A LATE SAXON CEMETERY AT MILTON KEYNES VILLAGE

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A late Anglo-Saxon cemetery was partially excavated at Milton Keynes Village under salvage conditions during 1992 in advance of a car park extension. Human remains of Saxon/medieval date had been found during 1967 on an adjacent area. The skeletons and unstratified bones recovered during 1992 represented a minimum of 97 individuals. Remains of three others were subsequently found in 1993 during construction of a cyclepath and bridleway. There were no grave goods, and burials were aligned east-west. There was a high degree of disarticulation/disturbance of the remains, which were too fragmentary for detailed palaeopathological analysis. Two skeletons were radiocarbon dated – the results indicate that the cemetery was in use during the late Saxon period. Very few cemeteries of this period have been excavated in Buckinghamshire. The cemetery is also of interest in that it is some distance from the present church. The cemetery is discussed in the light of local settlement patterns in Milton Keynes in the late Saxon and Medieval period.

Introduction

Work on an extension of the Community Centre Car Park, Milton Keynes Village, began at the beginning of May, 1992. Almost immediately human skeletal remains were discovered and reported to the police, who informed Buckinghamshire County Museum. On-site inspection confirmed that the remains had been deposited in antiquity, The archaeological sensitivity of the area had not been noted when the decision to extend the car park was made, though part of an apparently late Saxon or medieval burial ground had been found in 1967 just to the north, during gravel extraction (Mynard 1968). Fortunately the developers (The Commission for New Towns) and the contractors (Pell Frischmann) were able to halt work until salvage recording of the site had been undertaken by Buckinghamshire County Museum. A watching brief was subsequently carried out in May 1993, on adjacent land to the north, in advance of the construction of a cyclepath and bridleway.

Location, geology, topography, soils

The site is on level ground at SP 8898 3925 at 65m above OD, approximately 1 km east of the River Ouzel, just upstream from its confluence with the river Ouse. It lies on the eastern edge of Milton Keynes Village, 180m east of the church (Fig 1), abutting a car park. A small agricultural building and associated hardstanding had stood in the northwestern part of the site until some twenty years earlier.

The underlying geology is primarily mudstones of the Oxford Clay (Upper Jurassic) which outcrop in places, but generally are overlain by various Quaternary deposits, such as glacial till and head, river terrace gravels and alluvium. The cemetery site itself lies on the second terrace of the River Ouzel. The terrace typically has an upper layer of "hoggin", ill-sorted gravel in a brown sandy clay matrix, 1m to 2m in depth, over gravels (Williams 1993, Horton et al. 1974).

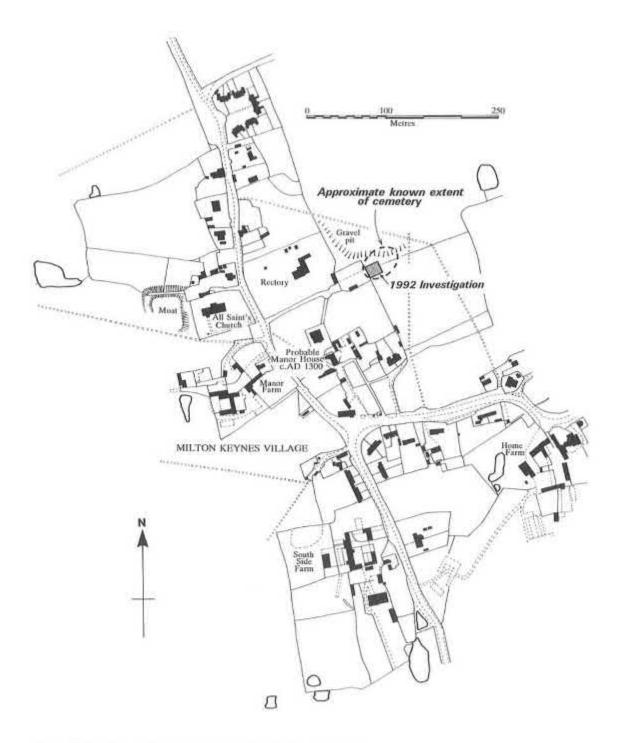


Fig. 1: Milton Keynes Village: location of Anglo-Saxon cemetery

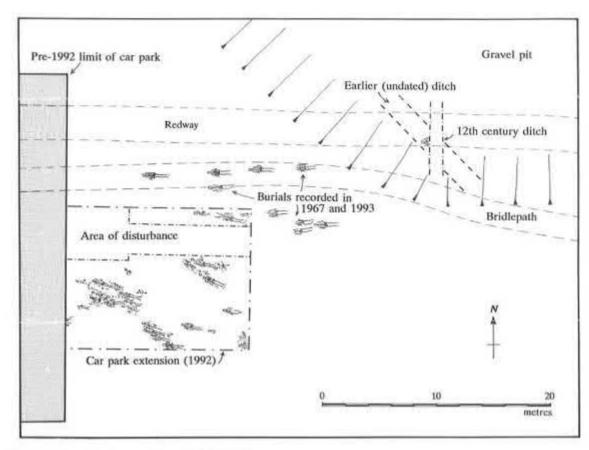


Fig. 2: Extent of cemetery, as recorded 1967-93

At the site itself the soil was a grey-brown, loamy sand with small, medium and large stones (context 100). The ground had been ploughed, and disturbed by construction of the agricultural building noted above.

The 1967 discoveries

Seven burials had been discovered during gravel quarrying in 1967, just north of the car park. They were excavated over one weekend by volunteers (Mynard 1968) (Fig 2). All burials were laid eastwest, with heads to the west. There was no evidence of coffins. One burial was recovered from a ditch 1.5m wide and 0.45m deep orientated westnorthwest to east-southeast. This ditch and burial were in turn cut by a later ditch 0.7m wide by 0.7m

deep, orientated northwest to southeast, from which one sherd of St Neots ware was recovered. It was not possible to ascertain how many burials had already been destroyed by gravel quarrying.

The 1992 Excavation

An area of 16m by 11.2m was examined under the direction of Jo Short (Fig 2). The extent of the excavation was limited to those parts of the site which would be directly disturbed by the car park construction, although it was evident that the cemetery was of greater extent. As only shallow ground disturbance was anticipated the deeper components of the cemetery were not examined. These constraints dictated a sampling strategy which was far from satisfactory, and the investigations are best

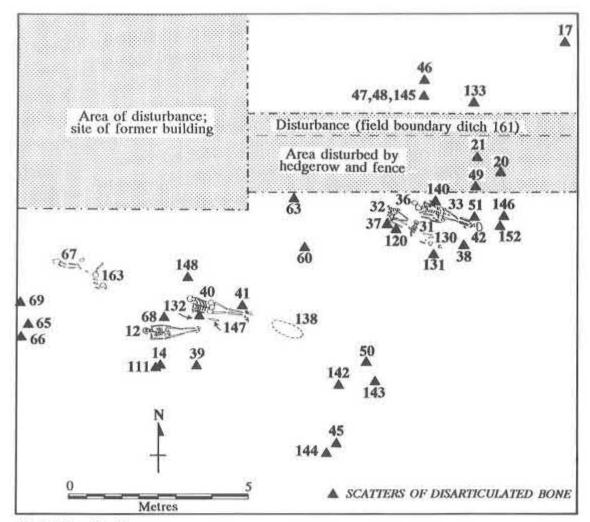


Fig. 3: "Upper" burial contexts

considered as salvage work. The topsoil had been partially removed before Museum staff became involved, which resulted in the loss of some archaeological material at the western edge of the excavation. Over the greater part of the site, a shallow topsoil, about 0.3m deep, was mechanically removed under archaeological supervision. The excavation took place over a period of two weeks during May 1992.

The northwestern quarter of the site was apparently devoid of human remains. This was probably due to the former presence of the dairy (see above) and a former field boundary ditch; however, it is possible that there were deeper, undisturbed, burials in this area. Over the remainder of the area the burials were distributed unevenly (Figs 2–5). Their depth varied considerably. Some were just 0.35m from the surface (eg skeleton 15) while others were below 0.7m of topsoil (skeleton 35) and it is likely that there were deeper burials that were not located. Grave cuts were generally indistinct and there was considerable intercutting. In many cases the edges of grave cuts could only be distinguished by the patterns of disarticulated skeletal material, derived from earlier inhumations, which had been packed

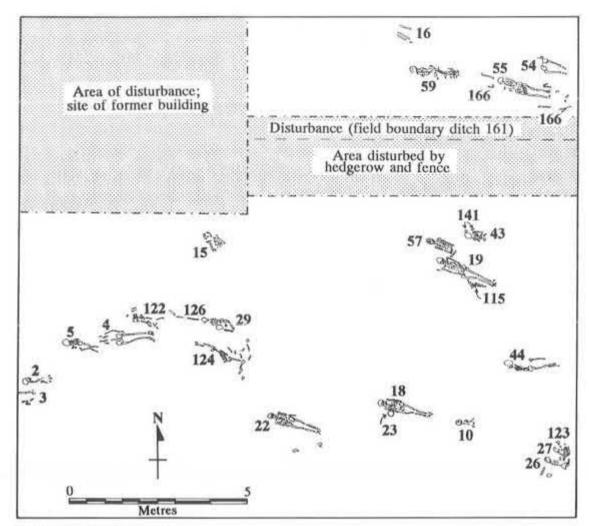


Fig. 4: "Middle" burial contexts

around the later burials. Thus the edge of a grave might be distinguished by a row of skulls or a line of disarticulated long bones (eg Figs 6 & 7).

Forty-four articulated or partially-articulated individuals were recognised on site. These were aligned east-west with the heads to the west. Numerous isolated skulls were also recorded, together with a number of other contexts which consisted of concentrations of disarticulated bone (see appendix). Calculations of minimum numbers of individuals (MNI) in this report are based on bone counts conducted during the post-excavation stage, rather than the number of contexts formally identified on site.

Where it was possible to determine the burial position, most of the remains were extended and supine. However, in the majority of cases, so much damage and dislocation of bones had taken place after burial that it was difficult to determine the original burial position. Where this could be determined, or a reasonable assumption made, the burials were parallel-sided (sensu Boddington 1987; see also below) or nearly so (11 cases), with legs close together and hands close to the sides, imply-

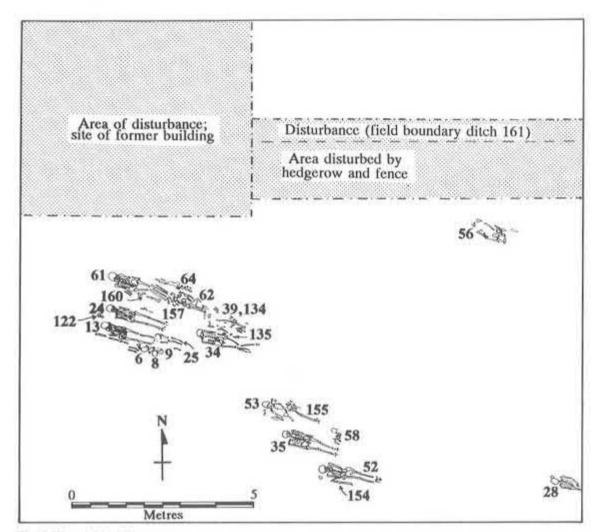


Fig. 5: "Lower" burial contexts

ing that the majority of individuals were buried in shrouds, rather than coffins. There were also cases (eg 022, 034a) where the hands rested above or beneath the pelvic girdle, and two instances (013, 024) where the feet appeared to lie slightly further apart, implying a looser shroud or possibly a coffin. However, diagnostic features of a coffin burial, where the bones would tend to be tumbled outside the original body outline, would not necessarily be readily visible amongst such chaotic remains.

There was one example (inhumation 024; fig 8) in which the skull was found to rest upon a piece of

sandstone, but this was the sole possible evidence for any form of stone grave furnishing.

None of the graves had permanent markers and although there were one or two loose associations of finds there were no definite grave goods.

Detailed recording on site was mainly directed towards those remains which exhibited some degree of articulation. Given the limited resources available, there was insufficient time to record individual disarticulated remains within the graveyard soil, although obvious disarticulated but



Fig. 6; Skulls 006-009 defining grave-cut



Fig. 7: Inhumation 013, its grave cut defined by disarticulated material



Fig. 8: Inhumation 028 and sandstone "pillow"



Fig. 9: Inhumation 059: a typically "chaotic" inhumation

spatially concentrated "jumbles" of bone were recovered as single contexts. A further practical constraint was the very public nature of the site and the requirements of the Home Office licence to screen the excavations from view; this meant that, once exposed, remains had to be removed from the ground the same day. Inevitably, some data may have been lost by this procedure, but even with the most rigorous recording methods, the nature of the remains and the requirement to examine only those levels which were to be destroyed meant that it is unlikely that a significantly greater level of analysis could have been achieved.

For clarity the inhumations and related skeletal contexts are here shown as a set of three plans (Figs 3–5), described as "upper", "middle" and "lower". Although these distinctions correspond in most instances to stratigraphic relationships which were observed in the field, they should not be interpreted as representing genuine archaeological phases.

The 1993 watching brief

After the excavations, a watching brief was undertaken by Mr Philip Carstairs during the construction of a cyclepath and bridleway immediately next to the northern edge of the carpark and the 1992 excavation. Three inhumations and a small deposit of human bone were found in a central strip which had been dug deeper than the rest of the path (for drainage) to a depth of about 0.9m. One (the westernmost), was 0.5m below the surface and the other two were 0.9m below the surface (Fig 2).

The Skeletal Material

With minimal resources available for post-excavation work, only the most basic analysis of the skeletal material could be undertaken. All skeletal material recovered from the 1992 car park excavation, apart from a small quantity of unstratified bone material, was sent to the Calvin Wells Laboratory, Bradford University and analyzed by Ms Sue Ensor. The comments here are based on Ms Ensor's report in the site archive. It was concluded that a minimum number of 97 individuals was present. The fragmentary and eroded nature of most of the material made the application of many techniques used to determine, age, sex and disease from skeletons, 'difficult or impossible' to carry out. An estimate of age for seventy-one individuals is given (Tables 1a and 1b) but these results should be regarded as guidelines only, since dental attrition and development were used as the preferential ageing methods, because other diagnostic criteria (epiphyseal fusion, pubic symphyses, sternal ends of ribs and ilium auricular surface) could not be used with most of the skeletons.

The distribution of age at death was consistent with ancient populations elsewhere, with a proportionately high number of sub-adults dying around the age of weaning, and few individuals surviving over the age of 45. However, the expected high infant mortality was not represented. This is possibly due to poor preservation of infant remains, consistent with the overall poor preservation of the site as a whole, or, alternatively, there had been some selection of burials.

TABLE IA: AGE AT DEATH (Sub-adult)

No. of Individuals	Numbers in Catalogue
2	028c, 050
6	005, 017a, 048a, 060b, 067a, 127a
2	010a, 069
3	031a, 043, 059a
0	
4	046, 047, 063a, 066
17	
	2 6 2 3 0 4

TABLE IB: AGE AT DEATH (Adult)

Age in years	No. of individuals	No. in cutalogue
Young (18 – 25)	7	001a, 004a, 024, 039, 057, 060a, 064a
Young/middle-aged (25-35)	11	015, 019, 020, 026, 033, 034a, 040a,
		044, 053, 061a, 108
Middle-aged (35 - 45)	10	002, 008, 012a, 022, 028a, 029, 052,
		055a, 128b, 146a
Mature (over 45)	4	018a, 035, 054a, 062a
Adult	22	003a, 006, 007, 009, 011, 013, 014,
		016a, 021a, 023, 025, 027, 037, 032a,
		042, 045, 056a, 065, 067b, 067c, 127b,
		128a
Total	54	

TABLE 2: SEX

Sex estimation	No.	Catalogue number
Male	11	002, 004a, 014, 015, 033, 034a, 040,
052, 056a, 061a, 128b		
Female	9	001a, 013, 018a, 019, 022, 029, 032a,
035, 108		
Male?	5	024, 053, 054a, 062a, 064a
Female?	3	039, 055a, 146a
Total	28	

TABLE 3: STATURE

Sex	Range (cm)	Mean	Catalogue number	Total	
Female	154.3 – 167.7	157.2	013, 018a, 019, 032a, 035	5	
Female?	166.5	166.5	055a	1	
Male	150 - 183.8	163,2	004a, 033, 034a, 040a, 052, 061a, 128b	7	
Male?	161.8 - 175.8	164.4	024, 053, 054a, 062a	4	

The data retrieved was too small for conclusions to be drawn about the male/female or the age/sex ratios. It was only possible to estimate the sex of 28 adults (16 male, 12 female; see Table 2). Similarly, only 12 individuals could be used to assess height: females (n = 5) fell in the range 154.3cm to

167.7cm (mean 157.2cm, or 5^2) and males (n = 7) in the range 150cm to 183.8cm (mean 163.2cm, or 5^4 447) (Table 3).

Some pathological conditions were noted (see appendix), although there were insufficient data to reach any conclusions relating to the population in general.

The Finds

by Michael Farley

Due to the circumstances of the investigation and the impossibility of determining grave cuts amongst the jumble of human bone, few of the items recovered during the course of the excavation can be regarded as stratified. The only firmly stratified material consisted of two medieval sherds and roof tile from the fill (165) of a late boundary ditch (161); nevertheless, some of the unstratified Saxon ceramic material is of significance.

The presence of four struck flints from the relatively small area excavated is noteworthy.

A few items have a loose association with burials, by proximity, namely:

012 - skeleton 012 - animal teeth

040 - skeleton 040 - animal teeth

105 - skeleton 004 - SF1002, iron knife (see below)

112 - skeleton 015 - SF1001, pin (see below)

151 – skeleton 50 – SF1004 iron plate and SF1003 four copper-alloy nails or sprigs (see below)

The knife from 105 might have been a placed grave item; however, it was found adjacent to the left ankle. The iron plate and copper nails could have come from a composite item such as a box. The pin is a Mid-Late Saxon type. However, there was clearly no general intent to place grave goods so these associations may be accidental.

Metal:

1 SF 1002, part of blade only of iron knife with back slightly angled near point, length 67mm, breadth 14mm (Fig 10.1). Possibly of Saxon date, e.g Evison 1987, fig 22 no.3.

- 2 SF 1001, pin, copper-alloy, globular head with trace of cordon beneath and part of shaft, length 19mm. (Fig 10.2). Although by no means completely diagnostic, pins with globular heads, often with hipped shafts, are a common component on sites of Mid-Late Saxon date (e.g Southampton, Addyman and Hill 1969, 67 and Barking Abbey, Webster and Backhouse 1991, 89.)
- 3 SF 1004 Ovoid iron plate, length 30 mm, with traces of three square-section rivets passing through, and fragments of same (Fig 10.3).
- 4 SF 1003 One T-headed copper-alloy nail, length 12mm, two others lacking heads, of similar dimension, of which one is of folded metal, and a fragment of a fourth. Perhaps box fittings (Fig 10.4).
- 5 SF 1005 Iron tongue of buckle, length 50mm. From layer 159, probably relatively recent (Fig 10.5).

The following unstratified items were also present; three pieces folded lead sheet width c.50 mm, one of which has two iron nails passing through plates; iron strap, perforated at one end, bent, perhaps a strap hinge, overall length 150mm; two pieces of a large diameter copper-alloy flat ring, width 5mm thickness 2mm.

The Pottery:

The pottery (total 60 sherds recovered), although in effect unstratified, nevertheless is of some interest since it includes small quantities of pottery of mid-Saxon date, uncommon in the county as a whole. Bracketed numbers are context numbers.

a) Roman.

Oxfordshire colour-coat, 1 sherd.

b) Early-mid Saxon.

Total fourteen sherds. One Maxey-type sherd from the rim of a horizontal bar-handled vessel (unstrat, 200), diagnostic of the mid-Saxon period, in a coarse shelly fabric (Fig 10.6). There is one other from Milton Keynes Village (Mynard 1994, Fig 96.2). It was not possible to determine whether the handle was positioned inside or outside the vessel; the latter is not uncommon, e.g. locally at Chicheley (Farley 1980, 98). Many such vessels are individual in character and, since they are often fragmentary, also difficult to reconstruct. The writer is grateful to Dennis Mynard for confirming, on grounds of form and fabric, that this sherd is not an aberrant piece from the Olney Hyde medieval pottery kilns. Six other

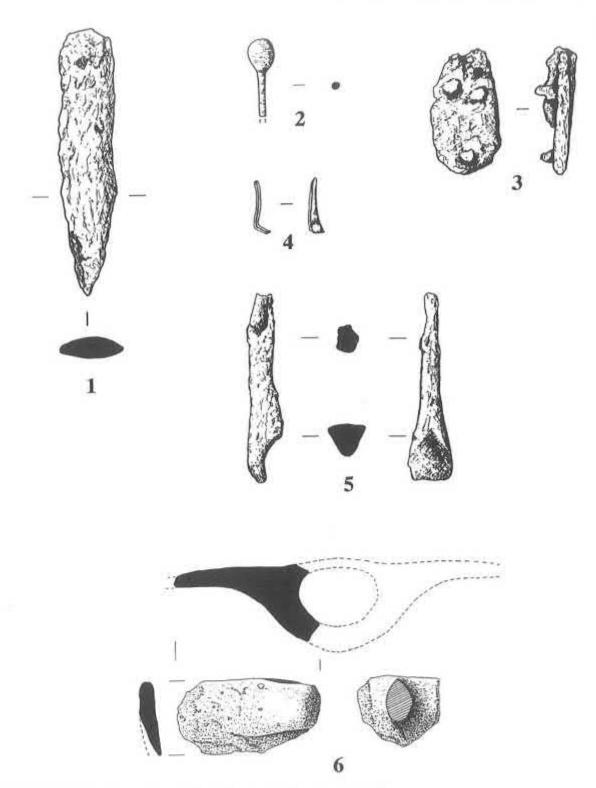


Fig. 10: Finds from the cemetery: 1-5 metal (scale 1:1); 6 pottery (scale 1:3)

shell-tempered sherds possibly of this date were present, however the fabric itself is long-lived and not chronologically diagnostic. These are included amongst the undated material below.

There were seven sherds of Ipswich-type ware, grev. with lightly burnished exterior and hard fabric containing rounded silica grits, clear or pinkish (200, 40, and 132). Five other handmade Saxon sherds were present (200, 12,122, 152), in similar fabric to these, but in a reduced fabric, and broadly similar to other local material, e.g Pennyland, Milton Keynes (Blinkhorn 1993, 246-7, sand-tempered fabrics). Sand-tempered fabrics are one of the least chronologically diagnostic of fabrics being present both in the early and middle Saxon periods. There was a single sherd only of vegetable-tempered pottery. The absence may be significant in that it appears not to be a fabric utilised in the Late Saxon period in the area. The Saxon assemblage as a whole is minute; however, given the combination of fabrics, the Maxey-type bar-lug, the Ipswich ware and the lack of vegetabletempered sherds it seems likely that that the group commences in the mid-Saxon rather than the early Saxon period.

c) Late Saxon - twelfth century

Two base sherds St Neots-type, and five shelly sherds of the same tradition; also a rim with fine silica grits and some vegetable temper.

d) Thirteenth-fourteenth century

Nineteen sherds, all in sandy fabric with the exception of two shelly, possibly Olney Hyde. A few of the former were in large pieces indicating nearby occupation.

e) Post-medieval and undated

Nineteen sherds

Other Finds:

Four struck flint flakes, including three with cortex from pebbles, ?Neolithic; thirty-three pieces of peghole tile, medieval or later; two pieces clay pipe; two lumps of ironstone; animal bone, v. 1 Kg., not identified.

Radiocarbon Dating

Two bones were selected for dating, from skeletons 040 and 062. Skeleton 040 was virtually intact and clearly overlay and disturbed the partially intact skeleton 062. These skeletons were selected in order to provide dates from two burial contexts which could be shown to have a stratigraphic relationship, although the dates do not, in all probability, demonstrate the full date range of the cemetery's use. The dates are given in full in Appendix 2.

The upper skeleton, 040, gave a date of 1050±40 BP (GrN-21203) (AD 900). Calibrated to two standard deviations there are two alternative date ranges; AD 896 to 928 and AD 932 to 1026.

The lower skeleton, 062, gave a date of 1080±40 BP (GrN-21204) (AD 870). Calibrated to two standard deviations there is a date range of AD 890 to 1014.

Use of the graveyard therefore certainly seems to span the tenth century, but earlier and later use cannot be ruled out.

Discussion

The quality of the evidence from the Milton Keynes Village cemetery is constrained by the circumstances of its discovery, or rather its re-discovery, and the limited resources available for its investigation. Nevertheless, the site is not without interest, particularly in respect of the implications for the development of the settlement at Milton Keynes Village.

Size, extent and date:

It is extremely difficult to quantify the size of this cemetery. It is evident from the results of the various investigations that it covered a minimum area of c750m², but its limits have not been satisfactorily defined in any single direction.

We can be no more certain of the number of individuals buried. A minimum of 107 individuals has been recovered, but this is clearly only a (?small) fraction of the whole burial assemblage. It was noted that the density of burials appeared to be irregular across the area examined in 1992; if, however, an average density based on the 1992 data were to be extrapolated across the assumed minimum area, a minimum number of burials in excess of 500 would be implied.

Radiocarbon dating of two individuals confirmed the hypothesis, adopted at the time of the 1992 investigation, that the cemetery was of Late Saxon date. The dates imply use during the tenth century. The frequency of intercutting suggests that the graveyard was in use for an extended period, probably rather longer than that indicated by the radiocarbon dates, but it is extremely difficult to quantify the period involved. The pottery is not directly associated with the burials and must therefore be used with caution; some of it may represent general debris which became incorporated into the graveyard soil whilst interments were taking place, and on this basis it seems likely that use of the cemetery may have begun as early as the middle Saxon period, and continued beyond the Norman conquest.

Funerary rite and cemetery organisation

No other cemeteries of this period have been excavated in the Milton Keynes area; indeed in England as a whole, relatively few cemeteries of this period have been published. A few burials that were apparently associated with the mid-Saxon Minster at Aylesbury were examined at George Street, Aylesbury (Allen and Dalwood 1983), but the degree of chronological overlap between the two sites is uncertain; the radiocarbon dates from George Street suggest that the Avlesbury cemetery was in use from late eighth century to early tenth century. Local comparanda are thus hard to come by. In general terms, the burial rite (extended inhumations orientated east-west, without grave goods) is what one would expect for a late Saxon cemetery, although not diagnostically distinguishable from a mid-Saxon or medieval cemetery.

There are some clear differences between the Milton Keynes Village cemetery and a cemetery of similar date excavated at Raunds, Northamptonshire, some 35km to the north (Boddington 1987, 1996). Burial at the Raunds site, which was associated with a proprietary church, took place from the late ninth until around the end of the eleventh century, when the church was incorporated into the manor complex. Some 363 burials were excavated here. Of these, some 93% had survived in situ. In those instances where burials had been cut through earlier graves (c19%), only about half had caused any disturbance to the burials themselves. There was some evidence for reburial having taken place at Raunds, since even where burials were entirely disarticulated, they were complete, suggesting that in these instances the original interment had been within stone coffins. The relatively low incidence of intercutting at Raunds was taken to indicate that the cemetery had gone out of use at around the end of its first "generation" of burials.

Approximately one third of the Raunds inhumations were described as "chaotic", with bones (particularly the ribs and lumbar vertebrae) being "tumbled"; these could be divided into burials exhibiting "internal tumble" (in which both sexes were equally represented) and those exhibiting "external tumble" (which were exclusively male, and situated in the higher status area south of the church wall). External tumble appears to point towards burial in a coffin, or with an overlying wooden cover, whose subsequent collapse caused dislodgement of the bones. The presence of a coffin could also be inferred from the extent to which burials were parallel-sided, ie with the feet together and no bones, other than those which had clearly been disturbed, lying outside a line from the top of the humerus to the base of the tibia.

Apart from the distinction apparently conferred by burial in a coffin, further evidence for differentiation was provided there by the existence of burials with stone arrangements within the grave (some 55%), ranging from a cluster of stones beneath the head to complete cists. Infants were generally buried close to the church.

The Milton Keynes Village burials show a higher degree of uniformity than those from Raunds, There was no evidence for burials within coffins, or for the presence of any form of stone lining in the graves. The greater degree of disturbance prevents any meaningful analysis of the incidence of parallel-sided burials; however there are evidently some non-parallel-sided burials. This may imply that some individuals were buried clothed (although no metal clothes fastenings were found) or in coffins. In the case of the various "chaotic" burials it is impossible to determine whether these were indicative of coffin burials, or of significantly later (medieval or later) agricultural disturbance. Several individuals appeared to have been buried in shrouds. It has been suggested that the shroud was introduced in the eleventh century (Pader 1982) although the evidence is inconclusive.

The relative absence of infants amongst the excavated sample has been noted above. Although this may be due to differential preservation, there may have been some form of spatial differentiation, as at Raunds, with infants being buried close to the wall of the (hypothetical) church (see below).

The high degree of intercutting is also of interest, in that it implies that the space available was physically restricted (although there is no other evidence for this), or that the cemetery was in use for a considerable period of time, with several "cycles" of use, or that there was a distinct preference for burial in a particular location. As the full extent of the cemetery is unknown, it is difficult to explain a frequency of intercutting which does not seem to be paralleled at other sites of the period.

Settlement patterns in Milton Keynes Village:

Excavations undertaken by the Milton Keynes Archaeology Unit at the Hartigan's gravel pit to the west of the historic core of the village have demonstrated occupation from the later Bronze Age to the early Saxon periods. This activity was focused around the southern limits of the second gravel terrace (Williams 1993).

Evidence for Romano-British activity is sparse, First-century activity, apparently spanning the earliest part of the Romano-British period, has been recorded a little way to the west of the main area of excavations at the Hartigan's quarry site, whilst a number of Romano-British sherds and a few tile fragments were found in 1983 during drainage works along the north wall of All Saints' Church (Mynard 1994, 184). There appears to have been a hiatus during the later Romano-British preiod.

The early Saxon element recorded at the Hartigan's site consisted of a single sunken-featured building and a number of pits, together with a well some 150m to the north. It is highly probable that there had originally been other early Saxon features within the quarried area; nevertheless, the excavated evidence points to a dispersed pattern of settlement which appears to have ceased in this area by the end of the seventh century.

In the middle Saxon period a settlement shift is attested elsewhere in the Milton Keynes area (Croft and Mynard 1993, 15; Williams 1993, 95). The focus of middle Saxon activity within Milton Keynes Village is unclear, although a large sherd from a middle Saxon bar-lip Maxey type vessel was found in 1983 during re-ordering of the churchyard, close to the south wall of the church (Mynard 1994, 184–5 & fig 96.2). Several sherds of this date were recovered during the 1992 excavation (see above), and the quantity of material recovered is probably suggestive of occupation close by.

Evidence for late Saxon activity in Milton Keynes Village is, at present, almost entirely restricted to the cemetery under discussion here. By the mid or late Saxon period, cemeteries were no longer situated at the periphery of settlements. This change in location is bound up with the increasing association of cemeteries with churches; the start of this association is difficult to pin down chronologically and the social and religious processes involved are not fully understood (Boddington 1992, Morris 1983, Godfrey 1974 p133), but the church/ cemetery association, even away from the focal minster churches, was probably well established by the presumed floruit of our cemetery. It is quite possible therefore that the Milton Keynes Village cemetery was associated with a church. The location of such a building remains unknown, but was presumably nearer the excavated cemetery than the present church. A local tradition that a former barn, evidently of unusually substantial stone construction, some 100m north of the cemetery had been a church may probably be discounted, as it would have been too far away. Furthermore it seems unlikely that the existence of such a building would have been overlooked by the antiquary Browne Willis, who had in his youth lived at the Rectory (Croft and Mynard 1993, 123). Perhaps more significant is that the cemetery lies within, but towards the northern edge of, an area called Chapel Yard on an estate map of 1685 (Buckinghamshire Record Office MaR/13T, reproduced in Croft and Mynard 1993, figs 45, 47). This may indicate that a church was sited to the south or east of the cemetery; on the other hand, the field name may indicate that the area of the cemetery remained an ecclesiastical appurtenance after it had gone out of use.

Although disturbance of the village cores (and thus the opportunity for archaeological investiga-

tion) has been minimal during the developments in Milton Keynes over the past 25 years, the overall impression is that the establishment of those nucleated villages that lie within the city limits took place during the tenth and eleventh centuries (Croft and Mynard 1993). The earliest documentary evidence for Milton Keynes Village is in the Domesday Survey. The main landholder at the time of the Conquest had been Queen Edith, but the existence of two other landholders may hint at some complexity of manorial organisation. Certainly there appears to be no good reason to doubt that the settlement inhabited by the occupants of the cemetery lies beneath the present village. Inevitably, however, there will have been some degree of settlement shift. In the case of Milton Keynes, it appears that a manorial complex, consisting of a moated platform with fishponds, was established immediately west of All Saints' Church. The church itself is situated on a slight platform, although it is difficult to determine whether this is in itself evidence of contemporaneity with the immediately adjacent moated site, or the results of the normal build-up of deposits through use of the churchyard. The earliest fabric within All Saints' Church is the chancel arch of late twelfth/ early thirteenth century date, but the major part of the fabric dates from a major remodelling circa AD 1330 (Woodfield 1986, 83). This remodelling may possible have been undertaken at approximately the same time as the construction of the moated site, perhaps by Philip de Aylesbury who held the manor from c1302 to 1349 (VCH 4, 402).

Prior to the establishment of the moated site, the manorial centre appears to have been an area described on the 1685 estate map as Manor House and Close, situated east of Willen Road, southwest of the excavated cemetery and southeast of the church. A hall house, dating to c1300, still stands here (22 Willen Road), and it has been suggested that this was the manor house of the Cahaines family, who held the manor from c1166 until it passed by marriage to the Aylesbury family c1302 (Woodfield 1986, 84). The parcel of land on which this structure is shown as standing in 1685 is directly adjacent to the Chapel Yard. A watching brief carried out during building operations on a small plot of land immediately east of the medieval house during August 1996 failed to produce any further archaeological data.

We may therefore tentatively suggest a hypothesis on the following lines:

- Early Saxon settlement, probably of a dispersed nature, is situated some distance to the west of the present village. This area was not occupied after the seventh century. The position of any middle Saxon occupation cannot be fixed with any certainty, but may have been in the general environs of the later Parish Church, or closer towards the cemetery, as pottery of this date has been recovered from both these locations.
- During the late Saxon period, a manor house, probably with an adjacent proprietary church and cemetery, situated east of Willen Road, develops as the focal point of the village. The churchyard, and probably also the church, goes out of use at some unspecified period, perhaps after the Norman Conquest.
- By circa 1200 a church has been built on a new site to the west of Willen Road. The original manor site continues in use, with a new structure (that which is still in existence today) being erected circa 1300.
- The manor house is re-established, probably by Philip de Aylesbury during the early C14, on a moated site next to the church, which is substantially remodelled.

Archive

The site archive and the non-skeletal finds recovered during 1992–3 are held at Buckinghamshire County Museum (ref: CAS 3501: accession no. 1995.102). The skeletal remains were re-interred within the churchyard of All Saints Church, Milton Keynes, on All Saints Day 1995.

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APPENDIX I

Summary of inhumations and related contexts containing skeletal material

KEY:

Type:

A = articulated skeleton; Sk = skull; D = disarticulated bone;

A+/Sk+ = articulated skeleton or skull with additional, disarticulated material.

Preservation:

G = good; F = fair; P = poor

Pathology:

AMTL = Antemortem tooth loss; Ank. Spond = Ankylosing Spondylitis; C = Cervical vertebra; Cribra = Cribra orbitalia; DJD = Degenerative joint disease; MNI = minimum number of

individuals; OA = Osteoarthritis; S = Sacral vertebra; SN = Schmorl's Nodes;

TMJD = Tempero-mandibular joint disease.

No.	Туре	Preser- vation	Burial Position as excavated	Age (Years)	Sex	Estimated Stature (cms)	Remarks/Pathology
001a 001b	A+	P	Extended, supine	18-25	F		Lower part of body removed by machine, MNI = 1 adult. OA
002	Α	F	?Extended, supine, chaotic	35-45	М		Very fragmentary; AMTL, Abscess, Spinal OA
003a 003b	A+	k	?Supine	Adult		160.1164	Lower part only, remainder beyond limit of excavation MNI = 1 adult. OA
004a 004b	A+	Р	Extended, supine, non parallel	18-20	М	167.3	Much of upper part of skeleton absent. Non-union of fracture. MNI = 3 adults, 1 sub-adult
005	A	G	Extended, supine	3.5-5.5			Poor preservation of ribs and vertebrae
006	Sk	P	Not in situ	Adult			AMTL (006-009: line of skulls together with a small quantity of other bones (108, below), defining the grave cut of burial 013)
007	Sk	G	Not in situ	Adult			(see 006)
008	Sk	G	Not in situ	35-45			Calculus Periodontal (see 006)
009	Sk	F	Not in situ	Adult			Calculus (see 005)
010a,b,c,d	A+:	F	Chaotic	6-9			Severely disturbed. Cribra Calculus. MNI = 1 adult
011	A		Chaotic	Adult			Severely disturbed.
012a 012b	Α+	F	Extended, supine. ?parallel-sided	35-45			MNI = 3 adults, 1 sub-adult
013	A	F	Extended, supine, near-parallel-sided, but feet apart	Adult	F	159.8	Skull displaced; some damage to ribs, L.leg. Cut 025. Dental disease, OA, fused C2, C3
014	Sk	G		Adult	M		
015	A	F	Extended, supine	25-35	М		Damaged – upper body parts only. Ank Spond. Bone cyst? AMTL, SN
016a 016b	Α+	F		Adult		150.8-156.2	Rib periostitis, SN MNI 1 adult, 2 sub-adults

No.	Type	Preser- vation	Burial Position as excavated	Age (Years)	Sex	Estimated Stature (cms)	Remarks/Pathology
017a 017b	Sk+	P		2-5			Skull and 7 vertebrae. Remainder of bursal beyond limit of excavation MNI 1 adult, 1 sub-adult
018a 018b	Á+	F	Extended, Supine: Parallel-sided	454	F	154-3	Damaged hands/feet. AMTL, OA 1 x adult femoral head
019	A	F	Extended, Supine, hands over pelvis. Parallel-sided	25-35	F	167.7	Ribs and lumbar vertebrae messing. Calculus
020	Šk	F/P		25-35			
021a 021b	Sk+	P		Adult			SN MNI = 1 adult
022	A	P	Extended, supine, skull inverted (?displaced), L.hand below pelvis, R.hand over pelvis, Parallel-sided	35-45	F		Fragile, Periostitis, AMTL.OA
023	Sk	P		Adult			Displaced by burial of 018?
024	A	F	Extended, supine. Parallel-sided; feet set slightly apart	18-25	?M	172.6	Hand/foot bones largely missing. Associated with/(?) cuts 125. Dental disease, OA, fused sacro-iliac joint.
025	A	G	?Supine	Adult		181	Disturbed; lower legs only
026	A	P	?Extended, supine	25-35			Severely disturbed. Lumbarised S1
027	Sk	F	3/10	Adult			Possibly associated with 123
028a 028b 028c	A+	P	Extended, supine	35-45			Lower part of body beyond limit of excavation. Head on possible sandstone "pillow". Dental disease Impetrous part of temporal. Disarticulated bones of infant
029	A	G	?Extended, supine	35-45	P		Middle part of body only.
031a 031b	A+	F	Extended, supine	10-12			Much cut away by 032 MNI = 1 adult, 1 infant/neonate
032a 032b	A+	G	Extended, supine, chaotic	Adult	F	164	Central part of body only. Disfigured lst metacarpal, OA MN1 = 2 adults, 2 sub-adults (inc, 1 infant)
033	A	G	Extended, supine. ?Parallel-sided	25-35	M	174.8	Many vertebrae displaced. Grave cut defined by displaced limb bones (140) and skull (036). ? Facial trauma. Dental disease
034a	A+	G	Extended, supine. R.hand below pelvis, L.hand above pelvis. 'Parallel-sided (some displace-ment of L.leg)	25-35	М	174.4	Slipped femoral epiphysis, periostitis, possible ank-spond. Dental disease.
034h							MNI = 1 adult
035	A	F	Extended, supine, head facing L. Parallel-sided	45+	F	155.7	Hands missing. OA, dental disease, C4, C5 fused
036	Sk+		Displaced				In grave cut of burial 033, ? Assoc. with 140 MNI = 1 adult, 2 sub-adults (inc. 1 infant)
037	Sk	P	Displaced	Adult			
038	Sk		Displaced	Adult			
039	A	F	Extended, ?supine	18-25	2F		Severe dislocation and fragmentation (plough damage?) Cribra, maligned left canine

No.	Type	Preser- vation	Burial Position as excavated	Age (Years)	Sex	Estimated Stature (cms)	Remarks/Pathology
040a 040b	A+	F	Extended, Spine and Rarm slightly flexed, head facing L. *Parallel-sided	25-35	М	183.8	Overlies 062. Radiocarbon date (1050± 40bp). Very severe calculus MNI = 1 adult, 1 sub-adult (infant)
042	Sk	F	Displaced	Adult			Inverted, by feet of 033. Dental disease
043	Α	P	Extended, supine	10-12			Incomplete, Caries
044	A	Р	Extended, supine. ?Parallel-xided	25-35			Incomplete (plough damage). Severe calculus
045	Sk	F/G	Displaced	Adult			
046	Sk+	F	?Supine	Sub-adult			Major part of body beyond limit of excavation
047	Sk	F/G	?Supine	Sub-adult			Major part of body beyond limit of excavation
048a 048b	A+	F		5-6			Incomplete MNI = I adult
049	Sk+						MNI = 1 adult, 2 sub-adults (inc. 1 infant)
050	A?/D	G		<6 months.			Largely displaced scatter, 4 nails/ sprigs possibly associated.
051	A		Extended				Lower body only, Not lifted
052	Α	F	Extended, supine, ?parallel-sided	35-45	M	189,5	Limbs and most vertebrae missing. Rickets
053	Α	P	Extended, supine, L hand over pelvis	25-35	?M.	175,8	R.side disturbed and incomplete. 155 associated, Appears to have disturbed/ cut 058. Dental disease, OA, rib fracture
054a 054b	A+	P	Extended	45+	?M	167.5	Disturbed, Rickets?, OA, AMTL, TMJD, MNI = 1 adult
055a 055b	A+	P	Extended, supine, ?parallel-sided	35-45	?F	166.5	Damage to skull. Arms displaced/ incomplete. Associated 166. Dental disease, OA MNI = 1 adult
056a	A+	F/P	Extended, supine	22-43	M		Upper part only; 6 ribs missing. Fused thoracic vertebrae; ank-spond?
056b 057	A	P	Extended, supine	18-25			MNI = 1 sub-adult (femur) Upper parts only; some ribs missing. Fused C4, C5 – Spinal DJD
058	А		?Extended, supine				Upper 20% of body only, remainder lay beyond limit of excavation. Not lifted. Cut by 053?
059a 059b	A+	G	Disturbed	10-12			Severe dislocation. Cribra, fused C vertebrae, infected temporal, calculus MNI = 2 adults (1 with severe maxillary abscess), 3 sub-adults.
060a 060b 060c	A+/0	P	Dislocated	18-25 2-5			MNI = 1 adult, 3 sub-adults (inc. 1 infant)
061a	A+	G	Extended, supine, R.hand over pelvis. Near parallel-sided	25-35	M	171.1	Infant. 160/167 associated. Cuts 062. Periostitis, calculus

No.	Type	Preser- vation	Burial Position as excavated	Age (Years)	Sex	Estimated Stature (cms)	Remarks/Pathology
061b							MNI = 2 adults (1 with periostitic rib shaft, 1 sub-adult (infant)
062a	A+	P	Extended, ?supine. Chaotic	50-65	?M	161.8	Disturbed: cranium and lower legs missing. Cut by 061. Partially overlain by 040. Radiocarbon date 1080± 40. AMTL, rib fracture, TB
062b							MNI = I adult, sub-adult (infant)
063a 063b	A+	F	1	Infant			Skull and frags of upper body only : much disturbed. Cribra MNI = 1 sub-adult (infant)
064a	A+	F	Extended	18-25	?M		R.arm, femur, pelvis only; damaged and disturbed.
064b	960	run.	T KATAN SAN	77.6			MNI = 1 adult, 1 sub-adult (infant)
065	Sk	F/P	Not in situ	Adult			Disturbed
066	Sk	P	Not in situ	Sub-adult			Dunaged and disturbed
067a 067b 067c	A+ Sk	F/P P P	?legs flexed. Supine	2-5 Adult Adult			Fragmentary, 162 associated, Pelvis only Cribra
068	Sk			1///			Not lifted
069	Sk	P	Not insitu	6-9			- A-9900CT.Di
108	D	P		25-35	F		Associated 006-009
H	D			2007/1			Associated 014, MNI = 1 adult
113	D						Associated 016, MNI = 1 adult, 2 sub- adults (inc. 1 infant)
114	D						Associated 018, MNI = 1 adult, 1 sub- adult
115	D						Associated 019, MNI = 2 adults (1 vertebrae osteophytosis), 1 sub-adult
116	D						Associated/displaced by insertion of 020. MNI = 1 adult
117.	D						Associated/displaced by insertion of 021, MNI = 1 adult, 1 sub-adult
118	D						Associated/displaced by 013, MNI = 2 adults, 1 sub-adult
120	D						MNI = 1 adult, 4 sub-adults (inc. 2infants)
123	D						MNI = 2 adults, 1 sub-adult
124	D						MNI = 4 adults, 1 sub-adult
125	D						?Displaced by insertion of 024. MN1 = 1 adult (AMTL, calculus)
127a 127b	D			2-5 Adult			Dental disease
128a 128b	D	P		Adult 35-45	М	150.4	Traoma
130	D						?Displaced by insertion of 031. MNI = 2 sub-adults
131	D						MNI = 1 adult, 1 sub-adult (infant)
132	D						MNI = 1 adult, 1 sub-adult

No.	Туре	Preser- vation	Burial Position as excavated	Age (Years)	Sex	Estimated Stature (cms)	Remarks/Pathology
133	D					2,11,1/41	MNI = I adult, I sub-adult (infant)
134	D						MNI = 1 adult (AMTL), 1 sub-adult
135 137	D						?Displaced by insertion of 034. MNI = ?Displaced by insertion of 033. MNI = I adult. 2 sub-adults
138	D						Associated/displaced by insertion of 041. MNI = 2 adults, 3 sub-adults
139	Đ						?Displaced by insertion of 040, MNI = 3 adults, 1 sub-adult
140	D						*Displaced by insertion of 033, MNI + 2 adults, 2 sub-adults (inc. 1 infant)
141	D						MNI = 1 adult, 1 sub-adult
142	D						MNI = 1 adult
143	D						MNI = 1 adult, 2 sub-adults (inc. 1 infant)
144	D						?Displaced by insertion of 052. MNI = 1 adult, 1 sub-adult
145	D						MNI = 5 adults, 4 sub-adults
146a 146b	D			35-45	?F		MNI = 1 adult, 1 sab-adult
147	D						?Displaced by insertion of 040, MN1 = 1 adult, 1 sub-adult
148	D						MNI = 1 adult
149	D						?Displaced by insertion of 040. MNI = 1 adult, 1 sub-adult (infant)
150	D						?Associated/displaced by insertion of 051
152	D						MNI = 2 adults (OA, osteochondritis dissecuns)
153	D						MNI = I adult
154	D						?Associated/displaced by 052. MNI = 2 adults
155	D						?Associated/displaced by 053. MNI = 1 adult.
156	D						MNI = I adult
159	D						MNI = 3 adults, 1 sub-adult
160	D						?Displaced by insertion of 061. MNI = 1 adult
162	D						?Associated with 067. MNI = 1 adult, 1 sub-adult
163	D						Extensive scatter. MNI = 6 adults, 3 sub-adults (inc. 1 infant)
164	D						MNI = 1 adult (rib periostitis), 1 sub- adult
165	D						MNI = 1 adult (OA) (redeposited within fill of later ditch 161)

APPENDIX 2

Radiocarbon determinations

Calibrated using Stuiver and Pearson 1986

Skeleton 040 GrN-21203 The Upper Skeleton

 $1050 \pm 40 \text{ BP}$

68.3% (1 sigma) confidence level yields the following ranges:

904 cal AD 906 cal AD

958 cal AD 1020 cal AD

95.4% (2 sigma) confidence level yields the following ranges:

896 cal AD 928 cal AD 932 cal AD 1026 cal AD

Littern 2

Skeleton 062 GrN-21204 The Lower Skeleton

 $1080 \pm 40 \text{ BP}$

68.3% (1 sigma) confidence level yields the following ranges:

896 cal AD 920 cal AD

944 cal AD 998 cal AD

95.4% (2 sigma) confidence level yields the following range:

890 cal AD 1014 cal AD