 19, 175-179.

Scarfe, N., 1972 — *The Suffolk Landscape,* (London).

Schmidt, B., 1961 — 'Die späte Völkerwanderungszeit in Mitteldeutschland', *Veröffentlichungen des Landesmuseums für Vorgeschichte in Halle,* Heft 18.

Schmidt, B., 1970 — *Die Späte Völkerswanderungzeit in Mitteldeutschland,* (Der Deutscher verlag der Wissenschaften Berlin).

Schroller, H., 1934 — 'Beiträge zum urgeschichtlichen Hausbau in Niedersachsen', *Mannus,* 26, 65-81.

Schunemann, D., 1964 — 'Zwei spätsächsische Grubenhäuser in Bierden b. Achim, Kr. Verden (Aller)', *Nachrichten aus Niedersachsens Urgeschichte,* 33, 109-11.

Siegel, S., 1956 — *Non parametric statistics for the Behavioural Sciences,* (New York).

Silver, I.A., 1969 — 'The Ageing of Domestic Animals', In Brothwell, D., and Higgs, E.S. (eds.), *Science in Archaeology,* Second Edition, 283-302, (London).

Sims, R.E., 1978 — 'Man and vegetation in Norfolk', in Limbrey, S. and Evans, J.G. (eds.), *The effect of man on the landscape: the Lowland Zone,* (C.B.A. Research Report 21), 57-62.

Smith, C.R., 1852 — *Collectanea Antiqua,* II, 165-167.

Smith, R.A., 1923 — *A Guide to the Anglo-Saxon and foreign Teutonic Antiquities in the Dept. of British and Mediaeval Antiquities,* (British Museum Oxford).

Smith, J.T., 1964 — 'Cruck Construction; a survey of the problems', *Medieval Archaeol.,* VIII, 119-152.

Sprockhoff, E., 1955 — 'Central European Urnfield Culture and Celtic La Tène: An Outline', *Proc. Prehist. Soc.,* XXI, 257-281.

Stanfield, J.A., and Simpson, G., 1958 — *Central Gaulish Potters.*

Stead, I.M., *1969* — 'Verulamium 1966-8 (interim)', *Antiquity,* XLIII, 45.

Sturdy, R.G. and Eldridge, D.J., 1976 — 'Cereal yields in Loamy and Sandy Soils in East Anglia' *Welsh Soils Discussion Group Report,* No. 17, 55-83.

Swanton, M., 1963-6 — 'An Anglian Cemetery at Londesborough in East Yorkshire', *Yorkshire Archaeol. J.,* 41, 262-86.

Swanton, M.J., 1973 — *The Spearheads of the Anglo-Saxon settlements,* (Roy. Archaeol. Inst. Gt. Brit. Ir.).

Swanton, M.J., 1974 — *A Corpus of Pagan Anglo-Saxon Spear Types,* (B.A.R., 7).

Tackenburg, K., 1931 — 'Bericht über die Tätigkeit des Vertrauensmannes für die kulturgeschichtlichen Bodenaltertümer der Provinz Hannover im Jahre 1930', *Nachrichtenblatt fur Deutsch Vorzeit,* 7, 199-201.

Taylor, E.C., 1955 — 'Parasitic helminths in medieval remains', *Veterinary Record,* 67, 216-218.

Thomas, S., 1960 — 'Studien zu den germanischen Kammen der Römischen Kaiserzeit', *Arbeits und Forschungberichte zur Sächsischen Bodendenkmalpflege.*

Trier, B., 1969 — 'Das Haus im Nordwesten der Germania Libera', *Veröffentlichungen der Altertumskommission im Provinzialinstitut für Westfälische Landes und Volkskunde,* Band IV.

Trotter, M., and Gleser, G.C., 1952, 1958 — 'Estimation of Stature from long bones of American Whites and Negroes', *American J. Physical Anthrop,* 10, 463; 16, 79.

Tymms, S., 1853 — 'Anglo-Saxon Relics from West Stow Heath', *Proc. Suffolk Inst. Archaeol.* I, 315-318, pl.1-VIII.

Uslar, R., 1949 — 'Die germanische Siedlung in Haldern bei Wesel am Niederrhein', *Bonner Jahrbücher,* 149, 105-145.

Victoria County History, 1911 — see under Page, W., 1911.

Walters, S.M., 1953 — 'Montia fontana', *Watsonia,* 3, 1-6.

Warington, K., 1924 — 'The influence of manuring on the weed flora of arable land'. *Journal of Ecology, 12, 111.*

Warren, J., 19th century — *Journal,* unpubl., Ashmolean Museum, Oxford).

Wegewitz, W., 1960 — *'Stand der Sachsenforschung im Kreise Harburg', Die Kunde,* N.F.11, 28-60.

Werner, J., 1958 — 'Römische Fibeln des 5 Jahrhunderts von der Gurma im Gurina und vom Grepault bei Truns (Grabunden)', *Der Schlern,* 32.

West, S.E., 1952 — 'Romano-British Pottery Kilns on West Stow Heath', *Proc. Suffolk Inst. Archaeol.,* XXVI, 35-53.

West, S.E., 1964 — 'Excavations at Cox Lane (1958), Ipswich', *Proc. Suffolk Inst. Archaeol.,* XXIX, 233-303.

West, S.E., 1969 — 'The Anglo-Saxon Village of West Stow: an interim report of the excavations', *Medieval Archaeol.,* XIII, 1-20.

West, S.E., and Plouviez, J., 1976 — 'The Roman site at Icklingham', *E. Anglian Archaeol.,* 3, 63-126.

Wilson, D.M., 1956 'The initial excavation of an Anglo-Saxon cemetery at Melbourne, Cambs.', *Proc. Cambridge Antiq. Soc.*, 49.

Winkelmann, W., 1938 'Eine Siedlung des 1-5 Jahrhunderts in Milte, Kr. Warendorf', *Nachrichtenblatt für deutsche Vorzeit,* 14, 298-301.

Winkelmann, W., 1958 'Die Ausgrabungen in der frühmittelalterlichen Siedlung bei Warendorf (Westfalen)', *Neue Ausgrabungen in Deutschland,* (Berlin), 492-517.

Wishart, D., 1978 *Clustan User Manual,* (3rd ed., Edinburgh Univ.).

Young, C.J., 1977 *Oxfordshire Roman Pottery,* (B.A.R. 43).

Zoller, D., 1963 'Die Ergebnisse der Grabung auf dem Gristeder Esch, Kreis Ammerland, in den Jahren 1960-1961', *Neue Ausgrabungen und Forschungen in Niedersachsen,* 1, Hildersheim, 132-151.

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