EXCAVATION OF AN IRON AGE SITE AT SILFIELD, WYMONDHAM, NORFOLK, 1992-3

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SUMMARY

Area excavation of part of an unenclosed later prehistoric site indicated by a ploughsoil scatter of burnt flint and Iron Age pottery was undertaken in advance of highway construction by the Norfolk Archaeological Unit. All features demonstrably of prehistoric date were of the 'Middle' Iron Age, perhaps representing activity during the 4th-1st centuries BC.

The total size of the ploughsoil artefact spread could not be recorded. While no positive evidence for human habitation was found within the excavated area, which measured c. 4000 sq m, a wide range of craft and industrial pursuits was identified. These included iron-smelting, quarrying, antler- and horn-working and the manufacture of flint tools. Possible indications of spatial activity-zoning were seen in the distribution of pits, post-hole structures and other subsoil features.

Although the Iron Age site was overlain by a series of medieval field ditches, there were no signs either of earlier prehistoric or of Roman or later occupation.

Introduction

Background to the Project

Excavation work at Park Farm, Silfield, was necessitated by a trunk road development, the construction of the A11 Wymondham-Besthorpe Improvement. This crossed a ploughsoil scatter of Iron Age material, centred around TM 1072 9926, which had been discovered by amateur fieldwalking. Trench evaluation of the site in 1992 was followed by full-scale area excavation by the Norfolk Archaeological Unit (hereafter NAU) a year later. Funded by the Department of Transport, this work was carried out during the summer and early autumn of 1993, and construction of the new highway began shortly afterwards.

Site location (Figs 1-3)

The area examined lay 1.5km south of the modern town of Wymondham and c.600m SW of the yard and other buildings at Park Farm itself. The site was located at an elevation of approximately 41m OD, on a gentle SW-facing slope overlooking a small tributary of the Bays River which flows only 150m distant. The cultivation soil at the site was a poorly-drained heavy clay loam, overlying a mixed boulder clay deposit which contained varying proportions of flints and weathered chalk.

Discovery and previous research

After the announcement of the likely route of the re-aligned A11 trunk road, the entire road line was fieldwalked by a local amateur archaeologist, Roger Bellinger of the Norfolk Archaeological and Historical Research Group, during the winter of 1990-91. This work revealed a scatter of burnt flint fragments occupying over 200m of the new road's length at the Park Farm site. The main concentration of artefacts recorded by Bellinger lay to the north of an

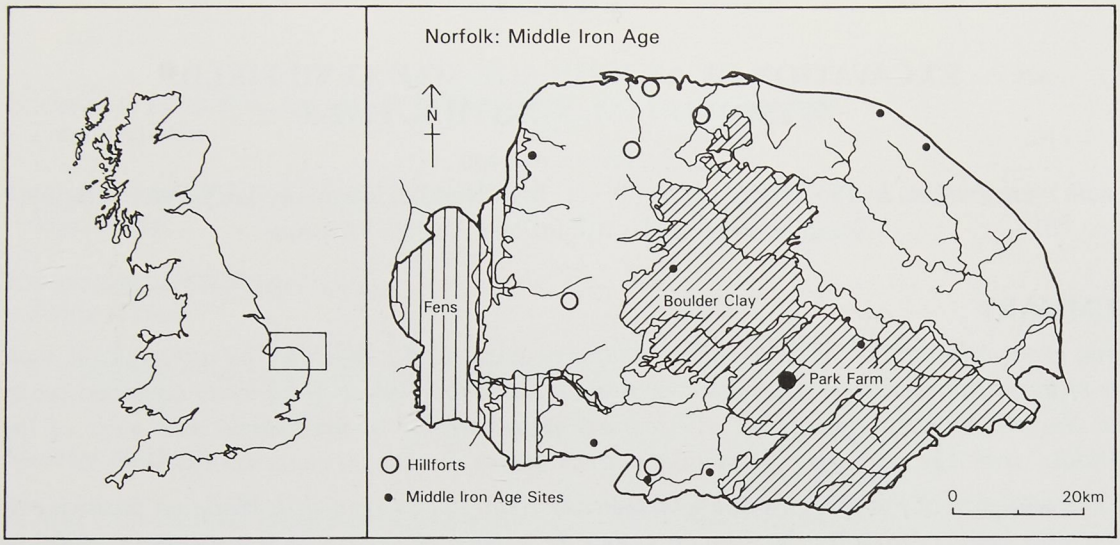

Fig. 1
Site location in UK/Norfolk, showing known Middle Iron Age sites and extent of Boulder Clay.

extant hedge which crossed the site. Quantities of worked flint and Iron Age pottery were also found, along with some iron-working slag from the area immediately to the south of the hedge.

Evaluation took place during the summer of 1992 when a total of 330m of trial trenches were excavated for the NAU by Myk Flitcroft in the area to the north of the hedge. The evaluation produced further Iron Age material and revealed a number of features, both linear and discrete. It was concluded from the results that Iron Age activity was concentrated in a relatively small area immediately north of the hedgeline, where it was sealed below the modern plough-zone by a colluvial accumulation of topsoil and subsoil up to 0.5m deep (Flitcroft 1992).

Project research aims

The likely 'Middle' Iron Age date of the Park Farm site gave it great significance at both local and regional levels. Iron Age settlement remains excavated in Norfolk and Suffolk to date have often been meagre and have tended to belong to the earliest or later parts of its chronological spectrum. Despite this lack of excavated data, scatters of Iron Age pottery abound in many parts of Norfolk, occurring in the intensively-studied parish of Fransham, in the centre of the county at intervals of less than one square kilometre (Rogerson 1995). Many of these sites could represent 'settlements' of the kind revealed by the Wymondham Bypass excavations. It was considered that excavation at Park Farm would make a contribution to characterising Norfolk's settlement archaeology of the period more firmly in both its local and regional contexts, and could help the future interpretation and discussion of 'sites' known only from field-walked pottery scatters. Of further importance was the fact that the apparent absence of 'Early' and 'Late' Iron Age activity and material could help in the closer definition of Norfolk's Middle Iron Age ceramic tradition.

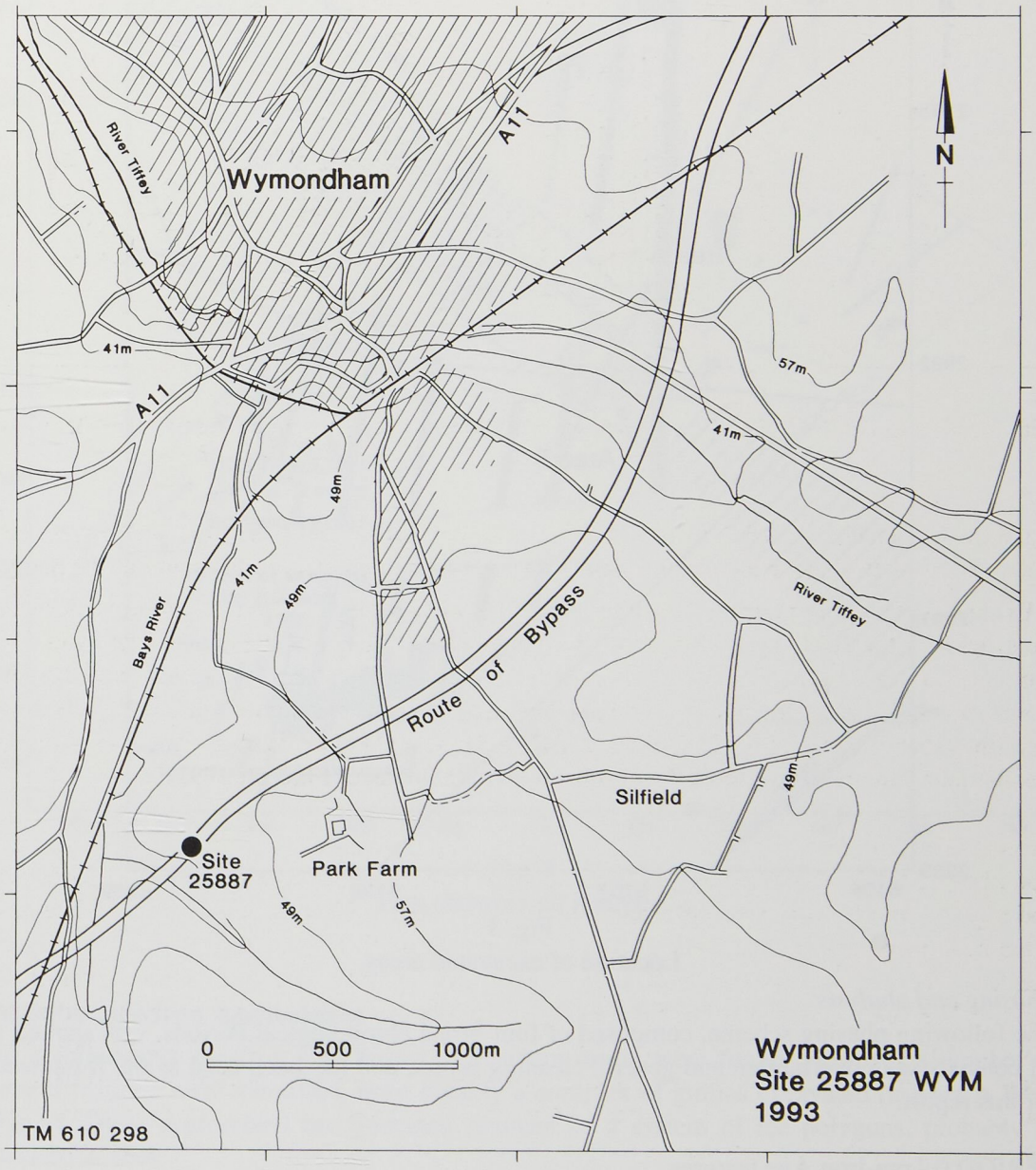

Fig. 2
Map of Wymondham area, showing bypass alignment and Park Farm.

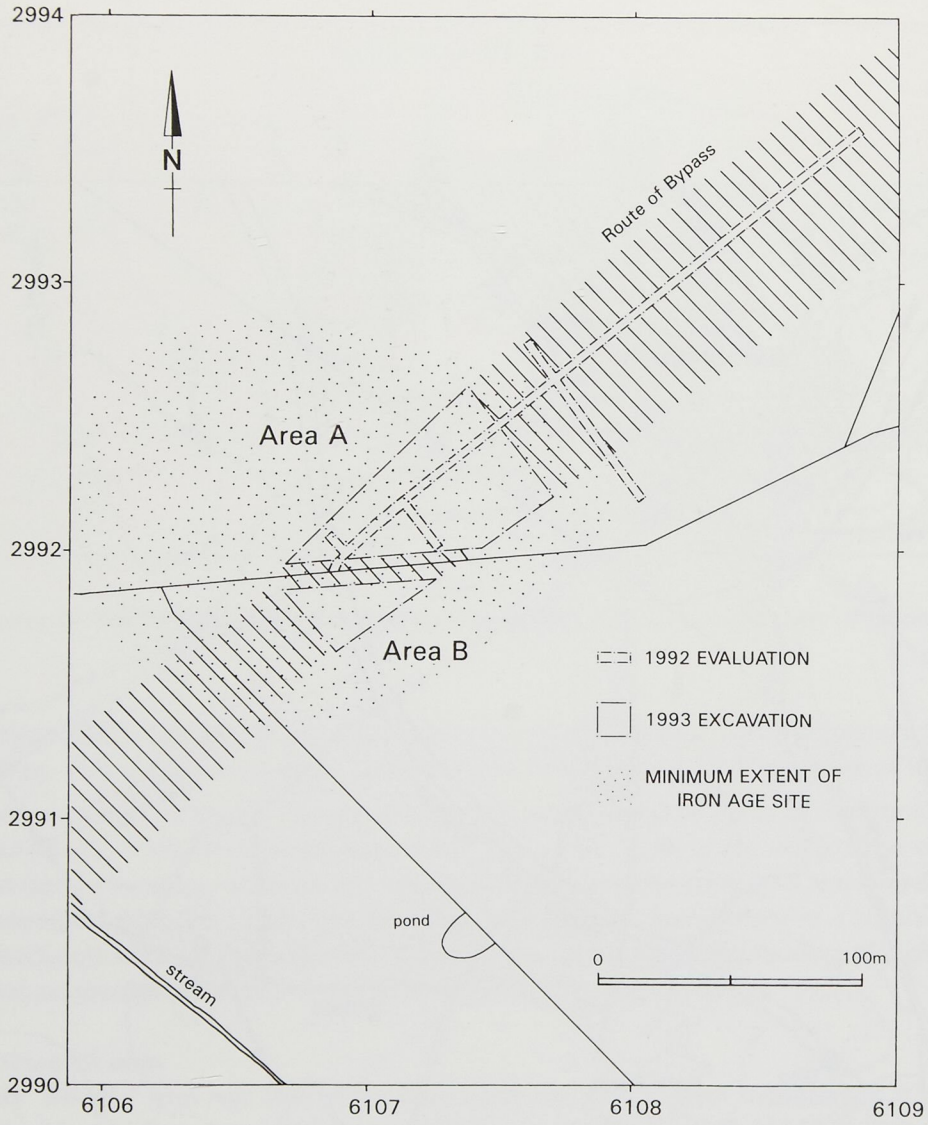

Fig. 3
Location of excavated areas.

Phasing and analysis

The following phasing scheme, composed of four broad chronological Periods, was applied to all contexts save overburden and general cleaning layers, and has been used as the framework for this report.

PERIOD 0 - pre-Iron Age features
PERIOD 1 - Iron Age
PERIOD 2 - Medieval
PERIOD 3 - Post-medieval

Archive deposition.

The Project Archive will be curated by Norfolk Museums Service and held in a designated store.

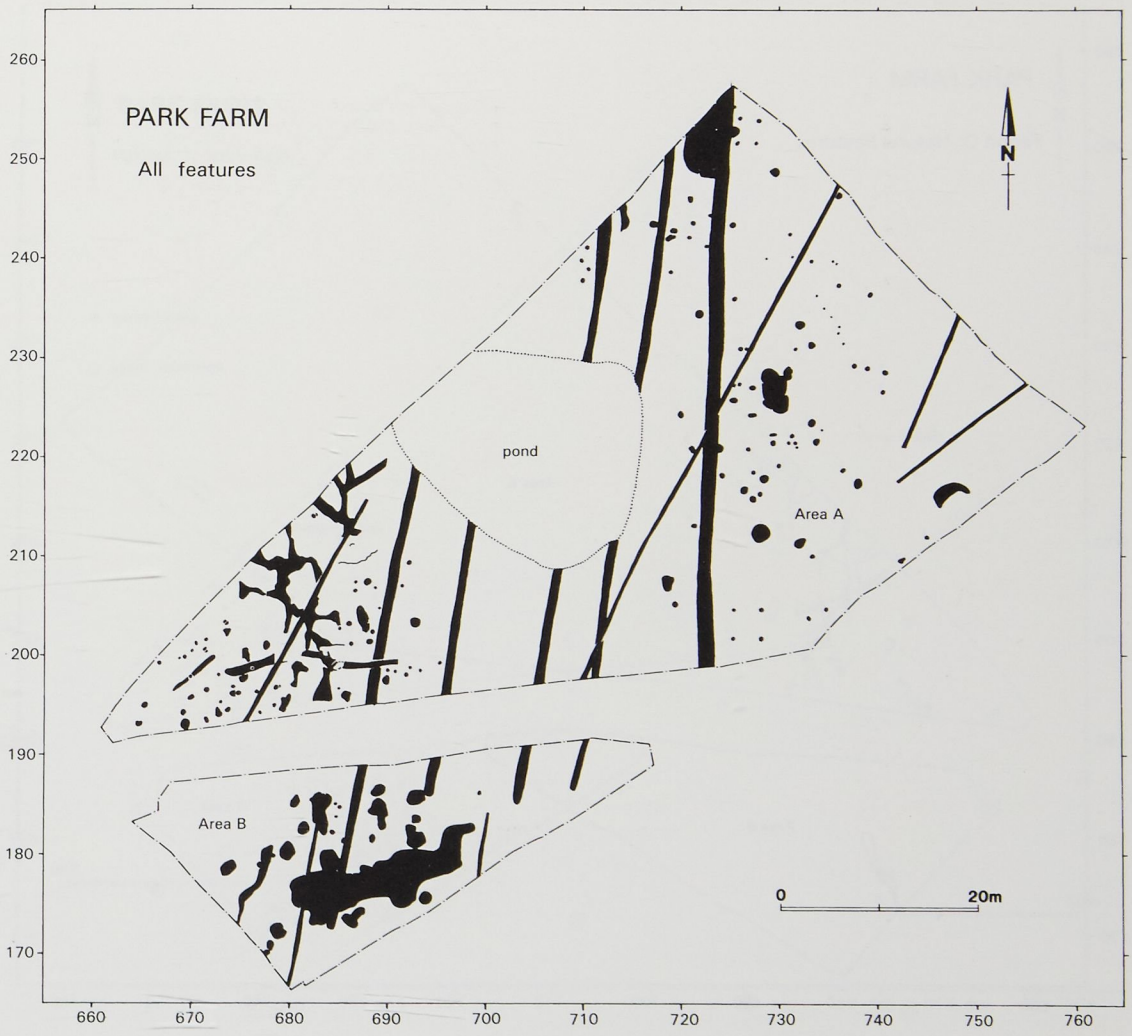

Fig. 4
Plan showing all features.

Period 0: pre-Iron Age features

No demonstrably pre-Iron Age features of human origin were found. However a number of natural features were identified, most notably a complex of gullies excavated in Area A West (Fig.5). These represented the truncated remnant of a system of ice polygons, probably of Devensian date.

When short lengths of these gullies were exposed within the confines of the 1992 evaluation trench they were originally interpreted as footing-trenches for Iron Age roundhouses of 'post-in-trench' construction. This hypothesis was strengthened at the time by the presence of sherds of Iron Age pottery in the upper fills of some of these features, but stripping of the surrounding area showed that none of these gullies actually formed the continuous circles demanded by the original interpretation. The gullies were usually steep-sided, and filled with fine silt/clay deposits often resembling the less stony natural deposits. Their bases were often hard to identify.

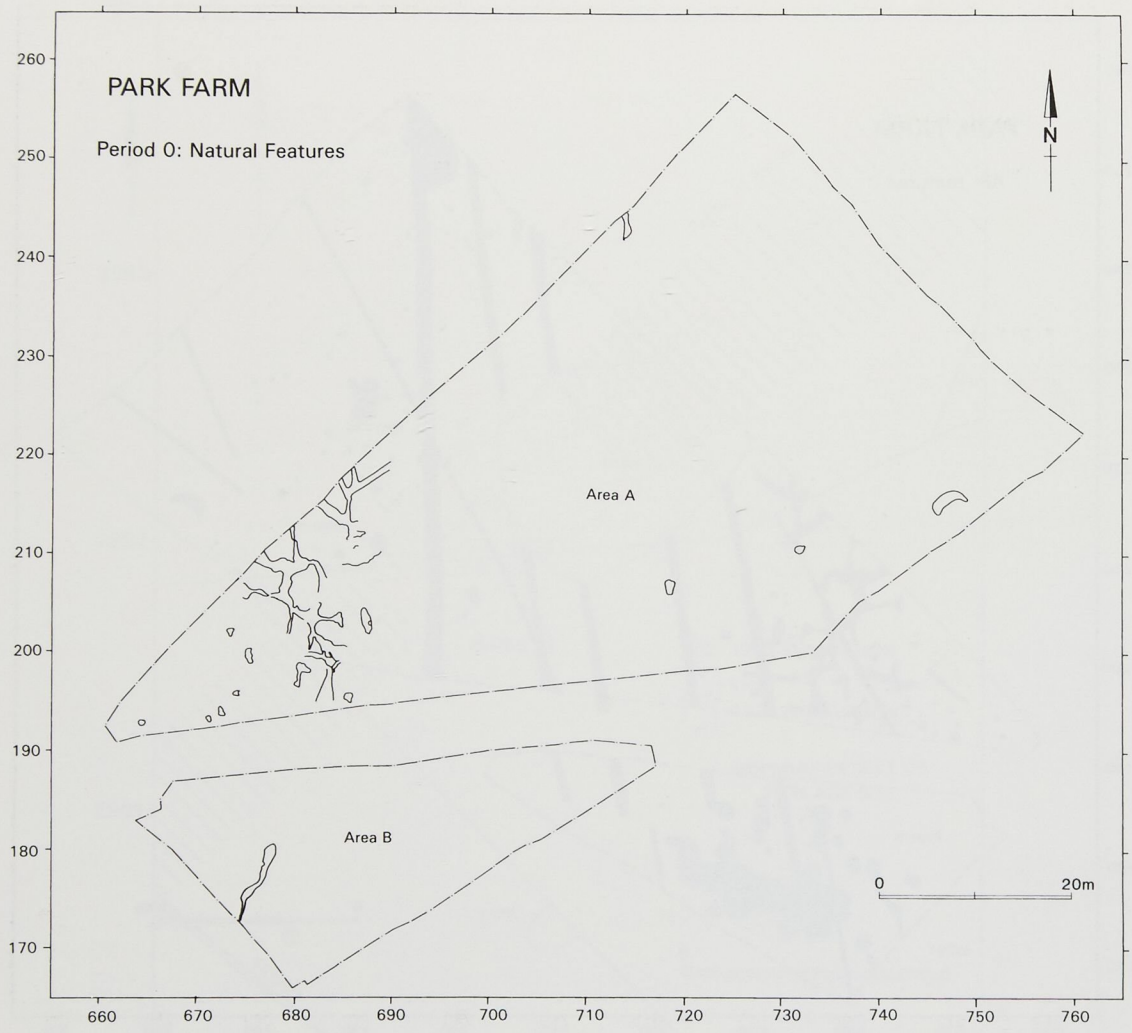

Fig. 5
Plan showing Period 0 (natural) features.

These features form an interesting example of an ice-wedge system occurring on natural boulder clay, resembling those often encountered on sands and gravels in Norfolk (eg. Spong Hill: Healy 1988, Norwich Southern Bypass: Ashwin and Bates forthcoming).

Period 1: Iron Age features

Introduction (Fig.6)

Period 1 features were dispersed across the entire excavated area. Fieldwalking of the areas to the north and west of the excavation after the main excavation showed that the 1993 trench evaluation had examined a small proportion of a very much larger occupation scatter.

It was clear that all negative features had been truncated to some extent by the plough: the paucity of stake-holes recorded suggests that a high proportion of shallow and ephemeral features had been completely lost. For the purposes of analysis the excavated area was subdivided into three broad zones, physically discrete and featuring contrasting Iron Age occupation

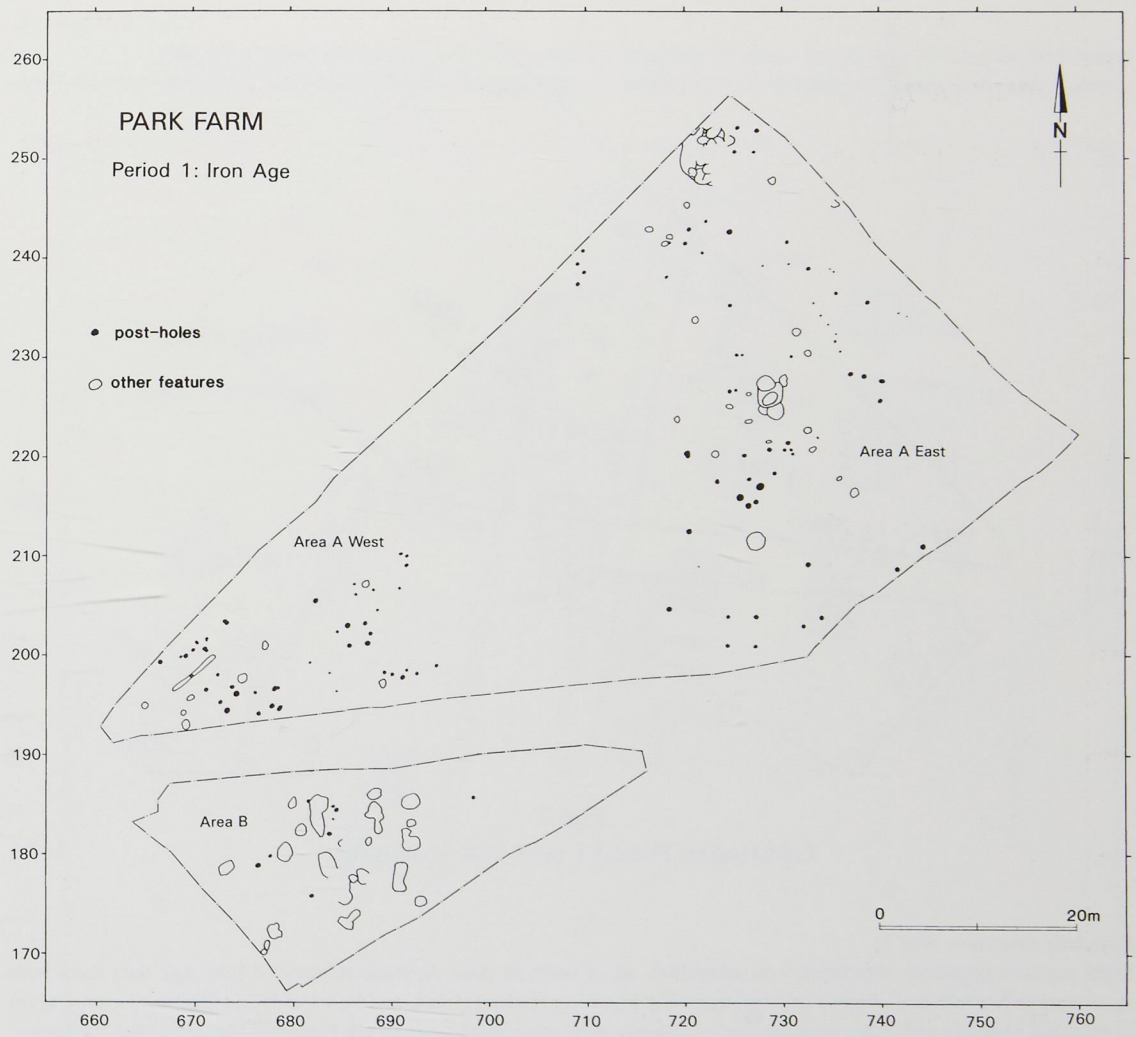

Fig. 6
Plan showing Period 1 (Iron Age) features.

evidence. These were as follows: Area A East (east of grid 710E), Area A West (west of grid 710E) and Area B. The apparent separation between Area A East and West might be due in part to later disturbance by Period 2 (medieval) field-strips, aligned north-to-south, and by a Period 3 (post-medieval) pond in this part of the site.

Structural features in the form of post-holes and stake-holes predominated in Area A West, making up over 70% of all Iron Age features. This dominance of structural features over all others was also observable, though less pronounced, in Area A East where just over half of all cut features were post-holes or stake-holes. Also in Area A East were excavated two large concentrations of intersecting pits. One of these was interpreted as a quarry, the other as a possible complex of industrial features. In sharp contrast to Area A, most of the features in Area B were pits.

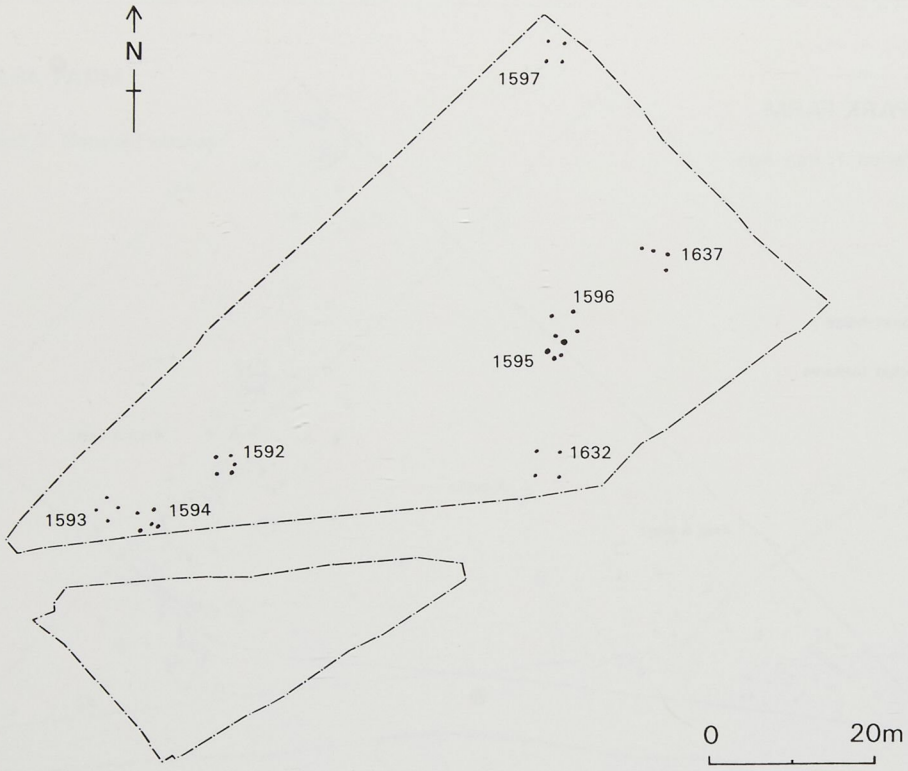

Fig. 7
Location of Period 1 post-hole structures.

Post-hole structures (Fig.7)
Eight putative post-hole structures were identified, all of them in Area A. Roundhouses of Iron Age date have been excavated in Norfolk at a number of sites, most notably West Harling (Clark and Fell 1953) and Harford Farm, Caistor St Edmund (Ashwin and Bates forthcoming). However none were identified at Park Farm, all but one of the 'buildings' here being small square or sub-square structures of the kind most commonly interpreted as raised granaries or similar elevated storage structures (Cunliffe 1984, 87ff). Only in the case of structure *1597* were any signs of post-pipes or post-impressions seen. Very few artefacts were found.

Structures *1595* and *1596* formed a pair of apparently overlapping post-hole structures in central Area A. One post-hole appeared to be 'shared' with the two putative features, but no stratigraphic relationship between the two structures could be observed.

The closeness of structure *1597* to, and its shared alignment with, the adjacent quarry complex *1329* (p253; Fig.10) make it possible that the two features were in some way associated.

Miscellaneous post-holes (Fig.6)
A total of 32 post-holes in *Area A West* did not form part of any identifiable structure, although traces of two possible fence-lines were seen.

As well as the five post-hole structures in Area A East, a total of 48 other post-holes were assigned to Period 1. While most of these were isolated features, traces of two possible fence-lines were observed. Isolated post-holes were present in most parts of *Area A East*. Usually they were indistinguishable *per se* from those which constituted the post-hole structures in the area. Where present, Iron Age pottery generally occurred in very small quantities, while three of the post-holes also contained single (presumably residual) sherds of Beaker or Bronze Age type pottery.

Nine post-holes were excavated in *Area B*, most of them in the western part of the area. Virtually all were very shallow. A group of four post-holes lay in the area of the large Period 1 pits *1095* and *1125*. The easternmost of these had been cut on its western edge by pit *1095*. It is conceivable that these post-holes were the remnant of a north-to-south aligned rectangular post-hole structure measuring *c.* 3m x 2.5m, similar to structure *1636* in Area A but subsequently cut away by the large pit *1095*.

Pits (Figs 6, 8 and 9)

Area A West. Although this part of the site was dominated by structural features, twelve pits of varying dimensions were also excavated. They fell into two broad physical types, circular pits up to 0.65m in diameter and ovate features.

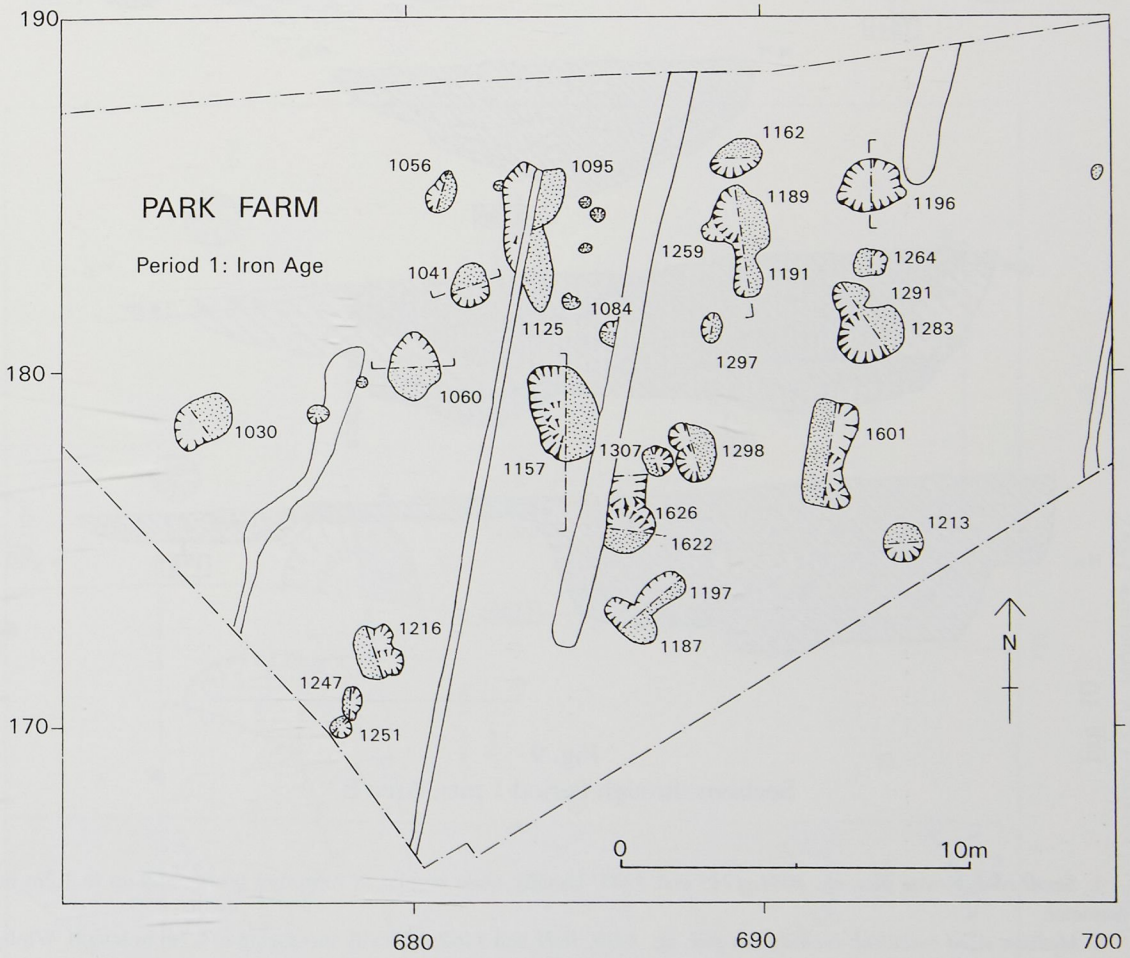

Fig. 8
Plan of Period 1 pits, Area B.

Their fills were usually backfill deposits of loamy or sandy consistency. Only two contained more than a very few sherds of Iron Age pottery, although the dark fill of one feature yielded animal bone and nearly 1.4kg of burnt flint.

Area A East. Excluding the putative quarry *1329* and pit group *1636*, described below, twenty other pits excavated in Area A East were assigned to Period 1. Most of these features had been reduced to depths of 0.2m or less by plough truncation, making it likely that other shallower features had been removed completely. However two possible dispersed groups of pits could be seen in the northern part of the area. In the SE part of Area A, a short distance to the south-east of post-hole structure *1595*, a single large round pit was excavated.

Area B. Twenty-nine pits were excavated in Area B. They varied in size, but many were substantial. A minority contained rubbish-like fills rich in artefacts. Most of the pits were confined to the central part of Area B. While it is possible that further more easterly examples had been stripped away by the medieval field system which traversed this part of the site, the relative depth of many of the easternmost pits made their wholesale removal from this area by ploughing rather unlikely.

Most of the pits fell into one of three distinct physical types, none of them concentrated in any particular part of the area.

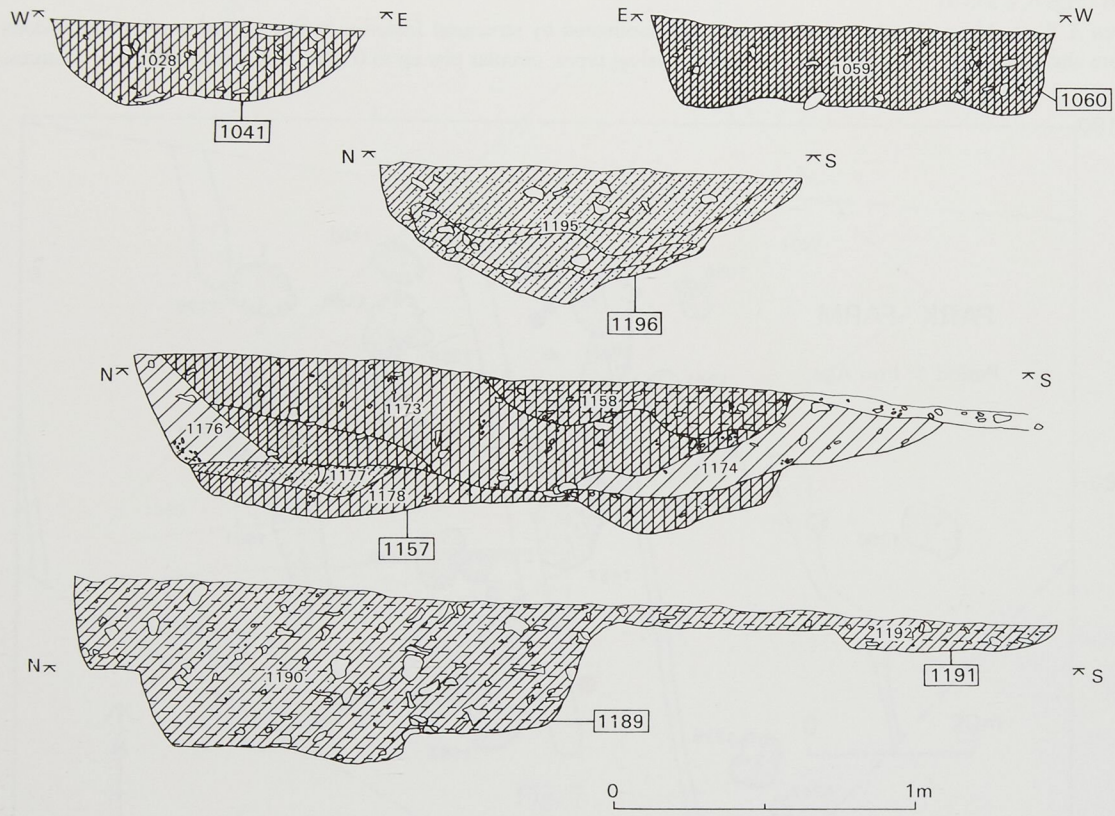

Fig. 9
Sections through Period 1 pits, Area B.

1. *Small round/ovate pits*, eg. *1084, 1213* and *1307*. Usually quite regular in form and profile and up to 1.2m in diameter.

2. *Medium-sized ovate/sub-rectangular pits*, eg. *1030*, *1041* and *1162*, typically measuring *c.* 1.7m in length. While some examples were up to 0.4m deep, others had been rendered much shallower by plough truncation.

3. *Large ovate/subrectangular pits, eg. 1095, 1125, 1157 and 1601*). The largest of these features, *1601*, was in the eastern part of the pit concentration, and was 3m x 1.8m in area. The depth of the pits varied considerably, the most substantial (*1157*) being 0.55m deep.

The fills of the more westerly pits tended to be devoid of finds, and often featured large inclusions of clean orange natural clay. A small number of pits contained darker, more artefact-rich fills, with pits *1189, 1196* and *1283* relatively rich in burnt flint and Iron Age pottery. Pit *1196* was exceptional in producing 72 pieces of worked flint - the largest lithic assemblage from a single feature at Park Farm - and also featured a layer of large burnt flint nodules lying on its base. Pit *1030*, although reduced to a depth of only 0.1m by plough truncation, contained a deposit of nearly 2.3kg of iron-smelting slag. However the base of the pit showed no signs of the heat-discoloration which might be expected on the base of an actual furnace.

No evidence was recovered for Iron Age activity subsequent to the pits' disuse. It is possible that many of the pits were backfilled *en masse* as part of a levelling and landscaping operation; this is particularly suggested by the fact that many of the more westerly examples were filled with compact deposits containing many large inclusions of natural clay.

These pits cannot be interpreted as 'storage pits' on such heavy, poorly-drained subsoils as those at Park Farm. Alternatively they might represent craft or industrial activities of some kind. The slag deposit in pit *1030* showed that iron smelting was carried on in the vicinity, although the deposit from this pit probably represented only a single smelting operation.

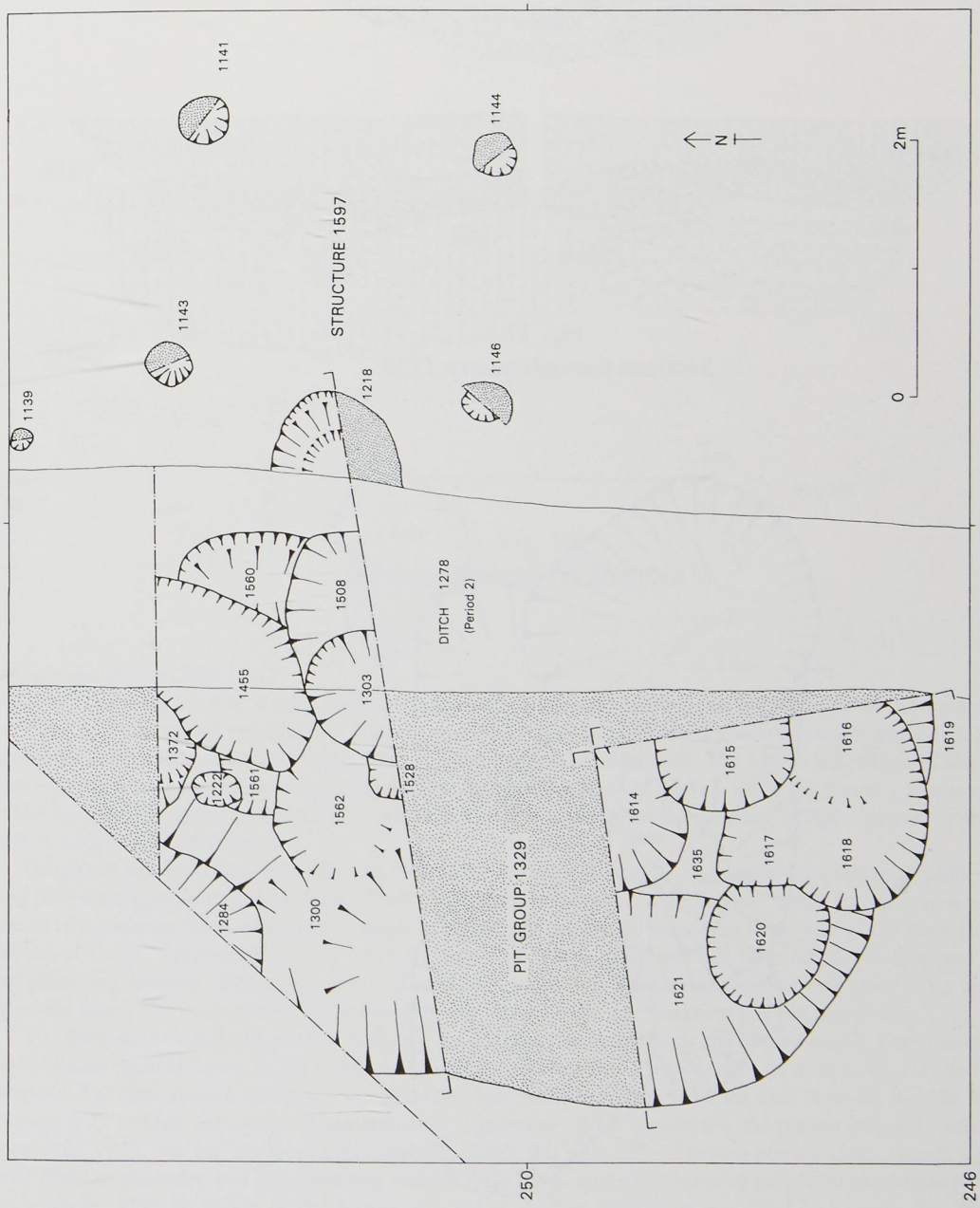

Fig. 10
Plan of quarry *1329*, structure *1597*.

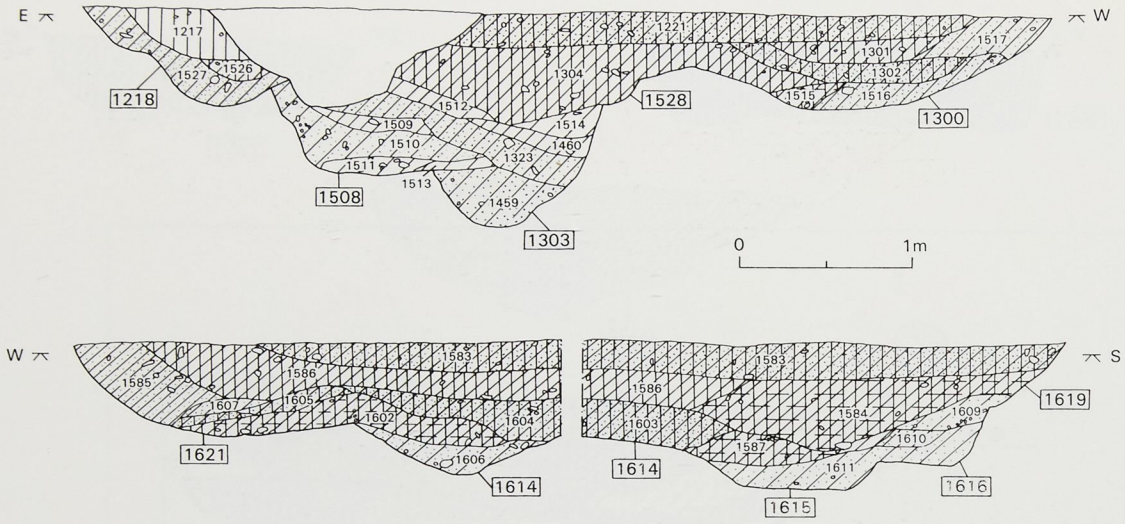

Fig. 11
Sections through quarry *1329*.

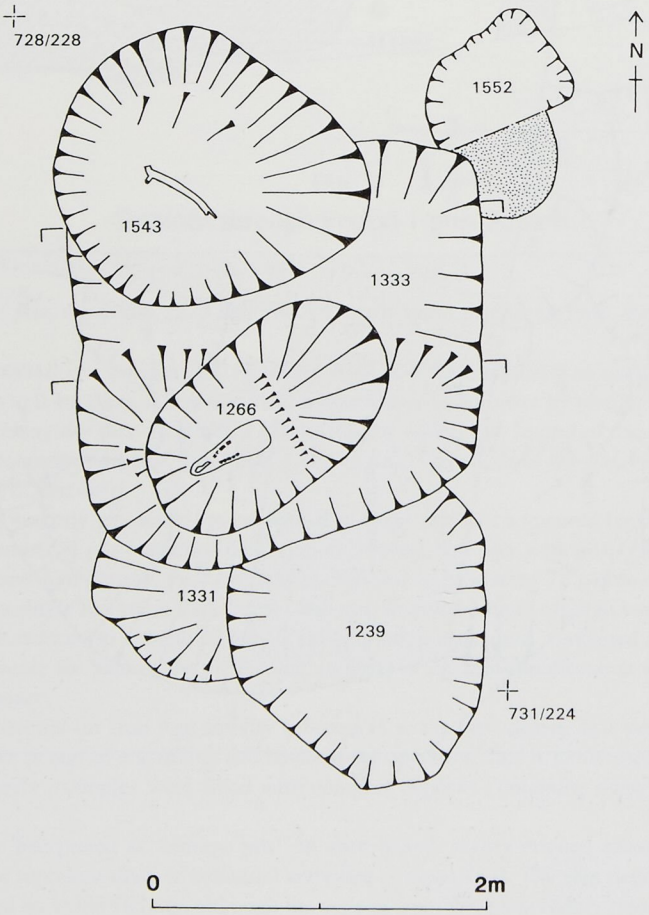

Fig. 12
Plan of pit group *1636*.

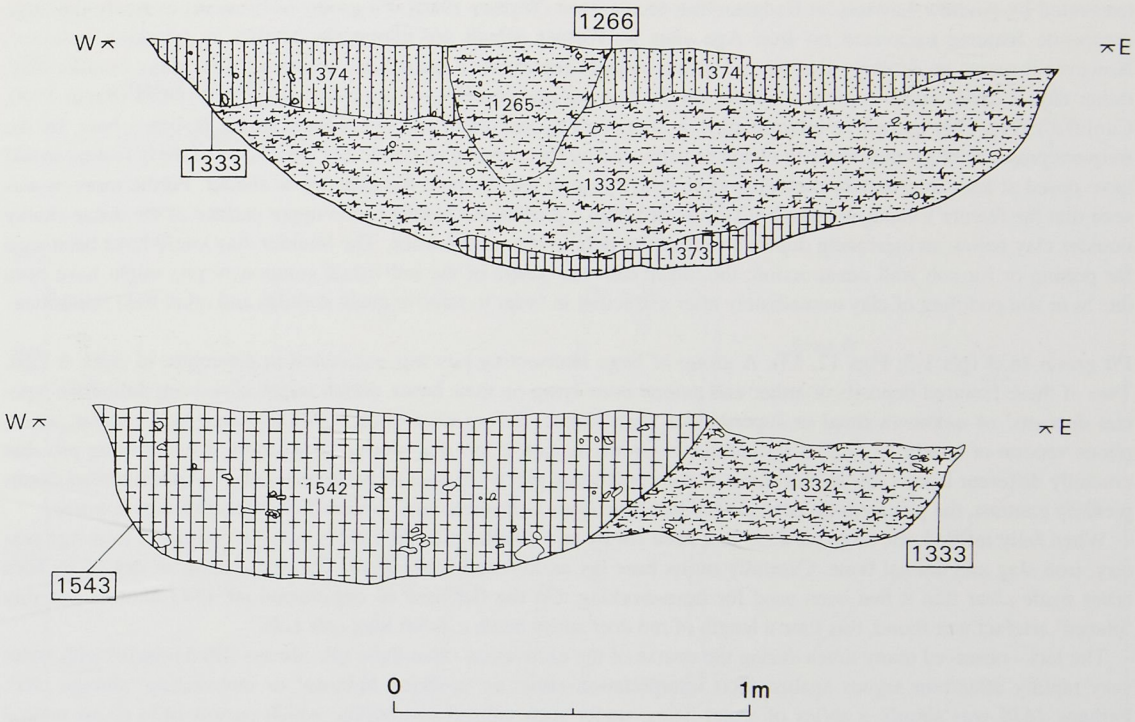

Fig. 13
Sections through pit group *1636*.

Pit groups (pls 1-3; Figs 10-13)

Quarry 1329 (Figs 10, 11). A large "hollow" composed of many intercutting pits excavated in the northernmost corner of Area A. After topsoil stripping the feature resembled the south terminus of a north-to-south aligned pit or ditch of exceptional size which extended to the north beyond the limit of excavation. The feature was truncated along its eastern edge by one of the north-to-south aligned Period 2 (medieval) field ditches, while the Period 1 four-post structure *1597* lay only 1m further to the east. An Iron Age date was indicated by the presence of Iron Age pottery in its fills to the exclusion of all other types.

Despite its regularity in overall plan, the base of the feature was actually made up of a profusion of smaller intersecting pits; the digging-out of these features had generated a large, quarry-like 'hollow' which had then been infilled as a result of a common series of events. A single component pit protruded somewhat to the east of the main group. Many of the pits were represented only by small fragments of side or base, and had been otherwise destroyed by deeper neighbouring features. Where they survived relatively intact they were usually ovate, with steep sides and smooth, rounded bases. The western edge of the complex was formed by larger, shallower pits and depressions.

The sequence in which the pits had been dug out could not be determined, due to their largely simultaneous infilling by common backfill layers. In the northern segment it was clear that a whole series of thick sandy clay and clay loam deposits had been thrown into pits *1303* and *1508* and their neighbours from the east. It seems that the feature was almost fully infilled, surviving only as a shallow depression *c*.0.2m deep below the present stripped surface, when a post-hole, *1222*, was cut into these upper deposits. While this well-defined feature seemed quite solitary, it is possible that other neighbouring and corresponding features were not discovered because of the partial excavation of the feature as a whole. After the disuse of this feature, this broad, shallow depression was filled by a sandy clay loam deposit which represented the final infilling of the hollow, probably by deliberate backfilling rather than by silting.

Few artefacts were found. A number of small pieces of red deer antler, some of them bearing saw-marks, came from intermediate fill *1327*, while Iron Age pottery and burnt flint occurred in small quantities in many deposits. Most prolific in finds were the already-mentioned uppermost layers, *1221* and *1583*. Both of these produced much burnt flint, while *1221* also yielded Iron Age pottery, animal bone (including one sawn piece) and 19 lithic items.

Negative features of this scale are rarely found on Norfolk's excavated Iron Age sites, with the exception of one

excavated by Andrew Lawson on Redgate Hill, Hunstanton (Wymer 1986). Pit group *1329* seems to typify the large composite features excavated on Iron Age sites in Wessex which are commonly known as 'working hollows'. However it seems more likely that this pit group actually represents a quarry dug to extract the chalky boulder clay, rather than a *deliberately*-excavated shelter for winnowing and parching of grain and similar activities (Bersu 1940, Cunliffe 1991). This extractive interpretation is supported by the depth and unevenness of the feature's base, by the frequent presence of ground water in its lower parts, and by its tendency to flood after rain. Each of these factors would have posed at least intermittent problems to anyone trying to use the hole for industry or shelter. Furthermore, it was seen that the feature's south-western limit coincided with a gradual deepening of the upper surface of the dense chalky boulder clay below an increasing depth of sandy/silty natural clay overburden. The boulder clay could have been used for potting or for cob wall construction; the rather bath-like shape of the individual component pits might have been due to *in situ* puddling of clay immediately after extraction in order to remove chalk nodules and other hard impurities.

Pit group 1636 (pls 1-3; Figs 12, 13). A group of large intersecting pits was excavated in the centre of Area A East. Two of these featured deposits of antler and animal bone lying on their bases, which might have been deliberate 'special deposits' of unknown ritual or superstitious significance. Before excavation, *1636* appeared as a smaller, amorphous version of quarry *1329* 20m further north. On excavation it too was seen to be a group of intersecting pits, but crucially different from *1329* in that some of the component pits were seen to have been cut into other *infilled* examples. By contrast, the pits forming quarry *1329* had been open as a single large hollow before backfilling *en masse*.

When fully infilled, the large pit *1333* had been cut by two smaller pits. Pit *1266*'s sole fill contained Iron Age pottery, iron slag and animal bone. Centrally on its base lay an inverted cattle skull. The detachment of one of its horn cores made clear that it had been used for horn-working. On the flat base of egg-shaped pit *1543* another possibly 'placed' artefact was found, this time a length of red deer antler beam *c.* 0.5m long (pls 1-3).

The fact - observed many times during the course of the excavation - that these pits always filled brimful with water very rapidly after rain argues against their interpretation either as 'working hollows' or intersecting 'storage pits'. Perhaps *1636* was simply a series of water-holes; under such subsoil conditions, which permit little or no natural drainage of accumulated water, a shallow water-hole would foul rapidly and repeated re-excavation would have been necessary to secure a fresh supply for stock or humans. Alternatively the features might have fulfilled an industrial function. Horn- and antler-working both call for protracted initial soaking of raw material, and the presence of red deer antler and a cattle skull in the pits might point to such a function.

Excellent examples of both water-holes and antler-soaking pits, albeit of later Bronze Age date, were excavated in Suffolk at West Row Fen, Mildenhall (Martin and Murphy 1988, 355; fig.1). Interestingly the pit interpreted by Martin and Murphy as an antler-soaking reservoir also contained a length of red deer antler beam. It appears that these West Row pits were originally provided with lids, perhaps in an attempt to control the offensive smells which these operations would have produced.

Other features (Fig.6)

A single shallow length of gully, *c.* 5m long, was excavated in the westernmost part of Area A. This might have been an eroded remnant of a once-longer feature. Only 1.5m to the north-west of four-post structure *1593*, it shared the alignment of this building's north-western side.

Period 2: Medieval features

A series of five north-to-south-aligned ditches crossing the centre of the site (Fig.14) probably represented a medieval open field system pre-dating the establishment of the present-day hedged field boundary. The five ditches ran approximately parallel to each other and *c.* 7m - 10m apart, occupying a north-to-south strip 35m wide traversing the whole site. All the ditches extended to the north beyond the limits of excavation. To the south all terminated within the stripped extent of Area B, with the exception of *1278* which passed too far to the east to be exposed by the 1993 stripping south of the modern hedgeline. All but the easternmost example, *1278*, were interrupted in the centre of Area A by the recent pond.

The four most westerly of the ditches shared very similar dimensions and basal profile, typically being *c.* 0.8 wide, vertical-sided and flat-bottomed. Ditch *1278* to the E was more substantial, being *c.* 1.3m wide and featuring a U-shaped or slightly stepped lower profile. Where recorded, the southern termini of the ditches were all steep-sided and exceptionally well-defined. The ditches were largely filled by homogeneous loam deposits which resembled backfill. A small

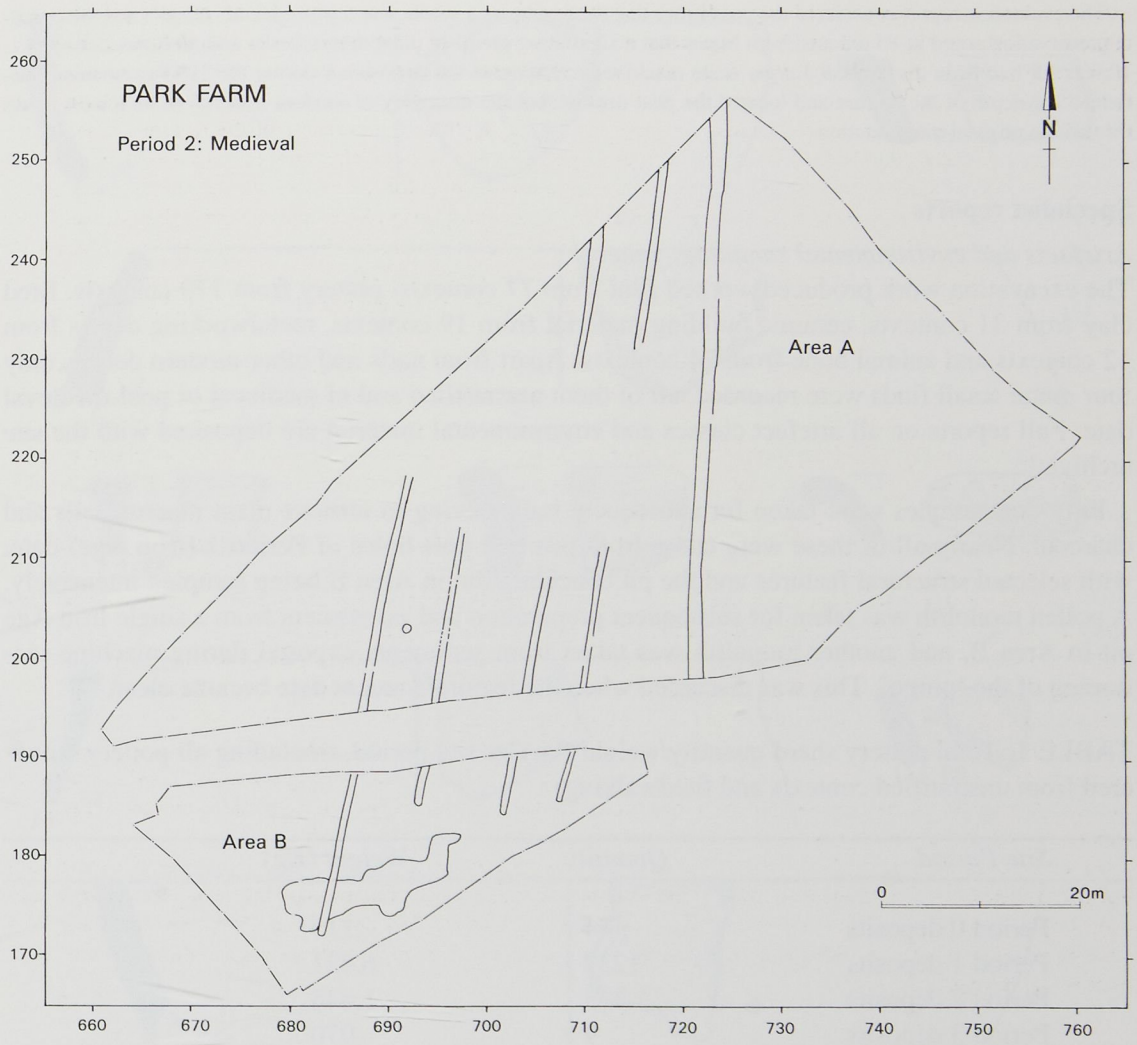

Fig. 14
Plan showing Period 2 (medieval) features.

proportion of excavated segments produced large numbers of artefacts, mostly residual Iron Age pottery and burnt flint. Despite the likely date of the features, post-Iron Age artefacts were conspicuous by their absence.

A solitary round pit, containing quantities of 11th - 12th century Early Medieval Ware, was excavated in the southern part of Area A.

Period 3: Post-medieval features

Apart from a small number of recent drains and traces of a possible headland rut in the southern part of Area A, the only post-medieval feature excavated at Park Farm was the large pond in central Area A (Fig.4).

Measuring *c.*25m (E - W) by 20m (N - S), the pond occupied a natural depression in the surface of the undisturbed natural boulder clay, and was filled with a compact sandy clay deposit. A sump mechanically excavated in its eastern part to speed drainage after heavy rain encountered the feature's base at a depth of 1.4m below the stripped surface. It was covered by a thin layer of peat, context 85.

The evaluation report considered the possibility that the feature as a whole was a post-glacial 'pingo', and the organic preservation noted in *85* aroused high hopes that a significant group of plant macrofossils and molluscs dating to *c.* 10,000 BP had been discovered. Larger-scale machine-sectioning of the depression during the 1993 excavation confirmed the depth of the feature and located the peat deposit, but the discovery of modern material in its lowest levels refuted the original interpretation.

Specialist reports

Artefacts and environmental sampling: general

The excavation work produced worked flint from 77 contexts, pottery from 170 contexts, fired clay from 31 contexts, ceramic building material from 19 contexts, metalworking debris from 12 contexts and animal bone from 74 contexts. Apart from nails and other modern debris, only four metal small finds were recorded, all of them unstratified and of medieval or post-medieval date. Full reports on all artefact classes and environmental material are deposited with the site archive.

Fifty-one samples were taken for subsequent bulk sieving to retrieve plant macrofossils and charcoal. Nearly all of these were taken from pits and post-holes of Period 1 (Iron Age) date, with selected structural features and the pit concentration in Area B being sampled intensively. A pollen monolith was taken for subsequent preparation and assessment from a single Iron Age pit in Area B, and another monolith was taken from sediments exposed during machine-sectioning of the 'pingo'. This was discarded when the feature's recent date became clear.

TABLE 1: Total pottery sherd quantity/weight (kg) by site period, (including all pottery recovered from unstratified contexts and fieldwalking)

Site Period	*Quantity*	*Weight (Kg)*
Period 0 deposits	44	.115
Period 1 deposits	1237	6.831
Period 2 deposits	323	1.448
Period 3 deposits	9	.070
Unstratified	128	.588
Fieldwalking	43	.329
TOTAL	1784	9.381kg

Prehistoric pottery *by* Sarah Percival

General. A total of 1784 sherds weighing 9.381kg were recovered from 170 excavated contexts and from surface collection (table 1). The great majority of this pottery (*c.*92% by weight) was of Iron Age type. All the pottery recovered was fragmentary and no complete vessels were found.

While the assemblage included 0.06kg of Roman pottery and 0.44kg of medieval ceramic, this summary is concerned exclusively with the prehistoric material, comprising 27 sherds (0.04kg) of pre-Iron Age and 1642 sherds (8.68kg) of Iron Age-type wares. In addition eighteen sherds of indeterminate prehistoric pottery weighing 0.46kg were found.

Catalogue of illustrated sherds (Figs 15-17)

P1 Rim type 1, flattened ?bowl rim. Fabric IA33, hard, wiped surfaces. Context *1000*, cleaning.

P2 Rim type 2, flattened ?jar rim. Fabric IA30, hard, smoothed surfaces. Context *1109*, fill of post-hole *1110*.

P3 Rim type 3, flattened, pinched out. Fabric IA31, hard, wiped surfaces. Context *1012*, fill of post-hole *1013*.

P4 Rim type 4, 'T'-section jar rim. Fabric IA30, hard, smoothed surfaces. Context *1028*, fill of pit *1041*.

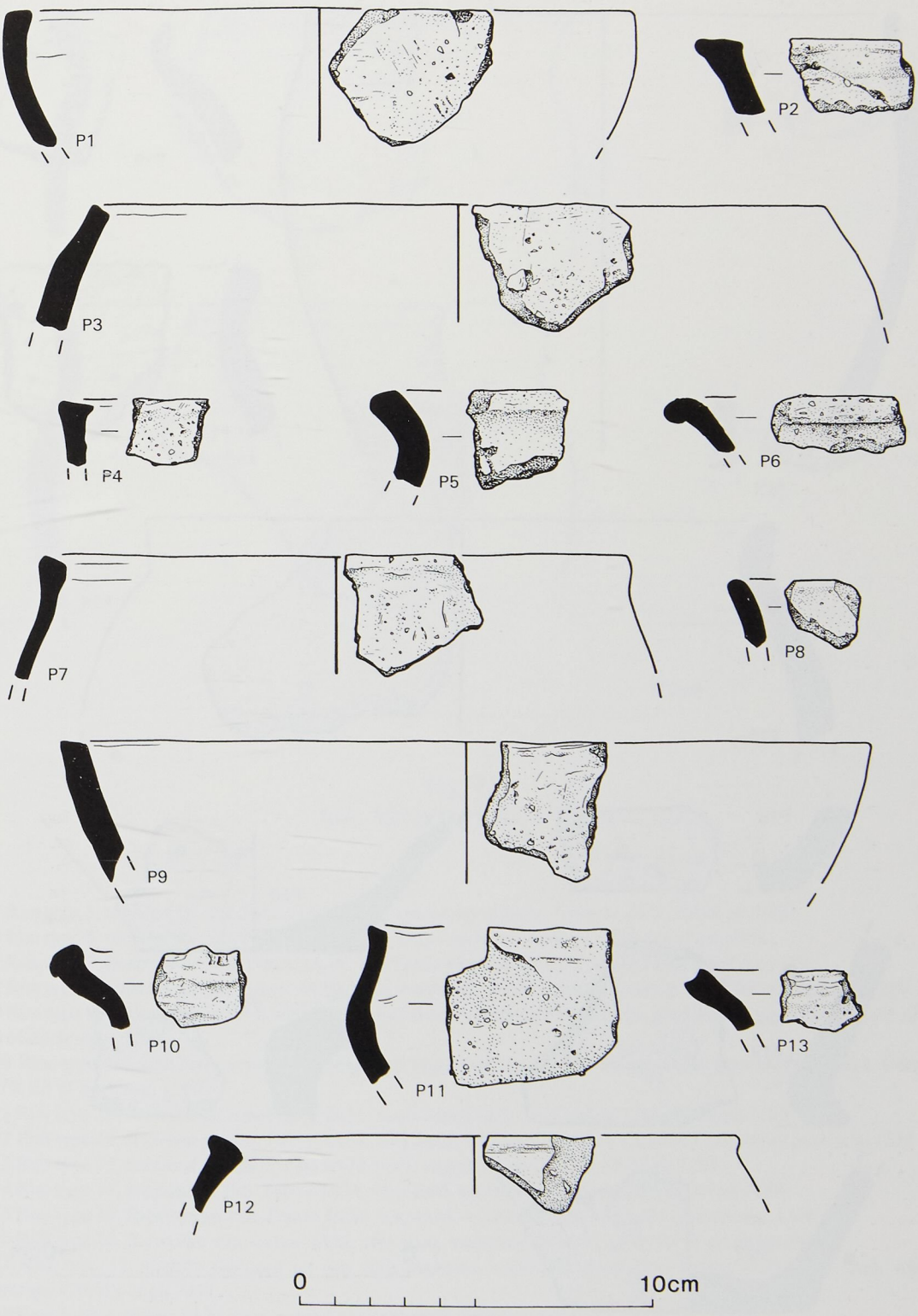

Fig. 15
Iron Age pottery (P1-P13).

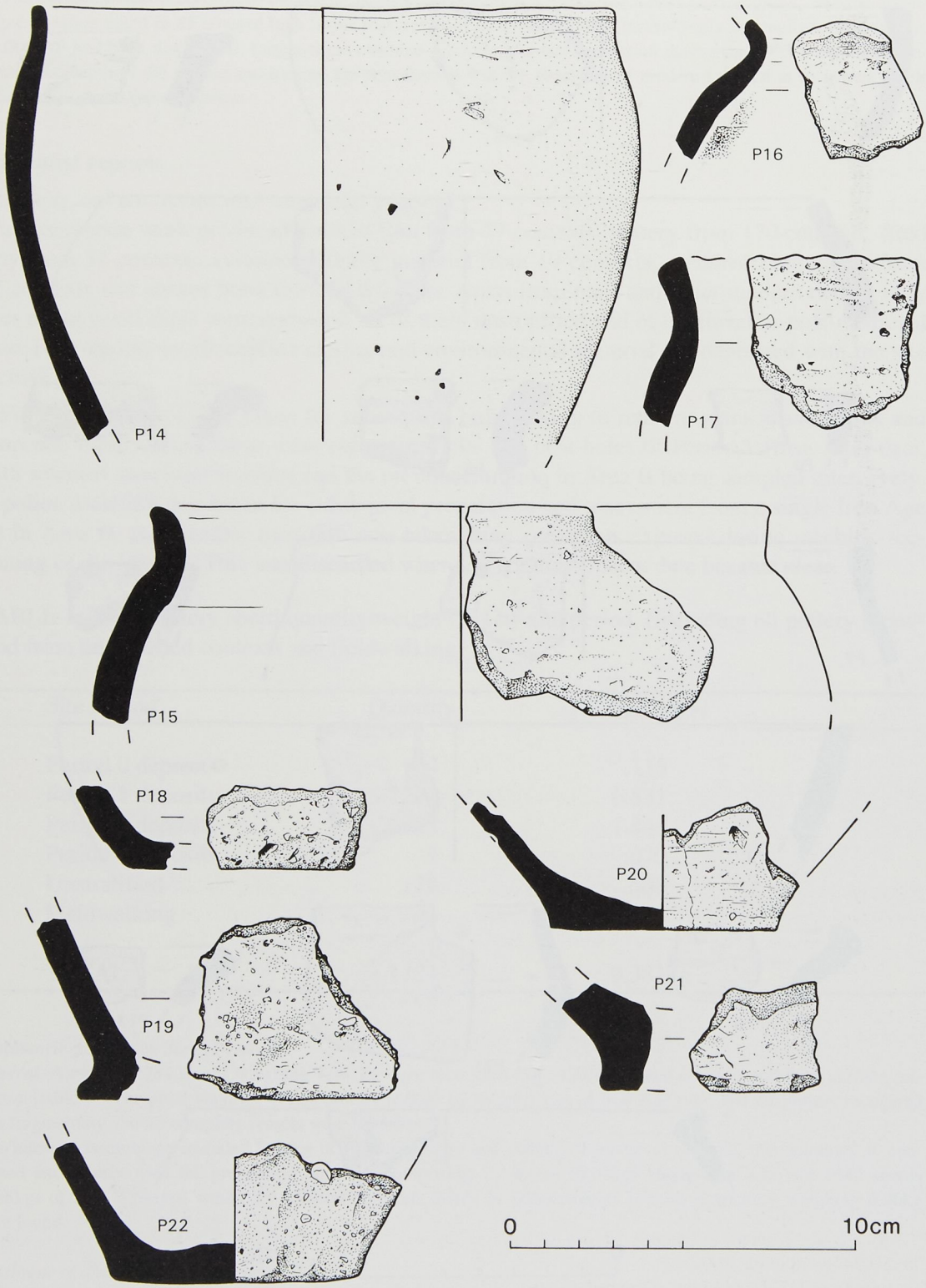

Fig. 16
Iron Age pottery (P14-P22).

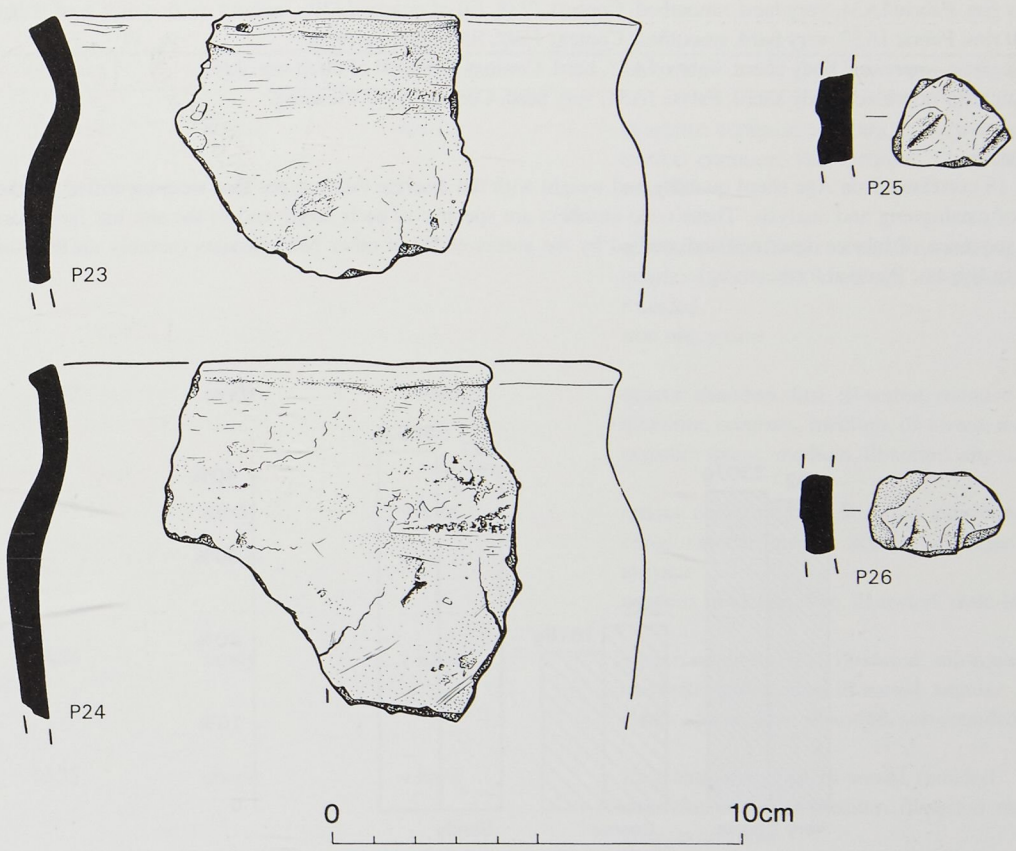

Fig. 17
Iron Age pottery (P23-P26).

P5 Rim type 5, rounded jar rim. Fabric IA34, hard, smoothed surfaces. Context *1031*, fill of pit *1050*.
P6 Rim type 6, rounded jar rim. Fabric IA30, hard, wiped surfaces. Context *1058*, fill of pit *1056*.
P7 Rim type 7, flattened jar rim. Fabric IA36, very hard, wiped surfaces. Context *1190*, fill of pit *1189*.
P8 Rim type 8, rounded jar rim. Fabric IA30, hard, smoothed, wiped surfaces. Context *1219*, fill of ditch seg. *1220*.
P9 Rim type 9, flattened ?bowl rim with impressed cable decoration. Fabric IA30, hard, wiped surfaces. Context *1219*, fill of ditch seg. *1220*.
P10 Rim type 10, flattened jar rim with finger-tip impressed decoration. Fabric IA30, smoothed surfaces. Context *1219*, fill of ditch seg. *1220*.
P11 Rim type 11, flattened jar rim. Fabric IA31, hard, wiped surfaces. Context *1195*, fill of pit *1196*.
P12 Rim type 12, flattened jar rim. Fabric IA34, very hard, smoothed surfaces. Context *1252*, fill of post-hole *1253*
P13 Rim type 13, flattened jar rim. Fabric IA30, hard, wiped. Context *1281*, fill of pit *1283*.
P14 Rim type 14, rounded jar rim. Fabric IA34, very hard, smoothed. Context *1290*, fill of pit *1289*.
P15 Rim type 15, flattened jar rim. Fabric IA34, very hard, wiped. Context *1305*, fill of ditch seg. *1306*
P16 Rim type 16, flared ?jar rim. Fabric IA32, very hard, smoothed. Context *1374*, fill of pit group *1636*
P17 Rim type 17, slightly flattened jar rim with finger-tip impressed decoration. Fabric IA34, very hard, wiped. Context *1470*, fill of pit *1471*.
P18 Base form 1. Fabric IA31, hard, wiped. Context *1012*, fill of pit *1013*.
P19 Base form 2. Fabric IA31, hard. Context *1190*, fill of pit *1189*.
P20 Base form 3. Fabric IA34, very hard, smoothed. Context *1207*, fill of pit *1208*.
P21 Base form 4. Fabric IA34, very hard, smoothed. Context *1207*, fill of pit *1208*.
P22 Thumbed base. Fabric IA31, hard. Context *1484*, fill of post-hole *1485*.

P23 Jar rim. Fabric IA34, very hard, smoothed. Context *1238*, fill of quarry *1329*.
P24 Jar rim. Fabric IA32, very hard, smoothed. Context *1542*, fill of quarry *1636*.
P25 Fingertip-impressed body sherd. Fabric IA33, hard. Context *1137*, fill of ditch seg. *1350*.
P26 Fingertip-impressed body sherd. Fabric IA34, very hard. Context *1000*, cleaning.

The Fabrics

Figure 18 correlates Iron Age sherd quantity and weight with the discrete fabric types that were identified for the purposes of cataloguing and analysis. These code numbers are specific to each fabric and to the site but form part of a larger sequence of fabrics described and studied by the author (S.P.) at other Norfolk sites (notably on the Norwich Southern Bypass; Percival forthcoming).

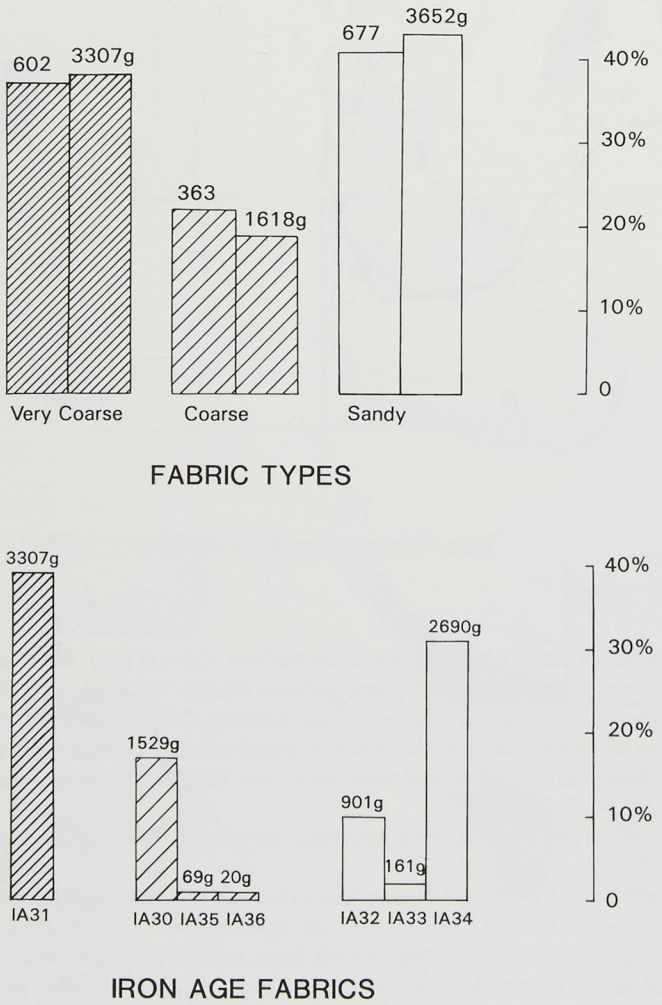

Fig. 18
Iron Age pottery fabric summary.

TABLE 2: Iron Age pottery fabrics

Fabric	*Type*	*Hardness*	*Inclusions*
IA30	coarse	hard	quartzite: common, medium, ill-sorted, angular quartz: common, fine/medium, ill-sorted, sub-rounded
IA31	v coarse	hard	quartzite: abundant, coarse, ill-sorted, angular quartz: moderate, medium, ill-sorted, sub-rounded iron ore: sparse
IA32	sandy	v hard	quartz: abundant, fine, ill-sorted, rounded quartzite: common, medium, ill-sorted, angular organic: sparse, medium, ill-sorted, angular
IA33	sandy	v hard	quartz: common, fine, ill-sorted, sub-rounded conglomerate: sparse, coarse, ill-sorted, sub-angular organic: moderate, fine, ill-sorted, plate-like
IA34	sandy	v hard	quartz: common, fine, ill-sorted, sub-rounded quartzite: sparse, fine, ill-sorted, angular chalk: sparse, fine, ill-sorted, sub-rounded
IA35	coarse	v hard	flint: abundant, fine, ill-sorted, rounded quartzite: common, medium, ill-sorted, rounded grog: occasional
IA36	coarse	hard	quartzite: abundant, fine, ill-sorted, rounded quartz: moderate, fine, ill-sorted, rounded

Pre-Iron Age fabrics. The small number of Bronze Age sherds were characterised by their light colour, often buff or orange, and their relative softness compared to the Iron Age fabrics. Usually they could be fairly easily marked with a fingernail.

Five of the seven Bronze Age fabrics contained grog, an inclusion found in only one of the Iron Age fabrics (IA35). The Beaker fabrics contained quartz sand and grog, some of which had leached out to form vacuoles in the surfaces of the sherd. They seem to be consistent with other Beaker fabrics in the region and can be compared to examples recently excavated at Trowse on the Norwich Southern Bypass (Percival forthcoming).

Iron Age fabrics (table 2). The Iron Age sherds were divided into seven fabric groups. Each of these fabrics was then assigned to one of three broader fabric types - 'very coarse', 'coarse' and 'sandy' - on the basis of inclusion size.

The distinctive 'very coarse' fabric IA31 contained large inclusions of up to 10mm, mostly angular quartzite with quartz and occasional haematite. The 'coarse' fabrics contained hard inclusions up to 5mm in size and were characterised by angular quartzite inclusions visible on their surfaces, giving the sherds a speckled appearance. The 'sandy' fabrics contained inclusions of up to 2.5mm in size. All contained rounded quartz grains and were hard and well-fired. They showed a greater variety of inclusions than the 'coarse' or 'very coarse' wares, containing quartz, quartzite (IA32 and IA34), chalk (IA34), vegetable matter (IA32 and IA33) and an unidentified conglomerate (IA33).

The forms

Pre-Iron Age forms. A single Beaker rim (not illus.) was the only diagnostic pre-Iron Age sherd. The rim was flattened and slightly out-turned, with fingertip impressions along the top and just below the rim.

Iron Age forms. All of the vessels were hand-made, the small size of the sherds and the presence of coil fractures indicating coil construction. Jars were the most common vessel type to be found, jar rims representing 75% of the rim sherds recovered from the site, but bowls (16%) were also represented. Nine percent of the rim sherds could not be assigned to a specific vessel form.

Jars with diameters at the rim of between 120 and 260mm predominated. These were found most commonly in

'sandy' and 'coarse' fabrics, and may represent the vessel types most commonly in use on the site. The flattened-rim jar was the most common vessel form, 60% of all jar rims falling into this category. These vessels were most common in 'coarse' fabrics. Eighty-eight percent of jars with diameters of over 200mm were found in 'very coarse' fabric (IA31), suggesting that this fabric may have been specifically chosen for larger vessels, perhaps including cooking and storage jars. Jars with rounded rims were most common in 'sandy' fabrics. Jars with 'T'-sectioned rims (*eg.* P4) were represented by three sherds in 'coarse' fabrics, while a single everted jar rim sherd of 'sandy' fabric was also found.

Bowls were only found with flattened rims, though these were in all fabric types. The smallest (up to 120mm at the rim) were only found in 'coarse' fabrics, while bowls with rims of between 130mm and 160mm were only found in 'sandy' fabrics. Large bowls (over 200mm in rim diameter) were only found in 'very coarse' fabrics.

The large number of undiagnostic base sherds demonstrates that the join between the base and body of many of the vessels was weak, suggesting that the bases may have been pre-formed. Approximately 55% of base sherds showed an increased density of inclusions on the outer base surface. The extra material appeared to have adhered to the vessel whilst the clay was still wet. This treatment has been observed in other Iron Age assemblages, for example from the Norwich Southern Bypass (Percival forthcoming) and Stansted, Essex (Brown forthcoming). Perhaps the extra coarse material was a deliberate addition designed to aid stacking and firing or to prevent slippage when in use.

TABLE 3: Quantity and weight (kg) of Iron Age decorated pottery by fabric

	FABRIC TYPES			
	Very Coarse	Coarse	Fine	Total
Fingertip-impressed:				
Rim (Jar)	3	4	3	10
Body sherds	3	4	5	12
Thumb-impressed:				
Rim (Jar)	6	-	-	6
Base	4	1	-	5
Body sherds	1	-	-	1
Cabled:				
Rim (Jar)	-	1	-	1
Fingered	17	-	-	17
Wet hand wiped	-	43	224	267
Burnished	-	-	1	1
TOTAL	34	53	233	320

Decorative techniques/surface treatments (table 3)

Pre-Iron Age. The single Beaker rim sherd featured deep fingertip-impressions which were slightly pulled out to form a rusticated surface.

Iron Age. Decorated sherds were sparse, and treatment was restricted to fingertip or thumbed impressions on the top of the rim and occasionally on the body of vessels. This was most common on jars with flattened rims, which lend themselves well to impressed decoration (P10, P11). One rim was decorated with oblique tooled impressions producing a cabled effect. Similar fingertip-impressed rims were also found on the Norwich Southern Bypass (Percival forthcoming) and at West Stow, Suffolk (West 1990, fig.46). Oblique tooled decoration was also found at Stansted (Brown forthcoming) and Little Waltham (Drury 1978), both in Essex, and at West Stow (West 1990, fig.46).

A 'dimpled', fingered surface was also seen on some body sherds in 'very coarse' fabric (*eg.* P22). This might have reflected production techniques; alternatively it might have been a deliberate treatment allowing the vessel to be held more securely.

The most common form of surface treatment observed was smoothing or compacting of the outer surfaces of the vessels. This could be seen on most of the 'coarse' and 'sandy' sherds. Many of the sherds, especially those of 'sandy' fabrics, had a smooth, hard surface similar to a slip which was achieved by wiping the sherds with wet fingers before firing. This treatment occurred mostly on the outer surface of vessels but occasionally appeared on both outer and inner surfaces. One sherd had a smoothed, compacted surface producing a burnished effect. There was, however, no evidence for the vertical scoring or striations found in many Iron Age assemblages.

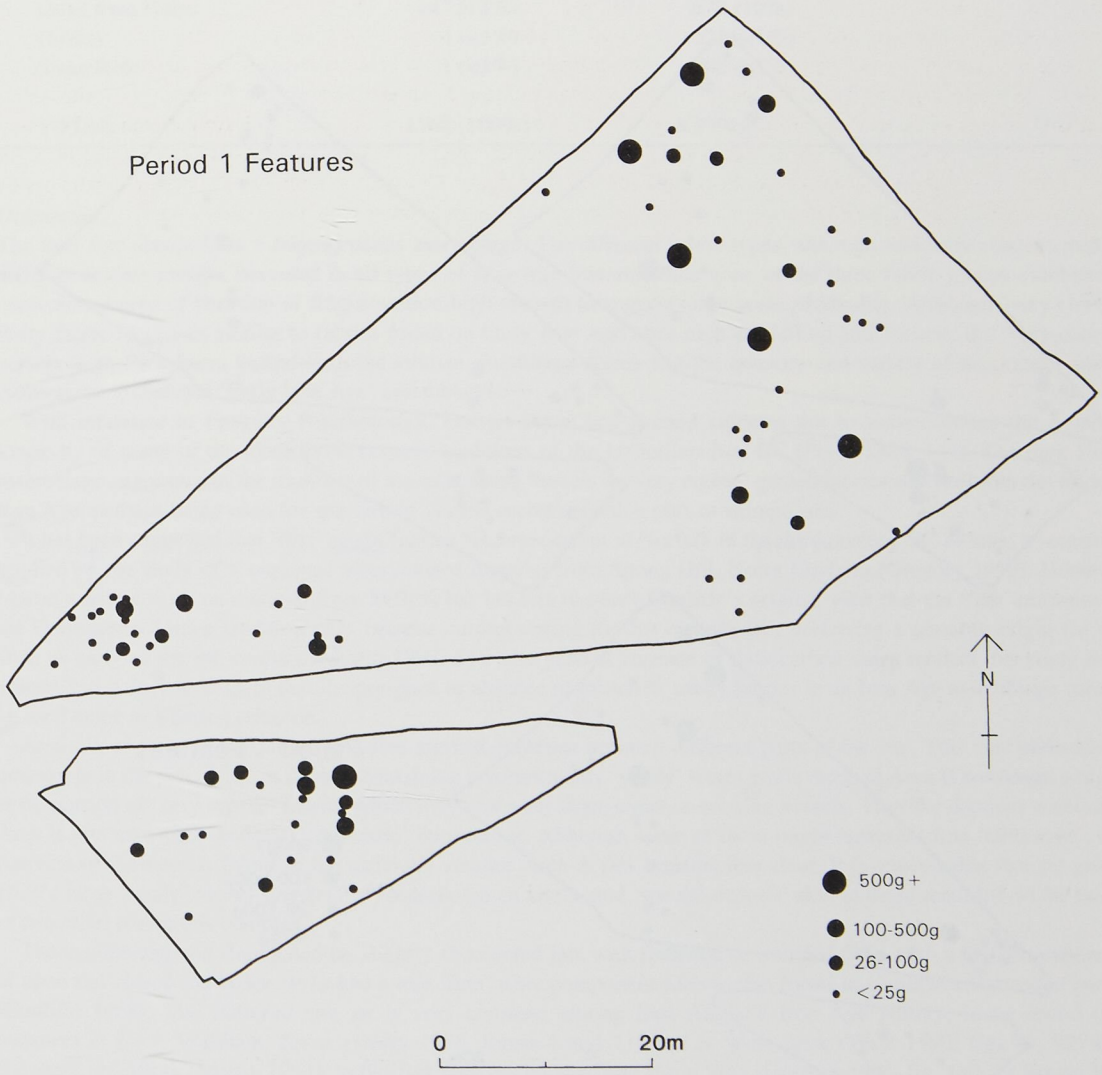

Fig. 19
Distribution of Iron Age pottery in Period 1 features.

Deposition of Iron Age pottery (Figs 19, 20)
The majority of the pottery was recovered from pits, which contained 60% of the total sherd quantity. Pits from all parts of the site contained all three types of fabric, but there was a marked difference between the assemblages from the Area A pits, which contained predominantly 'sandy' fabrics (*c.*55% sherd total), and those from Area B which were dominated by 'very coarse' fabrics (*c.*70% sherd total). Sherd sizes also varied between the two pit groups. Calculations based on average sherd weights demonstrated that Area A pits contained smaller-than-average sherds of 'coarse' wares, average-sized 'very coarse' sherds and larger-than-average 'sandy' sherds. By contrast the Area B pits contained highly fragmented examples of 'coarse' and 'sandy' sherds and larger 'very coarse' sherds.

The ?quarry *1329* and possible industrial pit complex *1636* contained all three fabric types, but echoed the other Area A pits in containing a high percentage of 'sandy' ware fabrics (*c.*45% sherd total). The largest sherds found in the post-hole structures were of 'coarse' fabrics, but the small number of sherds from these features makes any further interpretation risky.

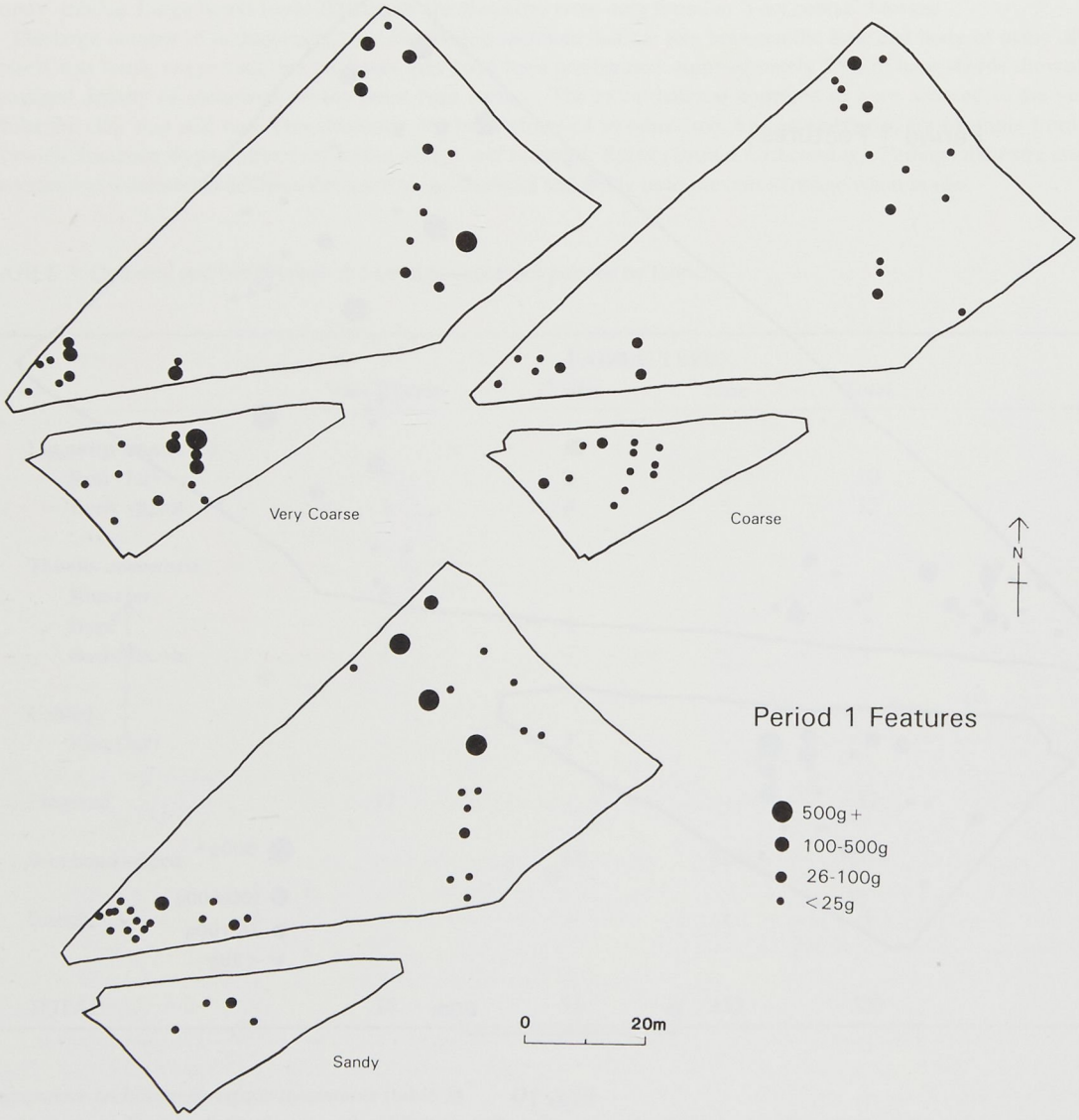

Fig. 20.
Occurrence of 'very coarse', 'coarse' and 'sandy' Iron Age ceramics in Period 1 features, by feature type.

TABLE 4: Quantity/weight of Iron Age pottery from Period 1 features, by feature type

Feature Type	*Quantity*	*Weight (kg)*
Pits	725 (61%)	4.145 (63%)
Quarry Pits	264 (22%)	1.584 (23%)
Post Hole Structures	27 (2%)	.135 (2%)
Other Post Holes	147 (13%)	.670 (10%)
Gullies	4 (<1%)	.023 (<1%)
Stake Hole	1 (<1%)	.002 (<1%)
TOTAL	1168 (100%)	6.559kg

Discussion

The Iron Age sherds form a homogeneous assemblage. The different fabric types, although variously concentrated in different feature groups, occurred in all types of Iron Age feature, while none of the three fabric groups exhibited a consistent degree of abrasion or fragmentation high enough to suggest large-scale residuality. Although 'very coarse' flinty fabric IA31 was similar to fabrics found on Early Iron Age sites such as Harling and Trowse, the 'very coarse' vessels from Park Farm lacked both the situlate shouldered forms and the quantity and variety of decoration which characterise archetypal 'Early Iron Age' assemblages.

With reference to Fengate, Peterborough, Francis Pryor has warned students not to underestimate the possible longevity of many of the identifiable ceramic traditions of the 1st millennium BC (Pryor 1984, 144). The Park Farm assemblage suggests that the tradition of manufacturing vessels in 'very coarse' gritted fabrics survived into the Middle Iron Age, perhaps being used for specialised vessels such as cooking pots or storage jars.

It has been suggested that 'fine' sandy fabrics became current in Norfolk in the third century BC or later, a sequence implied by the study of a sequence of excavated material from Spong Hill, North Elmham (Gregory 1995). However Martin's recent work on material from Suffolk has led him to query Cunliffe's original view that the 'fine' ceramics of the Darmsden - Linton tradition only became current during the 5th century BC, preferring a possible origin for the style as early as the 9th century (Martin 1993, 54). The general absence of radiocarbon dates renders this study hazardous, but it does now seem that the presence or absence of gritted or sandy fabrics in an Iron Age assemblage cannot be used alone as a dating criterion.

Analysis of ceramic deposition revealed marked contrasts between different parts of the site. This was particularly noticeable in the pits, those in Area A containing predominantly 'sandy' wares while those in Area B contained a higher proportion of 'very coarse' fabrics which may represent storage jars or cooking vessels. Thus the deposits within the Area B pits take on a distinctly 'domestic' appearance. Although some of them might represent fine 'tableware', the function of the vessels found in the generally smaller Area A pits remains less clear. It is conceivable that pit group *1636*'s large 'sandy' vessel sherds (P24) constituted an artefactual 'special deposit' akin to those recorded on the bases of two other pits in this complex.

The assemblage was dominated by slightly shouldered jars with flattened or rounded rims, with a lesser component of open and closed rim bowls. It lacked a true 'fine' ware component such as that found in Cunliffe's Darmsden group (Cunliffe 1968). The flattened rim jar is very common among East Anglia's Iron Age pottery, being found (for instance) at Little Waltham, Essex (Drury 1978, forms 4 and 11) and at West Stow (West 1990, figs 46, 92) and Barnham in Suffolk (Martin 1993). In Norfolk they are known from Fison Way (Gregory 1991, fig. 140, 3), Spong Hill (Gregory 1995), Feltwell (Gurney 1986, fig.29) and the Norwich Southern Bypass (Percival forthcoming).

The Park Farm pottery might well be contemporary with the Iron Age assemblage from Thetford Fison Way Phase I. This was dated by Gregory on typological grounds to the 4th - 1st centuries BC, and was also dominated by flattened rim jars. However the Park Farm assemblage lacks the grogged and wheelmade fabrics present in some Phase I contexts at Fison Way (Gregory 1991). The lack of any distinctively 'Belgic' or Romanised forms suggest that the latest date for the Park Farm site lies before the mid-1st century BC when these forms became established (Gregory 1995). The abundance of the flattened-rim, slightly shouldered jars, the absence of Darmsden-style fine ware bowls and the general lack of decoration combine to suggest a date in the 3rd to mid-1st centuries BC. It is unfortunate that no scientific dates are available to confirm or deny this hypothesis. While a programme of radiocarbon dates aimed at elucidating the chronological development of Norfolk's Iron Age pottery styles could be justified on several grounds, the 'flatness' of the calibration curve itself during the Middle Iron Age period makes it unlikely that useful new information would result (Alex Bayliss, *pers. comm.*).

TABLE 5: lithics collection summary

1. Initial fieldwalking/site identification (1990-2)		63
2. Evaluation trenching (1992)		107
3. Surface collection prior to area excavation		6
4. Topsoil stripping and cleaning		19
5. Main excavation	- in Iron Age features	250
	- other contexts	79
6. Fieldwalking of peripheral areas		87
TOTAL		611

Worked flint *by* Peter Robins

General.
The assemblage as a whole is summarised in Table 5.

The flint utilised was mixed in quality, the collection including a number of flint colours and types. Many of the flakes are small and misshapen, displaying incipient thermal fractures, and are clearly derived from poor-quality raw material with resultant poor control of flaking. Most was probably collected from the surrounding soil and underlying till, both of which contained abundant pebbles and frost-fractured nodules of flint.

The collection is described in this report under the general headings listed in Table 5, with especial emphasis on the material from Iron Age (Period 1) contexts.

1. Initial fieldwalking and site identification. The 63 flint artefacts collected at this time were briefly reported on by John Wymer (SMR) and are not further described here. It is noteworthy, however, that he remarked on a number of items, including several blades, blade core F2 and 'core burin' F3, which indicate the possibility of Mesolithic activity in the area. As will be seen below, slight further evidence of a Neolithic presence has also emerged as a result of the 1992-3 work.
2. 1992 evaluation excavation. A total of 107 flint artefacts was found in 23 contexts. Only 18 of the pieces, including one fragmentary core, were from excavated contexts, the rest of them apparently coming from overburden or disturbed layers. It is noteworthy that the three main concentrations of flint artefacts correspond with two concentrations of pot-boilers and one of Iron Age sherds.
3. Fieldwalking prior to the main excavation. These six artefacts collected from the surface of the ploughsoil included barbed-and-tanged arrowhead F1, probably dating to the 3rd millennium BC, which falls in the range of 'fancy types' in Green's classification (Green 1980). Indeed it closely resembles his 'Kilmarnock Type K', which is not usually found in southern Britain. However the present site is not far from the edge of the Breckland, an area which has yielded one of the highest densities of such finds in the UK.
4. Topsoil stripping and cleaning. These artefacts included three formal tools, a serrated blade, a nosed-end scraper on a secondary flake and an informal scraper. They serve only to reinforce the presence of prehistoric activity here.
5. The main excavation. A total of 329 artefacts was recovered from defined features in the main excavation, as summarised in Table 5. Cores are probably under-represented in the assemblage. Some irregular examples may have been discarded by excavators along with the many angular flints which were universally present in the till-derived soils, while many irregular cores could well have been re-used as pot-boilers in prehistoric times.
6. Fieldwalking of peripheral areas. This exercise recovered 86 struck flint flakes and fragments, of which 18 had undergone some further modification. In addition a faceted globular hammerstone was found. The modified pieces included 3 scrapers, 2 piercers and 13 other retouched pieces.

Two hundred and fifty of the total number of flints were contained by 38 features ascribed to Period 1 (Iron Age) during the phasing of the site. The remaining 79 were either from natural or medieval/post-medieval contexts.

Period 1 features.
Eighteen of the 29 pits excavated in *Area B* produced a total of 162 flints, *c.* 65% of the total from Period 1 features. The flints were most notably concentrated in the north-eastern part of the pit group, with 85 coming from pit *1196* and 18 and 13 respectively from adjacent pits *1283* and *1189*. With the exception of pit *1041* (14 artefacts) in the western part of the group, none of the other pits contained more than four. The flint distribution implies an area of flint knap-

ping on the north-east margin of the pit group area, with waste and some retouched products becoming incorporated in the (mainly upper) fills of the nearer pits. Classifiable pieces included five scrapers (including rounded-end, end-side, hollow and informal types) and a piercer prepared on a thermal flake, while the small group of retouched pieces showed no unusual traits. The sole evidence of core type was a single core rejuvenation flake, struck obliquely from the face of a core with a plain platform. Probably the most important attribute of the group is its association with quantities of Iron Age pottery and pot-boilers.

Thirty-two flints were retrieved from the fills of *?quarry 1329*, all but one from the upper strata. The assemblage differed from that of Area B in the presence of cores and core-trimming flakes. A small discoidal core showed evidence of second-period working after slight patination had occurred, while other significant finds included a core tablet, a crested flake and a retouched tertiary flake (F10) whose coarse denticulate edge showed heavy wear.

Pit group 1636 contained ten flints. Four of these, including side scraper F11, composite piercer F12 and a 'strike-a-light', were modified.

A further 46 artefacts came from 18 other Iron Age pits and post-holes. Individual feature assemblages were mostly small.

Non-Iron Age features. Thirteen such features contained 79 flint artefacts. The predominance of 'fresh' unpatinated material among the unmodified artefacts and the absence of any formal tool types apart from scrapers and piercers follows the pattern observed in the excavated Period 1 features.

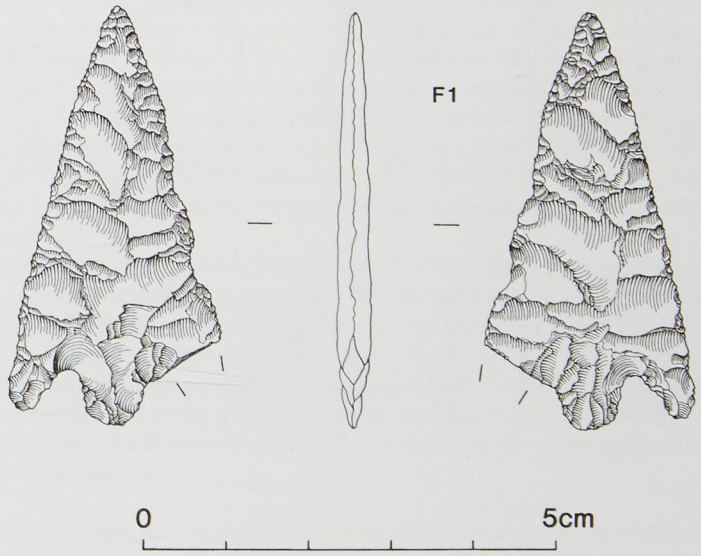

Fig. 21
Worked flint (F1).

Catalogue of illustrated flints (Figs 21, 22)

F1 *Barbed and tanged arrowhead*, one barb missing. Pressure-flaked all over. Probably Kilmarnock type 'K' (Green 1980). Small find 31. Fieldwalking

F2 *Blade core*, single-platform, pyramidal. Fieldwalking

F3 '*Core burin*', on thick edge of (probably thermal) flake. Fieldwalking

F4 *Side-end scraper*, rounded, on secondary flake with cortical platform. Context *1627*, fill of pit *1626*

F5 *Side-end scraper*, rounded, on secondary flake. Thick white cortex on lateral edges. Context *1299*, fill of pit *1298*

F6 *End scraper*, rounded, on thin, partly shattered, side-struck cortical flake. Context *1028*, fill of pit *1041*

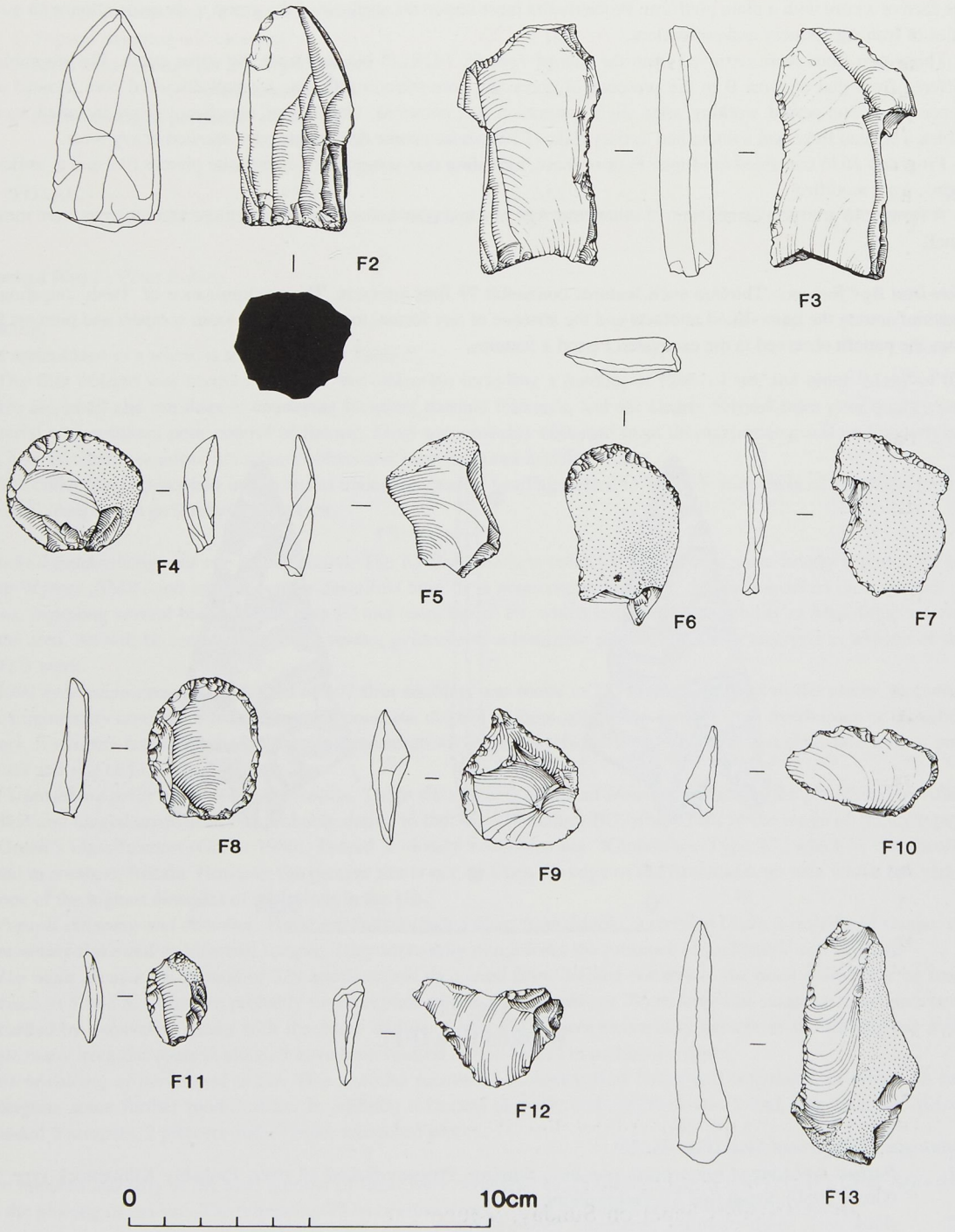

Fig. 22
Worked flint (F2-F13).

F7 *Scraper*, informal, on irregular cortical flake fragment. Context *1623*, fill of pit *1622*
F8 *Discoidal core*, with evidence of two-period working. Context *1221*, fill of quarry complex *1329*.
F9 *Piercer*, on irregular flake largely formed by shatter planes. Context *1299*, fill of pit *1298*
F10 *Denticulate*, on tertiary flake. Edges worn. Context *1584*, fill of quarry complex *1329*
F11 *Side scraper*, on small flake with patinated thermal fracture surface. Context *1374*, fill of pit group *1636*
F12 *Composite tool*, on broken tertiary flake. Ventral face retouched to give notch and piercer (broken). Context *1374*, fill of pit group *1636*.
F13 *Flake knife*, on irregular thermal flake. Slight patination on thermal surfaces, with post-patination retouch. Context *1207*, fill of pit *1208*.

Discussion

Despite the presence of a small number of easily-identifiable earlier prehistoric items, mostly from surface collection, the lithic assemblage from Park Farm is of interest for two especial reasons. Firstly, it provides solid evidence for large-scale Iron Age flintworking. Secondly, it contributes to discussion of the ongoing problem of attempting to distinguish later prehistoric flintwork from that of Neolithic or Early Bronze Age date on typological and technical grounds.

Iron Age lithic material: previous research. The presence of worked flint in association with Iron Age pottery has been long recognised, yet Iron Age lithic technology has only recently become the subject of more detailed study. This discussion of the dating and affinities of the assemblage must begin with a survey of the putative Iron Age flint assemblages known to date from excavations in Norfolk.

At Micklemoor Hill, West Harling, Apling's initial excavations produced pottery of 'Iron Age A' type in association with bone, worked flint, hammerstones and pot-boilers (Apling 1932). However the flint was only summarily described and none was illustrated. Three further seasons of excavation by Clark and Fell again recovered quantities of unpatinated flintwork in close association with Iron Age pottery, the assemblage being described and illustrated briefly in Clark and Fell 1953 as well as being considered summarily from a technological point of view. At Warborough Hill, near Stiffkey, an already-disturbed hilltop mound was excavated, within which both Roman and 'Iron Age A' ceramics were found in association with flint artefacts (Clarke and Apling 1935). Most of this flint was unpatinated, and the report contrasts this main body of flint with the few patinated examples present. Some description of the artefacts is given and a few are illustrated.

More recently Martingell (1988) has described and illustrated in some detail an assemblage of flint artefacts from a series of sites in Essex, and summarised the series of five distinct technological aspects of 'Iron Age' flintwork proposed in Clark and Fell 1953. Secondly, Gardiner (in Davies, J. 1993) has analysed the lithic assemblage from the Iron Age site at London Road, Thetford. She noted some patterning in the distribution of implements, as well as the fact that those pits which contained implements usually produced several while others produced none at all. This phenomenon is parallelled at Park Farm. The London Road assemblage was also of poor technical quality, featuring a limited range of identifiable implements. Gardiner infers an Iron Age date for the group but much of her comparative discussion concerns Late Bronze Age material.

Technology and date. It seems likely that the present site, with its small number of big stratified groups and its almost complete lack of pre- and post-Iron Age occupation, has afforded a valid sample of Iron Age flint products from which a few residual earlier elements can be identified and set aside. The technological criteria proposed by Clark and Fell for the characterisation of Iron Age flintwork in East Anglia have been recently summarised by Martingell as follows (Martingell 1988, 73):

a: Lack of patination
b: *c.*25% of pieces have no prepared striking platforms
c: Those *with* platforms are markedly obtuse in angle
d: Frequently the butt-ends are retouched for use, either notched or convex
e: Cores are irregular, and used for production of squat flakes.

The Park Farm lithics fit this pattern well, and three further characteristic features can be seen within our assemblage too: the production and abandonment of extremely irregular cores; production of a very restricted range of implements; and the retouching of blanks which were either thermal flakes or else preformed, patinated flakes produced by earlier industries.

The first two of these points both arise from the remarks of Gardiner. The last is an outcome of the present survey, but was presaged by Armstrong (1926) in his description of the Late Bronze Age occupation debris from the 'Black Hole' at Grimes Graves.

Distribution and associations. The concentration of flint items in the Area B pit group (65% of the total stratified in Period 1 features) has already been noted. Some patterning can be seen in the association of this 'sub-assemblage' with other classes of material, including pot-boilers and Iron Age pottery. It is in Area B that worked flint and Iron Age pottery are most positively associated *in quantity*, providing the most unequivocal evidence of knapping being carried out here on a major scale during the Iron Age. While pre-Iron Age pottery *was* found in three flint-containing pits, this earlier ceramic was usually only represented by single, probably residual, sherds.

It is notable too that the Area B pits display a clear quantitative relationship between the mass of 'very coarse' Iron Age pottery, the predominance of this fabric type over other wares, and the number of flint artefacts found. This is interpretable as the result of sustained and common activity in the area of the Area B pits during the Iron Age. However the relationship cannot be sustained in Area A East, where (for instance) a high mass of 'very coarse' ceramic in pit *1013* was accompanied by only four flints. Pit *1050*, with 18 flints, contained only a small number of 'very coarse' sherds, which formed a low percentage of the total ceramic mass from the feature.

Metalworking debris *by* Phil Andrews

Twelve pieces of slag weighing 2.9kg in total were retrieved from 12 contexts. Most of this total quantity came from the fill of one feature, small round pit *1030* in Area B. A small number of fragments occurred intrusively in deposits of Period 0 (natural) and Period 2 (medieval) date. The slag seems to derive from iron-smelting, and even the undiagnostic pieces (those without clear 'runs' and drips on their surfaces) are all likely to be from a common source. A single piece from context *1265* had traces of burnt furnace lining adhering to it, but such finds are by no means unusual.

A normal smelting operation would be expected to produce a quantity of slag measured in tens of kilogrammes, so the quantity represented here is small. However it is not unusual for single smelting operations to have been performed in order to produce small quantities of metal as required.

Worked antler *by* Trevor Ashwin and Julia Huddle

Twenty-five pieces of red deer antler, seven of them showing signs of working, were recovered from two contexts at Park Farm. Deposit *1327*, an intermediate layer within the fill of quarry complex *1329*, produced a number of small pieces including four incomplete sections of sawn antler beam/tine and a further three pieces showing one or more saw or knife traces.

Deposit *1542* within the possible industrial pit group *1636* yielded, as well as two smaller pieces, the right antler of a red deer (Pls 1-3). This item lay upon the base of pit *1543*, and might represent a deliberately 'placed' deposit rather than merely the casual disposal of rubbish. Still attached to the calvaria, the beam was broken off above the bez tine, while the brow, bez and trez tines had been sawn off close to the beam. Two traces from a metal saw, both 2.9mm wide, were recorded. One of these was set between the burr and calvaria (pl.2), the other just below the trez tine (pl.3).

This material adds to a small body of evidence for antler-working from Iron Age sites excavated in Norfolk and Suffolk. Although the putative antler-soaking reservoirs from West Row Fen, Mildenhall, have been invoked with reference to the pit group *1636*, these latter features date to the early 1st millennium BC (Martin and Murphy 1988). However a small assemblage including split and sawn fragments was found in the lower fill of the Iron Age outer ditch at Thetford Castle (Gregory 1992, 16). The clear evidence for the use of a metal saw is of some interest in considering possible Middle Iron Age antler-working technologies, but the pieces themselves appear very little different from published material from Iron Age sites at (for example) Winklebury, Hants (Smith 1977, fig.39), Danebury (Cunliffe 1984, fig.7.40) and Gussage All Saints, Dorset (Wainwright 1979, fig.91). By analogy with these and other sites, the end-products of this work may have included handles, toggles and bone combs.

Animal bone *by* Rosemary Luff

A total of 3.5kg of animal bone was recovered, almost all of it from deposits of Period 1 date. This figure does not include the cattle skull from pit *1266*, most of which remained embedded in heavily compacted earth. This acted as a support in preventing the bone from fragmenting into very small pieces.

In general the Iron Age assemblage had been subject to much recent breakage and was heavily eroded, with much unidentifiable material. In many cases the bone could not be identified to taxa and fitted within the broader categories of OXO (large mammal such as cow/horse/red deer) and SMA (medium sized mammal such as sheep/goat/roe deer). One small pit in the northern part of Area A yielded 40 burnt fragments, while another contained a small cattle horn-core typical of the Iron Age Celtic shorthorn.

Context *1221*, the uppermost fill of the quarry pit *1329*, produced approximately 43 fragments, one of which is a sawn-through centrum of a large artiodactyl vertebra. This is not typical of Iron Age butchery, which is more of a knife-cut tradition, and it is suggested that this might be an intrusive piece of medieval or later date.

Pit *1266*, one of the latest features comprising pit group *1636*, contained the remains of a cow skull. The animal was adult at death, and demonstrated severe malocclusion to the right side of the maxilla and mandible. The left horn-core

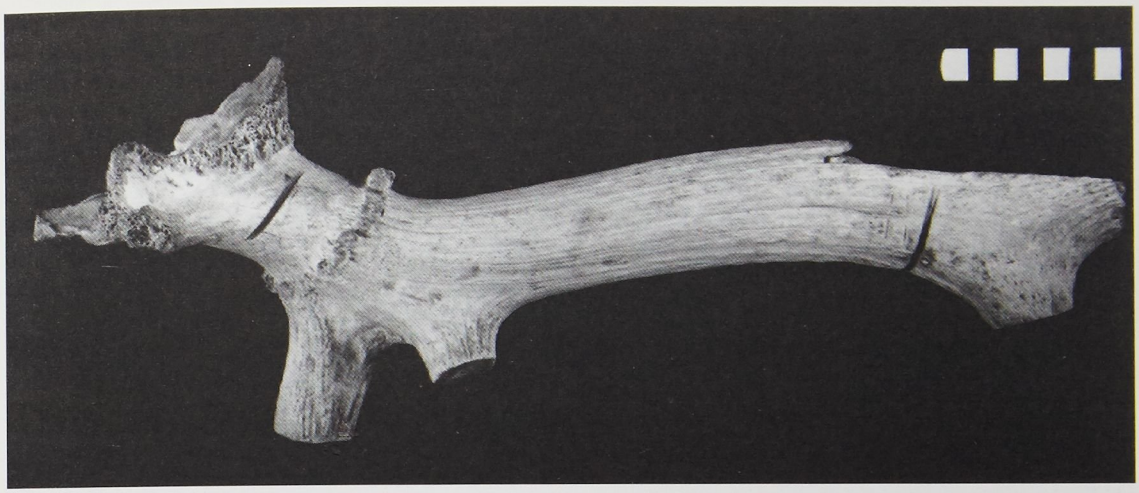

Plate 1
Red deer antler beam from pit *1543*, showing working.

Plate 2
Red deer antler beam from pit *1543*, detail of proximal saw-cuts.

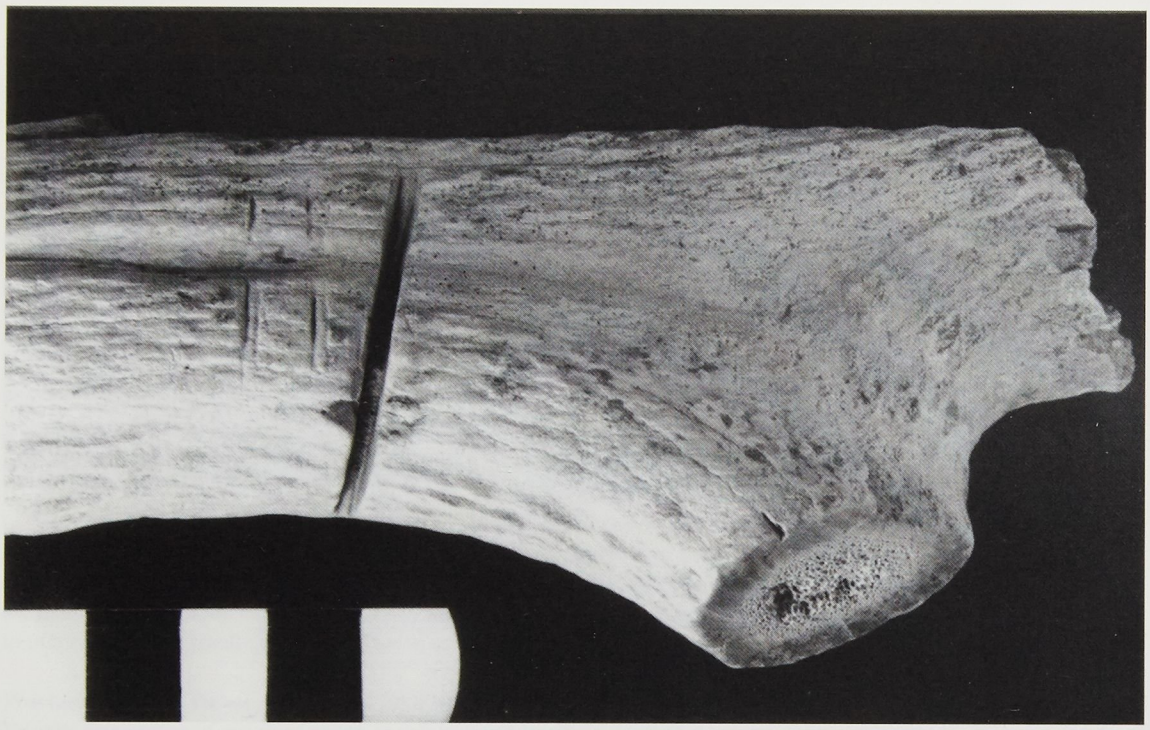

Plate 3
Red deer antler beam from pit *1543*, detail of distal saw-cuts.

had been removed by chopping through the base, and signifies the utilisation of horn. Other bones found associated with the skull were a distal radius of horse, a cow calcaneus and the radius of a foetal calf.

Plant macrofossils and molluscs: results from sample assessment *by* Val Fryer and Peter Murphy
Forty-eight bulk samples were collected from Iron Age deposits for flotation/bulk sieving and subsequent assessment. The plant macrofossil and molluscan assemblages retrieved were homogeneous in character, and no clear distinction was seen between material from pits, post-holes and other features.

Cereals: Charred cereal grains and chaff were recovered from thirty samples, mostly at very low densities. Preservation was generally very poor, the grains having become severely puffed and distorted during charring. Furthermore specimens from a number of samples were heavily coated in silt, impeding identification. Grains and chaff of wheat, mostly *Triticum dicoccum* (emmer), were noted in sixteen samples. Remains of *T. spelta* (spelt) were present in pits but not post-holes. Grains of barley (*Hordeum* sp.) were seen in four samples, while fragments of oats (*Avena* sp.) were identified from five.

Wild flora: Charred macrofossils including seeds, fruits and other material, mainly of segetals, were found in all but ten samples, generally at very low densities. *Prunus* sp. (bullace/sloe), *Corylus avellana* (hazelnut), and *Sambucus nigra* (elderberry) may have been exploited as additional food sources, although charred remains of these plants may well represent a nearby scrub or hedgerow habitat.

Molluscs: Specific sieving for molluscan remains was not undertaken, but shells were noted in many flots. The most common of these was *Cecilioides acicula*, a burrowing species and thus probably a modern contaminant. The remaining molluscs included shade-loving, open country and catholic species, although the assemblages were too sparse to be interpretable. Marsh and freshwater slum species were not seen.

Further detail on results from sample assessments is given in a report forming part of the site archive.

Palynology: results from sample assessment *by* Patricia Wiltshire

A total of ten samples were analysed. Five of these were taken from a soil monolith extracted from large Iron Age pit *1189* in Area B. The others were collected from the quarry complex *1329* in Area A. These latter samples were obtained as aliquots of bulk soil samples taken for macrofossil analysis.

Palynomorphs were very sparse. It was obvious that there was differential preservation and that most pollen had been lost, a point emphasised by the presence of Lactuceae pollen which is resistant to decay. Nevertheless many of the taxa recorded were among those considered vulnerable to corrosion. Thus it is reasonable to suppose that the pollen assemblage presented here might give some indication of the vegetation prevailing during the laying down of the sediments.

Pollen from pit *1189* was dominated by herbs, especially Poaceae (grasses) and Lactuceae (e.g. *Taraxacum dandelion* or *Sonchus sow thistle*). The other herbs are all characteristic weeds of grazed grassland or disturbed open ground. The presence of *Pteridium* (bracken) indicates acidic, well-drained soils in the vicinity, and this is corroborated by the presence of macrofossils of *Rumex acetosella* (sheep sorrel). The lower sediments contained cereal pollen, which was relatively abundant in the basal sample. Only three tree/shrub taxa were found, *Betula* (birch), *Coryloid* (cf hazel) and *Pinus* (pine). These are all wind-pollinated plants; the low pollen counts in these sediments indicate that they were probably not abundant locally, although hazel remains were noted during the plant macrofossil assessment. Fungal hyphae were relatively abundant, and probably derived from plant material deposited during sediment accumulation. The algal spores probably indicate that the sediments were damp, at least periodically.

Pollen from quarry pit *1329* also included weed taxa reflecting open weedy grassland and disturbed, open soils. Some of these might have been quite acid, as suggested by the presence of bracken. Only a single hazel grain was found, and it may be assumed that the landscape at the time of deposition was virtually devoid of trees and shrubs. Ancient marine elements of Cretaceous date, including foraminifera, were also found. These had probably weathered out of the chalky boulder clay soil. The teleutospore of a species of Ustilaginales (fungal smut) was also found but, as in the case of fungal rusts, smuts can be hosted by a wide range of plants. The presence of the endomyccorhizal fungus cf *Glomus* is interesting as it implies erosion of bioactive soil into the feature.

Discussion

Pre-Iron Age activity

The manner in which this area of the county remains relatively blank when considering the distribution of sites of the Neolithic and Bronze Age has led to suggestions that it saw little settlement before the later Iron Age. However the fact remains that the clay subsoils and natural material are not conducive to the formation of the crop-marks which have been so important to the discovery of Norfolk's most numerous prehistoric monument, the round barrow. The danger of circular reasoning is clear, especially considering present dependence on air photography for interpreting the prehistoric landscape.

Future research must seek to interpret the absence of pre-Iron Age material from the Norfolk Boulder Clay, and ascertain if it represents a genuine dearth or is in part a product of archaeological methodology.

Date and duration of Iron Age occupation

On the basis of our present understanding of the broader ceramic picture, it seems best to assign the Wymondham ceramics (and, by extension, the use of the site) to the 'late' Middle Iron Age (perhaps *c.*300 - 100 BC, or even later). Certainly this date range can be proposed with reasonable confidence for the 'finer', sand-tempered pottery.

Can the differences in ceramic fabric, and the concentration of coarser pottery in Area B, be construed as evidence of more than one 'phase' of Middle Iron Age activity? While this point is open to further debate, in the absence of scientific dating the answer is probably no. The possibility that the 'very coarse' flint-gritted vessels are slightly earlier in date, a sequence implied by the recent research of Gregory and others (Gregory 1995), is an intriguing question which must be targeted by future research. However, the roughly even admixture of quantitities of

'very coarse' and 'fine' wares in some substantial feature assemblages in Area A speaks against this. Spatial analysis of the pottery supports the idea that the area of the settlement spread examined represents a single, and perhaps *relatively* brief, occupation. However, the possibility that the site was not permanently occupied but was frequented seasonally or on some other intermittent basis must also be borne in mind.

The proposed 'late' Middle Iron Age date must be considered in the light of the geographical analyses of 1st-millennium settlement patterns presented in John Davies's comprehensive and long-awaited new synthesis of the Norfolk Iron Age (1996). In this study is postulated a gradual expansion of settlement during the Iron Age, with occupation expanding eastwards over time from densely-occupied core areas on the light soils of the West Norfolk uplands and the Thetford area. A date in the 'late' Middle Iron Age would accord well with this hypothesis, since Davies uses settlement and artefactual evidence to suggest a major expansion of human activity on the Norfolk boulder clay during the Late Iron Age proper. Within the scope of this model Park Farm can be seen as a precursor of this main period of enlargement. A scientific dating programme aimed at the Iron Age ceramics of Eastern England might permit this and similar hypotheses to be tested further in the future.

Extent of the Iron Age site

No evidence for an enclosing feature of any kind was retrieved either during evaluation trenching or the main excavation. This apparent openness makes the site typical of the Iron Age settlement pattern not only of East Anglia but of the East Midlands too (Cunliffe 1991, 166-7; Darvill 1987, 114-6). Excavations directed at Iron Age settlements in Norfolk and Suffolk have seldom succeeded in defining their full extent, and the Wymondham site has provided no exception to the regional pattern.

Excavation and fieldwalking have placed the area examined in 1993 on the eastern periphery of a large occupation spread, of unknown size but certainly exceeding 25,000 sq m. This *minimum* size seems comparable with those established for the somewhat earlier Iron Age sites excavated in Norfolk on the Norwich Southern Bypass (Ashwin and Bates forthcoming), and the apparently two-phased site at Little Waltham, Essex (Drury 1978).

Even if the area investigated in 1993 constituted a single 'phase' of settlement (and this is by no means proved), it would be unsafe to assume that the occupation scatter as a whole represents a correspondingly brief period of occupation. It is quite possible that the 'site' in its present form results from a lengthy period of gradually shifting settlement on this gentle, south-facing slope. Possible evidence for such a sequence dating to the earlier 1st millennium BC has been identified by excavations at West Row Fen, Suffolk (Martin and Murphy 1988, 357). Alternatively, Richard Bradley has speculated that some of the 'unusually large' later prehistoric settlements of Eastern England actually resulted from the growth and coalescence of more than one unenclosed site (Bradley 1993, 11). In the absence of further fieldwalking these questions concerning the site's evolution must remain unanswered. Indeed the sparseness and poor condition of the pottery from the 1993 surface collection should temper any optimism that fieldwalking alone could have been used here to define anything but the broadest sequence of occupation.

Iron Age settlement and economy

Park Farm epitomises in many ways the problems posed in attempting to interpret Iron Age sites which are dominated by pits whose frequently rubbish-like fills provide no direct evidence of their original function. Many significant features, notably the large pits in Area B,

defied functional interpretation. Furthermore the generally poor quality of the environmental material, although giving useful insights into a thoroughly cleared and open landscape possibly dominated by weedy grass and pasture, provides little information about food production or animal husbandry. Despite these *lacunae*, evidence was retrieved for a wide range of activities, including iron-smelting, quarrying, flint knapping, antler/horn working, the processing and storage of cereals, and possibly potting too.

Within the area examined, most of these pursuits appeared to centre on a single feature or relatively small area of the site. This section of the report will summarise the economic evidence briefly, and will conclude by discussing the data's potential to contribute to the study of Iron Age ritual behaviour.

Metalworking. The presence of evidence for iron *smelting*, rather than merely smithing debris, is notable, particularly in an area without abundant ore sources. Of especial interest here is Park Farm's position in a possibly newly-settled or once-marginal zone of the county. Recent studies by Haselgrove (1989) and Hill (forthcoming) draw attention to the evidence for heightened craft and industrial diversification and innovation in other areas, notably the Humber Levels, which apparently saw settlement expansion in the Middle Iron Age. A greater frequency of evidence for iron smelting has been identified as part of this phenomenon, and it is interesting that the Park Farm slag might fit in with this pattern.

Phil Andrews has commented on the small quantity of iron slag from Area B, yet the amateur fieldwalking predating the NAU project recorded other concentrations of debris south of the limit of the excavated area. The scale of the operation cannot be judged, nor is any information available concerning the ore source or the nature or range of the iron products which resulted.

It is interesting to note this activity apparently being carried on alongside such a variety of other industrial and agricultural activities. Cunliffe has commented that Iron Age smelting furnaces, where they are found, often occur in a 'homestead' context rather than in one of large-scale specialist activity (Cunliffe 1991): examples cited include Kestor, Devon (Fox 1955) and West Brandon, Co. Durham (Jobey 1962). If the interpretation of clay-quarrying activity offered elsewhere in this report is correct, then it is possible at least that the chalk nodules removed from the extracted boulder clay by puddling could have been used as flux material in iron-smelting, but such a suggestion is a speculative one in the absence of more direct evidence of the smelting process itself.

Flint-working. Peter Robins's analysis of the struck flint suggests that knapping took place on a large scale in the southern part of the excavated area during the Iron Age. This constitutes conclusive and important evidence for the extensive use of struck flint during the Middle Iron Age. Further research is needed into Iron Age lithic technology and the extent of its use, an issue which has received little attention on a national scale.

Antler/horn working. While the worked antler assemblage from the site was not remarkable in itself, it does provide evidence that this activity was carried on here. Traces of antler-working are uncommon from excavated Iron Age sites in East Anglia; while no complete items are represented here, the splitting and sawing technology employed seems typical of later prehistoric antler-working from elsewhere in the country. The identification of further putative examples of horn- or antler-soaking reservoirs akin to Martin's from West Row Fen (Martin and Murphy 1988) makes an interesting contribution to the functional study of pits from Iron Age settlement sites.

Agricultural economy. The poor preservation of the animal bone assemblage provide no detailed information about animal husbandry at the site, but Murphy and Fryer's analyses give a broad impression of the range of cereals cultivated here during the Iron Age.

Despite the efforts of Ellison and Drewett (1971) to consider possible alternative functions, including use as watchtowers and as platforms for the excarnation of corpses, four-post structures of the type excavated at Park Farm are most commonly interpreted as raised granaries. Although no direct evidence to support this view was retrieved, arguably this interpretation is supported by the absence of silo-type 'storage pits' from the excavated area. Indeed such storage pits would almost certainly not have functioned properly on the ill-drained clay subsoils here - unless, of course, the grain or other foodstuff was stored within the pit in a ceramic or other container. This important point was raised by the excavator of the Iron Age site at Little Waltham, Essex, where similar conditions prevailed (Drury 1978, 125).

Our understanding of these small post-hole structures, such characteristic features on settlement sites of the 1st millennium BC, remains uncertain despite general acquiescence to the 'raised granary/storeroom' theory. They are not common in the 'Iceni' territory of Norfolk and northern Suffolk, and those excavated at Wymondham form a valuable addition to the small regional corpus known to date. These include no less than nine from NAU's excavations on the Norwich Southern Bypass, six of them excavated at Valley Belt, Trowse (Ashwin and Bates forthcoming).

Quarrying: pit group 1329 and the problem of 'working hollows'. An interpretation for pit group *1329* as a quarry for extracting natural boulder clay has been set out elsewhere in this report. However the pit complex resembles very strongly another class of feature particularly well-represented on Iron Age sites in Wessex, the 'working hollow' (Cunliffe 1991). Some important issues concerning the interpretation of this well-known and yet little-discussed type of feature must be considered here.

The phenomenon of the 'working hollow' was first identified by Bersu at Little Woodbury, Wiltshire, and quarry *1329* bears a strong resemblance to some of the large composite features from this site (Bersu 1940, fig.16; Pls V, VI) and at Gussage All Saints, Dorset (Wainwright 1979, figs 24, 34). Other very similar features have been excavated at Winklebury (Smith 1977, figs 25, 26) and Old Down Farm (Davies S. 1981, 136), both in Hampshire. Bersu proposed that the Woodbury hollows had been excavated deliberately to provide shelter for threshing, winnowing, grain-drying and other agricultural chores. This view he supported with reference to his own ethno-archaeological observations in the Nile valley, rather than to positive evidence gleaned from the Woodbury excavation itself.

In describing the Gussage 'hollows', Wainwright queried the validity of Bersu's interpretation, yet concluded that 'no additional evidence was obtained which contributes to our understanding of them' (Wainwright 1979, 20). Smith concluded that the Winklebury 'hollows' had originally been dug to gain access to strata of flint (Smith 1977, 52-4); while the excavator proposed that heated flint nodules might have been used in grain-parching, flint could also have been used as ceramic temper.

The Wymondham evidence must strengthen the conviction that many of these features in fact began life as quarries, although they may well have been used as convenient shelters for other activities afterwards. A classic example of this would be the presence of an iron furnace in 'hollow' F2 at Gussage (Wainwright 1979, 20). 'Hollow' *1329* is particularly intriguing since it highlights the apparent rarity of these features outside the heartland of Iron Age studies,

Wessex. The only other plausible example discovered to date in Norfolk is a complex of intersecting pits containing Early Iron Age pottery from Redgate Hill, Hunstanton (Wymer 1986). It is quite possible that this rarity reflects at least in part a lack of research and excavation on Iron Age sites in East Anglia rather than a genuine regional attribute. However it is also interesting to note that, despite its close resemblance to Gussage F2 and the other well-known Wessex features, the Park Farm 'hollow' was, of course, excavated not into chalk but into boulder clay. Future research into the 'working hollow' phenomenon should certainly take into account not only their size and morphology but also the undisturbed natural material into which they were cut, especially in view of their possibly extractive origins. There certainly seem to be relatively few examples known to date from limestone or gravel sites (Ashwin and Bates forthcoming; J.D. Hill, *pers. comm.*).

'Special deposits'?: evidence for ritual behaviour. Research into Iron Age settlement sites in recent years has increasingly sought evidence for gross or subtle patterning in the distribution of features and artefacts which can provide information about social architecture and the degree to which Iron Age lifeways were structured by religious or ritual considerations (eg. Bowden and McOmish 1987; Hill 1994, 1995; Fitzpatrick 1994). In particular this has led to increasing attention being paid to the extent to which the deposition of 'rubbish' in Iron Age pits and other features is the result not of casual but of deliberate and careful behaviour. The relatively small scale of the excavation has not provided the raw material appropriate for studies of the kind undertaken (for instance) by Hill at Danebury, Winnall Down and other Wessex sites. However this facet of Iron Age studies, although touched upon with reference to Suffolk in Martin 1993, awaits systematic study in East Anglia. Two related features of artefact-distribution at Park Farm must be mentioned here.

First of these - relatively little discussed and yet a ubiquitous feature of Iron Age settlement archaeology nationally - is the manner in which the majority of artefacts recovered from pits tended to occur in a relatively small number of exceptionally 'rich' features, with other morphologically identical pits containing few or none. This can be seen especially clearly in the Area B pit group, and has already been described with reference to these features, but also occurred in the smaller pits excavated in the northern part of the site.

Secondly, the possible evidence for the deliberate and careful deposition of selected artefacts - especially animal bones or skeletons - in pit fills must be considered. This phenomenon was prominent at Danebury (Cunliffe 1984, 533-43) and has more recently been studied by Hill with regard to many other sites (Hill 1994, 1995). It is conceivable that the cattle skull and length of red deer antler found lying on the base of individual features in the possibly industrial pit complex *1636* fall into this category, and it is interesting to note that a piece of worked antler beam was also found in the analagous antler-soaking reservoir already cited from West Row Fen (Martin and Murphy 1988, 355). It may be that these remains signify merely the casual disposal of horn- and antler-working waste in a convenient abandoned hole (the 'carefully placed' position of the cattle skull on the base of pit *1266* being merely the result of gravity). However the possibility that these were in fact 'special' deposits of a deliberate nature is a real one. They will certainly be of interest to much-needed future study of this Iron Age theme in Eastern England.

Conclusions. The collection of all this evidence from such a small and arbitrarily-defined part of this ploughsoil site indicates a versatile and broad-based craft economy. The possibility that this is (for whatever reason) a characteristic trait of 'pioneer' communities at the time of

Middle Iron Age settlement expansion has already been raised with reference to the metal-working evidence. The lack of actual habitation evidence is considered in the following paragraphs concerning spatial organisation. While it is certainly possible that domestic activity was concentrated in a zone which lay beyond the excavation limits, it is equally possible that the site was never actually a 'settlement' at all, but actually a continuously or intermittently-used focus of craft and industrial pursuits.

Spatial organisation

The presence of the medieval field system and modern pond makes it most likely that the apparent separation between Area A East and West actually reflects not Iron Age patterns of occupation but more recent erosion. However the sharp difference in character between Areas A and B, which were dominated by structural features and large pits respectively, is of greater interest. Although this study was impeded by the inconvenient presence of the modern drain and hedgeline, two alternative interpretations can be suggested.

The division might reflect the varying functions of discrete areas of the site where different types of activity predominated. It seems most likely that the pits in Area B had an unknown craft or industrial function; perhaps by contrast Area A, with its putative raised granaries and other scattered features, had more of a 'farmyard' ambience. Alternatively, however, it might denote a *horizontal* stratigraphy, representing spreading and development over time in the manner discerned at West Row, Mildenhall (Martin and Murphy 1988). The possibility that the predominance of 'very coarse' pottery in the Area B pits, indicating an earlier date for these features than those to the north, has been treated with caution elsewhere in this report. Such a division seems unlikely on the basis of Percival's ceramic analyses, yet the present absence of radiocarbon dates makes it impossible to rule out.

It is possible that human habitation - if present at all - was located somewhere beyond the limits of excavation. Accounting for the absence of roundhouses of the kind excavated in Norfolk at West Harling (Clark and Fell 1953) and on the Norwich Southern Bypass (Ashwin and Bates forthcoming) must be done with care. Differential plough truncation and the modern pond could have removed vital evidence, while some of the four-post 'granaries' might arguably have been the substantial square 'porches' of roundhouses which have otherwise been ploughed away. However not even a fragment of either an arc of post-holes or of a circular eaves-drip gully was recorded, despite the excavation of over 110 post-holes within the stripped area. This must constitute reasonable negative evidence for these structures.

The regional context

In many respects the site's location typifies Iron Age domestic sites in Norfolk and Suffolk, in being unenclosed and lying on a gentle south-facing slope not far from water (Martin 1993). However it is unfortunate that the present research did not succeed in defining the size of the occupation area: this has not been achieved in the case of any excavated Iron Age site in Norfolk to date with the possible exception of that at West Harling (Clark and Fell 1953).

Recent detailed surveys of individual areas of the Norfolk boulder clay, in central Norfolk at Fransham (Rogerson *pers. comm.*) and in south-east Norfolk in the Hales/Loddon area (Davison 1990) have given some information about the density of Iron Age 'sites' identified as pottery scatters. Andrew Rogerson's work at Fransham recorded Iron Age 'sites' on average at intervals of less than 1km. By contrast the results from Davison's study-area suggested a lower level of Iron Age activity, with only three such concentrations recovered by a survey encompassing 10 sq km. The process of elucidating human activity on the Norfolk and Suffolk boul-

der clay before the Late Iron Age deserves recognition as a major East Anglian research goal. The site provides a rare excavated example of a later prehistoric site known only from field-walking.

With which other *excavated* sites should Park Farm be compared? Middle Iron Age occupation sites excavated in Norfolk in recent years have included Thetford London Road (Davies, J. 1993), Beeston with Bittering and Aylsham Bypass (Gregory and Percival in prep.), while from Suffolk the results of work at Barham, Great and Little Bealings and other small sites have recently been published (Martin 1993). However NAU's Norwich Southern Bypass project of 1989-91 (Ashwin and Bates forthcoming) may provide the best reference point for the results of the present work, since excavations during this campaign at Harford Farm and at Trowse constitute the only other major *area* exposures of Iron Age sites in Norfolk to date.

The site at Harford Farm, Caistor St Edmund (Site 9794) lay in the midst of an earlier round barrow cemetery and was dominated by roundhouses, fenced boundaries and small groups of pits. Interpretation of the Trowse site (Site 9589) was bedevilled by large numbers of undatable features and by difficulties in the secure separation of Iron Age features from those evidencing earlier occupation: no roundhouses were excavated here, but groups of pits yielding Iron Age pottery and occasionally loom-weights were scattered over an area exceeding 20,000 sq m which was also dissected by a series of fenced and ditched enclosures. Although neither of these sites could be dated by radiocarbon, the carinated jar ceramics they produced implied an earlier start to Iron Age occupation than at Park Farm (Percival forthcoming). Furthermore, although neither site could be phased in detail, it appeared that each had seen some re-modelling and re-use of space during the span of the Iron Age occupation. By comparison the Park Farm site's 'single phase' appearance is striking, and may denote a briefer period of occupation.

A major factor in this discussion may be that the Norwich Southern Bypass sites occurred on sand and gravel subsoils rather than boulder clay. The fact that, unlike Park Farm, these free-draining sites were not only both occupied in the earlier Iron Age but also in previous millennia by Beaker-using communities may support John Davies's already-cited view that settlement expansion onto the Boulder Clay occurred in Norfolk only during the later Middle Iron Age.

Subsequent human activity

No pottery of conspicuously 'Late' Iron Age pattern was found and the absence of Roman material, both ceramics and metalwork, from the site was almost total. This suggests that the site was certainly abandoned by the time of the Roman invasion, if not some time before. It provides an intriguing contrast to the sequence excavated elsewhere in Norfolk at Spong Hill, Elmham (Gregory 1995) where a lengthy sequence of Late Iron Age/Early Roman material, indicating continuous occupation over the 'transitional' 1st century AD, was recovered.

The medieval field system could not be dated, since the artefacts which it contained were almost exclusively residual Iron Age finds. As such, these deposits record graphically the degree to which the site has been disturbed by pre-modern agriculture, and allow a glimpse of the sheer quantity of burnt flint and Iron Age pottery which was present in the medieval cultivation soil. The ditch system as a whole was sealed by the extant east-to-west hedge bisecting the site. The hedge appears prominently upon an enclosure map of 1810 (NRO DS 369 254). Its date of origin is unknown, although a preliminary species-count made during the environmental impact assessment which preceded the construction of the road suggested that it could be of medieval or early post-medieval date. If so, this would establish a *terminus ante quem* for the excavated field system.

Conclusions

The results of the Wymondham Bypass project make a significant contribution to the pursuit of a number of important questions raised at present by the Iron Age of Norfolk and northern East Anglia. Notable among these are the further characterisation of unenclosed settlement sites, the definition and study of well-provenanced ceramic assemblages, and the geographical analysis of the character and density of Iron Age settlement against environmental variables including drainage and soil type (Davies J. 1996).

However much of the picture arising from the site, even in its partially-excavated state, is of relevance to the study of major *national* research goals too. The study of the pottery and the problems of date and chronology posed by the site, matters already considered in detail in this report, reinforce the need for a better temporal understanding of Eastern England's Iron Age ceramics in general. But perhaps pre-eminent here is the apparently 'marginal' location of the site, in a major geological zone of the county which may not have been intensively settled before the Middle Iron Age. Apparent evidence for human 'expansion' during the later 1st millennium BC is not confined to Norfolk, but seems rather to be a ubiquitous feature in lowland England which has only been prioritised by recent scholarship (Haselgrove 1989, Champion 1994, Hill forthcoming). Characterising this phenomenon further and trying to account for it forms one of the most important issues presently confronting British Iron Age studies.

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