SECTION SEVEN

Excavations adjacent to Coldean Lane

David Rudling

INTRODUCTION

During 1990 two sites on the southern side of Coldean Lane, Brighton, were investigated in advance of the Bypass construction works. Site A had been specifically targeted at a Public Inquiry in 1981 (*see* below), while Site B ('Downsview') was discovered by trial trenching on land which had previously not been suspected of containing archaeological remains (Figs 7.1 and 7.2).

Site A, at the junction of Coldean Lane and Ditchling Road (centred around National Grid Reference TQ 3260 0930), was the northern end of a large pasture field belonging to Home Farm. This land forms part of one of the six 'potentially sensitive' archaeological areas identified by Dr Andrew Woodcock, the County Archaeologist for East Sussex County Council, at the Brighton Bypass Public Inquiry in 1981 (Woodcock 1981). This 'Area 5' was selected because 'Bronze Age burials and Iron Age and Romano-British settlement sites were discovered when the north end of Ditchling Road was widened' in 1921. In addition, this general area has in the past yielded 'many finds' (Woodcock 1981: 4). In particular, the downland ridge which runs north–south along the western margins of the pasture field and continues southwards to Hollingbury Camp (an Iron Age hillfort) and northwards into Pudding Bag Wood and ultimately to Ditchling Beacon hillfort, was the location for various Bronze Age round barrows and human burials (Fig. 7.1). Other discoveries in the vicinity of the pasture field include additional round barrows, two cross-ridge dykes and evidence for Iron Age/Romano-British and Medieval occupation to the north of Coldean Lane; Iron Age/Romano-British occupation or land utilisation to the west of Ditchling Road, the Eastwick Barn field system and enclosure to the north-west of the junction of Ditchling Road and Carden Avenue (*see* Section 6); Iron Age/Romano-British settlement evidence to the south-east on land now covered by the Coldean Estate, and most recently (1992) a Later Bronze Age settlement site which was discovered and excavated in advance of new development at Varley Halls (Greig 1997; *see* Section 14).

Brief details of the various archaeological finds discovered in the immediate vicinity of Area 5 are given below. The numbering, which is also used in Figure 7.1, is based upon the County Sites and Monuments Antiquity Numbers for area TQ 30 NW.

Site 29 (TQ 3272 0915)

In 1951 a Late Bronze Age (LBA) pit and pottery were found during the construction of No. 133, Hawkhurst Road, north-west of the junction of Ditchling Road.

Site 40 (TQ 3281 1012) (to the north of the area shown on Fig. 7.1)

Known as Rocky Clump, this site has been the scene of excavations from 1951 to 1981 (Gilkes 1997), and annual investigations by the Brighton and Hove Archaeological Society (BHAS) since 1992 (Funnell 2000). Work in and around the wooded Clump has revealed an interesting archaeological sequence from Iron Age pit (Funnell 1994) to activity possibly connected with the laying out of Stanmer Park in the eighteenth century. Of particular interest is a substantial rectangular Roman timber structure and an overlying early-mid Saxon inhumation cemetery. Although the original excavators suggested that the Roman building may have been a Romano-Celtic shrine (Gorton and Yeates 1988: 8–9), the structure may have had an agricultural or domestic function (Gilkes 1997: 116).

Site 41 (TQ 3285 0943)

A round barrow *c*.14.5m in diameter, 0.7m high, with no visible ditch. In the southern half of the mound, some 75 years ago, workmen while digging for chalk discovered three extended human skeletons. The position of the disturbance in the barrow suggests that the primary burial may not have been uncovered.

Site 42A (TQ 3254 0959)

A bowl barrow *c*.20m in diameter, 0.7m high, with no visible ditch. Evidence of robbery.

Site 42b (TQ 3255 0953)

A 'vague mound' *c*.10m in diameter, 0.2m high, with no visible ditch. Extensively burrowed by rabbits. A probable bowl barrow.

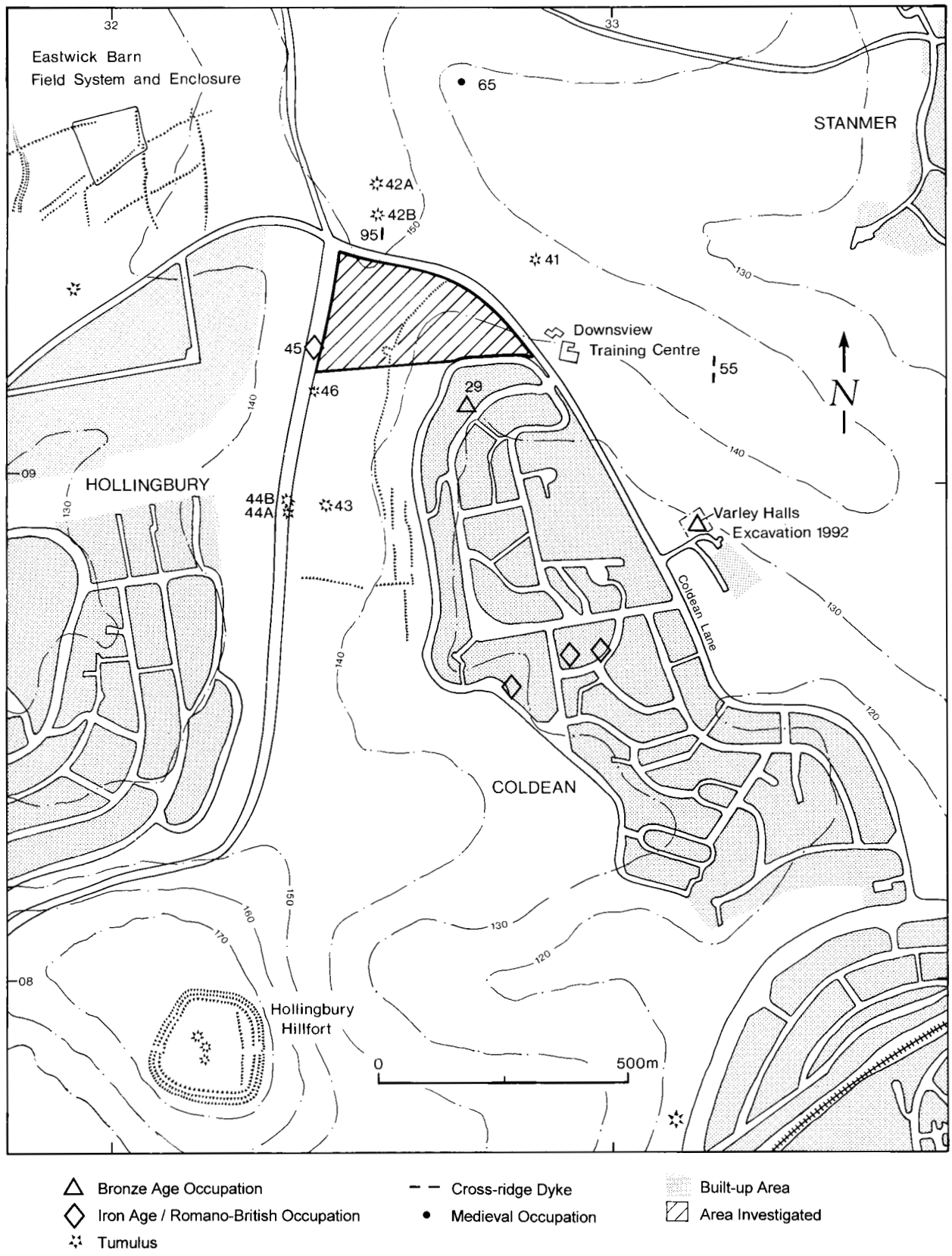

Fig. 7.1 Coldean Lane: Location of investigated area in relation to other nearby sites.

Site 43 (TQ 3244 0895)

An Early Bronze Age (EBA) bowl barrow, *c*.10m in diameter, 0.4m high, with no evidence of a ditch. Excavations in 1950 by C. W. Yeates, K. A. Goodchild and N. E. S. Norris (Holleyman and Yeates 1960: 133–6) revealed that the barrow consisted mainly of large flints piled over an inverted EBA collared urn containing cremated human bone. The urn had been packed round with large flints and clay, and a number of sarsen stones had been placed above

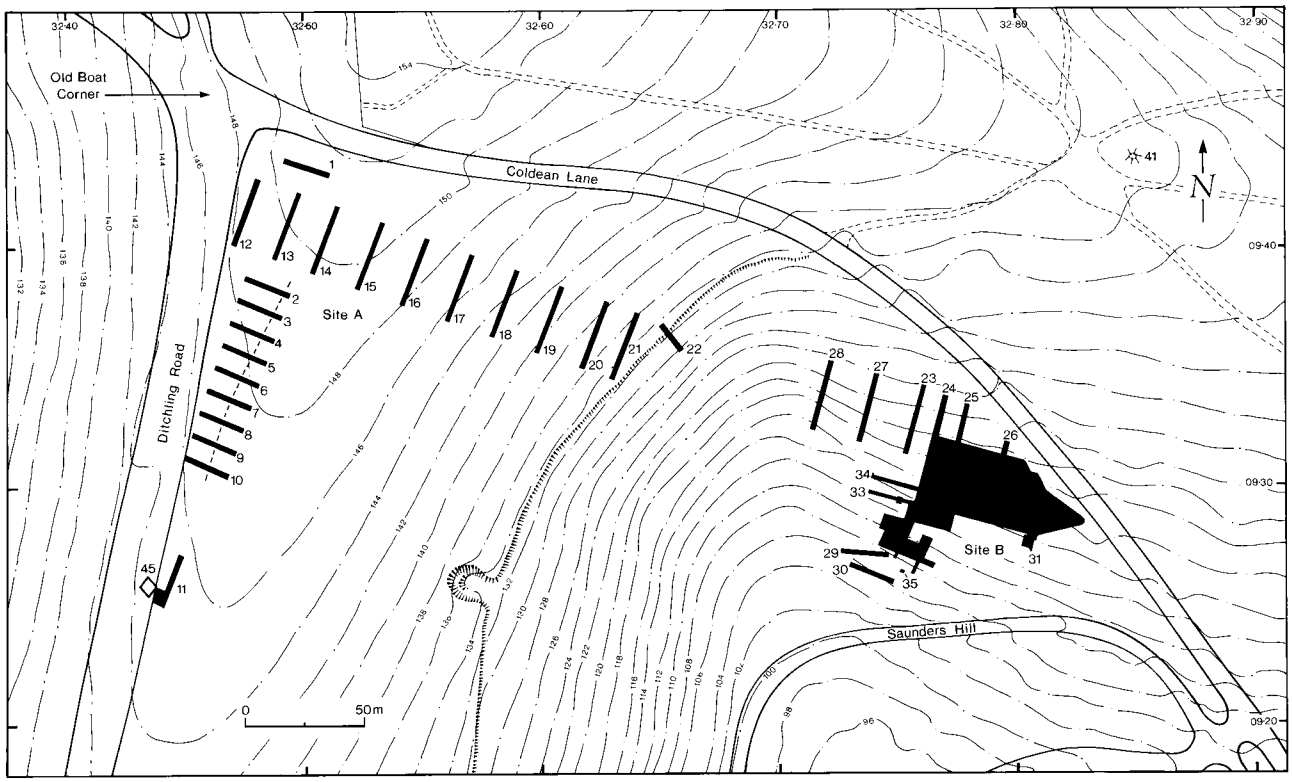

Fig. 7.2 Coldean Lane, Sites A ('Old Boat Corner') and B ('Downsview'): Trench layout.

it. A second inverted collared urn containing part of an unburnt human skull was found east of the first urn. A second deposit of cremated human bone was found un-urned in a small hollow in the chalk to the west of the second urn. The excavations yielded numerous finds of flintwork, including scrapers, borers, a knife and a hammerstone. Pottery finds consisted of EBA and Romano-British sherds.

Site 44A (TQ 3236 0894)

Burial of an immature female, extended in a shallow grave. Found during road widening in 1921.

Site 44B (TQ 3236 0887)

Platform barrow, 15.7m in diameter, with a ditch 0.77m wide and 0.39m deep. The road widening in 1921, which destroyed the barrow, revealed that it covered a disturbed (?crouched) skeleton in an oval grave.

Site 45 (*c*. TQ 3243 0927)

Road widening in 1921 exposed the site of an 'ancient oven' (TQ 324 0928) and part of a 'La Tène/Romano-British village' (TQ 3243 0926).

Site 46 (TW 3241 0918)

Road widening in 1921 uncovered a crouched male burial with 'a richly ornamental' (Type B) ceramic beaker and a flint barbed-and-tanged arrowhead. In front of the mouth of the skeleton 'was a heap of snail-shells, among which *cepaea nemoralis* and *Pomatius* preponderated' (Grinsell 1931: 39).

Site 55 (TQ 3319 0924)

An earthen bank, 10m wide, with traces of a ditch on the east (uphill) side, Centred at TQ 3319 0924 this cross-ridge dyke extends for 72m in a north–south direction. A trench has recently been excavated across this earthwork (Funnell 2001).

Site 65 (TQ 32720979)

A Medieval (thirteenth-century) occupation site at the head of a south-east facing dry combe, and bounded by lynchets, was excavated by the BHAS from 1965 into the early 1970s.

Site 95 (TQ 3255 0950)

A substantial dyke running north–south lies immediately to the south of Sites 42A and 42B (*see* above: bowl barrows). A trench has recently been excavated across this linear earthwork (Funnell 2001).

In addition to the archaeological discoveries referred to above, the only other known archaeological features in the pasture field to the south-east of the junction of Ditchling Road and Coldean Lane consist of a well-defined trackway, an adjacent chalk pit and some undated lynchets (Fig. 7.1).

The trackway is mainly oriented north–south before it curves to the north-east in the direction of Stanmer. The lynchets, which together with the chalk pit and most of the trackway, lie south of the area affected by the building of the Bypass, were recorded by Ken Goodchild in 1950.

SITE A ('OLD BOAT CORNER')

Introduction

During January 1990 trial trenching was undertaken in the pasture field to the south-east of the junction of Ditchling Road and Coldean Lane (Fig. 7.2). This land represented the eastern end of Area 5 as highlighted of archaeological importance at the Public Inquiry (Woodcock 1981: 4). The original aim was to locate, and then sample for dating and economic data, the Late Iron Age and Romano-British settlement site which had been revealed during the widening of Ditchling Road in 1921 (*see* above, Site 45). Although the findspot of the 1921 discoveries lies to the south of the Bypass, it and adjacent areas were due to be disturbed by the construction of a new junction (including a flyover) between Ditchling Road and Coldean Lane. The arrangement of trial trenches (Fig. 7.2: Trenches 1–11 and 12–22) was thus designed to sample both the new approach road and the route of the Bypass respectively. More specifically, Trench 11 was located adjacent to the recorded findspot of Site 45 of 1921, and Trench 22 was designed to investigate the threatened part of the trackway which is referred to above. All of Site A is located on Upper Chalk overlain by surface deposits of Clay-with-Flints. The highest point investigated was at the eastern end of Trench 1, which is approximately 152m Ordnance Datum (*see* Fig. 7.2).

Excavation methodology

Ten trenches (1–10) 20m long, one trench (11) 22m long, ten trenches (12–24) 30m long and one trench (22) 13m long, were stripped of topsoil using a JCB mechanical excavator fitted with a 1.65m wide toothless ditching bucket. The surface of the Clay-with-Flints, which was encountered at an average depth of 200mm, was then cleaned by shovel scraping and trowelling. The exposed features were then excavated by hand. Context numbers at this site began at 2000.

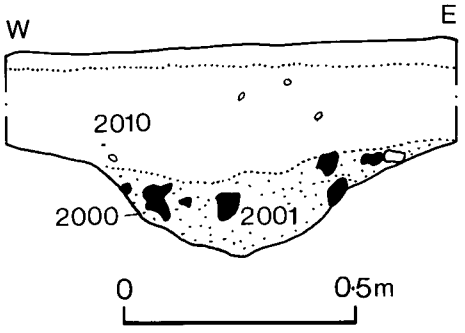

Fig. 7.4 Coldean Lane, Site A, Trench 6: Ditch section.

Results

Although Trench 1 (the most northerly) revealed no archaeological features, Trenches 2–10 exposed a linear cut feature (Context 2000) approximately 1m wide and up to 0.25m deep (Fig. 7.3 (Appendix 4) and Fig. 7.4). This fairly small and shallow ditch, which may have been severely truncated by ploughing, is oriented approximately north-east (Trench 2) to south-west (Trench 10). Trench 1 unfortunately lay to the west of the ditch's projected northwards route; neither was the feature exposed in Trench 11 to the south. No pottery was recovered from the fill of the ditch, and the only finds were undiagnostic and undatable flintwork, and fire-cracked flint. Other features revealed by Trenches 2–10 included, in Trench 4: a rectangular post-hole (2002) 370mm long, 300mm wide and 300mm deep, at 5m to the west of ditch 2000; in Trench 7: a pit cutting the western side of the section of ditch 2000; in Trench 9: part of a possible post-hole or pit to the west of Ditch 2000; and in Trenches 2 and 9: unexcavated natural (?) features. No finds were recovered from any of these features.

Trench 11, which was oriented differently from Trenches 1–10 (i.e. it followed the proposed centre line of the new approach road), was designed to investigate that part of the area threatened by construction work nearest to the Iron Age and Romano-British remains found in 1921 (*see* above). Despite the proximity of Trench 11 to the recorded findspot for Site 45, no features were exposed, and the only finds of Iron Age or Romano-British date were two unstratified Roman pottery sherds. Although the trench was enlarged westwards at its southern end (Fig. 7.2), this also failed to locate any features or relevant finds.

Trenches 12–21 followed the route of the new Bypass. No features or significant concentrations of finds were made.

Trench 22 was designed to section the trackway, which at this location lies on the 132m Ordnance Datum contour (Fig. 7.2). The western (upper) end of the trench revealed a deposit of Clay-with-Flints above chalk; the trackway surface (i.e. below the topsoil) consisted of grey silt and chalk: Context 2038; while the deposits to the east of the trackway comprised clay and chalk (Fig. 7.5 (Appendix 4)). Two well-defined cart ruts 1.9m apart and each approximately 100mm wide, were discovered on the surface of the trackway. Unfortunately no dating evidence resulted from the excavation of Trench 22.

Discussion

Although the trial trenching at Site A failed to uncover further evidence of the Iron Age/Romano-British settlement which had been found nearby in 1921, it did locate a long linear feature just below the crest of the natural ridge which lies immediately to the east of the northern end of Ditchling Road. This ditch feature could perhaps be a continuation of the dyke in the woods to the north of Site A (i.e. Fig. 7.1, Site 95). If so, it has been suggested (M. Bell, pers. comm.) that this feature could be a boundary radiating from the Hollingbury hillfort. Such boundaries are well represented in the area of the Wessex linear ditches (Bradley *et al*. 1994), and are also found radiating from Danebury. Unfortunately, a lack of finds means that the section of ditch revealed in Trenches 2–10 remains undated. Its alignment and probable

function as a boundary may have had earlier precedents, such as the linear alignment of Bronze Age barrows which can be traced along the crest of the hilltop between Pudding Bag Wood (i.e. to the north of Site A) and Hollingbury hillfort (Fig. 7.1).

Although the section across the trackway failed to date this feature, its size is testimony to extensive usage. The associated chalk pit was probably used to provide chalk for marling purposes on nearby Clay-with-Flints fields. The chalk pit and much of the trackway remain prominent features of the landscape.

Generally the low levels of archaeological finds of all periods from Site A indicate an agricultural/pastoral usage of this land over a long period.

SITE B ('DOWNSVIEW')

Introduction

During the programme of trial trenching at Site A (*see* above), the opportunity was taken to sample the steep-sided north-eastern corner of the same field. Initially three trenches (23–25) 30m long were machine-excavated down to the natural chalk (*NB* the average depth of topsoil was only 200mm), which was then shovel-scraped. Trenches 24 and 25 revealed parts of various features, including terraces for buildings (Fig. 7.6). A shorter trench (26) confirmed that the archaeological features continued to the east, but two 30m trenches (27 and 28) to the west were devoid of such remains. Trenches 24, 25 and 26 were enlarged to form two area excavations, and the subsequent investigations produced evidence which demonstrated that the site was that of a Later Bronze Age settlement. Given the importance of this discovery and its ultimate destruction during the construction of the Bypass, English Heritage agreed to a further programme of investigations, which took place in May and June 1990. The extended excavations included Areas A–I and trial Trenches 31 and 32 (Fig. 7.6) and trial Trenches 29 and 30 (Fig. 7.2). A geophysical soil-resistivity survey using an RM4 meter was also undertaken around the main area of excavations. The results of this survey, which did not reveal any major anomalies, form part of the archive. The site supervisors during the Field Archaeology Unit's excavations at Downsview were Christopher Broomfield, Andrew Reynolds and Miles Russell.

During the October following the fieldwork outlined above, Southern Gas plc. diverted its pipeline adjacent to Coldean Lane, so that this would not be disturbed by construction work on the Bypass. Since the route for the new pipe was just to the north of Saunders Hill (Fig. 7.2) and thus very close to the southern edge of the Later Bronze Age settlement site, Southern Gas plc funded the Field Archaeology Unit to maintain a watching-brief during the construction of the new pipeline. In the area nearest to the Bronze Age site there were a number of unstratified sherds of prehistoric pottery but no archaeological features, and this suggested that the area of settlement did not extend much further than had been exposed by the archaeological excavations. Elsewhere along the new pipeline the watching-brief revealed several features and some finds, including prehistoric flintwork and pottery (Broomfield 1990).

Owing to continuing delays in the construction of the stretch of the Bypass in the vicinity of Coldean Lane, the Brighton and Hove Archaeological Society (BHAS), under the direction of John Funnell, enlarged the excavations undertaken by the Field Archaeology Unit. Finally, the construction work began in late 1991 and John Funnell and the BHAS maintained a watching-brief and undertook some salvage excavations. The results of the fieldwork undertaken by the BHAS are included in this report.

The Later Bronze Age settlement at Site B (National Grid Reference: TQ 328 093) was named Downsview after the school by that name which formerly existed on the north side of Coldean Lane.

The excavations

Note: the features recorded within the main excavation area (Fig. 7.6, i.e. an enlargement of trial Trenches 24–26: Fig. 7.2) have been grouped for convenience of reporting into various loci (A–L: Fig. 7.6A). A few features are located outside these loci and only appear on plan in Figures 7.6 and 7.6A. The site, which is on a steep slope, has at some stage (but not recently) been subjected to severe plough damage and colluvial processes. Thus in the case of the various building terraces, the northern (i.e. upslope) parts of the terraces have survived much better than the southern parts. In many cases therefore, the surviving shapes and depths of features, especially post-holes on the southern halves of the building terraces, do not necessarily provide a good indication of the original shapes and dimensions of such features. Most of the fills of these terraces, and various other features, are the result of hillwash.

Area A (Figs 7.6A, 7.7, 7.8, 7.9 and 7.10; Plates 7.1, 7.2, 7.3 and 7.4)

Area A consisted of four major features: three building terraces (Contexts 2046, 2048 and 2062) and a large pit (2054). Another large feature (2085) was irregular in shape and had a gulley-like depression surrounding a central area of chalk. Context 2085 is thought to be a natural feature, perhaps a rabbit warren or a tree hole. There was, however, a concentration of stake-holes in the vicinity of Context 2085, including an alignment to its north of evenly spaced holes which may be the remains of a fence.

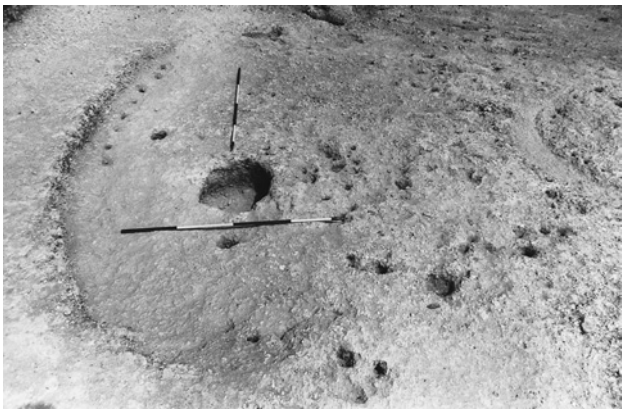

Plate 7.1 Downsview, Area A, terrace 2046. Viewed from the west. Scales: 2m.

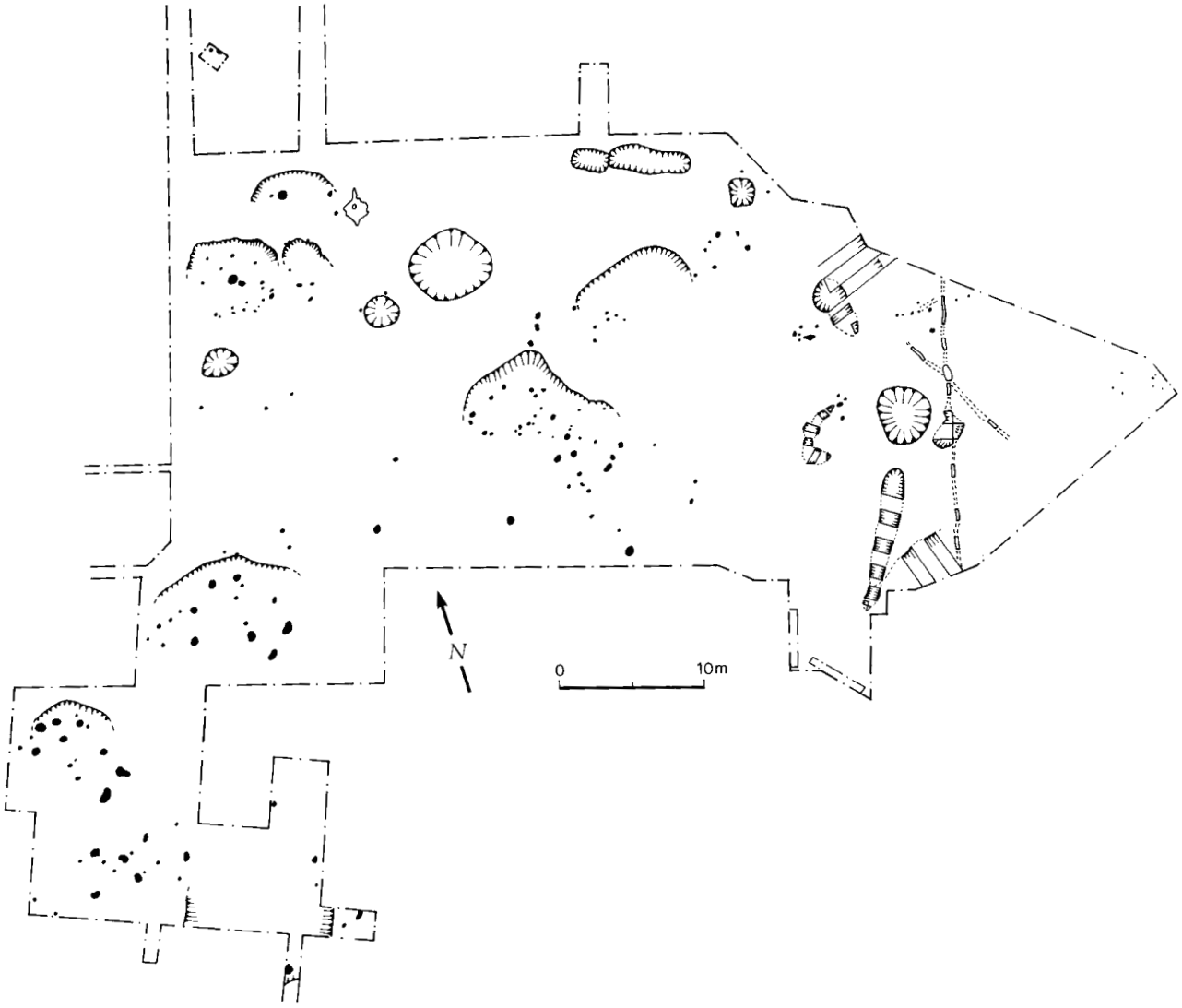

Fig. 7.6 Downsview: Plan of the main features.

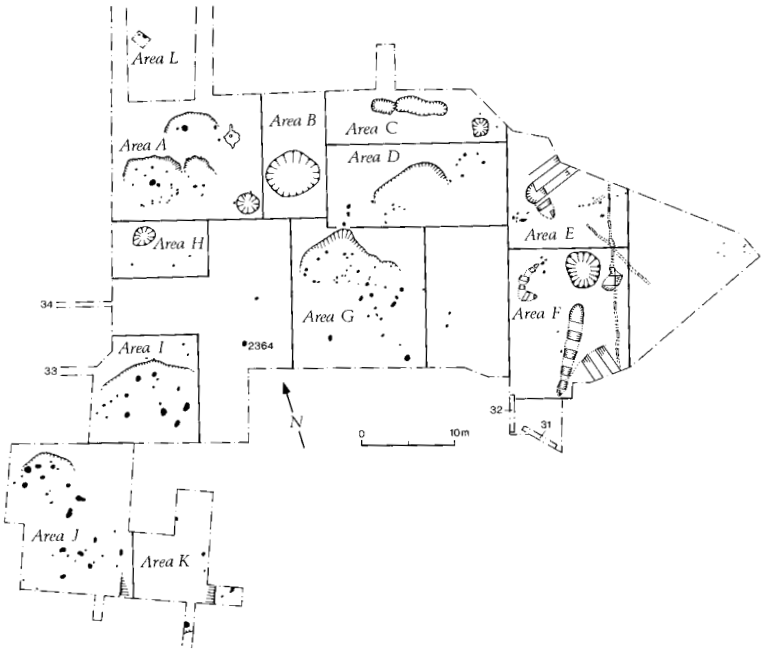

Fig. 7.6A Downsview: Plan of area locations.

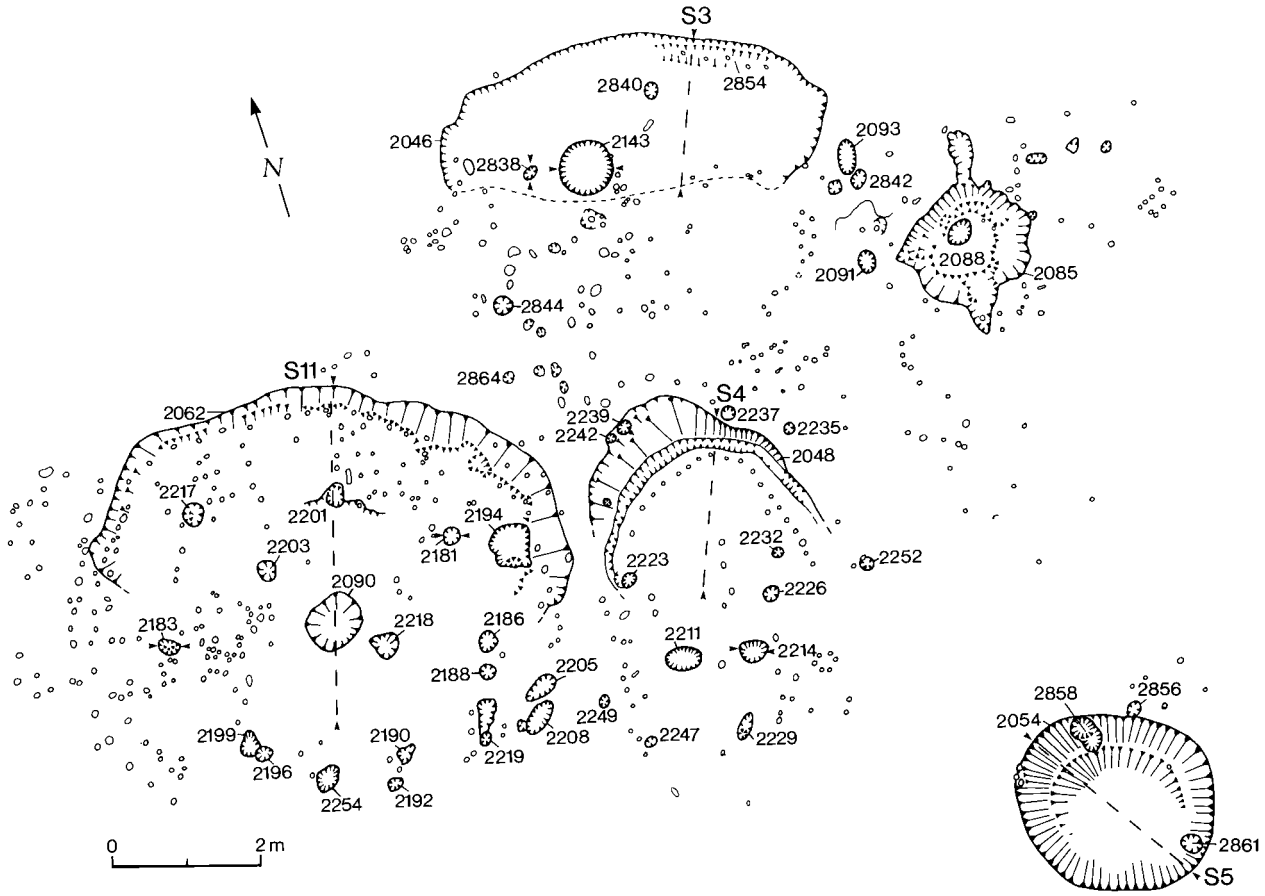

Fig. 7.7 Downsview, Area A: Plan.

Building terrace 2046 (Figs 7.7, 7.8, 7.10; Plate 7.1)

This shallow terrace, which is at least 5.2m across (east–west) and perhaps 4.8m wide (north–south), was cut into the hillslope and has a vertical northern terrace edge surviving to *c*.330mm (Fig. 7.8: Section 3). Evidence for the structure (3) which occupied this terrace consisted of post-holes and stake-holes. Post-holes 2844, 2838 (Fig. 7.10), 2840, 2093/2842 and 2091 are probably the remains of an internal ring of roof-supports. Evidence for the entrance is uncertain, but may comprise post-holes 2237 and 2239 (and perhaps post-holes 2235 and 2242) which are located on the upper edge of terrace 2048. At the rear of the terrace survived part of a line of stake-holes set within a very shallow trench/gulley. These stake-holes formed the wattle wall of the building. Other traces of the external wattle wall probably include some of the stake-holes and small post-holes in the vicinity of the postulated entrance (i.e. post-holes 2239 and 2237). Features within the building include various stake-holes and a large circular pit with vertical sides and a flat bottom. The pit (Context 2143), which is 720mm in diameter and survives to a depth of 400mm (Fig 7.10), is not centrally located within the terrace or postulated building. The pit contained three fills: a deposit of compacted chalk (Context 2144) – perhaps a final sealing of the feature – and two deposits containing much burnt flint. The lower of the deposits comprising burnt flint (Context 2146) also contained much charcoal and blackened soil. In contrast, the other deposit (Context 2145) was approximately 90% burnt flint. Charcoal from the pit, which includes samples of hazel, maple, *Prunus* and pomoideae (*see* below and Table 9.2 (Appendix 4)), was used to obtain a radiocarbon date of 1520–1435 cal BC (weighted mean of UB-3783-5; *see* Section 9).

The fills (Contexts 2047 and 2052) of terrace 2046 yielded very few finds. An important find from the upper fill (2047) of the terrace was a stone mould (*see* below).

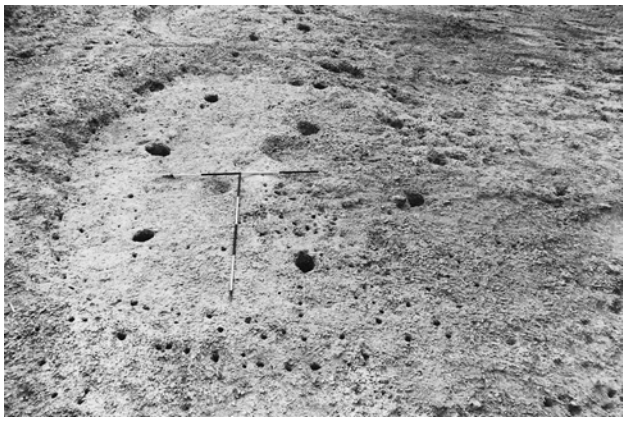

Plate 7.2 Downsview, Area A, terrace 2062. Viewed from the west. Scales: 2m.

Building terrace 2062 (Figs 7.7, 7.9, 7.10 and 7.11; Plates 7.2 and 7.3)

This terrace, which was 6.8m across and 5.4m wide, had a sloping northern terrace edge surviving to *c*.260mm (Fig. 7.9: Section 11). Evidence for the structure (1) constructed

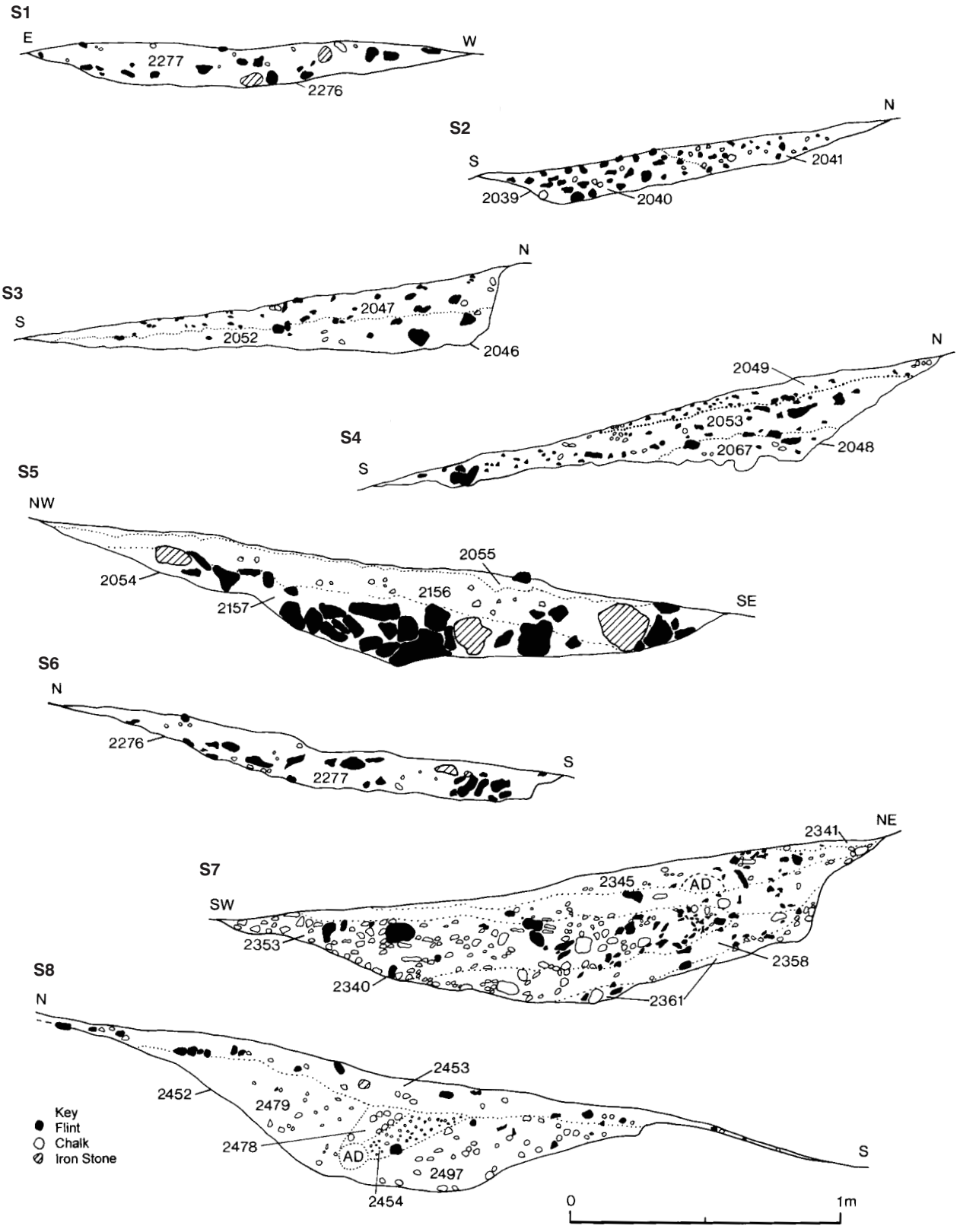

Fig. 7.8 Downsview, Areas A, C, F and H: Selected sections.

on this terrace was, for Downsview, reasonably clear and well-preserved. The roof of the structure was supported upon a probable ring of seven posts, the post-holes of which include Contexts 2196/2199; 2183 (Fig. 7.10); 2217; 2201 (Fig. 7.9: Section 11); 2181 (Fig. 7.10); 2186 (or 2188) and 2190. Evidence for the entrance is less certain, but is thought to involve either post-holes 2192 and 2254 or post-holes 2190 and 2188 (*see* Bareham, below). Stake-holes at the rear of the terrace formed an internal wattle wall to the building. This line of stake-holes continues along the western side of the building where it is complemented by a parallel line of stake-holes, thus creating a double wattle

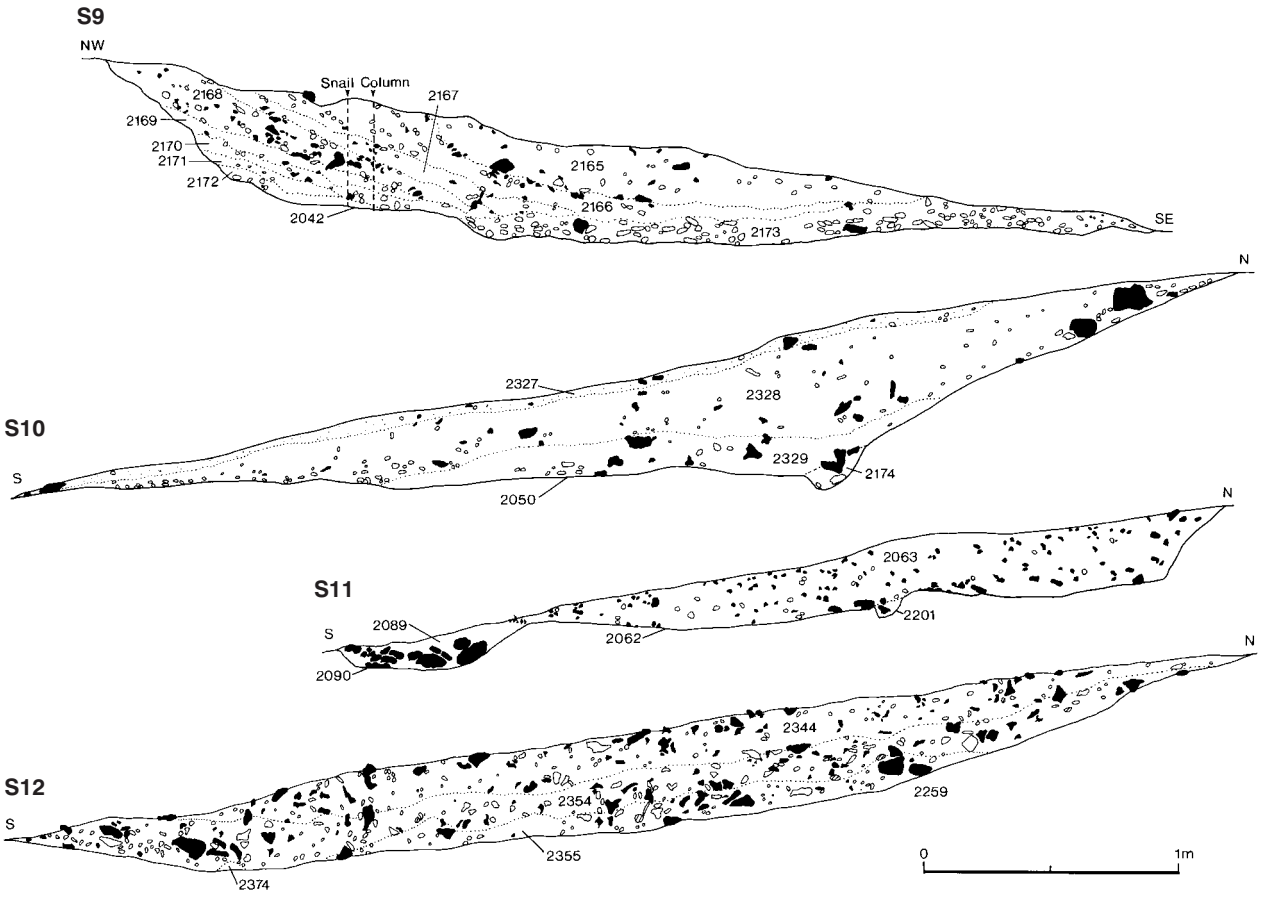

Fig. 7.9 Downsview, Areas A, B, D and G: Selected sections.

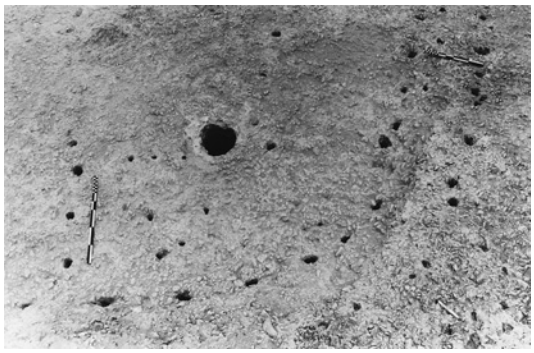

Plate 7.3 Downsview, Area A, terrace 2062. Detail of double stake-hole external wall; internal stake-holes and post-hole 2217. Viewed from the north. Scales: 50cm and 40cm.

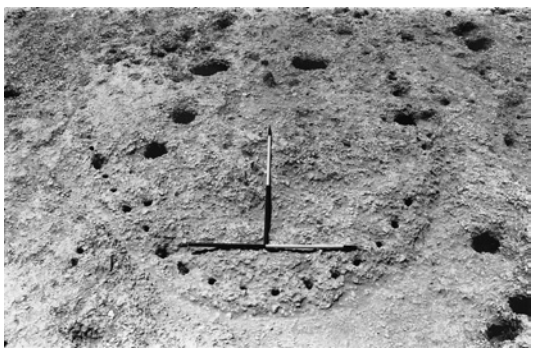

Plate 7.4 Downsview, Area A, terrace 2048. Foreground: shallow gulley and stake-hole wall. Top of photograph: post-holes 2211 and 2214 (i.e. the doorway). Viewed from the north. Scales: 1m.

wall (Plates 7.2 and 7.3) (*cf.* Patcham Fawcett Round-house 4: *see* Section 14). Considerably fewer stake-holes from wattle wall/s were found along the eastern side of the building. Features within the building include a central fire-pit (?) (2090), another shallow pit (2194), various post-holes (examples: 2203 and 2218), and lines of stake-holes (Plate 7.3) which probably formed wattle screens. Unfortunately, the central pit (Fig. 7.9: Section 11) did not yield any charcoal, and so it was not possible to obtain a radiocarbon date for comparison with the contents of pit 2143 on terrace 2046. It has been suggested (*see* Bareham, below) that post-hole 2218 might have held an upright timber which had a horizontal arm for suspending material over the adjacent fire-pit.

The few finds recovered from this terrace include a fragment of a sarsen stone quern or grain-rubber (*see* Barber, below). This fragment was found in post-hole 2201 and was probably used as packing material around the post in this feature.

Building terrace 2048 (Figs 7.7, 7.8 and 7.10; Plate 7.4)

This much smaller terrace, which was located adjacent to terrace 2062 and immediately to the south of terrace 2046, was approximately 2.5m across and perhaps also 2.5m from north to south. As in the case of terrace 2062, the cutting of this building platform also involved a sloping northern edge (Fig. 7.8: Section 4). The construction of this terrace may have truncated features, such as post-holes 2239 and 2242,

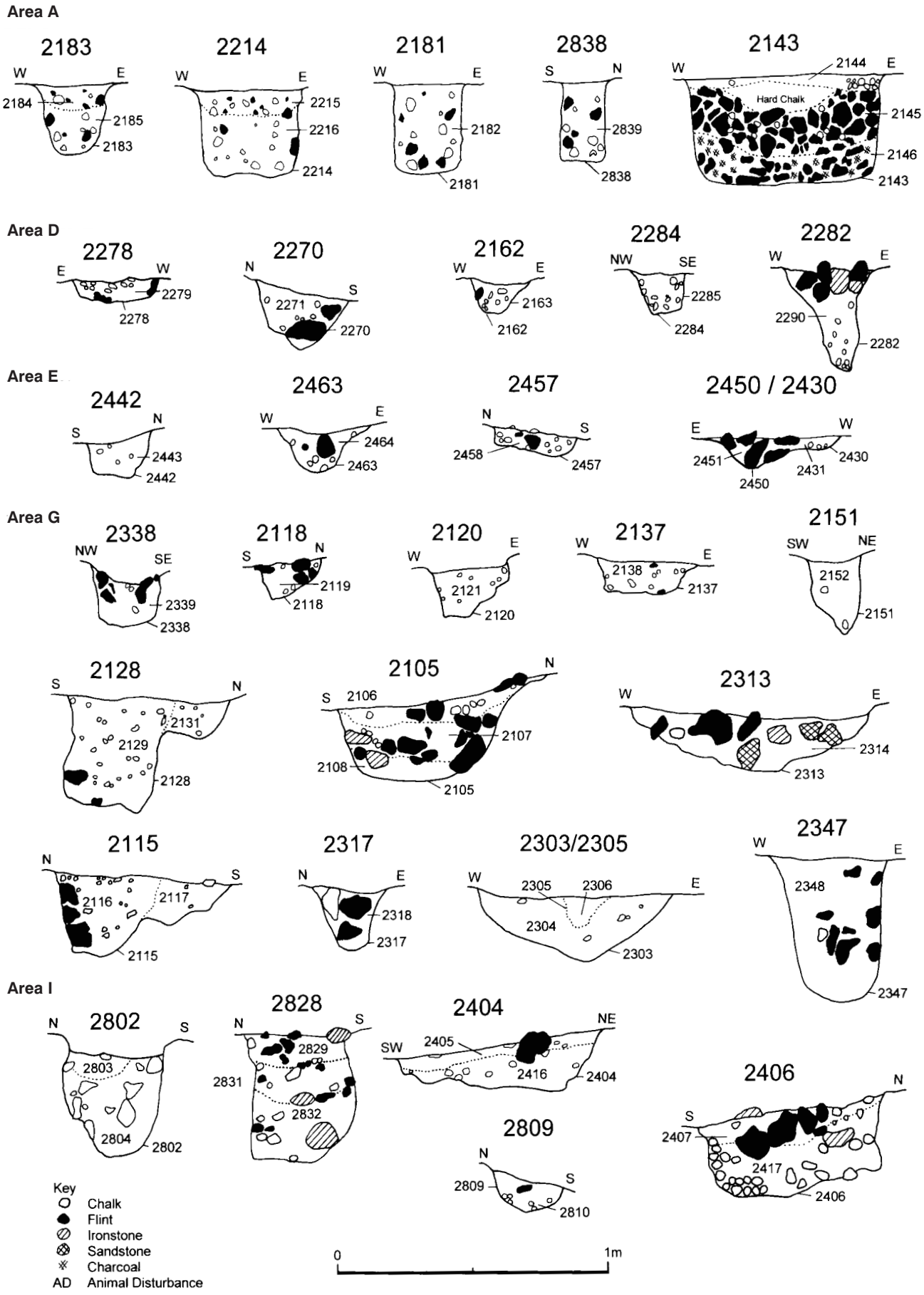

Fig. 7.10 Downsview, Areas A, D, E, G and I: Selected sections.

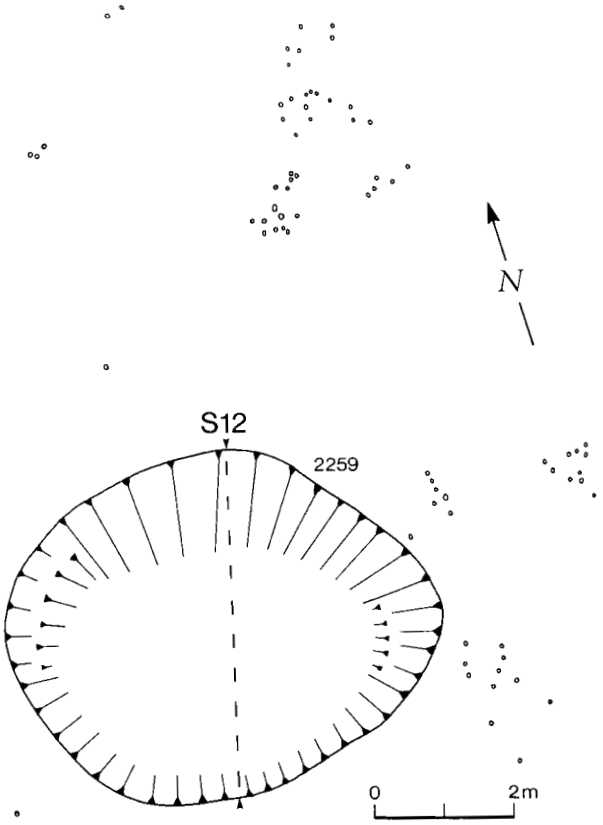

Fig. 7.11 Downsview, Area B: Plan.

associated with Structure 3 on terrace 2046. The building (Structure 2) on terrace 2048 incorporated both post-holes and stake-holes. Upright roof-supports probably included post-holes 2223 and 2226 or 2232. The doorway is probably represented by two large post-holes, 2211 and 2214 (Fig. 7.10). The wall of this building was of single wattle construction. Immediately to the north of the northern half of the building was a small gully concentric with the structure's stake-wall. It is suggested by Tristan Bareham (*see* below) that some of the stake and post-holes (examples: 2229 and 2247) to the south of post-holes 2211 and 2214 may have formed parts of a windbreak in front of the door into Structure 2. Although again this terrace contained very few finds, it did yield 14 sherds of pottery (*see* Hamilton, below). The upper terrace fill (2049) included 12 sherds of LBA pottery and one sherd of Romano-British date. The lowest terrace fill (2067) yielded a single sherd of LBA pottery.

Pit 2054 (Figs 7.7 and 7.8)

This almost circular (2.7m × 2.4m) feature had sloping sides (Fig. 7.8: Section 5). Two post-holes (2858 and 2861) were found inside the pit; post-hole 2858 being of two phases. Another post-hole (2856) was found on the northern edge of the pit. The pit's lowest fill (2157) contained large quantities of flints and pieces of ironstone (*see* Barber, below) The few finds from the middle fill (2156) included ten pieces of bone (small ungulate: *see* Table 7.15). The upper fill (2055) yielded four sherds of LBA pottery (Fabric 7: *see* Table 7.5).

Discussion of Area A

Area A contained the remains of three Bronze Age buildings (round-houses). All three structures yielded evidence of the presence of walls involving stakes, and Structure 1 (terrace 2062) had a double-wattled wall. The roofs of the two largest buildings were supported on rings of roof-supports, while the roof of the smallest structure may have needed only two such posts. Although conclusive evidence is lacking, it is possible that the entrances of all three buildings faced south or south-west. The possible superstructures of Structures 1 and 2 are discussed below (*see* Bareham). In terms of phasing it is thought that Structure 3 (terrace 2046) is the earliest, and that it was replaced by Structures 1 and 2. Problems of roofing caused by the close proximity of Structures 1 and 2 are discussed below by Bareham, who argues that this issue need not require us to conclude that the two structures were not contemporary. Bareham also suggests that the need for a water-conducting gully so close to the rear wall of Structure 2 may be significant with regard to the nature of the building's roof, especially if this involved prepared hides.

The general sparsity of finds from all three buildings in Area A does not help their interpretation. Structure 1, the most complete of the three buildings, and containing what is interpreted as a central fire-pit, is a reasonably typical example of a Bronze Age round-house. However, the evidence for internal wattle screens within the building (such as the line of stake-holes between post-hole 2203 and

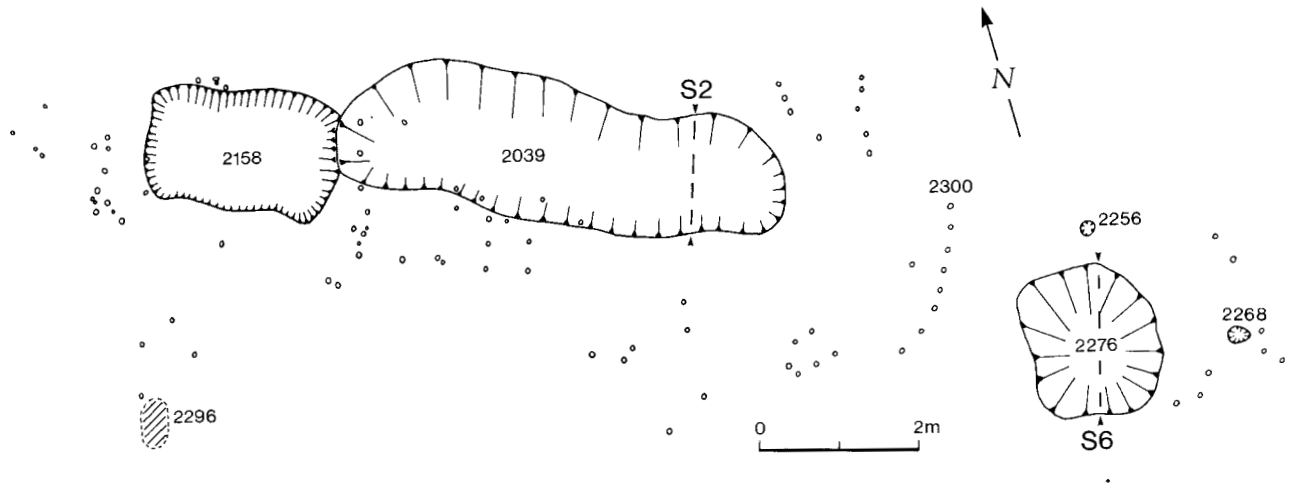

Fig. 7.12 Downsview, Area C: Plan.

the northern wattle wall of the structure), provides a rare example of the provision of subdivisions within a timber round-house (*see* also Mile Oak Round-house I: Section 2). The much smaller and presumably contemporary Structure 2 can perhaps be interpreted as an annexe to Structure 1. If so it was probably used either for the undertaking of specialist activities and/or the accommodation of certain categories of people (there are a large range of such possibilities, including menstruating females, a second wife, a widow, adolescent males or guests (for a useful ethnographic insight into such matters, i.e. the range of hut functions and occupancy within a Fulani compound, *see* David 1971). Structure 3 (terrace 2046) may have been the predecessor of the similarly-sized Structure 1 (terrace 2062). If so, it is interesting that the circular fire-pit containing much burnt flint is located off-centre and towards the rear of the building. It is also uncertain why the fire-pit is so deep, and what its precise functions (warmth, cooking, etc.) were.

The function of pit 2054 is also unclear. The presence in its lowest fill of large amounts of stone (especially flints and ironstone) may indicate that the pit was ultimately used as a store for such materials. It is possible that originally the pit was constructed as a small 'pond' (*see* below, Area B).

Area B (Figs 7.6A, 7.9 and 7.11)

Pond 2259

The main feature revealed in Area B was a large oval cut (2259) measuring 6.3m long by 4.7m wide, and surviving up to 440mm deep (Fig 7.11; Section 12). The lowest deposits (2355 and 2374), which were of compacted silty clay with some flints and chalk fragments, yielded one sherd of LBA pottery (Fabric 8; *see* Table 7.5, below). Interestingly, all six sherds of pottery from the overlying fill (2355) date to the Middle Bronze Age (MBA), while the uppermost fills (2344 and 2260) yielded a few sherds representing both the Middle and Late Bronze Ages, together with one Romano-British sherd. Other finds from the fills of feature 2259 include flintwork, animal bone and a piece of worked (?) iron-rich sandstone (*see* below).

Similarly-sized oval features have been discovered at various Middle and Late Bronze Age settlement sites, including from Sussex: Black Patch (Drewett 1982b: Fig. 5); Varley Halls (Greig 1997: 25) and Mile Oak (*see* Section 2). Although such hollows are often interpreted as ponds, other suggestions have included places for puddling clay (*see* Section 2). At Downsview neither of the 'pond' features (i.e. 2259 and 2276: Area F), nor the possible pond (i.e. 2054: Area A – *see* above) could be said to have been lined with clay. Such action would have been necessary for these hollows to hold water for long periods.

Other features

The other features within Area B were stake-holes. Although these holes formed several clusters, their patterning is unintelligible.

Area C (Figs 7.6A, 7.8 and 7.12)

Area C exposed three major features (2039, 2158 and 2276), an area of burning (Context 2296), two post-holes (2256 and 2268) and a number of stake-holes. Some of the stake-holes are in lines (example: a line (2300) to the north-west of feature 2276).

Ditch/pit 2039 and pit 2158

East–west oriented linear feature 2039 was 5.75m long, 1.75m wide and survived as a very shallow cut (Fig. 7.8: Section 2). Feature 2039 had two main fills: 2040 and 2041. The few finds from these fills included three sherds of LBA pottery (*see* Table 7.5, p. 175). Feature 2039 was cut at its western end by a rectangular pit 2.4m long and 1.4m wide. The fills (2066 and 2071) of this pit yielded no dating evidence.

Pit 2276

To the south-east of feature 2039 was another rectangular pit, 2276. This feature, which measured 1.8m long and 1.67m wide, was only some 150mm deep (Fig. 7.8: Section 6). The fill (2277) of the pit produced no dating evidence.

Feature 2296

An area of burnt chalk and some fire-cracked flint was recorded to the south of pit 2158. This area of burning may represent the location of a fire or hearth. Its date is unknown.

Discussion of features 2039, 2158 and 2276

All three of these features lie on the periphery of the main settlement area. Together with features 2423 and 2427, they may thus represent parts of the eastern and northern boundaries to one or more phases of the settlement. While feature 2423 (*see* Area F) is a much more typical ditch feature, it is possible that features 2427, 2276, 2039 and 2158 may have had a similar function, perhaps as quarries to provide chalk for a subsequently ploughed-out boundary earthwork.

Area D (Figs 7.6A, 7.9, 7.10 and 7.13)

Area D comprised a building terrace (2042), the possible remains of another building, and a concentration of stake-holes around the terrace.

Building terrace 2042

This deep terrace (Fig. 7.9: Section 9) was approximately 8.2m long and in excess of 3.7m wide (north-west/south-east). Unfortunately, relatively few features were discovered on this terrace and evidence for the building (Structure 4) which once existed on this space may thus include various post-holes (2162, 2179, 2284, 2288, 2291, 2297, 2525, 2527 and 2529) and several clusters of stake-holes at the southern end of the terrace. The orientation of this terrace (i.e. south-west/north-east) may indicate that the entrance faced south-east. This relatively deep building terrace was filled by a large number of distinct hillwash deposits: 2165 (= 2043), 2166,

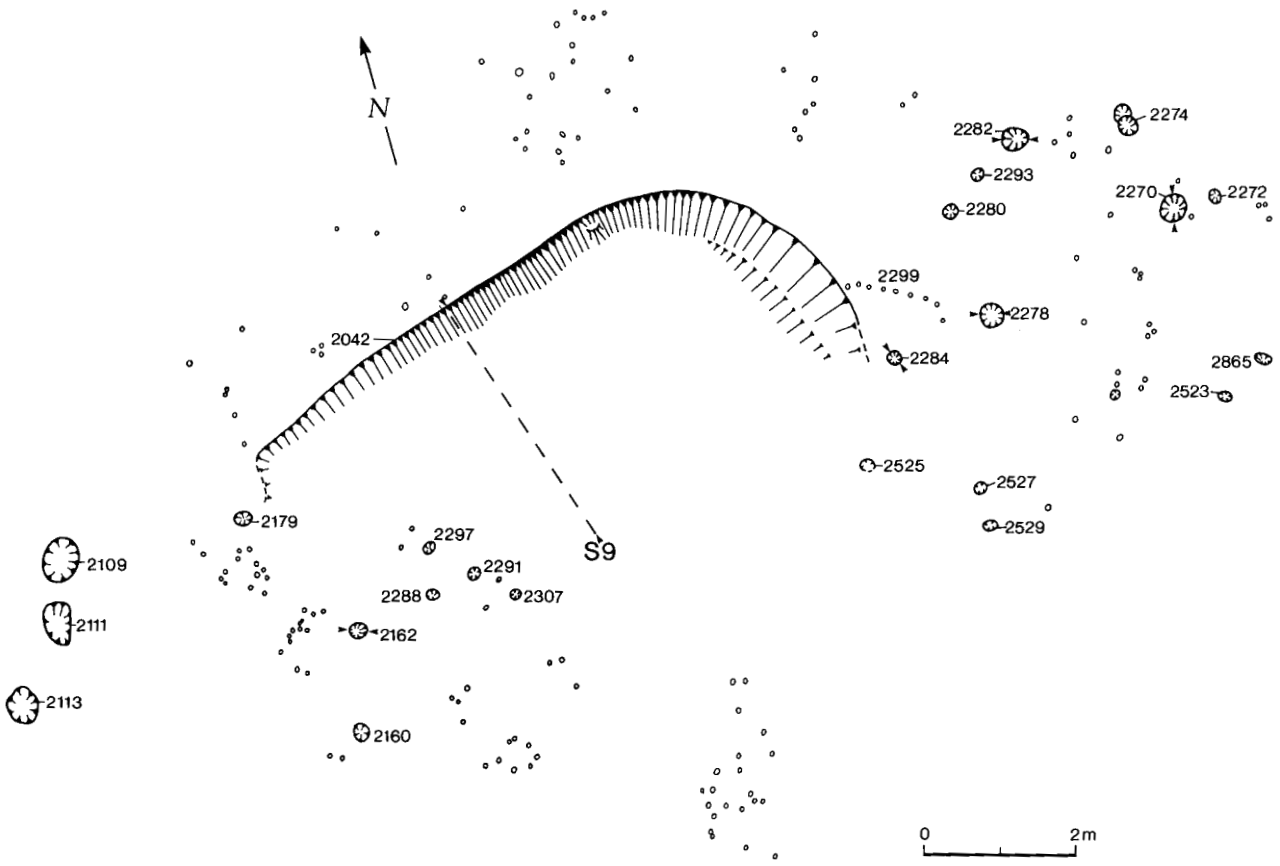

Fig. 7.13 Downsview, Area D: Plan.

2167, 2168, 2169, 2170, 2171 and 2172 (= 2082) (Fig. 7.9: Section 9) and samples were taken for molluscan analysis (*see* Wilkinson, below). Resting on the floor of the terrace was a layer (2173) of re-deposited natural clay. With the exception of one sherd of Romano-British pottery from the upper fill (2043) of the terrace, the other six pottery finds all date to the MBA (*see* Table 7.4, below). Of the other finds from the terrace fills there is a 'minor' concentration of flintwork (*see* Underwood, below), a piece of worked Upper Greensand and a small quantity of bone (*see* below).

Structure 5

Immediately to the north-east of terrace 2042 was a group of post-holes: 2270 (Fig. 7.10), 2272, 2274, 2278 (Fig. 7.10), 2280, 2282 (Fig. 7.10), 2293, 2523 and 2865 which may be the remains of another timber round-house (i.e. Structure 5). Some of the larger post-holes; i.e. 2270, 2274 (which has two phases), 2280, 2282 and 2278 were possibly part of a ring of upright roof-support posts. This ring, which may also include some of the smaller post-holes (such as 2293,) has a possible diameter of 4.4m. The position of an entrance is uncertain (perhaps post-holes 2523 and 2865). Some of the stake-holes recorded in the vicinity of Structure 5 may have formed parts of the structure, either in terms of wattle walling or internal divisions. A line of stake-holes (2299) between terrace 2042 and Structure 5 may have belonged to a wattle fence. Finds from Structure 5 include 50 sherds from an MBA biconical urn. All the sherds were found in post-hole 2278.

Post-holes 2109, 2111 and 2113

To the west of terrace 2042, and immediately to the north of terrace 2050 (Area G), was a group/line of three large post-holes (2109, 21111 and 2113).

Discussion of Area D

Structures 4 and 5 may have formed a pairing of accommodation similar to that provided by Structures 1 and 2 of Area A (*see* above), that is a large 'house' with an adjacent smaller annexe. The limited evidence from Structure 4, and the very good ceramic evidence from Structure 5, indicates that these two structures date to the MBA.

Area E (Figs 7.6A, 7.10, 7.14 and 7.15)

Located along the eastern boundary of the excavation site, Area E revealed various types of features including a negative lynchet (2427), a large pit/ditch (2437), three small gulleys/ditches (2430, 2435 and 2461), two concentrations of post-holes and two areas of stake-holes.

Negative lynchet 2427

Much of the northern part of Area E had been truncated by a large shallow feature (2427) oriented north–south (Figs 7.14 and 7.15: Section 18). This feature, which is interpreted as a negative lynchet, overlay and cut pit/ditch 2437. Finds

from the fills of negative lynchet 2427 include flintwork, pottery (*see* Table 7.5, p. 175) and bone (*see* Table 7.15, p. 190). The pottery comprises both MBA and LBA fabrics, most of the latter being recovered from the uppermost layer: 2428. Much of the MBA pottery, and perhaps also much of the bone and flintwork, may be derived from the underlying and truncated pit/ditch (2437).

Ditch 2437

The truncated remains of a large pit/ditch (2437) were found below the fills of negative lynchet 2427 (Fig. 7.15: Section 18). This feature, which was 4.8m long and up to 2m wide at its northern end, was only partly excavated (*see* Fig. 7.14). Finds included 21 sherds of MBA pottery from the primary fill (2467), 8 sherds of MBA pottery and 3 sherds of LBA pottery from the uppermost surviving fill (2434). Since fill 2434 may contain intrusive material as a result of the overlying negative lynchet (2427), it is probable that feature 2437 dates to the MBA.

Post-holes 2440, 2442 (Fig. 7.10), 2444, 2446, 2448, 2455 and feature 2438

To the west of pit/ditch 2437 was a group of six post-holes around a shallow irregular (?natural) feature (2438). No pottery was recovered from the fills of these features.

Linear features 2430, 2435 and 2461

The eastern boundary of the Downsview site is marked by a shallow linear feature: 2430 (Figs 7.6 and 7.14), approximately 200mm wide. At the southern end of Area E, feature 2430 was cut by, or cut part of a similar, but narrower, feature 2435, which is oriented roughly north-west/south-east and continues to the east of feature 2430 (Fig. 7.6). Another small stretch of linear gulley/ditch (2461) was discovered adjacent to the northern end of post-hole 2459. In the absence of any datable finds from features 2430, 2435 and 2863, dating is relative to features which cut, or were cut by, these contexts. Thus in Area E, feature 2430 either cut, or was cut by, post-hole 2450 (Figs 7.10 and 7.14) which contained one sherd of LBA pottery (*see* Table 7.5, p. 175). Unfortunately, the exact relationship between these two truncated features was not established.

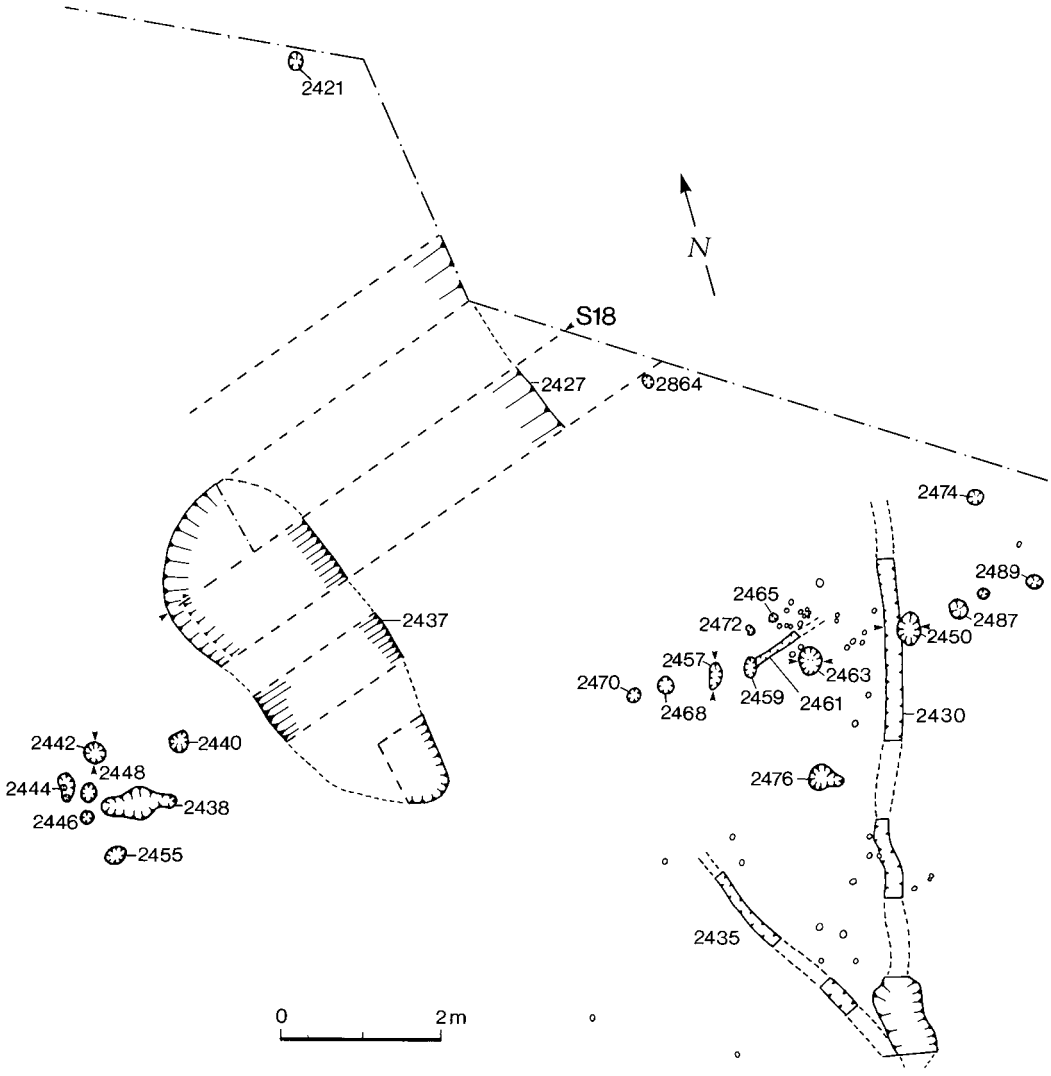

Fig. 7.14 Downsview, Area E: Plan.

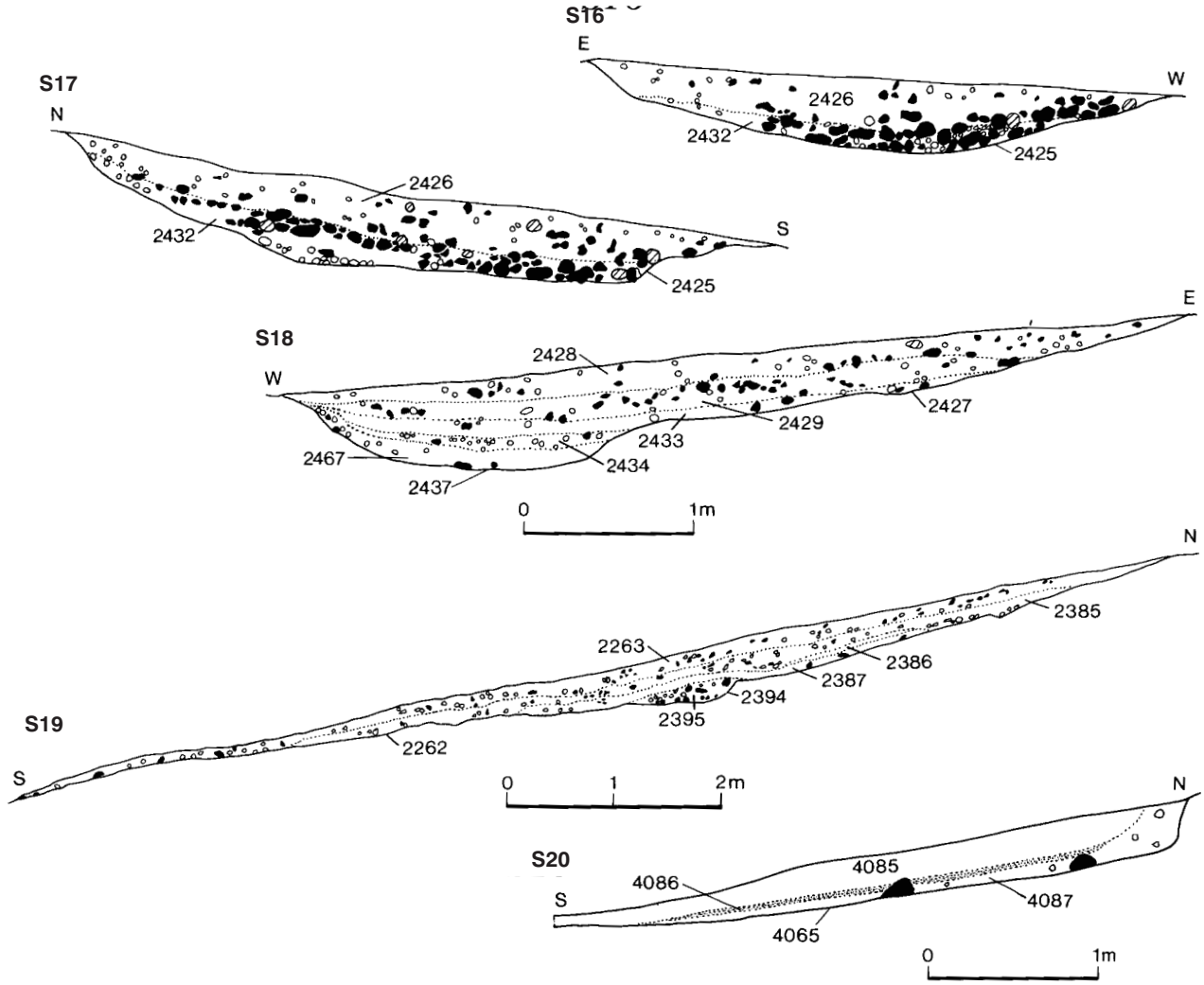

Fig. 7.15 Downsview, Areas E, F, I and J: Selected sections.

Structure 6

Post-hole 2450, referred to above in relation to linear feature 2430, is one of a number of sub-circular post-holes: 2457 (Fig. 7.10), 2459, 2463 (Fig. 7.10), 2465, 2468, 2470, 2472, 2474, 2476, 2489 and 2864, which were found to the east and west of linear feature 2430. The area cut by these post-holes also contains a number of stake-holes (Fig. 7.14). The post-holes fall roughly into two surviving diameter categories: *c*.400mm and *c*.200mm respectively, and it is probable that they belong to a badly truncated and un-terraced round-house (Structure 6) with an inner ring of four larger post-holes (2450, 2463, 2476 and one missing) which would have contained the roof-supports, and an outer ring of smaller post-holes (2468/2470, 2474 and 2489) representing the exterior wall of the building. Dating evidence for this postulated round-house is limited to the single sherd of LBA pottery from post-hole 2450.

Other post-holes

Area E also contained two isolated and undated post-holes: 2421 and 2864.

Discussion of Area E

The earliest feature in Area E was probably pit/ditch 2437, which on ceramic evidence is dated to the MBA. This large pit (or ditch) appears to have formed part of a circuit of such features: 2158, 2039, 2276, 2437 and 2423 (*see* above, Area C, for a fuller discussion of these features).

The negative lynchet (2427) which overlay and truncated ditch 2437 is of uncertain age, but its fills contain pottery of both the Middle and Late Bronze Age.

The relatively narrow linear features (2430, 2435 and 2465) may represent badly truncated gulleys or ditches. Dating evidence is very minimal (*see* above), but could be LBA or later if feature 2430 cut post-hole 2450. The long and fairly straight feature 2430, which runs at approximately right-angles to the site's contours (*see* Fig. 7.2), may be a boundary ditch. If so, it was perhaps part of a cross-ridge dyke; several such features having already been identified in the vicinity of Downsview (*see* above, Introduction: Sites 55 and 95 and Site A: Context 2000).

The postulated round-house (i.e. Structure 6) lacks a building terrace, is outside what is thought to be the Bronze Age settlement site's eastern boundary and is not based upon well-preserved circles of post- and stake-holes. Dating evidence consists of only one sherd of LBA pottery. If the

Plate 7.5 Downsview, Area F, ditch 2423. Section. Facing south. Scale: 1m.

interpretation is correct, this building may represent a late phase in the settlement history.

The other concentration of post-holes (i.e. around feature 2438) is both undated and unexplained.

Area F (Figs 7.6A, 7.8, 7.15, 7.16 and 7.17; Plate 7.5)

Located immediately to the south of Area E, Area F contained further stretches of feature 2430 and the postulated eastern boundary of the Bronze Age settlement. Other features included another negative lynchet (2493); another 'pond' (2425), a concentration of stake-holes, a group of four post-holes (2502–2508), a gulley/ditch feature (2491) and a ditch (2423).

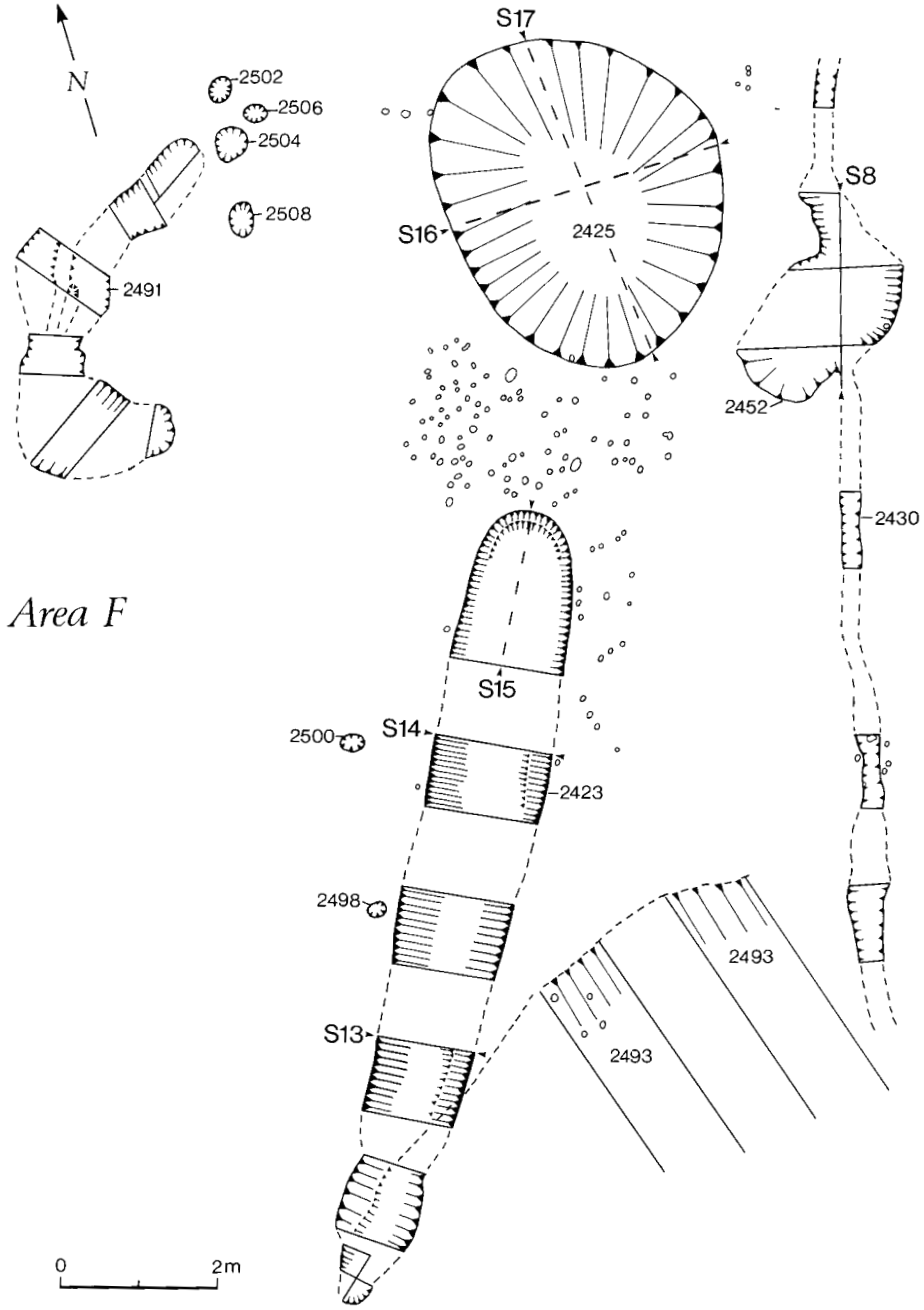

Fig. 7.16 Downsview, Area F: Plan.

Ditch 2430

The narrow, linear, north–south oriented ditch found in Area E continued into Area F. It cut a rectangular pit (2452, Fig. 7.8: Section 8) which yielded one sherd of LBA pottery from its uppermost fill (2453) (*see* Table 7.5, p. 175). This relative dating evidence for feature 2430 supports that obtained from Area E (*see* above). No dating evidence was recovered from the main fill (2479) of pit 2452, and the function of this feature is not known.

Ditch 2423

Ditch 2423 was fully exposed within Area F which was extended southwards in order to achieve this objective (Fig. 7.6). While at the northern end this ditch was very well-preserved (*c.*1.5m wide and up to 1m deep: Fig. 7.17; Plate 7.5), at its southern end it had been much truncated by negative lynchet 2493. At both ends the ditch had a rounded terminal. The primary ditch fill (2486) contained one sherd of MBA pottery (*see* below, Table 7.5). Above this deposit, fill 2483 yielded five sherds of MBA pottery, while higher still fills 2489 and 2424 contained six and five sherds respectively of MBA pottery. The uppermost fill (2497) of the ditch yielded six sherds of MBA pottery, two sherds of LBA pottery, two sherds of Roman pottery and one sherd of Post-Medieval pottery. (*NB* Intrusive Romano-British sherds were also recovered from fills 2424 and 2480.) The fills of ditch 2423 which did not yield any pottery were: 2481, 2482, 2484 and 2485. Fill 2480, which included many large flints, yielded a copper alloy awl, large numbers of sheep/goat bones and one pig bone (*see* below). The very small quantities of charred plant remains

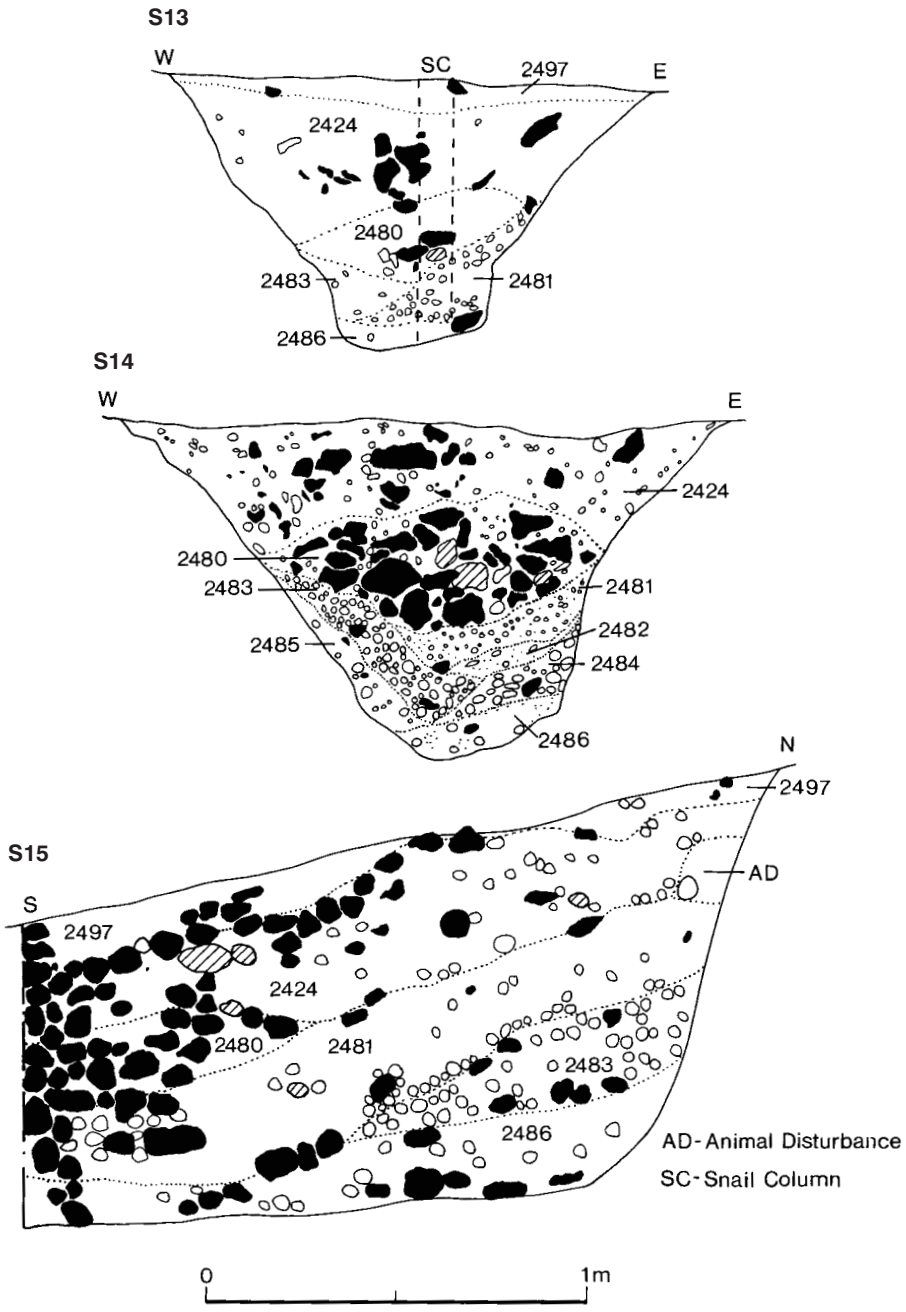

Fig. 7.17 Downsview, Area F: Sections of ditch 2423.

from the fills of the ditch (*see* below, Table 7.18) perhaps indicate that this feature was not used for the general disposal of all domestic refuse. Other finds from the ditch comprise flintwork (including a Late Neolithic adze) and a possible Wealden sandstone whetstone (*see* below). In an attempt to investigate the environmental context of the ditch, samples were taken for molluscan analysis (Fig. 7.17: Section 13; *see* Wilkinson, below). Two small and undated post-holes (2498 and 2500) along the western side (i.e. inner) side of ditch 2423 may relate to some sort of retaining structure for the bank which would have been adjacent to the ditch.

Immediately to the north of ditch 2423, and filling the space between the ditch and 'pond' 2425, were a large number of stake-holes. Smaller numbers of stake-holes were also found to the east of the northern terminal of ditch 2423, and to the east and west of the northern end of feature 2425. Feature 2425 was a large oval depression 4.4m long, 3.5m wide and up to 650mm deep (Fig. 7.15: Sections 16 and 17). The primary fill (2432) consisted of compacted silty clay with some chalk and many pieces of flint, and is thus more typical of Bronze Age 'pond' features than feature 2259 of Area B. This fill yielded four sherds of MBA pottery. Pottery finds from the upper fill (2426) consisted of three sherds of MBA fabrics, six sherds of LBA fabrics and one Romano-British sherd (*see* below, Table 7.5). Other finds from pond 2425 include some animal bones and flintwork, the latter including (from the upper fill) a flaked axe which is thought to have been produced in the Late Neolithic (*see* Underwood, below).

To the west of pond 2425 was a group of four post-holes (2502, 2505, 2506 and 2508) at the northern end of a curved gulley/ditch feature (2491) which widens at its southern end. No dating evidence was recovered from any of these features and their functions remain unknown.

The southern end of ditch 2423 was truncated by negative lynchet 2493. The fill of the lynchet yielded a single sherd of Roman pottery, and this many be an indication as to the period of arable cultivation associated with the lynchet (*see* also below).

In an attempt to see if there was a further ditch to the south of ditch 2423, two trial trenches (31 and 32) were hand excavated to the south of Area F (Fig. 7.6). Neither trench revealed any features. After the main (i.e. Field Archaeology Unit) excavations had ended, the BHAS further investigated the area contained by trial Trenches 31 and 32. Although this area, which was again excavated by hand, revealed no features, finds from the topsoil included flintwork, bone, pottery sherds (2 MBA; 2 LBA; 11 Romano-British; 1 Medieval and 2 Post-Medieval) and one Roman coin of Constantius II (*see* below). The Roman pottery and coin are possibly additional evidence that this area (which includes negative lynchet 2493) was cultivated during the Roman period.

Discussion of Area F

Ditch 2423 is the longest section of ditch or linear pit forming part of the postulated eastern boundary to the Bronze Age settlement site (*see* above). Ceramic dating evidence from the lower fills of ditch 2423 indicates that this feature was constructed during the MBA. Such dating is consistent with that obtained from ditch 2437, but at variance with the few sherds of LBA pottery recovered from the shallow fills of ditch 2039. Variability in the size and state of preservation of different parts of ditch 2423, especially where these have been damaged during the creation of a negative lynchet (2493), highlights dramatically the importance of post-constructional/depositional factors for the survival of archaeological evidence. The relatively well-preserved northern terminal of ditch 2423 indicates either an entrance or the non-continuous nature of quarry features forming parts of the settlement enclosure/eastern boundary.

The presence of pond 2425, which may also date to the MBA, in the entrance/gap between ditches 2423 and 2437 is somewhat surprising. Perhaps the pond is later than the ditches; if so it may have been associated with the postulated (?) Late Bronze Age round-house (Structure 6) to the north-east.

Negative lynchet 2493 provides further evidence concerning the later land-use of the former Bronze Age settlement site. Finds retrieved from the vicinity of the lynchet indicate that it may date to the Roman period.

Area G (Figs 7.9, 7.10 and 7.18; Plates 7.6 and 7.7)

Area G comprised a large building terrace (2050), an area to the south with post- and stake-holes, and an area to the east with stake-holes.

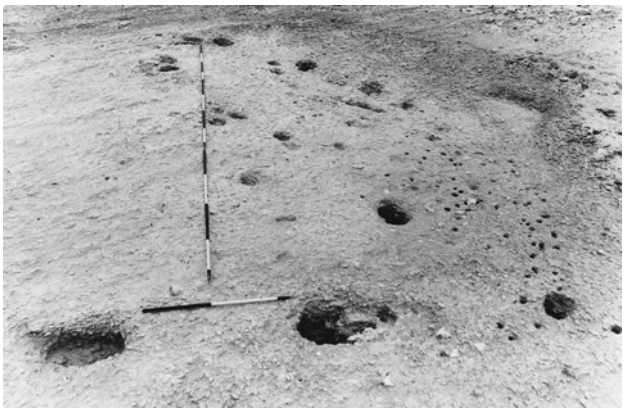

Plate 7.6 Downsview, Area G, terrace 2050. Foreground: post-holes 2115 and 2128. Viewed from the east. Scales: 2m and 6m.

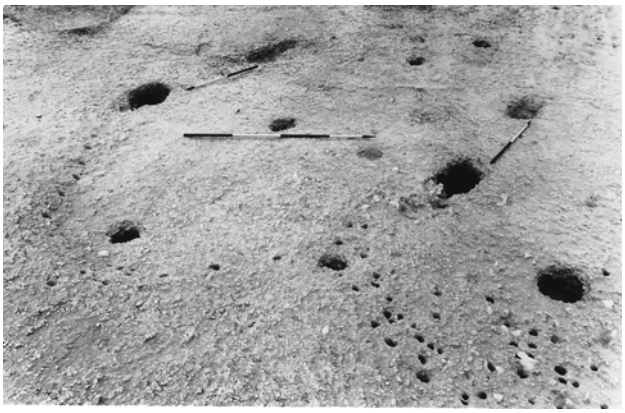

Plate 7.7 Downsview, Area G, terrace 2050. Top-left: post-holes 2105 and 2133; Middle-right: post-holes 2128 and 2115. Viewed from north. Scales: 2m and 1m.

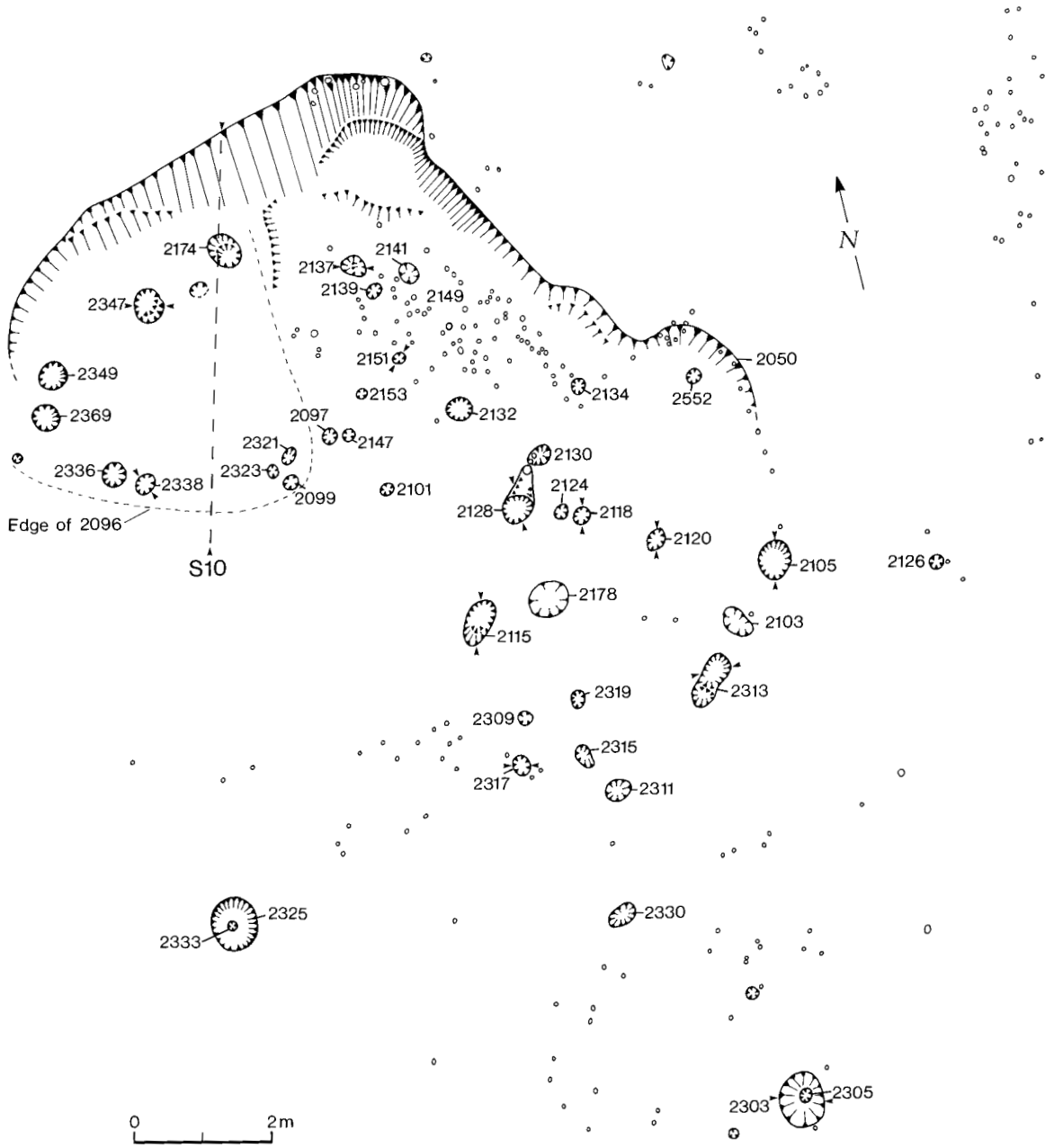

Fig. 7.18 Downsview, Area G: Plan.

Building terrace 2050

This relatively deep terrace, which was 10.8m across and at least 4.8m wide, was cut into the hillslope and had a sloping northern terrace edge surviving to *c*.500mm (Fig. 7.9: Section 10). The terrace was filled by several layers of hillwash: 2327 (=2051), 2328 (=2051) and 2329 (=2095). Ceramic finds from the lowest of these deposits (i.e. 2095) consist predominantly of MBA sherds (12), with just one sherd of LBA pottery (*see* Table 7.4, p. 174). Other finds in Context 2329 include possible fragments from an Upper Greensand rotary quern and a sarsen quern/grain-rubber. Beneath fill 2095 was a layer (2096) of compact chalk fragments (this deposit does not appear on Figure 7.9: Section 10). Layer 2096, which is interpreted as a probable floor level, yielded four sherds of MBA pottery.

Evidence for the first building (Structure 7) which existed on terrace 2050 consisted of post- and stake-holes, and was reasonably well-preserved on the eastern half of the building (Plate 7.6), but very poorly preserved on the western, downslope part. Post-holes 2369, 2349, 2347 (Fig. 7.10), 2174, 2137 (Fig 7.10) or 2141 and 2132 are probably the remains of an internal ring of roof-supports, with additional post-holes for roof-supports on the western part of the round-house having been lost through plough damage. The entrance is thought to be marked by large post-holes, 2115 and 2128, which both had traces of a groove (Fig.7.10) to aid the insertion of the upright timbers. The eastern wall of the round-house involved the use of stakes, examples of which were found between post-holes 2134 and 2141. Post-holes 2130 and 2134 presumably represent the front wall of the house. Some of the stake-holes to the west of post-hole 2115 may have belonged to the western stake-wall of Structure 7. Other features within the house included various stake- and post-holes (2336, 2338 (Fig 7.10), 2101, 2139, 2099, 2323, 2321, 2097, 2147,

2153, 2151 and 2149), some of which may belong to Structure 8. Post-holes 2323, 2321, 2097, 2153, 2151 (Fig. 7.10) and 2149, which form a straight line (and perhaps also 2099 and 2147), may represent a screen or division within the building. Dating evidence for Structure 7 includes a sherd of MBA pottery from each of two post-holes, 2115 and 2174, and the four MBA sherds from the possible floor deposit, 2096.

At some stage the original house on terrace 2052 was replaced by a new, smaller structure (8: Plate 7.7), the entrance of which was on the same alignment as that for Structure 7, but 3.6m further south. The presumed entrance to Structure 8 is marked by post-holes 2313 (Fig. 7.10) and 2105 (Fig. 7.10). The south-eastern wall of Structure 8 is marked by a line of stake-holes, and the north-east section of the same wall may be represented by a curve of stake-holes to the south of post-holes 2151 and 2149. A ring of roof-supports may be indicated by post-holes 2134, 2132 (?), 2101, 2317 (Fig. 7.10) and 2315. Other features within Structure 8 include the base of a possible fire-pit (2178) and various stake- and post-holes: 2309, 2317, 2319, 2120 (Fig. 7.10), 2118 (Fig. 7.10) and 2103 (which is located in the middle of the postulated entrance). Unfortunately, no dating evidence was recovered from any of the features which are thought to be part of Structure 8.

Other features within the vicinity of Structures 7 and 8 include various stake-holes and several post-holes (examples 2126 and 2330). Two pits/large post-holes, 2303 and 2325 (Figs 7.6 and 7.18), both contained small post-holes (2305 and 2333 respectively). The dating and function of features 2303/2305 and 2325/2333 are unknown. A similar feature (2364/2373) was found to the west of Area G (Fig. 7.6). The three such features are roughly in a line and perhaps represent a boundary.

Discussion of Area G

The evidence from Area G indicates that at least two phases of building occurred on terrace 2050. The first of these phases, which is dated to the MBA, involved the construction of a large round-house (Structure 7) which had a ring of roof-supports, stake-walls and an entrance which faced south-east. It may also have included an internal division wall. The second structure (8) on terrace 2050 was partly to the south of Structure 7, but also partly overlay the former building. Although the evidence for Structure 8 is much less well-preserved than that for Structure 7, this round-house also had stake-walls, an entrance which faced south-east, and presumably a ring of roof-supports. It may also have had a central fire-pit (*cf.* Structure 1 of Area A). The dating of Structure 8 is uncertain.

Area H (Figs 7.6A, 7.8 and 7.19)

Area H, immediately to the south of Area A, revealed a large (?natural) depression (2340), two gulley/ditch features (2342 and 2375), several post-holes (2362, 2367, 2377 and 2867) and a large number of stake-holes.

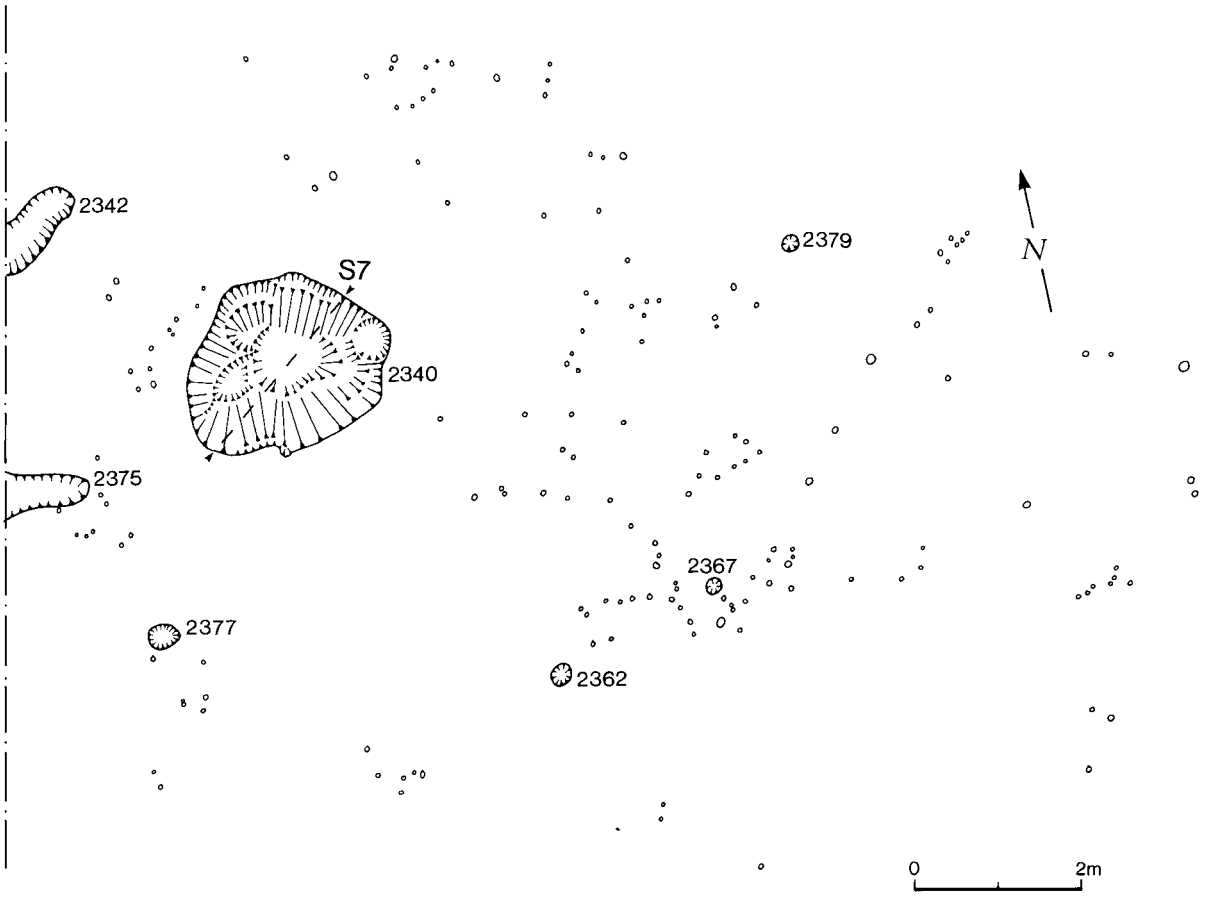

Fig. 7.19 Downsview, Area H: Plan.

The largest feature in Area H was a depression or pit up to 500mm deep (2340, Fig. 7.8: Section 7) which had somewhat irregular edges, an irregular, undulating bottom, and generally yielded very few finds (mainly fire-cracked flint). The only pottery finds came from one small deposit, 2383 (which does not appear on Fig. 7.8: Section 7) and included two MBA sherds, three LBA sherds and one Romano-British sherd (*see* Table 7.5, p. 175). The discovery of animal burrows in feature 2340 means that there is a higher than usual risk of intrusive material. Feature 2340 may be natural, perhaps a tree hole. Nearby were two gulley/ditch features (2342 and 2375) which continued to the west beyond the edge of the excavation area. Neither feature yielded any dating evidence. A similar lack of dating evidence resulted from the excavation of the four post-holes (2362, 2367, 2377 and 2379) in Area H. It is possible that the post-holes may have contained posts from a fence around feature 2340. The relatively large number of stake-holes from Area H was concentrated around, and to the east of, feature 2340. Various alignments can be made from the stake-holes (for example a line to the east of post-holes 2367 and 2379). Such alignments may be the remains of stake fences, and perhaps animal pens.

Discussion of Area H

Feature 2340 may be natural, or a pit/quarry. If the latter, it contains MBA, LBA and Roman sherds, all or some of which could be intrusive. Its location may have been respected by possible alignment of post- and stake-holes. The dating of these holes, and two partially excavated nearby gulleys/ditches, is unknown.

Area I (Figs 7.6A, 7.10, 7.15 and 7.20: Plate 7.8)

Area I consisted of a large building terrace (2262) and two undated post-holes (2411 and 2413) to the north.

Building terrace 2262

This large, shallow terrace was over 9.7m across and 5.7m wide. The shallow terrace fills (Fig. 7.15: Section 19), which included 2263, 2293, 2384, 2385, 2387, 2388, 2389, 2390, 2512 and 2597, yielded much flintwork, some animal bones, several items made of copper alloy, and a wide range

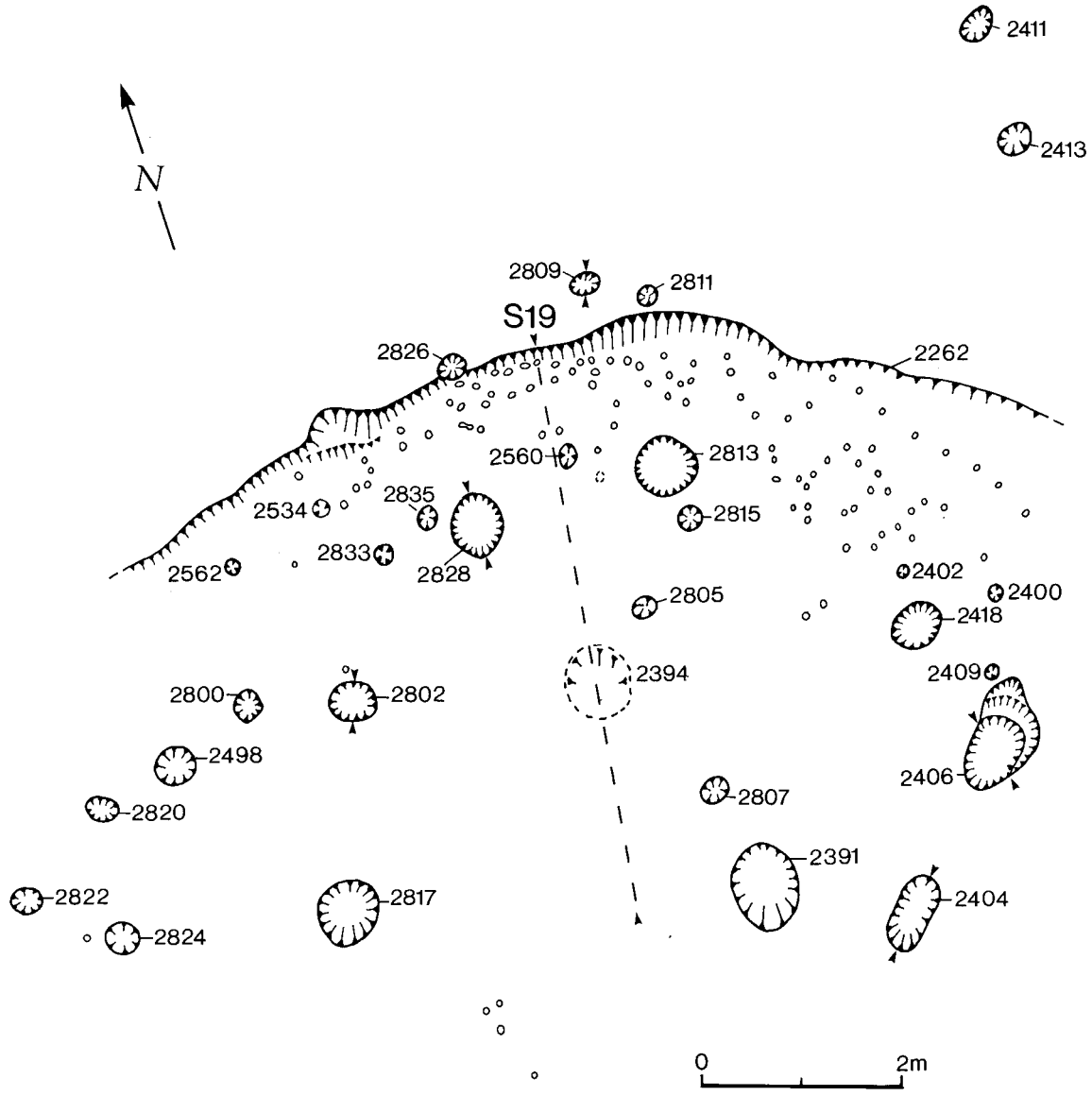

Fig. 7.20 Downsview, Area I: Plan.

Plate 7.8 Downsview, Area I, terrace 2262: Bottom-left: post-hole 2409. Viewed from north-east. Scale: 4m.

of pottery: MBA, LBA, Roman (75 sherds) and Medieval (1 sherd) (*see* below). Many of these finds from the terrace were presumably deposited as a result of colluvial processes, and the large number (70) of Roman sherds from the upper terrace fill (2263) provides an indication as to a major period of such activity. One of the primary deposits on terrace 2262, a compacted chalk floor (?) layer (2388) similar to Context 2096 on terrace 2050, yielded a single sherd of MBA pottery.

The building (Structure 9) on terrace 2262 was a round-house consisting of a ring of large roof-supports (post-holes 2418, 2813, 2828 (Fig. 7.10), 2802 (Fig. 7.10), 2817, 2391 and probably one more post-hole (now missing) on the building's southern side), an entrance facing south-east and marked by two large post-holes (2404 and 2406 (Fig. 7.10)) and an exterior single (?) stake-wall (part of which still survived between post-hole 2534 and to the north-east of post-hole 2400). A central pit (2394, Fig. 7.15: Section 19) might have functioned as a fire-pit. Other features within the round-house included post-holes 2400, 2402, 2560, 2835 and 2833, any of which may have formed parts of a 'corridor' between the exterior eastern stake-wall and the inner ring of roof-supports, *or* represent a different phase of building on terrace 2262. Post-holes 2409, 2534 and 2800 may have formed parts of the exterior stake-wall. Other post-holes within the house included 2805 and 2807. Some of the large number of stake-holes between the exterior stake-wall and post-holes 2560, 2813 and 2418 may have formed wattle screens (*cf.* Structure 1, Area A). Post-holes 2826, 2809 (Fig. 7.10) and 2811 above the northern terrace edge may have taken roof-supports. The functions of post-holes 2498, 2820, 2822 and 2824, which are outside the postulated western wall of the round-house, are unknown.

Some of the features on terrace 2262 have provided evidence for destruction by burning. Thus post-hole 2391 (fills 2392 and 2396), yielded relatively large amounts of fired clay or daub; charcoal and other charred plant remains (*see* below). Post-holes 2404 (2405, 2406), 2802 (2803, 2804), 2807 (2808) and 2817 (2818, 2819) also contained relatively large quantities of charcoal/charred plant remains. (*NB* Post-hole 2817 contained the remains of an estimated 125 beans.) The charcoal from the five post-holes referred to above is 'almost exclusively oak' and may derive from constructional timbers (*see* Berzins, below). It should be noted, however, that the charcoal samples submitted for radiocarbon dating from three of these post-holes are thought to represent material from occupation horizons which slipped into the post-holes as the posts were removed or rotted (*see* Section 9). The samples of charcoal from post-holes 2404, 2802 and 2391 that were submitted for radiocarbon dating produced dates of 1520–1220 cal BC (OxA-4811), 1610–1220 cal BC (GU-5429) and 1620–1300 cal BC (GU-5430) respectively (*see* Section 9).

Post-holes 2802, 2807 and 2817, together with post-holes 2800 and 2828 (which also contained burnt clay/daub) were found beneath a deposit of reddish brown clay (2597). In addition, the general terrace fills, especially 2263, produced, for Downsview, relatively large quantities of small pieces of burnt clay/daub.

Other finds recovered from the features on terrace 2262 include 23 sherds of MBA pottery from post-hole 2391 (*NB* this feature also yielded two sherds of LBA pottery), and a total of nine sherds of exclusively MBA pottery from post-holes 2404, 2406, 2807 and 2811 (*see* Table 7.4, p. 174).

Discussion of Area I

Terrace 2262 was the site of a round-house (Structure 9) which can be dated by both ceramics and radiocarbon dating to the MBA. It is possible that the burnt round-house was later levelled and replaced by a structure involving much smaller posts (possible examples include: 2800, 2833, 2835, 2560, 2402, 2400 and 2409). The recovery of 52 sherds of LBA pottery from terrace 2262 may indicate that occupation of this location continued after the destruction of the MBA round-house. Alternatively, this material, like the 75 sherds of Romano-British pottery, may relate to activity upslope and the subsequent downslope movement of deposits containing pottery.

Areas J, K and L: Trenches 29, 30, 33, 34 and 35

John Funnell and David Rudling

Introduction

During the Field Archaeology Unit excavations at Downsview, John Funnell and several other members of the BHAS had provided important volunteer assistance. On completion of the allotted resources for Field Archaeology Unit investigations at the site, John Funnell requested the opportunity for himself and other members of his Society to continue excavation work at Downsview, and ultimately to maintain a watching-brief during the initial stages of constructing the Bypass at this location. On completion of this fieldwork John Funnell submitted to David Rudling a report and site archive. These sources, which have been used to produce the current report, have joined the Field Archaeology Unit Archive for Downsview. BHAS context numbers begin at 4000.

Trenches 29, 30, 33 and 34

Trenches 29 and 30 (Fig. 7.2)

During the main excavations part of the field to the south of Area I was sampled by two machine-excavated trial

trenches (29 and 30). Neither trench revealed any archaeological features or deposits, and it was assumed that the Bronze Age settlement did not extend this far downslope. This theory was subsequently supported by the negative results from the watching-brief which was kept further downslope during the relaying of a gas pipe (*see* above, introduction).

Trenches 33 and 34 (Fig. 7.2)

After the Field Archaeology Unit excavations had finished, the BHAS hand-excavated two trenches (33 and 34) to the west of the main excavations. The aim of these trenches was to try to establish whether there were any traces of an enclosure ditch, similar to ditch 2423 in Area F, on the western side of the Bronze Age settlement. Although no such ditch was encountered, a shallow depression containing no finds was found 8m to the west in Trench 33. Finds of prehistoric and Roman pottery from the topsoil diminished as Trench 33 progressed westwards.

Areas J and K (Figs 7.6A, 7.15, 7.21 and 7.22 (Appendix 4))

Although the attempt to establish the western boundary of the Bronze Age settlement had been unsuccessful, it was next decided to try to establish the southern extent of the site. In an attempt to achieve this objective, a 1m-wide trench was hand-excavated between the southern edge of Area I and Trench 29 (Figs 7.2 and 7.6A).

'Terrace' 4003

At a distance of 10.7m from Area I, a slight feature/area (4003) containing prehistoric pottery and fire-cracked flint was revealed. The trial trench was then enlarged to both the east and west in order to fully expose feature 4003, which

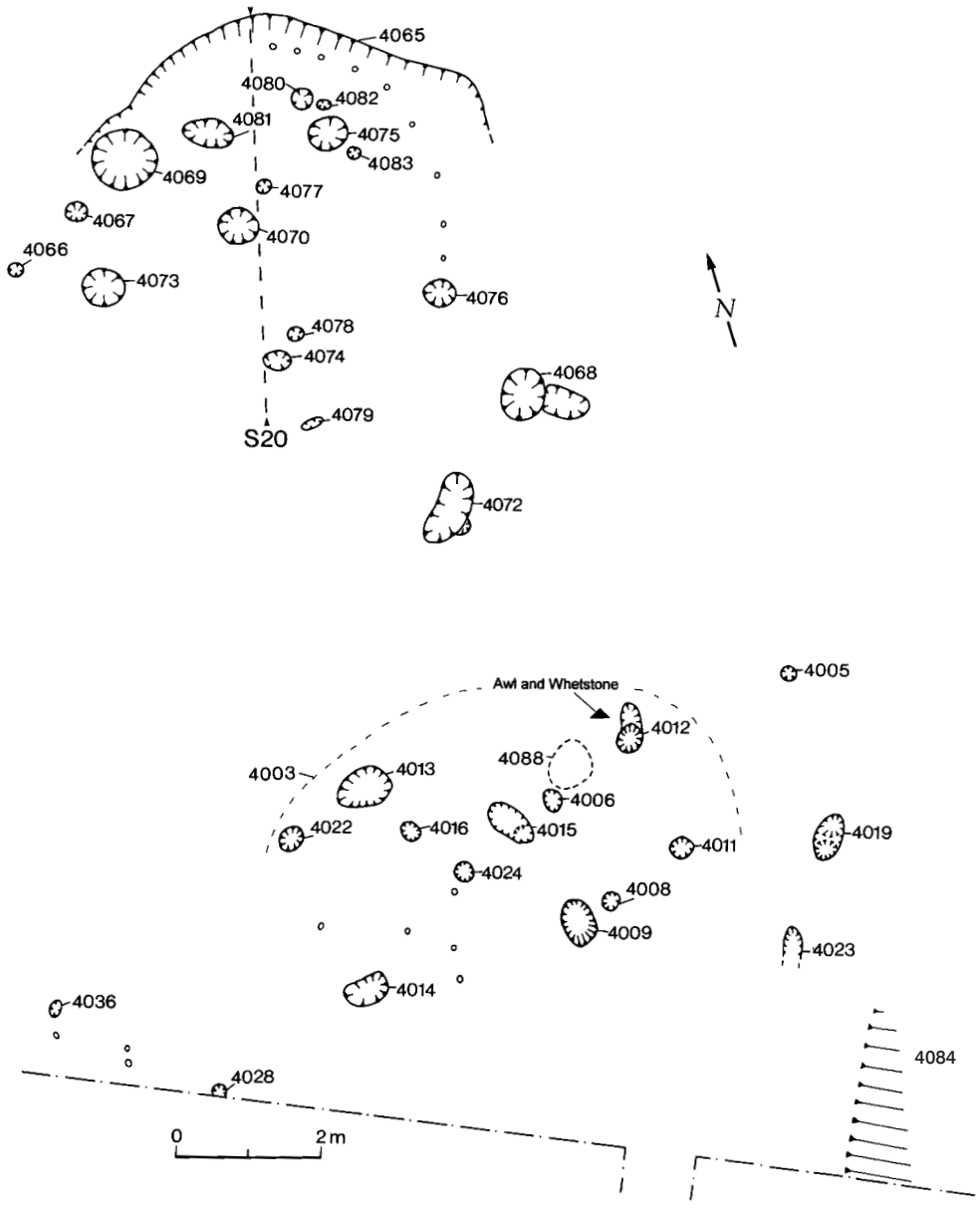

Fig. 7.21 Downsview, Area J: Plan.

had a curved edge on its northern border. Although no distinct platform was discovered, the excavation of this deposit revealed various post-holes and pits/depressions (4005, 4008, 4009, 4011, 4012, 4013, 4014, 4016, 4019, 4022, 4023 and 4024) and several stake-holes (Fig. 7.21). It is probable that this concentration of features represents the remains of one or more structures (10). This area also yielded many finds, including large quantities of MBA and LBA pottery and a copper alloy awl and an associated (?) whetstone (*see* below). The expansion of the excavation area southwards exposed two further small post-holes (4028 and 4036), and these and the majority of the features described above form a rectangular east–west oriented area with various possible 'pairings' and combinations of post-holes (examples: 10A: 4022, 4014, 4009 and 4015; and 10B: 4012, 4011, 4019 and 4005). A circular flat-bottomed feature (4088) was observed to the west of post-hole 4012. It may have been associated with the large amounts of fire-cracked flints found in this area. Finds from these features include 20 sherds of MBA pottery, 2 sherds of LBA pottery and 2 sherds of Romano-British pottery from 'depression' 4013 (*see* Table 7.6, p. 176). This evidence, together with the other MBA ceramic finds, from the general area of Context 4003, indicates either that this location was used in the MBA, or received MBA finds as a result of the downslope movement of material from Area I.

Terrace 4065 (Fig. 7.15: Section 20; Fig. 7.21)

During groundworks for the Bypass a watching-brief was maintained in order to check the absence of a western boundary ditch to the prehistoric settlement and to see if there were any other areas containing prehistoric features. The absence of a western boundary ditch was confirmed, and a major feature was found to the south-west of Area I and to the north of Structure 10 of Area J. The exposed feature, which is here considered as part of Area I, was cleaned and proved to be another shallow building terrace (4065) approximately 5.5m across. The main terrace fills were Contexts 4065, 4085, 4086 and 4087. The excavation of 4065 produced a large number of finds including flintwork, fire-cracked flint, bone, stone and pottery: two sherds of MBA fabrics and 26 sherds of LBA fabrics.

Evidence of features on the building terrace included post-holes, pits and stake-holes, and belong to one or more phases of round-house. The earliest structure (11) had an entrance facing south-east and represented by two large 'T'-shaped post-holes (4068 and 4072) and a ring of post-holes (perhaps 4076, 4075, 4081, 4073, 4079 (?) and ? one other) from roof-supports. A single stake-wall, which ran from the northern terrace edge to post-hole 4076, may belong to this or a later phase. Other features which may have belonged to Structure 11 include various smaller post-holes (4066, 4067, 4074, 4077, 4078, 4080, 4082 and 4083; and pits 4069 and 4070). Features 4066, 4069, 4070, 4073 and 4077 had charcoal and ash fills. In contrast features 4080 and 4081 contained flints used for packing posts. Pit 4069, which was 910mm in diameter and 240mm deep, was probably a storage pit at the rear of the round-house (*cf.* Black Patch, Hut 3: Drewett 1982b: Fig. 9). Its upper fill yielded much evidence of burning. Feature 4070, which was located inside the suggested ring of roof-supports, may have been a post-hole or a fire pit, perhaps with an adjacent post (4077) to support a horizontal arm over the fire (*cf.* pit 2090 and post-hole 2218, terrace 2062, Area A). The phasing of the various features of terrace 4065 depends mainly upon ceramic evidence and radiocarbon dating. Thus post-hole 4066 yielded 15 sherds of exclusively LBA pottery and also produced a radiocarbon date of 1050–800 cal BC (OxA-4810; *see* below, Tables 7.6 and 9.1). In contrast, adjacent post-hole 4073 produced an earlier radiocarbon date of 1410–1100 cal BC (weighted mean of GU-5432-3). In addition, entrance post-hole 4068 contained two sherds of LBA pottery, pit 4069 yielded five sherds of MBA pottery and 33 sherds of LBA pottery, and post-hole 4075 contained a single piece of LBA pottery.

Area K and Trench 35

Just to the south of the eastern end of Structure 10 was a large shallow depression (4084) approximately 10m wide (Figs 7.6, 7.21 and 7.22 (Appendix 4)). The excavation area was extended eastwards and a small trench (35) was excavated to the south in order to try to establish the extent and nature of this feature. Although Trench 35 was unsuccessful in achieving its objective, a southward extension of the main excavations (Fig. 7.22) located what is thought to be the southern edge (4086) of the depression. Just to the north of this southern edge, was a shallow undated feature (4064A), and alongside the edge was a line of flint nodules.

Pottery from the lowest silt deposit (4064) within depression 4084 is almost exclusively LBA (i.e. 11 sherds with only 1 sherd of MBA pottery). The overlying layers (4063) yielded four sherds of MBA pottery and 3 sherds of Romano-British pottery. No northern boundary to the depression was observed. To the east and north of depression 4084 were several undated cut features: 4035, 4050, 4059, 4061 and 4062 and various stake-holes. It is thus possible that a further area of prehistoric activity existed to the east of Area K. The excavation of Area K ceased with the commencement of topsoil removal as part of the Bypass construction works.

Discussion of Areas J and K

Area J contains the locations of at least two buildings (Structures 10 and 11). One of these buildings (11) was situated upon a distinct terrace (4065) and may have been of two or more phases. Although there is some evidence from this terrace for MBA activity, the majority of the evidence points towards Later Bronze Age occupation. It is possible that an original MBA round-house was destroyed and replaced by a new structure, with some of the original features (such as pit 4069) having a change of function. Building 10 probably represents two four-post structures, for which various interpretations have been suggested, especially as granaries (Ellison and Drewett 1971).

The main feature in Area K is a large depression, and it has been suggested that this might have been a pond. The available dating evidence would indicate that this feature belongs to the LBA.

Area L (Fig. 7.6)

Prior to the topsoil stripping in advance of road construction, British Telecom excavated a cable trench immediately

to the north of Area A. A watching-brief undertaken by John Funnell revealed the existence of a fire-pit (4029) and an adjacent post-hole (4030) in the area between Trenches 24 and 25 (Figs 7.2 and 7.6). The fire-pit, which was 600mm in diameter and 450mm deep, contained charcoal and fire-cracked flint (*cf.* pit 2143, terrace 2046, Area A). A radiocarbon determination of the charcoal provided a date of 1680–1450 cal BC (OxA-4809; *see* Section 9) and thus the earliest such date obtained for Downsview. The fire-pit and post-hole, which had a diameter of 250mm, probably belonged to another MBA round-house (Structure 12).

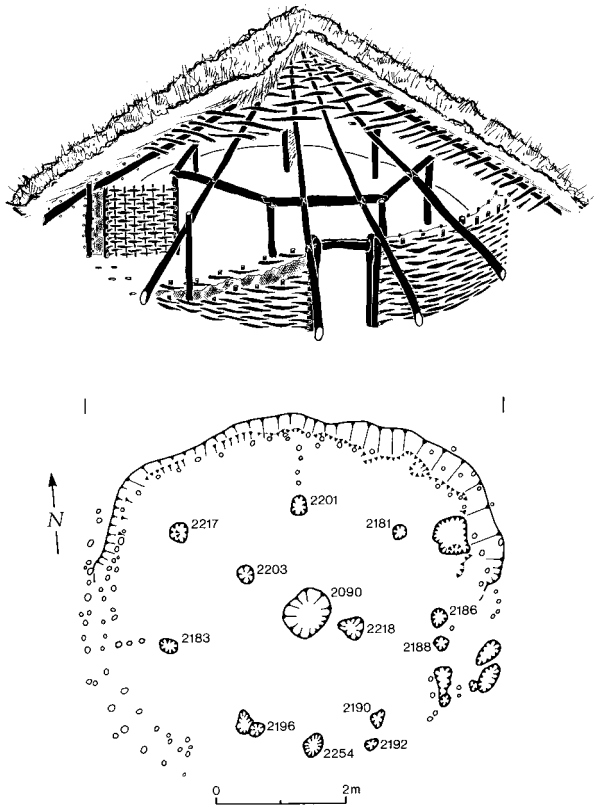

Fig. 7.23 Downsview, Area A, Structure 1: Reconstruction drawing by Matthew Lowerson.

Some observations on two of the Bronze Age structures at Downsview

Tristan Bareham

The following sections are an assessment of two of the post-hole structures excavated at Downsview in 1991. The two structures which will be examined are Structure 1, the building with a double front row of stake-holes, and Structure 2, the small stake-hole building situated immediately to the east of this. The primary consideration of this discussion will be an attempt to assess some aspects of the design of these structures and the materials used in their construction. This analysis is based on the reconstruction of these two buildings by the East Sussex Archaeology and Museums Project in 1999 and 2000 at Michelham Priory.

The double stake-hole structure

The remaining evidence (Figs 7.7 and 7.23)

The double stake-hole structure, Structure 1, was set in a shallow platform (2062) cut into the slope. All the evidence to the south of, and including, feature 2090 has been subject to erosion to a greater or lesser extent. This has removed some archaeological evidence, particularly at the front of the structure, and any possible remains above the rear of the platform. However, the main features of what appears to be a Bronze Age house are fairly well-preserved, particularly towards the rear of the platform. The house itself is roughly oval in shape, being 6m in length on an east–west axis and 5.6m on the north–south axis. In this interpretation seven post-holes are argued as being for uprights which had the primary function of supporting the roof of the house. These are: 2196, 2183, 2217, 2201, 2181, 2188 (or 2186) and 2190 (*see* Fig. 7.23). These holes have been selected for the regularity of their size and shape and the consistent spacing between them. If the doorway is to be found within the remaining evidence then post-holes 2254 and 2192 are located in a suitable position, although the inequality of their relative sizes does place a question mark by this hypothesis. It must, however, be remembered that between 200mm and 400mm of depth of chalk and soil may have been removed from this area by post-occupation erosion. Therefore we are probably looking at the bottom section of the two post-holes whose remaining shapes might not accurately reflect the dimensions of the original post set into them. It should also be noted that another possible orientation for the doorposts can be offered. Guilbert (1982) has proposed that many MBA post-ring round-houses appear to contain an axial symmetry within the layout of the larger inner posts. If this is superimposed onto the ground evidence of Structure 1, then post-hole 2217 would represent an inner post directly opposite a door situated beyond holes 2190 and 2188. This interpretation does have some interesting possibilities, but does not affect the structural analysis which follows.

Interpretation

Post- and stake-holes

The stake-holes at the rear of the platform form an external wattle wall to the house. The inner line of holes at the front south-west section of the building appear to represent a continuation of this wall with the addition of a line of holes outside this inner wall. This feature can be argued to represent a double wattle wall. The double wattle wall does not clearly continue right up to a door post and this suggests that the evidence has been removed from this area. The evidence from the south-east front section is even less clear, suggesting even greater erosion. It is probable that a single, or even a double, stake-hole wall ran from the south-east door post to the rear of the platform.

The seven inner posts form a series of upright timbers which in turn support the main weight of the roof. If this was originally the case, then it is most likely that these posts were linked together by having some form of ring-beam placed on them. This was put in place on the Michelham

reconstruction. This ring-beam in turn provides a continual horizontal surface onto which the roof rafters can be set. The advantage of this system is that it means that rafters are not restricted to being set only on top of the upright outer wall stakes. Such a ring-beam also has the value of evenly distributing the weight of the roof. The roof rafters rested, and have been secured, onto the external wattle wall of the house. It should be noted that in the reconstruction of this building at Michelham Priory the flimsy nature of this outer wattle is such that it could not support a roof and therefore the inner posts have to serve this function.

The double wattle wall

The role of the double wattle wall needs to be assessed. The postulated door is oriented due south and while this allows most light into the building, it can also give a problem with wind entering the building. If moss, grass or other organic matter was wedged between the two walls then this would give good insulation to this, the most exposed section of the building. No daub would be required in this area. Such evidence has been found on a double wattle-walled house at Deer Park Farms (Lynn 1989). Although this building dated to the early Christian period, it is in essence in its architectural methodology a prehistoric structure. One of the most valuable discoveries at this site consisted of nine rods of hazel which had been woven simultaneously to form the wattle wall. Such a weave takes at least three times as much hazel as a simple two-ply rand usually employed in British reconstructions of prehistoric houses. While there is no evidence to suggest that such a weave was used at Downsview, it does emphasise that the previously quoted figures for timber requirements should be treated as a minimum. The doorframe suggested in this interpretation is only 600mm wide. This is undoubtedly narrow in relation to other similar Bronze Age houses in Sussex (*see* Section 2), however if the double wattle wall was a response to a wind problem then a narrow doorway would help with this. Evidence from Structure 2 will reinforce this hypothesis.

The double wattle wall can also be considered as a constructional as well as structural feature. We cannot be certain of the details of the ground surface at the front of the house once the house builders had cut the platform into the slope. However, it is likely that at least the front metre of the house was made up of soil and the friable chalk situated between the soil and the chalk bedrock. It is possible that this was partially removed and replaced with chalk dug from the platform. This could have been trampled and beaten to form a more consistent surface; possibly the platform could even have been extended beyond the external front wall of the house. Even if this did not take place, the house builders may have been concerned to consolidate the area at the edge of the platform. The double line of stakes could have provided this extra support. Given the more friable nature of the front of the platform, it is likely that the house builders felt it would give extra security by driving the stakes through the soil and into the bedrock, thus explaining why some evidence remains in the chalk bedrock despite the depth of removed material. The friable nature of this area originally also helps to explain why it was so susceptible to subsequent erosion.

The roof

In structural terms, the mechanical strength of the stake-hole wall is such that it could have supported a thatched roof without the need for the inner posts. However, the strength of the inner post structure is such that it can support a thatched or even a turf-covered roof. A turf roof weighs roughly two to three times the weight of a thatched roof and the inner ring posts could be appropriate for such a roof. So with a turfed roof, even if the wall is strong enough to take the weight of the roof, the extra weight and shallower pitch could lead to greater stresses on the rafters. The inner ring-beam is therefore advisable not only to offer extra load-bearing support, but also to provide extra rigidity within the load-bearing length of the rafter. A turfed reconstruction Bronze Age house at Flag Fen had to be rebuilt after six years, precisely because of such sagging of the roof rafters. Although this building had an inner ring-beam, the roof still sagged; this serves to show the stresses such roofs can experience. It is quite probable that the roof of Structure 1 was originally thatched with wheat straw or reed. The reconstruction at Michelham Priory has two tonnes of wheat thatch laid onto it to a depth of 300mm.

Other possible functions for these uprights can be suggested. It is possible that these inner posts were not only designed to support the roof, but also to support internal half lofts or raised areas. These areas could have been for beds or storage; this would have greatly increased the floor space available in the house. An alternative to a purely functional explanation for these inner posts is one of architectural fashion or tradition. That is, that the inner ring of posts was an architectural style favoured by Bronze Age house builders and that although there may have been a functional aspect of these upright posts, they could also have had other architectural resonances for them. Another interesting element to note is the apparent internal divisions within this house. It is possible to identify lines of stakes running between the wattle wall and post-holes 2183 and 2201. These could have formed internal wattle screens, thus subdividing the inside of the building. Other features such as post-hole 2218 could have held an upright which supported a horizontal arm. This in turn could have been used for the suspension of material over the hearth.

Reconstruction

In 1999 Structure 1 was reconstructed by the East Sussex Archaeology and Museums Project at Michelham Priory. The reconstruction used 2,000 rods of hazel and willow for the wattle and the roof purlins and thatching sways. This material was two to four years old when cut and represents roughly the product of three-quarters of an acre of clear felled, managed coppice woodland. The wall stakes used were of 12-to 15-year-old hazel which were sharpened and driven into the soil. The door posts and the inner uprights were oak from which the bark and sapwood had been removed from the section buried in the ground. These timbers came from trees which were 35–45 years old. The ring-beam was similarly oak which had been split with wooden wedges. The semicircular half-sections were morticed and secured onto tenons on the tips of the upright timbers.

Structure 2

The remaining evidence (Figs 7.7 and 7.24)

Structure 2 was represented by a series of post- and stake-holes manifested on a cut platform immediately to the east of Structure 1. The platform is roughly 2.5m in width in an east–west orientation; the original size in the north–south axis is much more difficult to ascertain, but it is argued here that it is similar to that of the east–west orientation. All the evidence from in front of post-holes 2223 and 2232 is badly affected by erosion, and this makes the original dimensions of this structure difficult to ascertain. Two large post-holes (2211 and 2214) are set immediately south of the platform and a series of stake-holes and smaller post-holes (2229 and 2247) are situated in front of these. Of interest is a feature cut into the chalk at the rear of the platform; this takes the form of a shallow gulley.

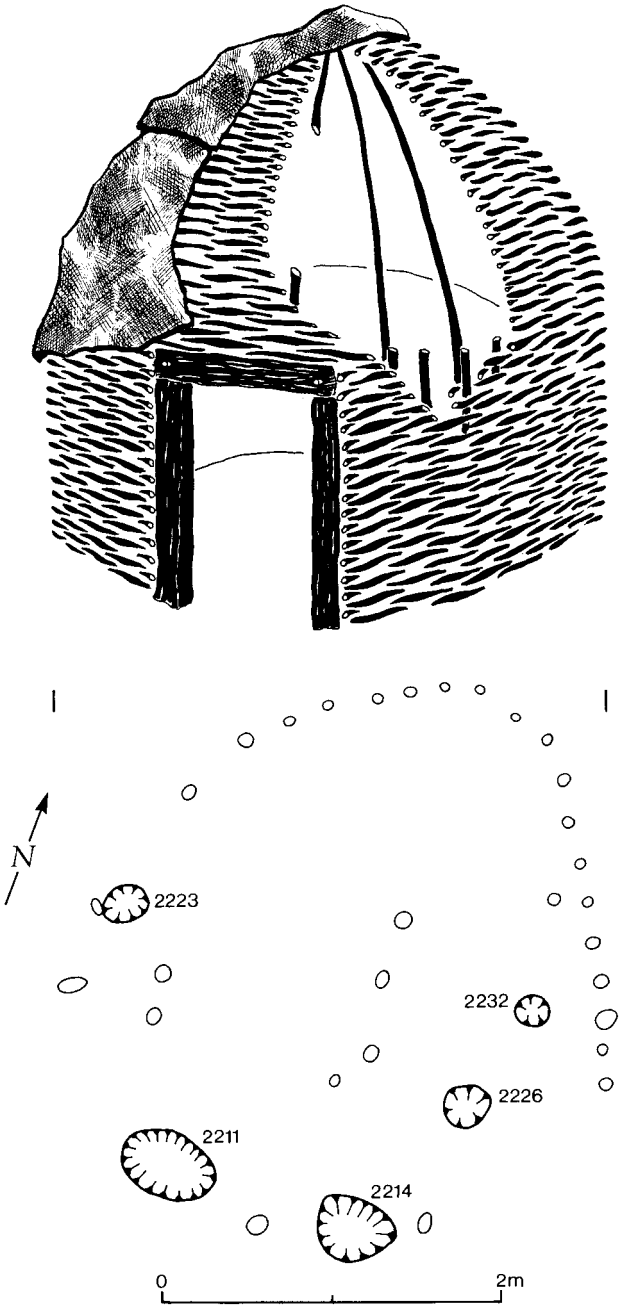

Fig. 7.24 Downsview, Area A, Structure 2: Reconstruction drawing by Matthew Lowerson.

Interpretation

Given the irregular shape of the post- and stake-hole evidence from the front area of this structure, and also the amount of erosion, any interpretation will be highly speculative. The interpretation offered here is that the structure was originally a stake-walled building roughly 2.4m in diameter with post-holes 2211 and 2214 constituting the doorframe. The stake-holes, running from the edge of the platform to post-hole 2247, can be seen to form a wattle screen which could have acted as a wind break; a similar screen could have existed on the other side with a wattle wall running to post-hole 2229. The stakes used in the wall of the building are on average 30–40mm wide with a distance between them of 120–160mm; this compares to an average of 60mm in width and an average gap of 280mm shown on Structure 1. This has definite implications for the fineness of the hazel or willow which would have been woven between the uprights on Structure 2. This material would have had to be very fine and there is, therefore, a further implication to be considered in relation to any roof. It is assumed that these post- and stake-holes do represent a roofed structure as the presence of a water-conducting gulley at the rear of the platform would not have been necessary if the structure had not been roofed. It is possible that post-holes 2223 and 2232 represent upright support onto which the main load of any roof could have been set. These could then have been linked to the doorframe to give extra support. The fine wattle wall is certainly so thin that it would need some support to hold a roof if one was being set on it. However, it is also possible that the upright stakes from the wall were pulled together to form the roof. Thus the whole structure would have been woven from ground level continually up to the apex of the roof. The buildings would therefore resemble the beehive-like structures suggested for some of the structures at Danebury (Cunliffe 1993: 62, Ill. 3). In this instance posts 2223 and 2232 could be seen as supports within the framework of the wall section of the structure. Their presence, and that of the doorframe, would have given a rigid skeleton to the building.

A further consideration in this respect is the evidence once again from Deer Park Farm. The wattle walls from this site had collapsed and been preserved by the waterlogged conditions. These appeared to show clearly a building method whereby the walls were wattled up to a certain height. Then further uprights were inserted alongside the original stakes. There did not appear to be a discrete and separate roof and the walls appeared to continue up to the roof. This is the construction method which the East Sussex Archaeology and Museums Project employed at Michelham for the reconstruction of Structure 2. This reconstruction required 1,200 rods of coppiced willow.

It is accepted that some of the interpretation offered here is highly speculative given the limited nature of the remaining evidence and the paucity of artefactual material associated with these structures. The primary focus of this interpretation has been to use some of the insights gained from an experimental approach to aid the theoretical reconstruction of the building represented by the evidence from the site. It is certainly not possible to propose a technology based on an analysis of the proposed problems which that

technology might have been trying to solve. So, for example, where we find a large post-hole we cannot assume that this means that it was purely for supporting a heavy load. The analysis of the inner post-holes in Structure 1 show the multiplicity of interpretations. So with Structure 2 we could look at post-holes 2211 and 2214 and consider that they appear to be oversized in relation to the proposed structure. However, a pair of large, perhaps highly decorated door posts could also have conferred status to the structure and its owner and the post size is therefore not structurally a functional necessity.

THE FINDS

The worked flint

David Underwood

A total of 1,951 humanly struck flints were recovered from deposits other than topsoil at Downsview.

Raw material

The raw material for the assemblage was nodular chalk flint with a thick unabraded cortex, presumably extracted from primary flint deposits in the immediate vicinity of the site. Flaked flint surfaces are patinated matt white.

Technology and typology

The composition of the assemblage is as follows:

Unretouched flakes	Cores	Tools
1893	8	50

The following representation of the main tool type is shown below. In contrast to Mile Oak (*see* Section 2), the Downsview material was never used as the basis for a research thesis. As a result, a much smaller sample of 50 flakes was extracted for statistical analysis from Context 2263, the upper fill of terrace 2262 which contained 40% of the flint assemblage. The results (for further details, *see* archive) show a breadth:length ratio around 4:5, and low incidences of soft-hammer percussion, faceted platforms and removal of overhangs before percussion. The technology of the small number of cores is consistent with that of the flakes. The débitage assemblage is therefore similar in character to those at Mile Oak (*see* Section 2) and Black Patch (Drewett 1982b) and may be considered typical of the Later Bronze Age in this region.

The retouched tool inventory is dominated – again as at Mile Oak – by pieces formed by non-invasive retouch of hard-hammer flake blanks. Over half of the tools recovered are scrapers. Seven flint hammerstones were recovered, indicating that some flintworking took place within the settlement. One piece, a plano-convex knife, bears invasive retouch and is likely to be Late Neolithic or EBA in date (Holgate 1988a: 27). It was recovered from Context 4027.

Of particular interest are two heavy core tools: a flaked axe roughout from Context 2426 and a waisted adze or mattock head from Context 2424. According to a general survey by Ford *et al*. (1984), such flint tools were among the first to go out of use with the introduction of metal. They are therefore probably of Neolithic date. The adze was recovered from an upper fill of the eastern boundary ditch (2423) and must be regarded as residual in an LBA context. The axe roughout was found in the upper fill of a 'pond' (Context 2425). Inspection of the other flints from both these contexts (14 and 52 flakes respectively) revealed no obvious differences in relation to the material from the LBA occupation contexts and the two core tools are therefore probably both isolated residual pieces. The occurrence of Neolithic flint artefacts in settlements of this date on the South Downs is documented with a leaf arrowhead at Mile Oak (*see* Section 2), axe fragments at New Barn Down (Curwen 1934a: 165) and a core tool at Itford Hill (Burstow and Holleyman 1957: 202–3).

The worked flint: contextual variation and behavioural implications

Grouping the flint-bearing contexts at Downsview into the major features, omitting isolated contexts, topsoil or contexts away from the main site, the distribution of the main flint artefact classes is shown below.

Table 7.1 Downsview: The main flintwork tool types.

Tool type	Count
Convex scraper	24
Straight scraper	2
Hollow scraper	2
Double scraper	2
Backed flake knife	2
Plano-convex knife	1
Notched flake	3
Retouched flake	2
Notched blade	1
Retouched blade	1
Axe roughout	1
Adze/mattock head	1
Rough core tool	1
Hammerstone	7
Total	50

Table 7.2 Downsview: The distribution of the main flint artefact classes.

Feature		Unretouched flakes	Tools	Cores
Terrace	2042	208	–	–
Terrace	2046	6	1	–
Terrace	2048	12	–	–
Terrace	2050	40	1	–
Terrace	2062	46	1	–
Terrace	2262	821	11	4
Ditch	2423	60	3	3
Neg. Ly.	2427	32	1	–
Pond	2259	37	–	–
Pond	2425	78	5	–
Total		1340	23	7

At this level it is only possible to point out the major concentration of flint on terrace 2262 and the minor one in terrace 2042. It is possible that this reflects a genuine spatial differentiation of flintworking and use within the settlement, but taphonomic and practical factors (e.g. relative volume excavated) must be taken into account. No more detailed analysis, such as that for Mile Oak, was carried out.

Discussion

In general the flint assemblage from Downsview is similar to those from other settlements of the same period in the region. Flakes were produced by hard-hammer percussion in an unstandardised and unsystematic fashion. The very high proportion of débitage to tools, and the recovery of hammerstones indicates that knapping took place within the site. It was not possible to carry out the kind of detailed multivariate analysis which enabled the finer classification of débitage at Mile Oak. A smaller number of flakes was modified into tools using the minimum retouch necessary to achieve the desired form, and again with little concern for standardisation. The tool inventory is dominated by pieces whose most likely function is scraping, i.e. wood or hide-working. The range of implements was restricted, this presumably being a reflection of the use of metal as the major raw material for edged tools. The use of flint therefore represents the ad hoc exploitation of a plentiful local resource in response to immediate needs. Individual pieces which appear to be of an older period than the settlement indicate some earlier activity in the vicinity of the site.

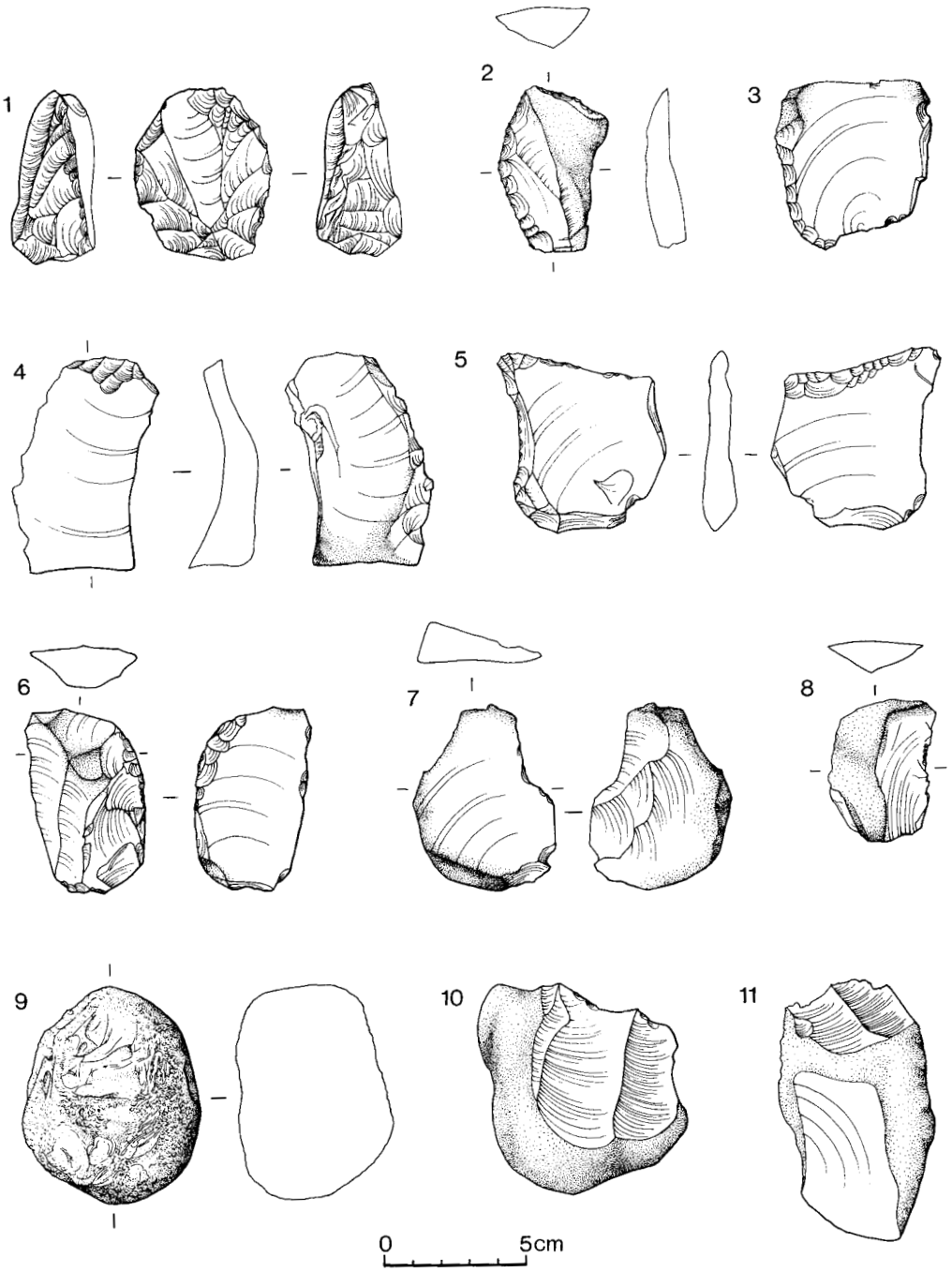

Fig. 7.25 Downsview: Flintwork.

Catalogue of the illustrated flintwork (Figs 7.25 and 7.26)

1 Endscraper: very robust convex endscraper on hard-hammer flake. Context 2047. Upper fill of terrace 2046.
2 Double scraper: hard-hammer flake with straight scraper edge on distal end, and convex scraper on one lateral edge. Unstratified.
3 Endscraper: straight endscraper on hard-hammer flake. Context 2393. Fill of terrace 2262.
4 Endscraper: convex scraper edge formed by inverse retouch on distal end of blade. Context 2095. Upper fill of terrace 2050.
5 Sidescraper: concave scraper on lateral edge of hard-hammer flake; distal end trimmed by retouch. Context 2070. Fill of terrace 2062.
6 Backed knife: hard-hammer flake with abrupt backing retouch opposite sharp edge. Context 2393. Fill of terrace 2262.
7 Notched flake: notch formed by inverse retouch on left lateral edge of hard-hammer flake. Context 2032. Top-soil.
8 Backed flake knife: cortical back opposite sharp retouched edge. Terrace 4065.
9 Hammerstone: battered spherical flint cobble. Context 2480. Fill of ditch 2423.
10 Core Type A2: one platform with flakes removed part way round. Terrace 4065.
11 Bifacial core: flakes removed from opposite directions on one edge, worked part way round. Context 2424. Upper fill of ditch 2423.
12 Adze/mattock head: core tool, flaked all over. Roughly wedge-shaped with a narrow 'waist; presumably for hafting. Probably Neolithic. Context 2424. Upper fill of ditch 2423.
13 Flaked axe roughout: flaked all over. Probably Neolithic. Context 2426. Upper fill of pond 2425.
14 Core tool: rough flint fragment as blank, with bifacial retouch on one edge. Context 2164. Fill of terrace 2042.

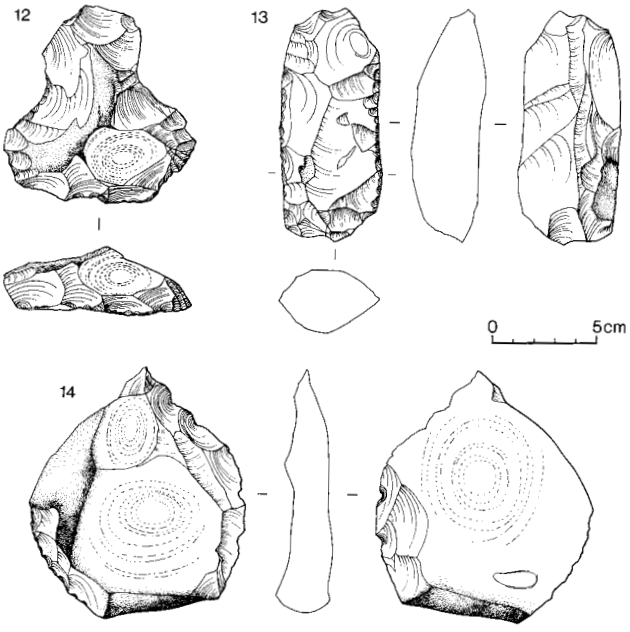

Fig. 7.26 Downsview: Flintwork.

The Downsview pottery with specific reference to the Bronze Age assemblage: its forms, dating and regional implications

Sue Hamilton

Introduction

A total weight of 8.6kg of pottery was recovered from Downsview. The assemblage comprised some 1,351 sherds of which 87% were Later Bronze Age (635 MBA sherds and 487 LBA sherds). Downsview is currently the third largest assemblage of Later Bronze Age pottery to be recovered from Sussex, comparing with the Black Patch assemblage of 1,192 MBA sherds (Ellison 1982: 361) and the 1921 MBA sherds recovered from Mile Oak (*see* Section 2). Only two earlier prehistoric sherds were recovered and these were both Beaker sherds. Ceramic evidence of pre-Roman Iron Age activity is absent. A total of 198 Roman sherds were recovered together with a minor quantity of post-Roman sherds, namely 11 Medieval sherds and 18 Post-Medieval sherds.

The total weight of the recovered Downsview Bronze Age pottery is small (7.7kg) compared to Mile Oak (19kg MBA) and Black Patch (15kg MBA) and reflects the small size of many of the Downsview sherds. No complete vessel profiles were recovered. Some sherds from single or related vessels were widely dispersed, downslope, across the site. Despite displacement of the pottery post-breakage/abandonment, the total recovered MBA and LBA pottery can be considered as coming from single assemblages related to distinct phases of occupation on, and proximate to the site, given that there is minimal pottery evidence of prior settlement activity and negligible 'contamination' from later material.

The MBA assemblage notably has fine wares (Ellison Type 7) which link it with central Sussex sites such as Park Brow and Mile Oak and with East Sussex sites such as Black Patch and Itford Hill. The LBA assemblage adds to a growing number of 'essentially plain ware' assemblages, dating to the beginning of the first millennium BC, now recognised in Sussex.

The associated radiocarbon dates concur with the presence of both MBA and LBA activity at Downsview (Figs 7.30 and 7.31).

Table 7.3 Coldean Lane, Sites A and B: Sherd counts from trial trenches according to fabric type. (The last vertical column gives the total weight of sherds in each context.)

			Fabrics					
Trench	Context		B	F1	F7	RB	PM	Wgt
Site A *(Old Boat Corner)*								
XI	2017	Us	0	0	0	2	0	1
XIX	2025	Us	0	0	0	1	0	2
Site B *(Downsview)*								
XXIV	2030	Us	0	0	0	1	3	46
XXV	2031	Us	0	0	4	3	1	20
XXVI	2032	Us	1	1	1	1	1	70
XXIX	2159	Us	0	0	3	0	1	10
Totals			1	1	8	8	6	148

Key: Us = unstratified; RB = Romano-British; PM = Post-Medieval

Methodology

The pottery was analysed using the pottery recording system recommended by the Prehistoric Ceramics Research Group (PCRG) (1992). All sherds were ascribed a fabric type (after macroscopic examination and the use of a binocular microscope), and then counted and weighed to the nearest whole gramme. For the MBA and LBA assemblages each diagnostic sherd was additionally assigned to a form/ decorative/ technological type (PCRG 1992).

The stratigraphic implications of the Downsview pottery

Just under 41% of the Downsview sherds were unstratified (coming from ploughsoil/topsoil contexts). Some 6% of the Downsview sherds came from hillwash contexts and undoubtedly a proportion of the original assemblage has been lost further downhill due to soil erosion. At best *c*.60% of the pottery assemblage can be considered to be '*in situ*' relating to the original processes of site-use and abandonment.

The trial trenches (Sites A and B)

These trenches produced minimal quantities of pottery (*see* below).

Downsview

Terrace fills

The majority of pottery from the building terraces was recovered from the terrace fills rather than from the pit and post-hole features within each terrace. This situation notably relates to the terraces uppermost on the hillslope (terraces 2042, 2046, 2048 and 2050).

Terraces 2042, 2046, 2048 and 2062 produced very small quantities of pottery (Table 7.4). The pottery from terrace 2042 was almost exclusively MBA and can be interpreted as a remnant assemblage with part of the original MBA 'house assemblage' having been moved downhill by ploughing and soilwash. One larger sherd from a cordoned storage urn (Fig. 7.27: 2) was recovered from the upper fill (Context 2043) of terrace 2042. Terrace 2046 has no real ceramic dating evidence having produced only one sherd,

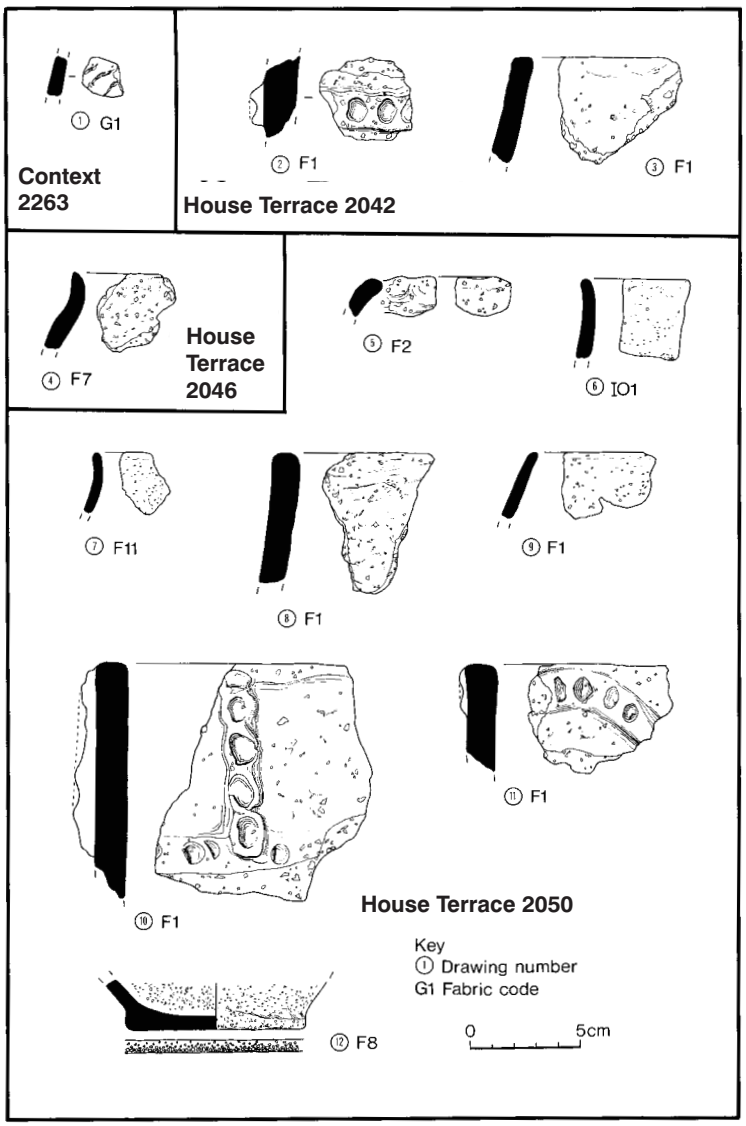

Fig. 7.27 Downsview: Later Bronze Age pottery. Sherd 1 = EBA; Sherds 2, 3, 8–11 = MBA; Sherds 4–7, 12 = LBA

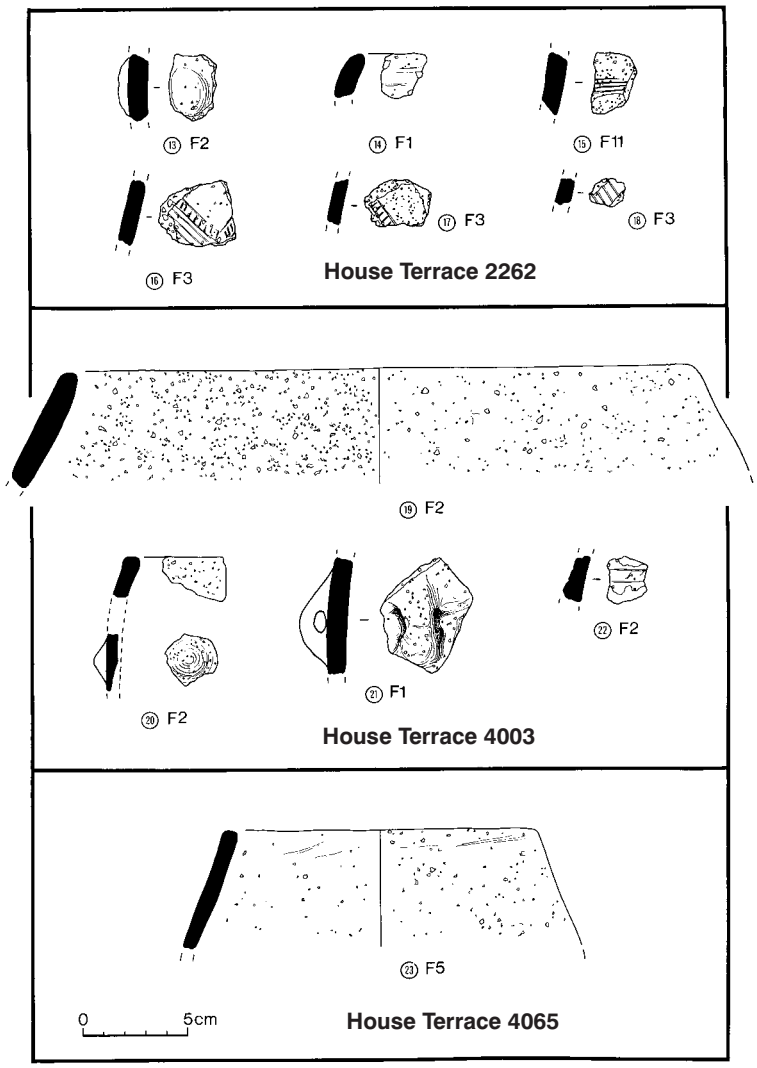

Fig. 7.28 Downsview: Later Bronze Age pottery. Sherds 13–22 = MBA; Sherd 23 = LBA.

namely an LBA sherd, from the upper terrace fill. Terrace 2062 produced no finds, while the adjacent terrace 2048 produced all LBA sherds, with the exception of one Romano-British sherd. The latter could indicate that terrace 2048 is of LBA date, possibly replacing terrace 2062, with any originally present sherds (MBA?) being washed downslope.

A more substantial quantity of pottery was recovered from terrace 2050. This comprised 42 MBA sherds, together with four LBA sherds and one Romano-British sherd from the upper terrace fills. The MBA assemblage from this terrace includes part of a bucket-shaped storage urn with a raised 'horse-shoe' cordon decorated with fingertip impressions (Fig. 7.27: 11).

Terrace 2262 produced the greatest quantity of Bronze Age pottery. Additionally, a total of 75 Romano-British sherds were recovered from the ploughsoil and terrace fill. A significant quantity of MBA pottery was recovered from post-hole 2391 (23 sherds). Although the number of sherds is small (9), it is additionally notable that post-holes 2406, 2404, 2807 and 2811 produced exclusively MBA sherds. The fill of post-hole 2391 produced sherds from a decorated fine ware globular urn. Further sherds from this, or a similarly decorated urn, were recovered from a shallow depression (4018) in Area J, to the south of the main excavated site. This either relates to downslope movement of material, or to the original dispersal of broken pottery during site-use post-breakage. The 52 LBA sherds from the fill of terrace 2262 may indicate activity on the terrace subsequent to its MBA use. Equally, the latter may relate to LBA activity upslope and subsequent downslope movement of deposits containing pottery.

Pit features (Table 7.5)

The lack of pottery from pit features is interesting. A total of two MBA sherds, eight LBA sherds and one Romano-British sherd were recovered from the pit features. Given that open pits are catchment zones for rubbish and hillwash accumulation, this suggests that other means of rubbish disposal took place, and, perhaps more significantly, that the pits were not 'open' during the main phase(s) of downslope erosion.

Ditches (Table 7.5)

Only one of the ditch circuits produced relatively substantial quantities of pottery, namely ditch 2427.

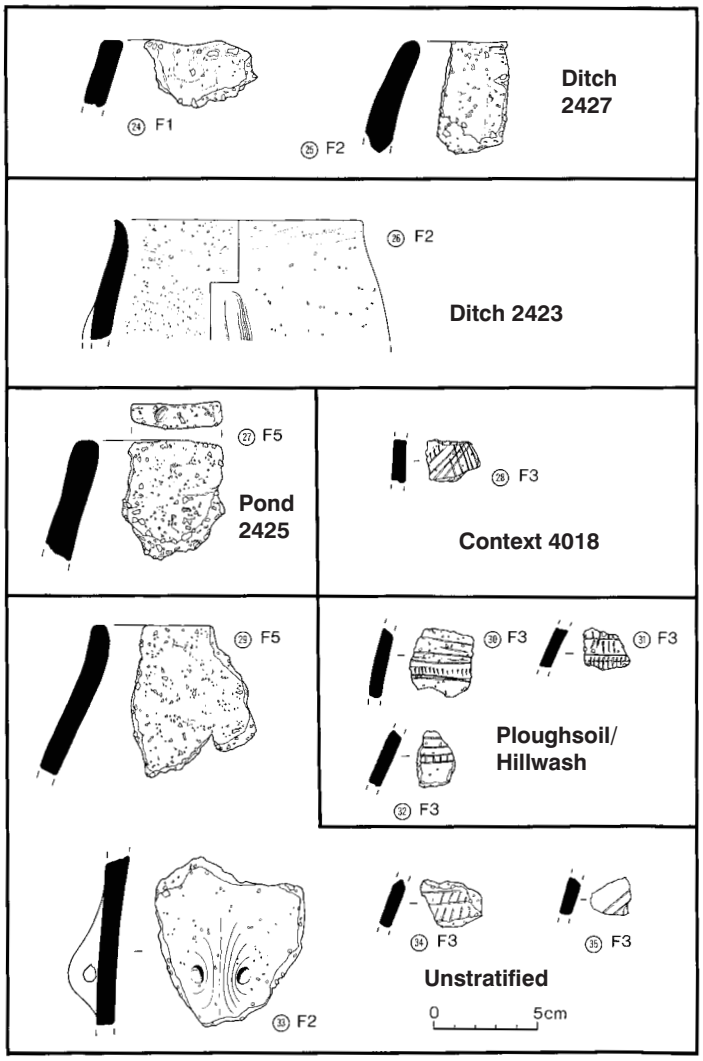

Fig. 7.29 Downsview: Later Bronze Age pottery. Sherds 24–28, 30–35 = MBA; Sherd 29 = LBA.

Ditch 2039 produced in total three sherds, all LBA including one rim sherd from a convex-sided jar. Ditch 2342 produced only one Romano-British sherd from its upper fill. In total 20 MBA sherds were recovered from ditch 2423 with, in addition, one LBA sherd from the ploughsoil and a total of five Romano-British and Medieval sherds coming from the middle fill and above. The basal fill had no post-MBA sherds.

The fills of ditch 2437 are dominated by quantities of MBA pottery (56 sherds).

Post-holes (Table 7.5)

A total of 50 sherds were recovered from post-hole 2278, all of which related to part of an MBA biconical urn (Ellison Type 6: *see* below). Post-hole 2450 in total produced one LBA body sherd.

Ponds (Table 7.5)

Both of the ponds (features 2259 and 2425) had predominantly MBA sherds in their fills.

Negative lynchets (Table 7.5)

The fills of negative lynchet 2427 produced both MBA and LBA sherds. In contrast, negative lynchet 2493 yielded only one Romano-British sherd.

Areas J and K (Table 7.6)

The greatest amount of pottery was recovered from the area investigated by the BHAS, i.e. immediately south of the south-west corner of the main excavated site. There are greater quantities of MBA than LBA pottery, but certain features (*see* below) produced exclusively/predominantly LBA pottery.

The presence in a shallow depression (4018) in Area J, of decorated sherds from a fine ware globular urn, of which similar sherds were also found on the main site (post-hole 2391 of terrace 2262), and the evidence for downslope movement of the main site MBA assemblage, has already been noted. Three contexts (4034, 4051 and 4063 – the last two being hillwash deposits) in Area K similarly produced decorated MBA fine ware sherds which come from the same (or a similarly decorated vessel). This again suggests downslope movement of deposits, but does not exclude the

Table 7.4 Downsview, Areas A–I: Building terraces sherd counts according to context and fabric type. (The last vertical column gives the total weight of sherds in each context.)

	Fabrics															
Context/fill	G	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	IO1	RB	M	Wgt
Terrace 2042																
2043 upper Tf	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	63
2082 lower Tf	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	108
Terrace 2046																
2047 upper Tf	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	8
Terrace 2048																
2049 upper Tf	0	0	0	0	0	12	0	0	0	0	0	0	0	1	0	97
2067 lower Tf	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5
Terrace 2050																
2081 Topsoil	0	2	3	0	0	0	0	1	1	0	0	0	0	0	0	34
2327 Tf:S1	0	3	4	0	0	0	0	0	1	0	0	0	0	1	0	74
2328 Tf:S2	0	4	6	0	2	0	0	0	0	0	0	0	0	0	0	40
2329 Tf:S3	0	8	4	0	0	0	0	1	0	0	0	0	0	0	0	20
2096 Tf:base	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	270
2117 f:Ph 2115	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2175 f:Ph 2174	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Terrace 2262																
2263 Ps	1	8	13	1	2	21	2	9	0	6	0	2	1	70	1	508
2083 Tf	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	14
2393 Tf	0	1	0	1	0	4	0	1	0	0	0	2	0	1	0	34
2384 Tf	0	4	5	0	0	0	0	0	1	0	1	0	1	1	0	78
2385 Tf	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	5
2387 Tf	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
2388 Tf	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
2389 Tf	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	5
2392 f:Ph 2391	0	0	21	2	0	0	0	0	2	0	0	0	0	0	0	252
2407 f:Ph 2406	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5
2416 f:Ph 2404	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
2808 f:Ph 2807	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	8
2812 f:Ph 2811	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7

Key: f = fill; u = upper; m = middle; b = base; Tf = terrace fill; Ph = post-hole; Ps = ploughsoil; S = spit; Ts = topsoil; RB = Romano-British; M = Medieval

possibility of MBA settlement activity to the south-west of the main site.

The majority of stratified pottery from terrace 4065 is LBA. This stratified material predominantly came from a hearth (feature 4069 which overlies a filled-in storage pit) and one post-hole (feature 4066). The latter post-hole is associated with an LBA radiocarbon date (1050–800 cal BC; OxA-4810; 2755±60BP). The fire-pit fill (Context 4073), however, produced an MBA radiocarbon date (1410–1100 cal BC; weighted mean of GU-5432-3; *see* Section 9). The latter radiocarbon date, and a limited amount of MBA pottery from terrace 4065, suggest some original MBA activity at this location. The greater part of the evidence from this terrace suggests an extension of site-use downslope, south of the main site during the LBA.

The Downsview fabric series

Definition of fabric types

The Downsview prehistoric fabric type series was established on the basis of macroscopic inspection in conjunction with microscopic analysis at X20 magnification. All inclusions/temper size are classified using the Wentworth sedimentary scale and descriptive terms (Krumbein and Pettijohn 1938; PCRG 1992: 35). Density charts (PCRG 1992: App. 3) were used to standardise assessment and description of the quantity of inclusions/temper present in fabric matrices.

The prehistoric fabrics

On the limited stratigraphic evidence from Downsview (*see* above), and on the basis of associated pottery forms and local dated fabric sequences (Hamilton 1993), Fabric G1 is of EBA date, Fabrics F1–F4 of MBA date and Fabrics F5–F12 and IO1 of LBA date.

Grog-tempered fabrics

G1 *Soft, grog-tempered fabric with flint*
Soft clay, sand-free matrix with moderately abundant (15% frequency) coarse sand-sized (*c*.1mm) grog together with rare (1% frequency) granule-sized (*c*.2mm) and pebble-sized (*c*.5mm) flint; matrix colour/firing – orange/buff oxidised exterior surface, dark unoxidised core and interior surface; sherd thickness – *c*.11mm.

Table 7.5 Downsview, Areas A–I: Other features' sherd counts according to context and fabric type. (The last vertical column gives the total weight of sherds in each context.)

	Fabrics												
Context/fill	F1	F2	F3	F5	F6	F7	F8	F10	F11	IO1	RB	PM	Wgt
Us	60	4	1	38	2	2	0	2	9	0	30	2	58
Pits:													
2054 2055 f	0	0	0	0	0	4	0	0	0	0	0	0	3
2452 2453 f	0	0	0	0	0	1	0	0	0	0	0	0	4
Pit/treehole:													
2340 2383 f	1	1	0	1	0	0	0	0	0	2	1	0	62
Ditches:													
2039 2041 f:u	0	0	0	0	0	1	0	0	0	0	0	0	1
2039 2040 f	0	0	0	0	0	1	0	0	1	0	0	0	2
2342 2343 f	0	0	0	0	0	0	0	0	0	0	1	0	4
2423 2497 Ps:b	1	1	4	0	0	0	1	0	1	0	2	1	73
2423 2424 f:u	0	5	0	0	0	0	0	0	0	0	2	0	51
2423 2480 f:m	1	4	1	0	0	0	0	0	0	0	1	0	28
2423 2483 f:m	0	5	0	0	0	0	0	0	0	0	0	0	146
2423 2486 f:b	1	0	0	0	0	0	0	0	0	0	0	0	5
2437 2434 f	6	2	0	0	0	3	0	0	0	0	0	0	73
2437 2467 f	21	0	0	0	0	0	0	0	0	0	0	0	156
Post-holes:													
2278 2279 f	0	50	0	0	0	0	0	0	0	0	0	0	602
2450 2451 f	0	0	0	0	1	0	0	0	0	0	0	0	1
Ponds:													
2259 2260 Us	2	0	0	0	0	0	0	0	0	0	0	0	2
2259 2344 f	1	0	0	0	0	1	0	0	0	0	1	0	9
2354 f	5	1	0	0	0	0	0	0	0	0	0	0	59
2355 f:b	0	0	0	0	0	0	1	0	0	0	0	0	6
2425 2426 f	3	0	0	6	0	0	0	0	0	0	1	0	60
2425 2432 f	2	2	0	0	0	0	0	0	0	0	0	0	33
Negative lynchet:													
2427 2428 f	1	7	0	13	0	0	3	2	0	0	0	0	90
2427 2429 f	16	0	0	0	0	0	0	0	0	0	0	0	83
2427 2433 f	0	1	0	0	0	0	0	0	0	0	0	0	3
2493 2494 Ps	0	0	0	0	0	0	0	0	0	0	1	0	5
Totals 121	121	80	6	51	3	13	5	7	11	2	39	3	2129

Key: f = fill; u = upper; m = middle; b = base; Ps = ploughsoil; Us = unstratified; RB = Romano-British; PM = Post-Medieval

Thicker-walled flint-tempered fabrics

F1 *Very coarse flint-tempered*
A moderate amount of (10–15% surface density) flint temper comprising mostly pebble-sized (6–10mm) and granule-sized (2–3mm) pieces together with some very coarse sand-sized (1.5mm) pieces; matrix colour/firing – oxidised orange exterior surface, dark red to black-brown core, and dark brown unoxidised or orange oxidised interior surfaces; sherd thickness – *c*.12.5mm.

F2 *Coarse flint-tempered*
A moderate (15% density) to common (20% density) amount of flint temper comprising occasional pebble-sized (*c*.5mm) and mostly granule-sized (*c*.2–3mm) pieces of flint; matrix colour/firing – orange oxidised exterior surfaces, with dark brown unoxidised cores and interior surfaces; finish – sherd exteriors are occasionally smoothed; sherd thickness – *c*.14mm.

F3 *Finer flint-tempered*
Smoothed/compacted surfaces with common (20% density) flint temper of granule (*c*.2mm), very coarse sand (*c*.1mm), and coarse sand (0.5mm) sizes; matrix colour/firing – orange to buff oxidised exterior surface, unoxidised dark brown core and interior surface; sherd thickness – *c*.9mm.

F4 *Finer flint-tempered with mussel shell*
Moderate (15% density) flint temper of very coarse sand-sized (*c*.1mm) and coarse sand-sized (*c*.0.5mm) grades together with sparse (5% density) granule-and pebble-sized (2–4mm) fragments of mussel shell; matrix colouring/firing – surfaces and core are commonly unoxidised dark brown; sherd thickness – *c*.10.5mm.

Finer-walled flint-tempered fabrics

F5 *Medium-coarse flint-tempered*
Common (20–25% frequency) flint temper comprising occasional pebble-sized pieces (*c*.4mm) together with numerous granule to coarse-sand sized flint (*c*.0.5–2mm); matrix colour/firing – variably oxidised orange/buff exterior and interior surfaces and core, with some cores remaining unoxidised dark brown; sherd thickness – *c*.10mm.

Table 7.6 Downsview, Areas J and K: Sherd counts according to context and fabric type. (The last vertical column gives the total weight of sherds in each context.)

	Fabrics													
Context	F1	F2	F3	F5	F6	F7	F8	F9	F10	F11	RB	M	PM	Wgt
4002 Ps	0	0	0	14	0	0	0	0	4	0	10	1	3	138
4003 Bt	58	73	0	70	0	26	0	0	0	0	10	2	4	1538
4013 Dep	10	10	0	0	0	0	2	0	0	0	0	0	0	250
4015 Ph	0	1	0	1	0	0	0	0	0	0	0	0	0	7
4017 Dep	0	5	0	0	0	0	0	0	0	0	0	0	0	10
4018 Scp	9	6	0	0	4	0	5	0	0	13	2	0	0	248
4024 Ps	0	0	0	3	0	0	0	2	0	0	2	0	0	33
4026 Ps	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4031 Ps	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4032 Ps	0	1	0	0	0	0	0	0	0	0	0	0	0	5
4033 Ps	0	10	0	0	0	0	4	0	0	0	4	3	0	103
4034 Ps	29	35	1	25	0	0	15	0	0	0	2	0	0	809
4043 Ps:u	2	0	0	0	0	0	1	0	0	0	5	0	0	36
4051 Ps:b	0	2	1	0	2	0	4	0	0	0	1	0	0	42
4044 Ps	2	0	0	0	2	0	0	0	0	0	11	1	2	314
4045 Ps	0	0	0	0	0	0	0	0	0	0	18	0	0	58
4046 Hw:u	2	0	0	0	0	0	0	0	0	0	3	1	0	13
4047 Hw:m	18	2	16	0	0	0	0	0	0	0	0	0	0	215
4048 Hw:b	0	2	0	0	0	3	0	0	0	0	0	1	0	35
4052 Hw:b	0	0	0	1	0	0	0	0	0	0	0	0	0	7
4054 Hw	1	0	0	15	0	0	0	0	0	0	0	0	0	33
4057 Ts	0	0	0	1	0	0	0	0	0	0	0	1	0	7
4063 Hw:u	0	3	1	0	0	0	0	0	0	0	3	0	0	36
4064 Hh:u	0	1	0	10	1	0	0	0	0	0	0	0	0	32
4065 Bt:f	0	2	0	8	0	0	18	0	0	0	0	0	0	68
4066 Ph	0	0	0	0	0	0	0	0	15	0	0	0	0	63
4068 Ph	0	0	0	2	0	0	0	0	0	0	0	0	0	17
4075 Ph	0	0	0	1	0	0	0	0	0	0	0	0	0	62
4069 Hth	5	0	0	33	0	0	0	0	0	0	0	0	0	410
Unstratified	0	0	0	9	0	1	4	0	0	0	0	0	0	67
Totals	138	153	19	193	9	30	53	2	19	13	73	10	9	4660

Key: f = fill; u = upper; m = middle; b = base; Dep = depression; Bt = building terrace; Hth = hearth; Hw = hillwash; Ph = post-hole; Ps = ploughsoil; Scp = scoop; Ts = topsoil; RB = Romano-British; M = Medieval; PM = Post-Medieval

F6 *Sparse medium-coarse flint-tempered*
Sparse (4% density) granule-sized (*c*.3–4mm) flint temper with rare (2% density) very fine (0.125mm) quartz; matrix colour/firing – generally unoxidised dark brown/black surfaces and core; sherd thickness – *c*.7.5mm.

F7 *Medium flint-tempered*
Common (25% frequency) flint temper comprising sparse (5% frequency) granule-sized (*c*.2mm) flint pieces, together with common (20% frequency) very coarse sand-sized (*c*.1mm) flint; matrix colour/firing – variably oxidised orange to unoxidised dark brown exterior surfaces with dark brown unoxidised core and interior surface; sherd thickness – *c*.7.5–10mm.

F8 *Medium-fine flint-tempered*
Common (20% frequency) coarse sand-sized (0.5–<1mm) flint temper together with sparse (7% frequency) very coarse sand-sized (*c*.1mm) flint temper; matrix colour/firing oxidised orange surfaces and core; sherd thickness – *c*.6mm.

F9 *Medium-fine flint-tempered with quartz sand*
The fabric is visually dominated by moderate to common (15%–20% frequency) very coarse sand-sized (*c*.1.5mm) flint inclusions. The clay matrix also contains moderately (15% frequency) abundant, transparent to translucent coarse sand-sized (*c*.0.5mm) quartz inclusions of low angularity; matrix colour/firing – unoxidised, dark grey surfaces and core; sherd thickness – *c*.6mm.

F10 *Abundant fine flint-tempered*
Flint temper comprising rare (2% frequency) very coarse sand-sized (*c*.1mm) and common (20% frequency) coarse sand-sized (*c*.0.5mm) pieces; matrix colour/firing – buff to grey partially oxidised surfaces and dark grey unoxidised core, or orange oxidised exterior surface and dark brown unoxidised interior surface and core; sherd thickness – *c*.6mm.

F11 *Sparse fine flint-tempered*
Sparse (7% frequency) medium and coarse sand-sized (0.25–<1mm) flint temper with a rare presence (2% frequency) of fine (<0.25mm) quartz sand; matrix colour/firing – dark red oxidised exterior surface with dark brown core and interior surfaces; sherd thickness – *c*.7–10mm.

Iron oxide fabrics

IO1 *Iron oxide*
The fabric is dominated by the presence of very common pisolitic iron oxides of medium sand-sized (*c*.0.4mm)

mixed with moderate (10% frequency) medium quartz sand. Rare (2% frequency) coarse sand and very coarse sand (*c*.0.5–1.5mm) size flint temper is also present; matrix colour/firing – leather-brown partially oxidised exterior surface with dark brown unoxidised interior surface and core; sherd thickness – *c*.9mm.

Romano-British fabrics

The Romano-British fabrics were not studied in detail. The sherds were subdivided into five general fabric groupings.

East Sussex Ware (also known as Cooking Jar Fabric)

Some 82% of the Romano-British sherds were of this fabric, Green (1977, 1980) has described this 'soapy'-feeling, grog-tempered fabric in some detail. The fabric has a Late Iron Age origin and remained common in Sussex until at least the third century AD.

Fine-grained sandy, grey ware

One fine-grained quartz-tempered sherd was recovered. The fabric is distinguished by a moderate amount (15% frequency) of fine (0.25mm or less) quartz grains.

Medium-grained quartz sand orange wares, and grey wares

Some 31 sherds belonged to this category. The texture of these wares is characterised by moderate quantities (10–15% frequency) of medium sand-sized (0.5mm or less) (10–15% frequency) quartz sand.

Silty wares

A total of two sherds are of silty fabrics. No visible inclusions are present with the matrix consisting of silt-sized particles (<0.125mm).

Samian

One Samian body sherd was recovered.

New Forest Ware

A single sherd of New Forest Ware was recovered.

Medieval fabrics

As with the Romano-British pottery, the Medieval sherds were ascribed to general fabric groupings and were not studied in detail.

Medium quartz sand

Seven sherds are of this general type. The fabric type is characterised by moderately abundant (15% frequency) coarse and medium coarse quartz sand (0.5–1mm). The quartz grains are polished, generally clear and sub-rounded to rounded in morphology. Surfaces are generally orange/buff and cores dark grey in colour.

Grog, medium quartz sand, and sparse flint

Two sherds are of this general type. Moderately abundant (10% frequency) coarse sand-sized (up to 1mm) grog is present together with smaller quantities of medium quartz sand (0.5mm) and medium sand flint. Sherds are dark buff to dark brown throughout.

Multi-gritted

One sherd was recovered of this type. The fabric compares with Bishopstone Anglo-Saxon Fabric 2 (Bell 1977: 229). Its most obvious distinguishing feature is a very common (30% frequency) temper of coarse and medium sand grades 0.25–<1mm) of multicoloured polished grits (white, red, grey and pink). The clay matrix colour is dark brown throughout.

Post-Medieval fabrics

Eighteen Post-Medieval sherds were recovered and were ascribed to the following fabric categories:

- *Red hard-fired fabric*: 11 sherds.
- *Brown-glazed earthenware*: 5 sherds.
- *Staffordshire (yellow glazed)*: 1 sherd.
- *Silty ware*: 1 sherd.

[*NB* The excavations at Downsview also revealed 11 fragments of 18th- to 19th-century clay pipes. These, together with fragments of Post-Medieval glass, are listed in the archive – D. Rudling.]

The Bronze Age pottery: clay and temper sources

There are no clay sources on-site. There are, however, major patches of Clay-with-Flints locally on Hollingbury Hill and Falmer Hill, at approximately 1km distance east and west of the site respectively. These deposits occur to a thickness of greater than one metre (Hamilton 1984: 57). Flint, the major clay tempering used, would have similarly been obtained locally, or on-site, either from the Clay-with-Flints or the chalk.

A littoral or riverine source might be suggested for the quartz sand tempering in LBA Fabric F9, on the basis of its particle size sorting, low grain angularity, and grain surface morphology. A similar LBA fabric from nearby at Hollingbury has been ascribed a beach source for its quartz temper (Hamilton 1980: 58). The present coastline is approximately 5km distance from the site.

The LBA iron oxide fabric (Fabric IO1) is distinctive of LBA and Early Iron Age wares in East Sussex and is indicative of the use of alluvial clays weathered out of the Wealden ferruginous strata (Hamilton 1980: 58). The richest iron-bearing alluvial clays are approximately 20km inland and derive from a High Wealden source such as Wadhurst Clay.

The Downsview Bronze Age pottery fabrics thus indicate the predominant use of locally available resources in ceramic production. Flint, however, is widely available in Lowland Britain and its presence as the major tempering material cannot be taken as a *de facto* indicator that all of the

Downsview flint-tempered pottery was produced on-site, or locally. The MBA urns with Essex, and Hampshire, decorative motifs (*see* below), for example, raise obvious questions about the nature of pottery exchange networks, the existence of peripatetic potters and contacts between communities during the MBA, and the Sussex MBA in particular. The Downsview LBA assemblage additionally evidences the exploitation of raw materials, or trade of resources or pottery, from up to 20km away.

The Bronze Age pottery: forms, decoration and technology

Beaker sherds

The Downsview assemblage contains two decorated Beaker sherds. Both are from unstratified contexts (Tables 7.3 and 7.4). Both are body sherds. One of the sherds is 'rusticated', having roughly horizontal rows of fingertip and fingernail decoration. The other sherd has horizontal rows of square-toothed comb impressions (Fig. 7.27: 1).

The MBA and LBA assemblage: quantification of form, decoration and technology elements

The elements of form, decoration and technology present in the MBA and LBA assemblages are listed in Table 7.7. These elements are tabulated in Table 7.7 together with their association with identified fabric types. In tabulating form and finishing technology and decoration, some sherds received more than one count due to the multiple presence of diagnostic elements.

Table 7.7 Downsview, Middle Bronze Age and Late Bronze Age pottery assemblage: form, decoration and technology elements.

Forms	Downsview code descriptions
Rim sherds	
Urns and convex jars	R1, Flat-topped, squared profile
	R2, Rounded
	R3, Incurved rounded
	R4, Internally bevelled
Round-shouldered jars	R5, Upturned, rounded
	R6, Upturned, flattened
Bipartite bowls	R7, Rounded
	R8, Upturned, squared
Necked shouldered bowls	R8, Out-turned, rounded
	R9, Out-turned, squared
	R10, Flaring, rounded
Lug-handle sherds	H1, Lug with wide horizontal perforation
Base sherds	B1, Flat
	B1, Splayed
	B3, Flinted (concentration of flint grits on the exterior surface)
Decorated sherds	D1, Fingertip-impressed
	D2, Incised
	D3, Plain unperforated applied lug
	D4, Applied cordon
	D5, Furrowed shoulder
Sherds with evidence of technology/surface finish	T1, Finger-furrowed
	F1, Smoothed
	F2, Combed

The typology of Sussex MBA pottery has been defined by Ellison (1978, 1980b) and these forms provide the basis for the type attribution of the Downsview MBA assemblage. The following types are represented in the Downsview MBA assemblage:

Ovoid and bag shaped jars

Ellison Type 1 — Plain, bag-shaped jar form. It occurs at Downsview with either rounded, or flattened, rim profiles (Fig. 7.27: 9, Fig. 7.28: 14, 19).

Ellison Type 2 — Ovoid jar with plain unperforated applied lugs at the maximum diameter. The Downsview examples have flat-topped rims (Fig. 7.28: 13, 20).

Ellison Type 3 — This local Sussex version of ovoid jar has unperforated applied lugs and flaring rim. Both rounded, and flat-topped, rims occur at Downsview (Fig. 7.29: 26).

Ellison Type 5 — Small ovoid pot with horizontally perforated lugs. The Downsview rims are of rounded profile (Fig. 7.28: 21, Fig. 7.29: 33).

Biconical urns

Ellison Type 6 — Plain urn with a slack biconical profile and slightly emphasised shoulder. The Downsview examples have flat-topped rims (Fig. 7.27: 3).

Globular jars

Ellison Type 7 — Globular jar with bar handles and incised geometric decoration (Fig. 7.27: 16–18, Fig. 7.28: 28, 30–32, 34).

Bucket-shaped urns

Ellison Type 8 — Plain bucket-shaped form. The Downsview examples have flat-topped rims (Fig. 7.27: 8).

Ellison Type 10 — Bucket-shaped form with applied cordon with fingertip impressions. The Downsview examples have flat-topped rims, one of which has a finger-impressed top (Fig. 7.27: 2, Fig. 7.29: 27).

BU1 — Bucket-shaped urn with applied finger-impressed cordon and 'horse-shoe' band. The Downsview example has a flat-topped rim. The Mile Oak and Downsview MBA assemblages currently provide the only examples from Sussex (Fig. 7.27: 10, 11).

The MBA assemblage: discussion of form, decoration and technology elements

MBA forms and decoration

With the exception of Ellison Type 5, all of the Downsview MBA forms are also present in the Mile Oak MBA assemblage (*see* Section 2). Medium-sized, bag-shaped and ovoid jar forms (Ellison types 1, 2, 3 and 5) are characteristic Sussex MBA forms and have a distinct localised distribution east of the River Adur (Ellison 1980b: fig. 12). Type 5 is a

Table 7.8 Downsview, Middle and Later Bronze Age pottery: correlation between form elements and fabric types.

	Fabrics								
Types/Elements*	F1	F2	F3	F5	F6	F8	D10	D12	Q1
Ellison Types									
1, R2	1	1	0	0	0	0	0	0	0
1, 2 or 3 R1	5	0	0	0	0	0	0	0	0
2 R1	0	4	0	0	0	0	0	0	0
2 R4	0	3	0	0	0	0	0	0	0
2 D3	0	1	0	0	0	0	0	0	0
2 or 3, D3	0	2	0	0	0	0	0	0	0
3 R2	1	1	0	0	0	0	0	0	0
3 or 6, R1	2	0	0	0	0	0	0	0	0
3 or 6, R2	0	1	0	0	0	0	0	0	0
5, R2	3	0	0	0	0	0	0	0	0
6, R1	1	0	0	0	0	0	0	0	0
5?,7?, H1	0	2	0	0	0	0	0	0	0
7, D2	0	3	3	0	0	0	0	0	0
8, R1 + D1	4	0	0	0	0	0	0	0	0
8, R1	0	1	0	0	0	0	0	0	0
10 D4 + D1	1	0	0	0	0	0	0	0	0
Other bucket urns:									
BU1 R1	3	0	0	0	0	0	0	0	0
BU1 D4 + D1	2	0	0	0	0	0	0	0	0
? R2	2	0	0	0	0	0	0	0	0
? D4	0	3	0	0	0	0	0	0	0
Jars:									
Convex									
R1	0	0	0	3	2	0	1	0	0
R2	0	0	0	1	2	0	0	0	0
R3	0	0	0	0	0	0	1	0	0
R4	0	0	0	1	0	0	0	0	0
Round-shouldered									
R5	0	0	0	0	1	2	0	0	0
R6	0	0	0	1	0	2	0	0	0
Shouldered bowls:									
Bipartite									
R7	0	0	0	1	1	1	1	0	0
R8	0	0	0	0	0	0	0	1	0
D5	0	0	0	1	0	0	0	0	0
Necked									
R9	0	0	0	0	1	0	0	0	0
R10	0	0	0	0	0	0	0	0	1
Bases:									
B1	39	0	0	1	0	0	0	0	0
B2	0	0	0	0	1	0	0	0	0
B3	0	0	0	0	1	0	0	0	0
Technology/finish:									
T1	0	0	0	2	2	0	0	0	0
F1	0	12	0	5	0	0	0	0	0
F2*	0	0	0	0	0	0	0	0	1

* See Table 7.7 for explanation of the codes used

version of ovoid pot which is specific to Sussex. At Downsview types 1–3 and 5 occur in both very coarse (Fabric F1) and coarse (Fabric F2) fabrics. These fabrics are the equivalent of Ellison's (1980b: 38) 'heavy-duty' and 'everyday' wares respectively. Ellison Type 6 is another distinct Sussex MBA 'everyday' ware form which, by contrast, is generally absent from Wessex and East Anglian MBA assemblages (Ellison 1978: 34).

In addition to these medium-sized forms, the Downsview assemblage has large thick-walled, bucket-shaped storage vessels (Ellison types 8 and 10) which occur mostly in very coarse 'heavy-duty' wares (Fabric 1). These bucket-shaped forms are ubiquitous in MBA assemblages from southern Britain as a whole. In Sussex bucket-shaped forms have been traditionally considered characteristic of assemblages west of the River Adur (Ellison 1978: 34). East of the Adur, however, these forms are common in the Mile Oak assemblage. The examples from Black Patch (Ellison 1982: 362) and Downsview extend the distribution of the form yet further into East Sussex.

As has been noted for the Mile Oak MBA assemblage, the best extra-regional parallel for the Sussex MBA assemblages with their preponderance of bag-shaped vessels is the 'Ardleigh group' of south-east Essex (Erith and Longworth 1960: figs 6 and 7). Additionally, the Ardleigh heavy rusticated bucket-shaped urns with applied finger-impressed 'horse-shoe' bands are now also paralleled by the examples from Mile Oak and Downsview (Fig. 7.27: 11). The Mile Oak example is distinctive in having an additional vertical band applied within the 'horse-shoe' (*see* Section 2). The latter is a specific characteristic of one of the Ardleigh examples (Erith and Longworth 1960: fig. 3: D17). One sherd from Downsview has a vertical, finger-impressed fillet strip just below the rim and it is possible that this too is a vertical applied band from within a 'horse-shoe' fillet (Fig. 7.27: 10). Equally, the latter vertical fillet may be the upright of a straight-arched 'horse-shoe', as is also found in the Ardeigh assemblage (Erith and Longworth 1960: fig. 2). The single example from Downsview of a Type 8 bucket urn with a finger-impressed rim (Fig. 7.29: 27), likewise has Essex parallels (Erith and Longworth 1960: fig. 5: H3, H6 and H8).

The uniformity of fabric (Fabric 3, fine ware) and incised 'fern' motifs associated with Type 7 globular urns has been interpreted as suggesting the output of a single workshop (Ellison 1980b: 40). This decorated form has a distinct distribution in central Sussex and is further discussed for the Mile Oak MBA assemblage, where it also occurs (*see* Section 2). The Downsview incised motifs fall into two categories. One is a variant of the 'fern' motif. The closest parallels for the Downsview fern motif sherds (Fig. 7.29: 30–32, 34), comprising incised horizontal lines, some filled with oblique hatching, are those from Plumpton Plain A (Hawkes 1935: fig. 3). A second incised motif occurs on the Downsview fine ware sherds. This second motif comprises a hatched triangle (Fig. 7.28: 18, Fig. 7.29: 28, 35) with a line of vertical incisions (Fig. 7.28: 16, 17). The standing hatched triangle occurs in the motif repertoire of Wessex Type 1 globular urns (Calkin 1962: fig. 10), but is rare in Sussex. A similarly decorated sherd to the Downsview examples occurs in the Black Patch MBA assemblage (Ellison 1982: fig. 31: 32). The decoration also bears some resemblance to the incised hatched triangle decoration associated with an LBA fine ware round-shouldered bowl from Plumpton Plain B (Hawkes 1935: fig. 11). Another similarly decorated fine ware sherd occurs in the Mile Oak MBA assemblage. As noted for the Mile Oak assemblage, the distribution of fine wares with this motif may suggest the presence of a second workshop producing fine wares in mid/east Sussex (*see* Section 2).

The production technology of the MBA assemblage

All the MBA pottery in Sussex has calcined flint filler. This includes the finer decorated forms. This contrasts with the use of a range of fillers further west in Dorset and Hampshire (Ellison 1978: 32). The pots appear to be coil-built and

there is tendency for the Fabric F2 coarse wares to have smoothed exterior surfaces.

The dating of the MBA assemblage

Currently, five Sussex MBA sites have radiocarbon dates. Four of these sites have pottery in direct stratigraphic association with radiocarbon-dated material (*see* Fig. 7.30). The six radiocarbon dates associated with the Downsview MBA assemblage include two contexts with pottery directly associated with radiocarbon-dated material (post-hole 2391 on terrace 2262, GU-5429; post-hole 2506 on terrace 2262, OxA-4811). The Downsview MBA radiocarbon dates as a whole exhibit a trend which suggests that the pottery is earlier than the Itford Hill MBA pottery assemblage (*see* Fig. 7.30). The latter has an associated date of 1310–1040 cal BC (GrN-6167; 2950±35 BP). The Downsview dates overlap with the dating of the Black Patch MBA pottery (Drewett 1982b: 391; *see* Fig. 7.30), and also with the time-span of the pottery from Varley Halls Hut 3 (Hamilton 1997: Fig. 15) which is associated with a date of 1520–1300 cal BC (BM-2936, 3130±50 BP). Additionally, the Mile Oak assemblage has a radiocarbon date of 1740–1410 cal BC (OxA-5107; 3260±65) for a post-hole in Round-house 1, the latter having MBA pottery from other contexts. Bayliss *et al*. (*see* Section 9) suggest that the MBA settlement activity at Mile Oak started between 1550 and 1440 cal BC (95% confidence) and finished between 1110 and 840 cal BC (LBA). The typological components of the Mile Oak MBA assemblage suggest a later MBA dating (Hamilton, Section 2), and therefore a dating a little later than that of Downsview. The Downsview dates are also in line with the dating for Wessex early MBA assemblages, such as the assemblage from Shearplace Hill, Dorset with a date of 1880–910 cal BC (NPL-19; 3130±180 BP). Similarly, the MBA settlement assemblage from South Lodge, Dorset (Barrett *et al*. 1991) has associated radiocarbon date ranges of 1880–1260 cal BC (BM-1921R; 3340±120 BP) and 1630–1050 cal BC (BM-1922R; 3110±110 BP) (*see* Fig. 7.30).

It therefore remains for further Sussex MBA pottery assemblages to be provided with absolute dates before the Downsview MBA pottery can be confidently interpreted within a wider chronological context. The present evidence suggests that Sussex MBA pottery traditions emerged in parallel with Wessex traditions and that the Itford Hill date comes from the latest phase of the settlement.

The LBA assemblage: form, decoration and technology elements

The LBA forms and decoration

A number of characteristic LBA plain ware types are present in the Downsview assemblage. This LBA pottery

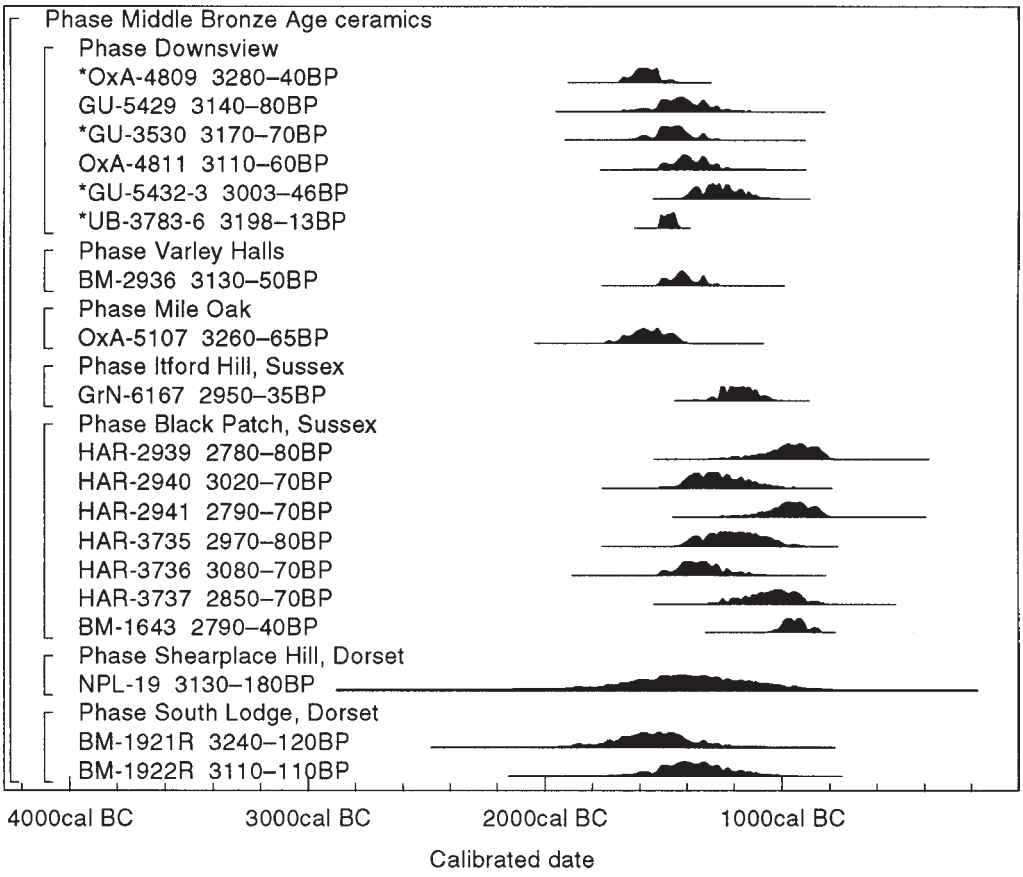

Fig. 7.30 Probability distributions of radiocarbon dates in stratigraphic association with Middle Bronze Age pottery assemblages from Sussex, and similar assemblages from non-Sussex sites. Each distribution represents the relative probability that an event occurred at a particular time. These distributions are the result of simple radiocarbon calibration (Stuiver and Reimer 1993). (Graph by Alex Bayliss.)

can only partially be separated from the MBA pottery on stratigraphic grounds (*see* above).

The Downsview LBA forms comprise convex-sided jars, round-shouldered jars, bipartite bowls and short-necked shouldered bowls. The jar forms are predominantly associated with coarser fabrics and the bowls with finer fabrics. The LBA forms present at Downsview are detailed below.

Convex-sided jars (Fig. 7.27: 5, Fig. 7.28: 23)

The Downsview convex jars have a range of rim forms: rounded; internally bevelled; flattened, square profile; and incurved. Convex jars with incurving rims and convex jars with internally bevelled convex rims, are characteristic LBA types and occur locally at Bishopstone (Hamilton 1977: fig. 40: 1, 2, 44, 61), Heathy Brow (Hamilton 1982: fig. 33: 10, 13) and Plumpton Plain B (Hawkes 1935: fig. 10: m;12:e,g).

Round-shouldered jars (Fig. 7.29: 27, 29)

This form of slack-shouldered jar occurs at Downsview with both upturned rounded, and upturned flattened, rim profiles. Similar jars are also present locally at Bishopstone (Hamilton 1977: fig. 41: 13), Heathy Brow (Hamilton 1982: fig. 33: 16, fig. 32: 33) and Plumpton Plain B (Hawkes 1935, fig. 10: l). The flattened, expanded rims associated with some of the Bishopstone and Heathy Brow round-shouldered jars are, however, absent from the Downsview LBA assemblage.

Bipartite bowls (Fig. 7.27: 7, Fig. 7.28: 15)

The Downsview bipartite bowls are plain with rounded rim, or upturned, squared, rims. Simple bipartite bowls also comprise a notable component of the Mile Oak LBA assemblage (*see* Section 2).

Necked shouldered bowls (Fig. 7.27: 6)

One out-turned, rounded rim from Downsview may be from a short-necked, shouldered bowl. One flaring, rounded rim also comes from a necked shouldered bowl. Similar forms occur locally Kingston Buci (E. Curwen 1931: figs 6 and 11) and further west at Highdown Hill (Wilson 1940: fig. 4: h).

Shouldered bowls with 'furrowed' shoulders (too small to illustrate)

The assemblage also contained one 'furrowed' (shallow, tooled channels) shoulder sherd. Furrowed bowls infrequently occur in Sussex. Two furrowed shoulder sherds are present in the Mile Oak LBA assemblage (*see* Section 2) and one example occurs locally among the LBA (stratigraphically mixed) plain wares from Kingston Buci (E. Curwen 1931: fig. 10).

The LBA assemblage: technology

The LBA assemblage has no secure evidence for the use of the slab-building construction technique, as has been noted for other LBA assemblages (e.g. Hamilton 1987). Finger-furrowing or vertical smearing is present on some of the Fabric F5 and F6 sherds. This is a constructional technique both for bonding coil, or slab, joins and for extending the height of vessel walls and is recurrently found on LBA pottery (Adkins and Needham 1985: 29; Jones and Bond 1980: 477). Some of the bases may have been formed by the slab method, these being subsequently joined to the body of the vessel with the pinching of the clay at the join resulting in a splayed form (tables 7.7 and 7.8). One base (Fig. 7.27: 12) has a concentration of flint grits on the exterior surface which most likely was a device to prevent them sticking to a surface during construction. This again is a recurrent feature of LBA pottery (Longley 1980: 65).

General discussion of the LBA pottery with specific reference to its dating

Convex-sided jars, straight-sided jars (absent from Downsview), and round-shouldered jars comprise the earliest LBA pottery types in Lowland Britain and emerge within the late second millennium BC. These forms are, for example, present at Cadbury Castle Somerset phase 4 (Alcock 1980) associated with radiocarbon dates which provide a collective date range of the fourteenth to tenth centuries cal BC (SRR-442/443, SRR-451, I-5973/5971). A similar assemblage from the double palisade phase of Rams Hill, Berkshire (Barrett 1975: fig. 3: 5:1–5) is dated by four radiocarbon dates (HAR-228/229/230/231) which provide a collective range of 1409–1080 cal BC and 908–800 cal BC. At Knights Farm, Berkshire, subsite 2, straight-sided jars, convex jars, and round-shouldered jars and shouldered bowls have a *terminus post quem* of 1510–930 cal BC HAR 2929); 3000±100 BP (Bradley *et al*. 1980: 271, 283). The dating of the earliest LBA assemblages in Lowland Britain as a whole is further discussed for the Mile Oak assemblage (*see* Section 2).

In Sussex convex jars and round-shouldered forms at Plumpton Plain B are associated with a medium winged axe which can be ascribed a date as early as the eleventh century BC (Barrett 1980: 311). At Bishopstone plain convex jars have a thermoluminescent date of 1550–350 cal BC (950±300 BC) (Bell 1977: 290; Hamilton 1977). At Yapton (Hamilton 1987) plain wares including convex jars, round-shouldered jars and shouldered bowls are stratigraphically associated with a 910–530 cal BC (HAR-7038, 2600±70 BP) date.

The presence of a furrowed bowl sherd at Downsview suggests that the chronology of the assemblage falls within the early first millennium BC. Furrowed bowls are rare in Sussex assemblages. Limited stratigraphic evidence suggests that furrowed bowls (often with flaring rims) appear early in the Wessex early first millennium BC (*see* discussion of Longbridge Deverill Cow Down furrowed bowls, Hamilton in Section 2).

By comparison with pottery from other regions, and extrapolating from the limited stratigraphic and absolute dating available from within Sussex (*see* Fig. 7.31), the Downsview LBA pottery would stylistically and technologically fall within a tradition which was emerging as early

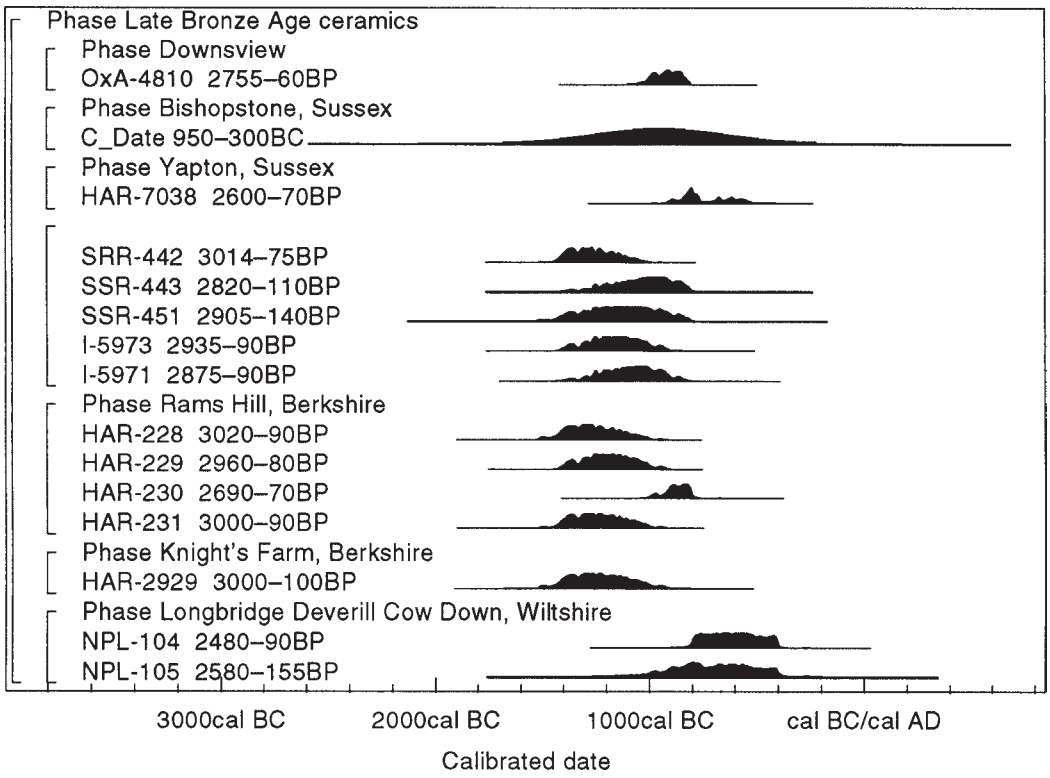

Fig. 7.31 Probability distributions of radiocarbon dates in stratigraphic association with Late Bronze Age pottery assemblages from Sussex, and similar assemblages from non-Sussex sites. The format is identical to that of Fig. 7.30. (Graph by Alex Bayliss.)

as the eleventh century BC and lasting in its limited use of decoration until the eighth century BC. The radiocarbon date (OxA-4810) from Downsview building terrace 4065 suggests a date within the range 1050–800 cal BC (OxA-4810; 2755±60 BP) for the LBA assemblage.

The significance of the Downsview Bronze Age pottery

Downsview importantly contributes to the limited number of radiocarbon-dated MBA ceramic assemblages which we have from Sussex (*see* Fig. 7.30). The MBA assemblage, in its range of both coarse ware and fine wares types, suggests that ceramic production (and thereby by implication community autonomy) may have been less self-sufficient and isolated than the pre-existing MBA ceramic database suggests. This is evidenced by the fine ware decoration which has its parallels westwards to Mile Oak and Wessex, and in the coarse ware urn(s) with horse-shoe applied bands which best compare with Essex examples.

The Downsview LBA assemblage is an 'essentially plain ware' assemblage. It provides the first East Sussex radiocarbon date for the growing number of Later Bronze Age plain ware assemblages which are now being isolated in Sussex (e.g. Hamilton 1987, 1993). It includes some distinctive fine ware types such as the furrowed bowl which, at present, has only a limited presence in Sussex LBA assemblages.

The Downsview pottery evidences both MBA and LBA on-site activity. Sussex has several 'mixed' MBA and LBA plain ware assemblages where precise stratigraphic information is lacking (e.g. Kingston Buci; Highdown Hill). The possibility of settlement continuity and craft continuity between the two ceramic phases are important issues. The further investigation of these questions requires detailed stratigraphic recording and analysis of sites which produce assemblages from both periods. Although the Downsview assemblages have suffered from stratigraphic disturbance, it has been demonstrated that we are dealing with two discrete and successive on-site assemblages.

Baked clay

David Rudling

In contrast to the sites at Mile Oak (*see* Section 2) and nearby Varley Halls (Greig 1997), the excavations at Downsview yielded very little baked clay. Although there were no definite objects (such as loomweights or spindle whorls), pieces of baked fine clay from Context 2429 (a fill of negative lynchet 2427) might be from a mould or moulds. Relatively large quantities of pieces of daub, some with organic impressions, were found on building terrace 2262. While much of this daub was recovered from Context 2263 (the uppermost fill of the terrace), large amounts of baked clay/daub were also found in post-holes 2391 and 2828. (Fig. 7.20). It is thus possible that at least one phase of the building on terrace 2262 may have caught fire, and/or that baked clay was deposited on the terrace either deliberately (i.e. as packing material in post-holes) or as a result of colluvial action once the terrace had been abandoned.

A catalogue of all the 'daub'/baked clay from Downsview forms part of the archive, as does a list of various Post-Medieval bricks and tiles.

Copper alloy objects

Stuart Needham

1 Awl (Context 2480). Figure 7.32: 1

Length 51.0mm; maximum width tang 4.5mm; maximum thickness (shank) 3.5mm; weight 2.6g.

Good dark green patina with scattered light corrosion; pointed end intact, but wedge-like tang end chipped, possibly in antiquity.

Shank of presumed working end with round section; this abruptly flattened at centre by means of tapered facets, giving tang a thin sub-rectangular section. Copious fine grinding marks on shank – both longitudinal and overlapping diagonal ones.

This is a basic Bronze Age implement type, assumed to be an awl or tracer, with the flattened tang sunk into a wooden handle. The type had a long currency.

2 Tracer/awl (Context 4003; found with stone metalworking object no. 2). Figure 7.32: 2

Length 113.5mm, maximum width tang 6.8mm; maximum width of contorted part 7.5mm; weight 20.1g.

Dry grey-green surface with numerous 'granular' corrosion deposits. Bronze with lead and arsenic traces (*see* Butler and Hook's report, below).

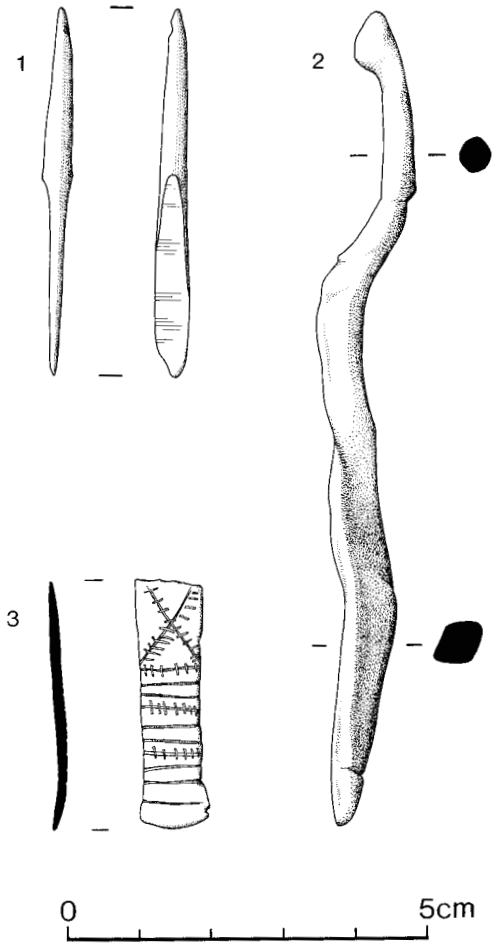

Fig. 7.32 Downsview: Copper alloy objects.

Two-thirds of the length describes a very convoluted form with variation in thickness and detailed section. It has almost certainly been deformed due to excessive heating, approaching the melting point. A crack has opened up partway across the angular junction between the convoluted part and the remaining straight section. The latter is by contrast of regular slightly rhombic section and tapers to a wedge end in classic tang form. The supposed working end is now an amorphous blob and it is not possible to ascertain whether it would have been pointed or 'chisel' edged.

As with object no. 1, this appears to have been a standard piercing or punching instrument. The partial melting was presumably due to an accident, although it seems possible that the working end was being deliberately reheated to anneal the metal. This would be necessary if the structure was being made brittle by regular hard work, such as punching metal or stone.

3 Decorated strip, reworked (Context 2263). Figure 7.32: 3

Extant length 34.0mm; width broad end 9.7mm, width narrow end 8.7mm; maximum thickness 1.7mm; thickness of ends 0.7mm; weight 2.7g.

Dark green patina with only minimal interference from corrosion; patina partly chipped away at broader end. Bronze with zinc trace (*see* Butler and Hook's report, below).

Thin rectangular-sectioned strip of fairly constant dimensions (*c*. 8mm × 1.7mm) in central stretch. At the two ends it broadens slightly and thins towards still-blunt ends. That this is due to secondary working is clear from the fact the decoration has been partially reduced by hammering. It seems likely that this was a fragment from a larger object, perhaps a bracelet, finger-ring, or binding strip. It seems that it was being reshaped or trimmed for further use.

The decoration falls into two fields. One comprises a simple saltire with each arm crossed by a series of transverse punch marks. The second field has ten grooves traversing the width of the strip; every third groove again carries a row of transverse strokes. The longer grooves are continuous and do not show signs of individual punch marks. The small strokes each have a ridge across their middles which must derive from a notch in the punch; two are double-struck. Overall the decoration is rather poorly laid out with irregular spacing and punch rows straying from the presumed intended alignment. The surfaces, especially the plain back, carry many longitudinal striations, presumably from grinding.

Bronze Age bracelets in Britain and Europe frequently convey superficially similar geometric ornament incorporating both multiple groove bands and saltire motifs. However, the Downsview fragment does not match any established type either in form or precise decoration. On present evidence it cannot be securely dated to the Bronze Age, and a later date in the Medieval period is considered possible (Angela Evans, pers. comm.).

4 Sheet-like fragment (Context 2263). Not illustrated

Extant length 14.5mm; extant width 16.0mm; max. thickness 1.5mm; max. breadth flange 2.0mm; weight 1.4g.

Powdery light green surface. There is corrosion loss at all edges so that it is difficult to tell which are breaks. One edge

retains the beginning of a small lip or flange on one face only. It is possible that there was a similar feature along the opposite side.

The fragment cannot readily be attributed to any object class. It could, for example, derive from a sheet ornament or from the tang of a light-duty blade.

5 Sheet-like fragment (Context 2263). Not illustrated

Extant length 13.0mm; extant width 4.5mm; maximum thickness 0.9mm; max. thickness lip 1.3mm; weight 0.2g.

Dark green patina with limited corrosion spots. Thin sheet-like fragment on which one edge has been turned up into a tiny flange. This edge bears hammered or cut facets; the other three edges are broken or cut. As with object 4, this is unclassifiable.

Stone metalworking equipment

1 Mould fragment (Context 2047). Figure 7.33

Mould

Extant length 122mm; extant width 62mm; maximum thickness 60mm; weight 406.7g.

Matrix

External diameter of ring at break 61mm; width of band 7.5–9.0mm; depth of band 2.6–3.6mm.

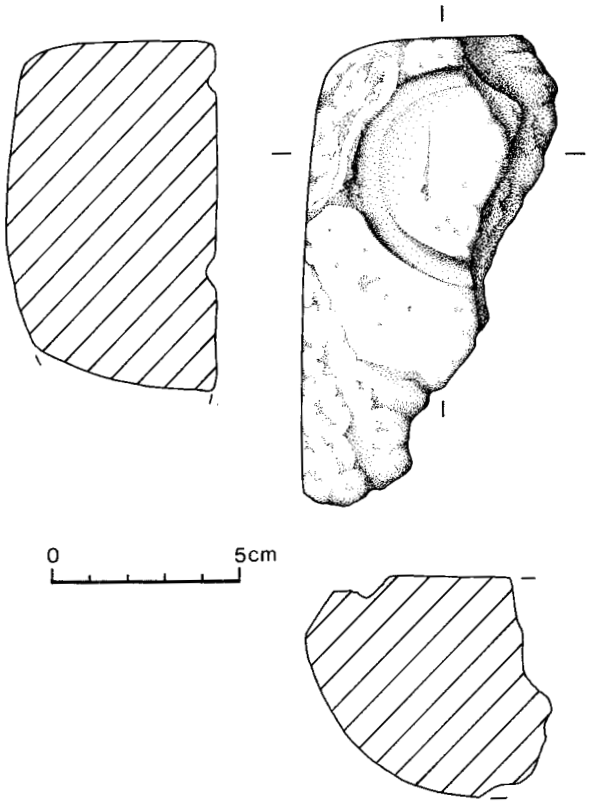

Fig. 7.33 Downsview: Stone mould.

Mould

This fragment represents one side of a mould valve of classic 'D' section. The block is neatly finished all round (where original surfaces remain). The top is not quite perpendicular to the extant side. The main face carrying the matrix is virtually flat with just marginal concavity in the transverse section. This provides an even surface for contact with a complementary valve. The latter would probably have had a mirror image matrix unless the casting was destined to have a flat back, in which case a flat cover would have served for the second valve.

The mould is in two fragments, and apart from the main breaks there is further damage. The top front corner has been detached thus removing the outer edge of the adjacent matrix. A shallow transverse furrow at the base of this fracture also seems to be damage rather than an original entry point to the matrix cavity. Most of the remaining angle running down the side of the block has been chipped. However, towards the bottom of the piece this rougher surface bears thin coppery-brown deposits. Some of this damage may thus have occurred prior to the mould's abandonment. The rest of the matrix and surrounding face is very pale-coloured with just a tinge of green, although no metallic traces were detected by surface analysis (*see* Butler and Hook's report, below).

Matrix

All that survives is about half of a roughly elliptical form which seems likely to have been either penannular or fully annular. Assuming co-alignment with the mould edge, the matrix appears in detail to be onion-shaped (the apex downwards in Fig. 7.33). The matrix furrow has an asymmetric near V-section, steeper on the outer side. Its width is reasonably constant.

Insufficient of the matrix survives to make a definite identification of the object cast. One possibility is a bracelet of lozenge section of the kind occasionally seen in Taunton Phase ornament hoards (e.g. Monkswood and Edington Burtle: Smith 1959: 147, Fig. 2; Durnford and Ebbesbourne Wake: Moore and Rowlands 1972: pls 14–15; Grimstone: Rowlands 1976: pl.11.34 (5)). Such bracelets are generally penannular. The dimensions of the Downsview matrix compare favourably with them.

An alternative identification is possible to account better for the continuation of the mould for at least 50mm (an unknown additional length is missing) beyond the annular matrix showing. It seems rather long simply to provide space for the feeder arrangement, although it could have allowed a second matrix for a discrete object. Alternatively, the length of the mould might suggest that the extant matrix continued axially along a now missing centre-line. This would allow reconstruction of a quoit-headed pin. A lozenge section head would be unusual in this context, but at least one quoit-headed pin has a triangular section, that from the Monkswood hoard, Somerset (Smith 1959: 147, Fig. 2.1), while others can have elliptic and even slightly onion-shaped quoits (e.g. Boughton Fen: Lawson 1979b: 47, Figs 2 and 3a).

2 Whetstone (Context 4003; found with copper alloy object no. 2). Figure 7.34

Length 49.5mm; width broad end 26mm; width narrow end 23mm; maximum thickness 10.0mm; weight 14.4g.

Tabular block of stone which has been given a regular shape: parallel faces, gently tapered in plan and generally elliptic in section. This section is, however, interrupted by furrows along either side of one face which presumably result from whetting. One furrow is more pronounced in its central section. The broader end is flat, the narrower one more concave, but both bear hone-smoothed faces.

This would have been a useful finishing tool, with the possibility of all surfaces being utilised, perhaps in different ways. However, the detection of tin globules without any other metallic elements is difficult to explain (*see* Butler and Hook's report, below).

Two pieces of a stone mould (lab nos 44289Q and 4429OT), and a probable whetstone (lab no. 44291R) were examined with an optical microscope.

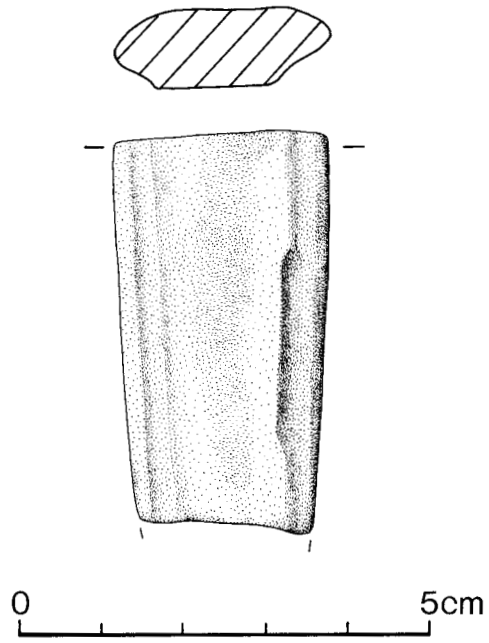

Fig. 7.34 Downsview: Whetstone.

Examination of the petrology of the stone artefacts

M. S. Humphrey

Two pieces of a stone mould (lab nos 44289Q and 4429OT), and a probable whetstone (lab no. 44291R) were examined with an optical microscope.

Stone mould (No. 1)

This consists of oolitic limestone; it contains numerous fossils (probably shell fragments) and can therefore be additionally described as fossiliferous. British oolitic limestones are in general of Jurassic age. As no Jurassic rocks outcrop in Sussex, an origin considerably to the west (greater than 150km) is probable.

Whetstone (No. 2)

The whetstone is of a beige siltstone. It is not possible to be more specific about the age or possible provenance of this rock without thin-sectioning of comparative material.

Analysis of two copper alloy and two stone artefacts

A. J. Butler and D. R. Hook

Four items were submitted to the Department of Scientific Research of the British Museum for examination and analysis. The two stone artefacts, a whetstone (No. 2) and two fragments of a stone mould (No. 1), were analysed at a number of areas using X-ray fluorescence (XRF), to try to identify any surviving metallic traces. A decorated copper alloy strip (No. 3) and a copper alloy tracer/awl (No. 2) were also analysed qualitatively using XRF to investigate whether their compositions were consistent with an MBA date.

Examination of the whetstone under the binocular microscope revealed the presence of many small, metallic globules. XRF analysis identified these globules as tin, with no detectable copper or other metallic elements. It seems unlikely that if the whetstone had been used to work bronze, only the tin would have survived on the surface of the whetstone. The other obvious scenario of the stone being used to work a pure tin object also seems unlikely, given the paucity of tin artefacts from the MBA.

No metallic traces were found on either fragment of the stone mould.

The decorated metal strip was found to be bronze with a trace of zinc and small traces of silver, lead and antimony. The presence of zinc would be unusual in MBA metalwork.

The tracer/awl was found to be bronze with traces of lead and arsenic. While this composition is consistent with an MBA date, metalwork of this composition was used in many other periods.

Discussion of copper alloy metalwork and metalworking equipment from Downsview

Stuart Needham

The small assemblage of metalwork and stone metalworking equipment from Downsview cannot be treated in any sense as a coherent group. Only one of the objects (awl No. 1) can be regarded as being from a sealed stratified context. There is thus little contextual evidence to judge the date or nature of use of the objects, some of which could have been subject to considerable disturbance since their original incorporation in ancient deposits.

Although most settlement-based activity on the site took place during the Bronze Age, some of these pieces could

conceivably be later introductions. This is especially likely for the decorated piece of copper alloy strip (Cat. No. 3), which does not compare closely in technique to Bronze Age pieces and, furthermore, contains traces of zinc which would be very unusual in Bronze Age metalwork. The upper terrace fill from which it came did in fact yield a mixture of Bronze Age and Romano-British sherds. This fill also contained two bronze sheet fragments (Nos 4 and 5).

Immediately to the south, in Area J, copper alloy object No. 2 and stoneworking object No. 2 were recovered from the fill of a shallow semi-circular area – possibly part of a house platform with associated post-holes. The context (4003) also produced a large group of pottery, the vast majority being of Bronze Age date. This association and the possible functional relationship of the awl/tracer and whetstone in terms of metalwork maintenance could indicate an *in situ* context, but this does not necessarily imply primary debris at the locus of last use. Indeed, the relatively large amount of pottery could suggest a phase during which the area was being used for refuse disposal.

Awl No. 1, a familiar Bronze Age form with origins in the EBA, was retrieved from the middle fill of ditch 2423. Pottery from the entire fill was almost exclusively MBA (*see* above), with just two intrusive Romano-British sherds. Awls are becoming a recurrent find on settlement sites of MBA date, just as on LBA sites (Needham 1991: 173, Table 33).

Undoubtedly the object of most intrinsic interest, also having wider ramifications, is the stone mould fragment. Unfortunately, its dating is at present insecure; overall morphology is entirely consistent with that of Bronze Age stone moulds, but the lack of diagnostic features in the extant portion of matrix precludes attribution to object type and phase. Its context in upper fill 2047 of house platform 2046 offers no assistance since only a single sherd was recovered from it. The suggestions made above regarding the type of object cast (i.e. bracelet and quoit-headed pin) depend in large measure on the supposition that the mould comes from a MBA context. They obviously need to be treated with some circumspection until comparable, better dated pieces come to light.

The petrological identification of the stone as oolitic limestone is of some importance regardless of precise date. This mould, or the raw material for it, had obviously been displaced from its westerly source by some distance (>150 km). Such displacement can be matched for a few LBA moulds identified as made from Keratophyre (Needham 1981); doubtless it was commonplace for stone of a quality suitable for carving and resisting thermal shock to be distributed over large distances.

It has been observed elsewhere that evidence for metalworking is becoming not infrequent on excavated Bronze Age settlement sites (Needham 1993: 55–6). This suggests that metalworking activity was widespread and took place at many different locales. As yet there is little to indicate that metalworking was confined to sites at particular levels in the local settlement hierarchy. However, at many sites the relevant evidence is very sparse, which may indicate that the metalworking was very low-key and transitory.

Coins

David Rudling

The excavations revealed two coins, one Roman and one Post-Medieval (an illegible copper halfpenny from Context 4026). The Roman coin is described below:

Constantius II. *c*. AD 353–354. Ae 16mm.

Obverse

DN CONSTAN - TIVS PF AVG, bust draped right, pearl diademed.

Reverse

[FEL TEMP REPARATIO], falling horseman Type 3. Mintmark illegible.

Type as Carson and Kent (1972) Trier 76.

Context

4044 (topsoil to south of Ditch 2423).

Other metalwork

David Rudling

The excavations at Coldean Lane Sites A and B produced a wide range of metalwork, which is mainly Post-Medieval in date and from unstratified or topsoil/hillwash contexts. Copper alloy objects include a horse bridle-ring, a horse harness-buckle of sub-rectangular type with an iron pin, and a Royal Artillery button of the late eighteenth/early nineteenth century (Context 4003). Iron objects include part of a horseshoe, a blade and nails. Finds of lead include shot, sheet metal, droplets and a large piece of molten metal. A full catalogue forms part of the archive.

The geological material

Luke Barber (incorporating comments by John Cooper, Booth Museum, Brighton)

The excavations at Downsview produced in excess of 5,042 pieces of geological material weighing more than 481,496g. A full list of this material by context forms part of the archive, although the data for the whole site are summarised by stone type on Table 7.9.

Much material, particularly the 'iron ore/ironstone', due to its quantity, size and weight, was quantified and discarded in the field. This proved unfortunate as when a retained sample was studied during post-excavation analysis, this rock type was found to cover a number of variants, some of which originated on the Downs (Table 7.10: group 5) and some from the Weald (Table 7.10: groups 7 and 11). It was therefore decided to create another group for this unclassified material knowing that some of groups 5, 7 and 11 would be mixed within the group (Table 7.10: group 16).

Table 7.9 Downsview: Worked stone summary.

Context	Stone type	Weight (g)	Description
2047	Oolitic Limestone	406	Mould: *see* report by Stuart Needham
2082	Upper Greensand	150	Worked flat on two adjacent sides
2095	Upper Greensand	160	Part of flat base with adjacent smooth curving side. Possible rotary quern fragment
2202	Sarsen	785	Fragment of quern/grain-rubber. Rubbing surface flat
2314	Quartzite	2,000	Large cobble with semi-flattened sides.Grain-rubber?
2329	Sarsen	760	Possible quern/grain rubber fragment. One surface smoothed
2374	Iron-rich sandstone	155	Worked/smoothed flat on one surface
2416	Sarsen	2100	Fragment of 'D' sectioned grain rubber
2424	Wealden Sandstone	150	Smoothed tabular whetstone or water-worn
4002	Wealden Sandstone	5	One face smoothed
4003	Siltstone	14	Whetstone – *see* report by Stuart Needham
4033	Wealden Sandstone	30	Smoothed tabular whetstone fragment?
4054	Sarsen	410	Quern/grain-rubber fragment. Part of flat smooth rubbing surface
4064	Sarsen	200	Fragment of quern/grain-rubber. Flat rubbing surface
4065	Wealden Sandstone	190	Flattened oval pebble, broken but with smoothed surfaces. Possible whetstone
	Mudstone	90	Flattened irregular pebble. Either a smoothing stone or water-worn
	Mudstone	130	Flattened circular pebble. Either a smoothing stone or water-worn

A variety of different stone types were present in the assemblage. Most of these could be found in the vicinity of the site or a little way to the north in the Weald. The stone types were as follows:

- Group 1 – Coombe Rock. A poorly consolidated 'chalky mud', some with blue staining, found all over the Downs in dry valley fills.
- Group 2 – Burnt flint, burnt chalk and flint beach pebbles. The burnt flint and chalk has been fully listed in the archive. The presence of beach pebbles does, however, show the exploitation of coastal resources.
- Group 3 – Chert. A single piece of this rock type was located from the site. Context 4035.
- Group 4 – Sarsen sandstone. A relatively large number of sarsen pieces was recovered from the excavations (Table 7.10). The colour range of the excavated pieces varies from off-white to light-dark grey with some orange, red, purple and black examples. Some sarsen showed colour zonation suggestive of burning. Most was medium grained although some very coarse material was present. The largest sarsen piece weighed 13,990g. Sarsens naturally occur as erratics in the Brighton area and had been extensively utilised during the occupation of the site. Much had been used as post-packing and a number of pieces show signs of having been utilised as 'grain-rubbers' (Table 7.9). Although not an ideal stone for grinding due to its friability, a number of the 'grain-rubber' fragments have a fairly hard, flat rubbing face, presumably due to use over a period of time. It is possible other fragments of grain-rubbers/querns were present, however, but without part of their grinding face remaining they would have been unidentifiable. Most of the identified grain-rubbers were of off-white to pinkish grey sarsen, although a few dark grey examples are also present. Only one fragment is diagnostically large, being a substantial part of a D-sectioned grain-rubber in dark grey sarsen (Fig. 7.35) from post-hole 2404.
- Group 5 – Iron-rich fissure fills. A number of variants of this stone type were present. All have an orange to rust brown colouring and always occur as irregular lumps with no bedding planes visible. Pieces frequently contain voids. Inclusions consist of sand grains, siliceous material and true flint. Some of the material can be considered as Boxstone and all the material in this group is of decomposed and refused rock. The source of this stone is likely to be solution pipe/fissure fills in the chalk and thus would be locally available. Some of the material from this group is undoubtedly present in group 16. As with the sarsen, this material is frequent in Bronze Age contexts, again often being used for post-packing.
- Group 6 – Calcite. A few pieces of this mineral, probably originating from the chalk, were found in Bronze Age contexts.
- Group 7 – Iron-rich sandstone (Wealden). This group consists of fine- to medium-grained bedded sandstones. Although present in low quantities, the occurrence of this stone demonstrates the utilisation of Wealden

Table 7.10 Downsview: Geological material from all contexts.

Stone type	No. of pieces	Weight (g)	% by weight
1. Coombe Rock	4	460	0.1
2. Burnt flint, burnt chalk, beach pebbles	423	11,553	2.4
3. Chert	1	1,410	0.3
4. Sarsen sandstone	239	101,695	21.1
5. Iron-rich fissure fills	100	13,380	2.8
6. Calcite	2	10	0.002
7. Iron-rich sandstone (Wealden)	23	1,620	0.34
8. Wealden sandstone	4	375	0.077
9. Siltstone	2	201	0.04
10. Mudstone (Wealden)	2	220	0.05
11. Wealden 'Iron Ore'/iron stone	9+	525+	0.11
12. Upper Greensand	2	310	0.06
13. Limestone	3	479	0.1
14. Quartzite	1	2000	0.4
15. Slate	5	60	0.01
16. Unclassified 'iron ore' (groups 5, 7, 11)	4223+	347,214	72.1
Total	5043	481,512	

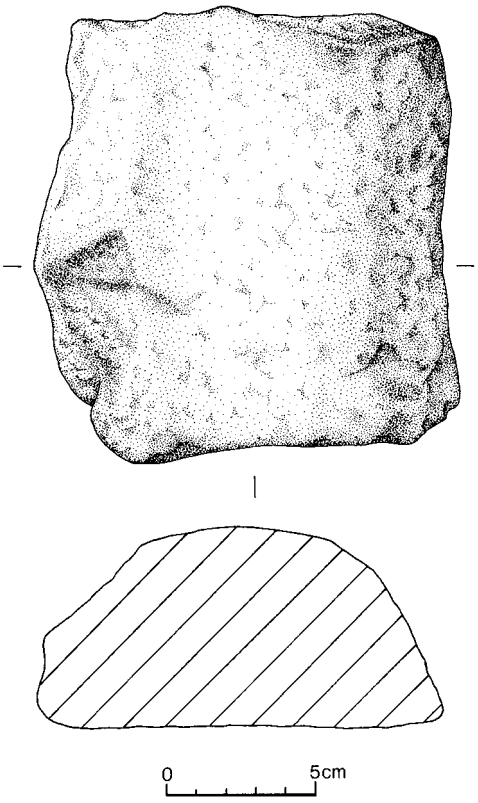

Fig. 7.35 Downsview: Part of a grain rubber.

resources during the Bronze Age. One piece in this group shows some signs of working (Table 7.9: Context 2374). It is likely that some of this stone type is incorporated in group 16.

- Group 8 – Wealden sandstone. This fine- to medium-grained bedded sandstone probably also originated in the Weald; some may have come from the Lower Greensand Beds. A number of the fragments appear to show some working, a few as the result of being utilised as whetstones (Table 7.9).
- Group 9 – Siltstone. One iron-rich example of this stone was located in post-hole 2105 while a further beige example (identified by M. S. Humphrey of the British Museum) came from Context 4003; *see* above). It is possible both siltstone pieces are of Wealden origin.
- Group 10 – Mudstone (Wealden). Two examples of this compacted stone were recovered. Both are in the form of flattened pebbles (Table 7.9) and can be seen as either the result of water-wear or utilisation as smoothing/polishing stones.
- Group 11 – Wealden Iron Ore/Ironstone. This stone type is extremely rich in iron, with some pieces being of good ore quality. Its source is likely to be anywhere north or east of Hassocks. Much of this stone type has undoubtedly been included in group 16 and thus its true percentage of the site assemblage unfortunately cannot be calculated. Much of the sample, however, does appear to have come from pit 2054. Why this pit should contain such a concentration of this type is uncertain. It is possible that the rock holds heat well due to its iron content and could be used for a sauna. None of the examples, however, show any obvious signs of heating, and it is possible the rock was collected in the pit as a store for smelting. This suggestion must remain tentative however, even though a lot of the pieces appear to be of good ore quality.
- Group 12 – Upper Greensand. Only two examples of this fine-grained sandstone were present. Both showed signs of having been worked (Table 7.9) and are likely to be the result of Bronze Age activity.
- Group 13 – Limestone. One example of limestone, possibly from the Woolwich Beds in the Newhaven/Peacehaven area, was located in Context 2263. The other fragments were from a mould (*see* report, above) of fossiliferous oolitic limestone (identified by M. S. Humphrey). This example is not local, with the nearest outcrop being some 150km to the west.
- Group 14 – Quartzite. A single example of this very dense rock was recovered from Context 2314. The piece consists of a large cobble with flattened faces, possibly the result of the piece being used as a rubbing stone. The source for this stone is unknown, but it is unlikely to be of local origin.
- Group 15 – Slate. Both West Country and Welsh are present, but all are from unstratified contexts.
- Group 16 – Unclassified 'iron-ore'. This group undoubtedly includes stone from groups 5, 7 and 11, as well as Limonite and Iron Pyrites. Much of the stone in this group consisted of large irregular pieces, often weighing in excess of 3,000g each. It appears to have frequently been used as post-packing (for example Context 2350), and was particularly common in pit 2054 (60 pieces weighing 31, 975g). Other contexts where this stone group was particularly common included: 2095 (154 pieces weighing 14,835g); 2263 (2382+ pieces weighing 49,105+g) and 2432 (138 pieces weighing 58,000g).

Discussion

The geological material from the site suggests that during the Bronze Age downland resources were utilised to the full, with local stone being used for construction (post-packing) and food processing (grain-rubbers). The presence of beach pebbles indicates coastal exploitation, while the Wealden material shows the use of geological resources to the north. Much of the latter appears to have been worked or brought in for a specific purpose, possibly for use in a sauna or for metalworking. Material such as the fossiliferous oolitic limestone mould fragments and quartzite 'grain-rubber' indicate more distant contacts. However the quartzite 'cobble' could potentially have been collected from the beach as a result of longshore drift, while the mould may have been brought in with a travelling smith.

The animal bones

Patricia Stevens

Introduction

The bones were examined and recorded using a system based on that followed by Tony Legge (Birkbeck College, University of London) and methodology used within the

Ancient Monuments Laboratory (Jones *et al*. n.d.). Measurements were taken following those recommended in the AML Manual or by von den Driesch (1976), and from these data some size estimates could be made. All bones were examined for butchery, pathology, gnawing, erosion, and ageing. Tooth-wear data were recorded following Grant (1982). Large and small ungulate are used where it is not possible to identify fragments to a particular species; large ungulate relates to those fragments which could have come from cattle or horse, and small ungulate relates to those fragments which could have come from sheep or pig. Unidentified mammal relates to small fragments which cannot be attributed to any particular species. The bones were generally in a very friable condition and were of a chalky/white appearance typical of material from downland sites.

A total of 2,017 animal bone fragments were examined from 79 contexts, 23 of which contained 10 or more fragments of bone. A full record of these bones forms part of the archive. Nine species of mammal and bird were identified, namely – cattle (*Bos* sp.), sheep/goat (*ovicaprid*), pig (*Sus* sp.), horse (*Equus* sp.), dog (*Canis* sp.), hare (*Lepus* sp.), hare/rabbit, fowl, (*Gallus* sp.) and goose (*Anser* sp.). All the above species are represented by fairly small numbers, with the major proportion of bone – around 84%, being large and small ungulate, and unidentified mammal (*see* Table 7.11).

Table 7.11 Downsview: Animal species list.

Species	No. of bones	%
Cattle (*Bos* Sp.)	199	10
Ovicaprid	70	3
Pig (*Sus* Sp.)	6	
Horse (*Equus* Sp.)	3	
Dog (*Canis* Sp.)	1	
Hare (*Lepus* Sp.)	8	
Hare/Rabbit	1	
Fowl (*Gallus* Sp.)	1	
Goose *(Anser* Sp.)	1	
Large ungulate	414	20
Small ungulate	452	22
Unidentified mammal	859	42
Unidentified bird	2	
Total species	9	
Total bones	2,017	

It can be seen from Table 7.12 that cattle are represented by almost all parts of the skeleton, whereas sheep/goat are represented mainly by the main meat-bearing bones and teeth. Pig is represented by single bones of the forelimb, together with a maxilla fragment and a tooth, with horse being represented by a jaw fragment, a single tooth and a

Table 7.12 Downsview: Animal species by part of skeleton.

Part of skeleton	Species													
	1	5	6	7	12	13	14	16	17	18	19	20	21	Total
JAW	22	1	0	1	15	0	0	0	0	0	0	0	0	39
SCAP	19	2	1	0	13	0	0	0	0	0	1	0	0	27
HUM	10	6	1	0	0	0	0	0	0	0	0	0	0	17
RAD	4	3	1	0	0	3	0	0	0	0	0	0	0	11
ULN	1	0	1	0	0	0	0	1	0	0	0	0	0	3
MC	4	0	0	0	0	0	0	0	0	0	0	0	0	4
APH	1	0	0	0	0	0	1	0	0	0	0	0	0	2
BPH	1	1	0	0	0	0	0	0	0	0	0	0	0	2
PELVIS	7	0	0	0	5	1	0	0	0	0	0	0	0	13
FEM	9	1	0	0	0	1	0	0	0	0	0	0	0	11
TIB	6	5	0	0	2	6	0	0	5	0	0	0	0	24
CAL	1	1	0	0	0	0	0	0	0	0	0	0	0	2
AST	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TARSALS	2	0	0	0	0	0	0	0	0	0	0	0	0	2
MT	2	0	0	0	0	1	0	0	0	0	0	0	0	3
MAX	2	2	1	0	0	0	0	0	0	0	0	0	0	5
HC	1	0	0	0	0	0	0	0	0	0	0	0	0	1
RIB	0	0	0	0	126	152	0	0	0	0	0	0	0	278
VERT	2	0	0	0	27	3	0	0	0	0	0	0	0	32
BCD	0	0	0	0	0	0	0	0	0	0	0	1	0	1
LC	0	0	1	0	0	0	0	0	0	0	0	0	0	1
LM3	1	7	0	0	0	0	0	0	0	0	0	0	0	8
UM3	0	4	0	0	0	0	0	0	0	0	0	0	0	4
FRAG	0	0	0	0	50	163	0	0	0	842	0	0	0	1055
LFRAG	0	0	0	0	111	82	0	0	3	17	0	0	2	215
SFRAG	73	0	0	0	49	0	0	0	0	0	0	0	0	122
LPM	1	3	0	0	0	0	0	0	0	0	0	0	0	4
LM	12	16	0	0	0	0	0	0	0	0	0	0	0	28
UM	14	6	0	0	0	0	0	0	0	0	0	0	0	20
LI	4	2	0	1	0	0	0	0	0	0	0	0	0	7
MP	1	0	0	1	5	0	0	0	0	0	0	0	0	7
TFRAG	7	10	0	0	11	40	0	0	0	0	0	0	0	68
Total	199	70	6	3	414	452	1	1	8	859	1	1	2	2017

Key and % of species: 1 = Cattle (*Bos*. sp.) (10%); 5 = *Ovicaprid* (3.5%); 6 = Pig (*Sus* sp.); 7 = Horse (*Equus* sp.); 12 = Large ungulate (20%); 13 = Small ungulate (22%); 14 = Dog (*Canis* sp.); 16 = Rabbit (*Oryctolagus cuniculus*); 17 = Hare (*Lepus* sp.); 18 = Unidentified mammal (42%); 19 = Fowl (*Gallus* sp.); 20 = Goose (*Anser* sp.); 21 = Unidentified bird

Table 7.15 Downsview: Animal bones by context.

	Species												
	Cattle (*Bos* Sp.)	Ovicaprid	Pig (*Sus* Sp.)	Horse (*Equus* Sp.)	Large ungulate	Small ungulate	Dog (*Canis* Sp.)	Hare (*Lepus* Sp.)	Hare/ Rabbit	Fowl (*Gallus* Sp.)	Goose (*Anser* Sp.)	Unidentified mammal	Unidentified bird
Context:													
Terrace 2042	2				9	24						15	
Terrace 2046	1												
Terrace 2050	10	14			38	57						10	
Terrace 2062					5	1						2	
Terrace 2262	7	1	1		4	1						18	
Terrace 4003		1	1		11	9						75	
Terrace 4065						105						87	
Pond 2259	9	1			14	23						6	
Pond 2425	31	6		1	93	5						60	
Pit 2054						10							
Ditch 2039					3							2	
Ditch 2423	120	33	1		196	105						500	
Neg.Ly. 2427	7	3		1	17	8						60	
Post-hole 2176						1							
Post-hole 2489	2												
Area J:UnStrat.		5			6	42	1	1				6	
Area K:UnStrat.	4	3	2		11	38		4	1	1		12	
Unstratified	6	3	1	1	7	23		3			1	6	2
Total	199	70	6	3	414	452	1	8	1	1	1	859	2

metapodial fragment. Dog and rabbit, domestic fowl and goose are represented by a first phalange, ulna, scapula and coracoid respectively, and two unidentified bird long-bone fragments. Hare is represented by five tibia and three long-bone fragments. The major proportion of large ungulate fragments are made up from rib and long-bone fragments, together with similar proportions of skull and small unidentifiable fragments, with vertebra, jaw, scapula and tooth fragments in similar proportions. The remainder are from pelvis, tibia and metapodials. Small ungulate fragments are again mainly represented by long bone and rib, with a larger proportion of small and tooth fragments. The unidentifiable mammal category consists mainly of small fragments and a small number of long-bone fragments.

Cattle

The cattle bones are represented by all major parts of the skeleton. A few bones were measurable, and from two of these it was possible to estimate shoulder heights of 120.8cm from a radius, and 102.8cm from a tibia.

From those few fusion elements present it can be seen that most animals would appear to be not less than three years of age, there being no unfused bone from early fusing elements (*see* Table 7.13 (Appendix 4)). From the teeth present it would also seem to indicate that the animals were adult and certainly none less than three years of age.

Some 12% of the cattle bones had been gnawed, and around 8% were eroded.

There was very little butchery evidence from the bones, apart from one mandible which had been split longitudinally, two pelvis fragments which had been chopped, and one tibia fragment which appears to have been sawn.

Sheep/goat

Fewer identifiable sheep/goat bones were recovered from the site and were mainly represented by teeth. Of those bone fragments which could be measured, it was possible to estimate the shoulder height from two: 64cm from a radius and 62.5cm from a calcaneum. Six lower third molars were measured and from these measurements we can see that there is little difference when compared with those from Mile Oak (*see* Section 2):

	Mean	No.	S.D.	Range	C.V.
Downsview	21.7	6	1.0	20.3 – 22.9	4.6
Mile Oak	21.7	6	1.1	19.8 – 23.1	5.2

The age of the sheep/goats was estimated from fusion data (Table 7.14 (Appendix 4)), from which it can be seen that practically all the sheep/goats survived up to the age of 36 months. This would suggest that the sheep were being kept primarily for meat (Payne 1973), with a very small number surviving after this age, presumably for breeding purposes.

Some 3% of the sheep/goat bones had been gnawed, and a similar number were eroded. One humerus appears to have been sawn.

Other species

Other species present are indicated by small numbers only and apart from noting their presence, nothing can be said. For the distribution of animal bones by context *see* Table 7.15 (prepared by D. Rudling). [*NB* Dog, hare, fowl, goose and bird were only present in unsealed or unstratified contexts, and dating is thus uncertain. D.R.]

Large and small ungulate fragments, together with unidentified mammal fragments, represent around 84% of the total fragments present, and approximately 50% of this number were severely burnt.

Discussion and conclusions

The most noticeable fact from this collection of bones is that the two major species are reversed in apparent importance when compared with those from Mile Oak (*see* Section 2). Downsview produced 199 cattle bones, compared with 90 at Mile Oak: and 70 sheep/goat bones, compared with 488 at Mile Oak. Pig and horse fragments are identical. It would seem therefore that the remains from Downsview compared more favourably with sites such as Down Farm, Wiltshire (Legge 1991b), Runnymede (Done 1980) and Grimes Graves (Legge 1992) than with those from its close neighbour at Mile Oak which would appear to be a more specialised site.

Marine molluscs

Penelope Hasler and David Rudling

A total of 147 marine mollusc shells (or shell fragments) were recovered from all contexts at Downsview. These included scallop (48 shells); periwinkle (41); oyster (38); whelk (9); mussel (8); limpet (2) and cockle (1). A full list by context forms part of the archive. Unfortunately, no marine mollusc shells were found in well-sealed Bronze Age contexts, most having been recovered from topsoil and colluvial deposits including hillwash in the upper fills of various Bronze Age building terraces. It is probably significant that the majority of the marine mollusc shells came from those areas of the site excavated completely by hand (i.e. the areas investigated by BHAS, the topsoil in the other areas having been removed by a mechanical excavator). Although it is therefore impossible to date most of the marine mollusc assemblage at Downsview, it is possible that some of the shells relate to the Bronze Age occupation of the site, while others probably belong to later periods. The total number of marine shells recovered at Downsview is very small when compared to the large assemblages at contemporary Mile Oak (*see* Section 2), but exceeds the small assemblage (22 minimum individuals) at the nearby MBA site at Varley Halls, where only three species (mussel, oyster and limpet) were found (Wilkinson 1997, microfiche). Thus, while at Downsview and Varley Halls marine molluscs do not appear to have had an important role in the MBA subsistence economy, at Mile Oak they were clearly of importance, especially mussel which accounts for 6,512 of the 6,641 shells from Trench 27.

Land molluscs

Keith Wilkinson

Introduction

Two separate areas were investigated using mollusc analysis at Downsview: a series of samples from the ditch surrounding part of the site, and from material accumulating in one of the building terraces. Both sets of data refer to material that accumulated after the construction of the site through colluvial action.

Sampling was carried out by the excavator and will be detailed later. Processing of the samples was carried out at the Institute of Archaeology, University College London, using methods adapted from Evans (1972). Samples were initially air-dried and weighed, and then were disaggregated in a mixture of water and 100 vol. hydrogen peroxide. The disaggregated samples were then sieved through a standard set of sieves of which the finest was 0.5mm. Material retained in each sieve was weighed before being separately bagged for later identification. This was carried out under a low power binocular microscope and with the use of a reference collection. In the tables which follow nomenclature is after Kerney and Cameron (1979).

The ditch sequence

Very few ditch fills from Later Bronze Age settlements have been sampled for mollusc analysis, although there are many examples from generally earlier Bronze Age barrow ditches which have been investigated.

Table 7.16 Downsview, ditch 2423: Mollusc shells.

Context	2424	2480	2486
Pomatias elegas Müller	4	8	14
Carychium tridentatum Risso	1	4	
Cochlicoa lubrica Müller	1	1	2
Cochlicopa spp	11	9	4
Vertigo pygmaea Draparnaud	1		3
Pupilla muscorum Linnaeus	7	23	11
Vallonia costata Müller	95	78	32
Vallonia excentrica Sterki	17	18	50
Ena montana Draparnaud	1	2	1
Punctum pygmaeum Draparnaud		1	
Discus rotundatus Müller	3	17	3
Vitrina pellucida Müller	1	3	4
Vitrea crystallina Müller	3		
Vitrea contracta Westerlund		6	3
Nesovitrea hammonis Ström		1	
Aegopinella nitidula Draparnaud	2	1	
Oxychilus cellarius Müller	18	14	5
Limacidae	5	1	1
Cecilioides acicular Müller	22	54	4
Cochlodina laminata Montagu		2	3
Clausilia bidentata Ström	1		
Candidula intersecta Poiret		1	
Helicella itala Linnaeus	8	7	
Monacha spp	1		3
Trichia hispida Linnaeus	10	16	7
Cepaea spp.	6	6	9
Total excluding *C. acicula*	197	229	155

A total of three samples were examined from the ditch deposits, one from the primary and the others from the secondary fill. Their location is illustrated in Figure 7.17. These samples were originally intended for flotation and so were far too large for mollusc analysis. Therefore prior to any processing they were divided, only half being used for mollusc analysis. Details of the molluscs found are provided in Table 7.16, and also as a percentage histogram in Figure 7.36.

The assemblages from all the samples are extremely diverse, being largely composed of species traditionally regarded as of 'open country' preference (Evans 1972), but also with smaller 'catholic' and 'shade-loving' components. The source of the material is probably both from molluscs actually living in the ditch (autochthonous) and those living without and eroding in by colluvial processes (allochthonous) (Evans 1990). Separation of molluscs from these two sources is not easy, but as with the fauna from Mile Oak (*see* Section 2), it is likely that the majority of the 'shade-lovers' are autochthonous, while the 'open country' component is mainly allochthonous. Note that there is a longer discussion on sources of molluscs from ditch deposits in the Mile Oak section of this volume.

Mollusc faunas from primary fills of ditches have been shown to reflect the landscape very soon after their construction (Thomas 1982). The sample from the primary fill of the ditch at Downsview shows a fauna that is dominated by *Vallonia excentrica*, a species which is intolerant of shade. Its close relative *Vallonia costata* is found in smaller numbers along with *Pupilla muscorum* and *Pomatias elegans*. As this fauna probably accumulated very soon after the ditch was constructed, it may indicate the type of environment in which the settlement was constructed. This would seem to have been open, with very little vegetation, i.e. Evans (1991) suggests faunas dominated by *V. excentrica* to be indicative of very short grassland. *P. elegans* is probably part of the autochthonous component of the fauna as conditions in a newly constructed ditch would be ideal for its burrowing activities. However, the presence of a single specimen of *Ena montana* is difficult to explain, as today it is rare in Britain (Kerney and Cameron 1979) and is thought to be synanthropic (Evans 1972), so just what exactly it was doing in a new, humanly constructed ditch is not known.

The samples from the secondary fills show several changes from the primary fill. *Vallonia excentrica* decreases in number, while *Vallonia costata* and the 'shade-lovers' increase. This probably reflects a greater development of an autochthonous fauna, and a change in environment outside the ditch to one of less stability, probably due to cultivation. The micro-environment inside the ditch also seems to have become more densely vegetated, as witnessed by the increase in *Discus rotundatus* and the Zonitidae. Both these factors point to the fauna having developed after the settlement was abandoned, as it is very unlikely that the people living there would have allowed their ditch to silt up and fill with vegetation, or suffer erosion inside their living area. If this is so it suggests that there was a hiatus in deposition between the primary and secondary fills.

Samples from the building terrace

Seven purposely taken samples were collected from building terrace 2042 in an attempt to gain an understanding of

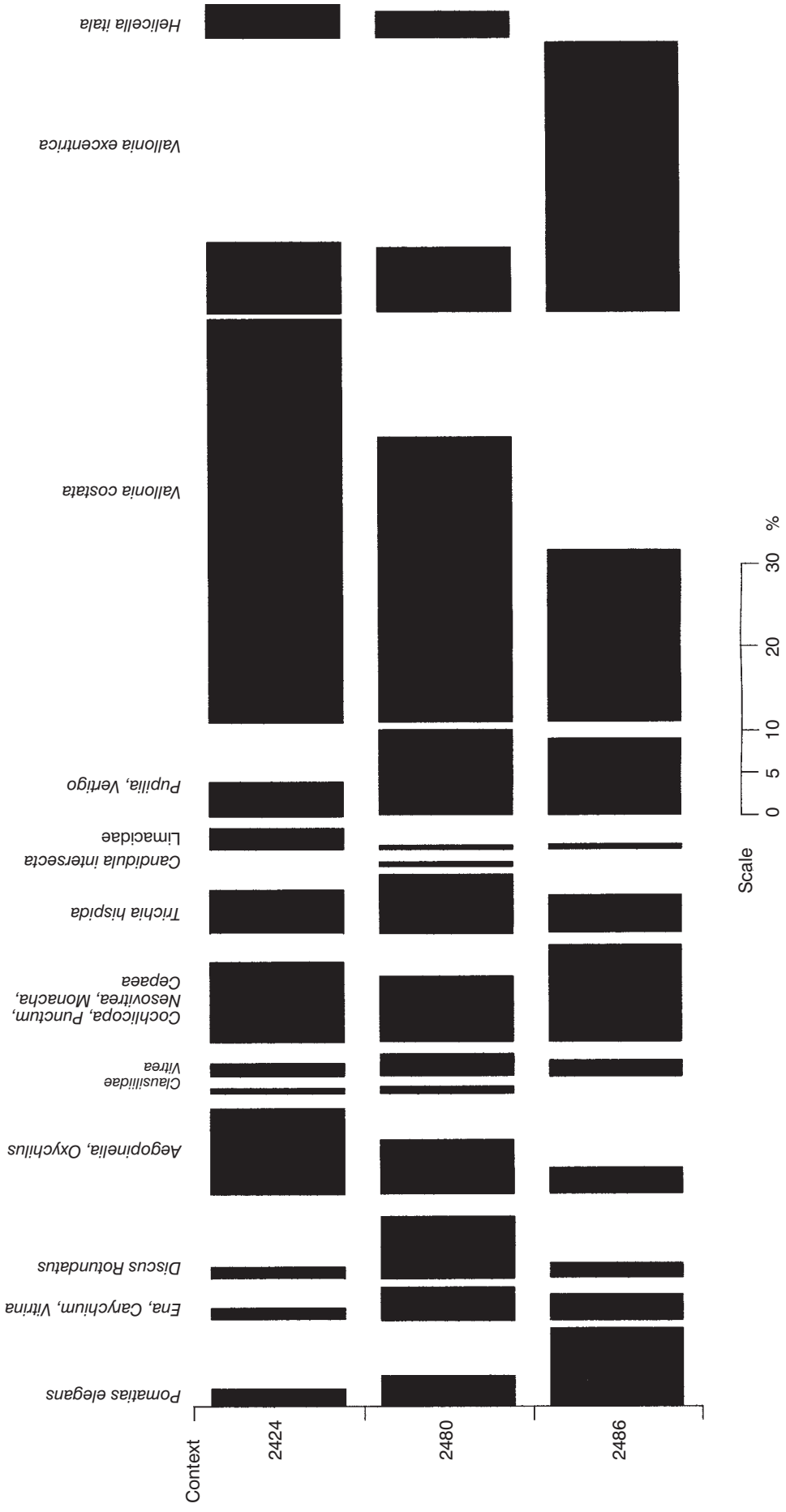

Fig. 7.36 Downsview, ditch 2423: Percentage histogram of mollusc shells.

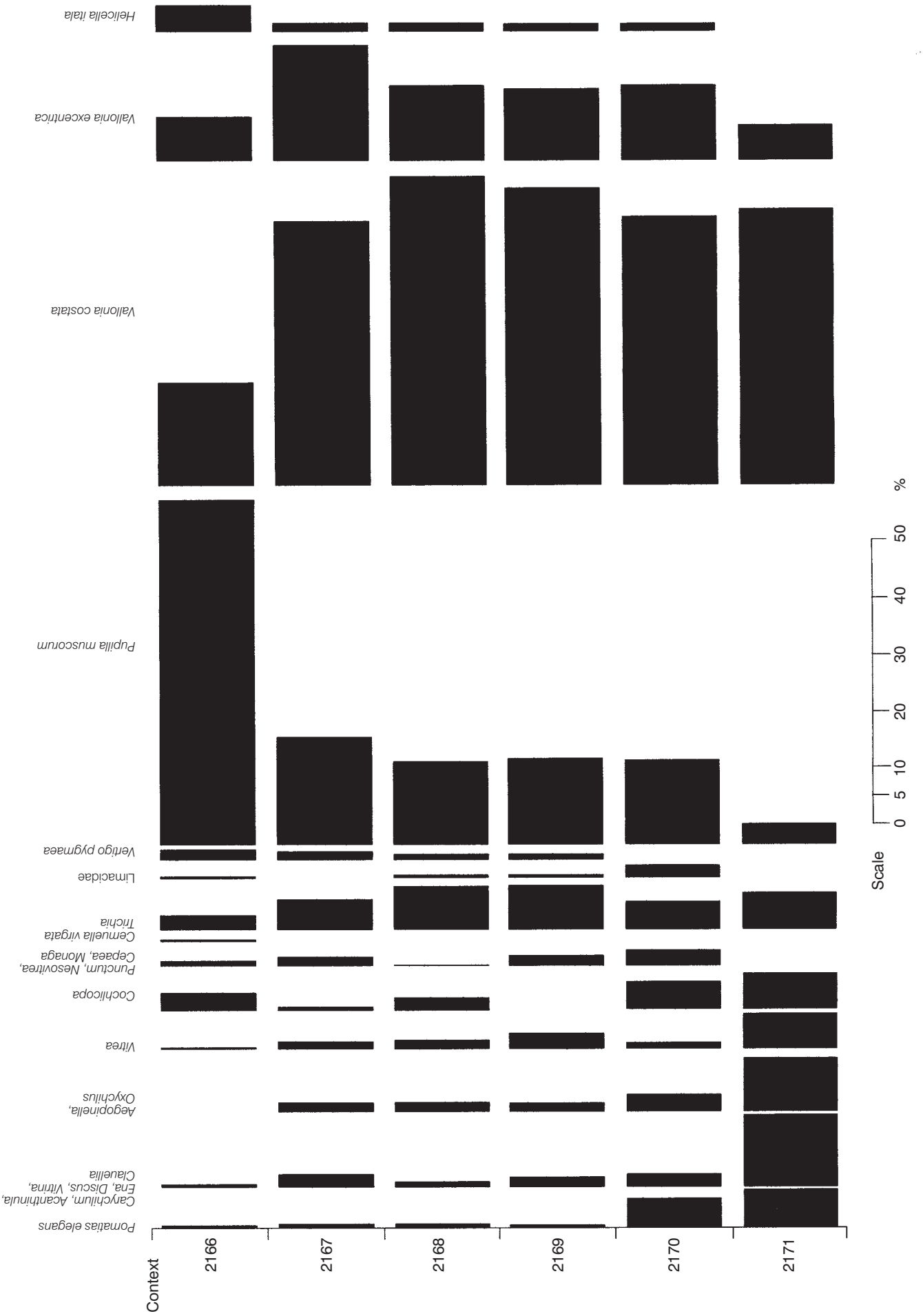

Fig. 7.37 Downsview, terrace 2042: Percentage histogram of mollusc shells.

the environment after abandonment of the building. All samples were of a similar volume, i.e. 10cm × 10cm × 5cm, and were taken by the excavator. The deposits filling the terrace consisted of seven very distinct layers (*see* Fig. 7.9), all of which had obviously accumulated through hillwash processes. However, the very fact that the layering was so clear suggests that little subsequent mixing has occurred, and that each accumulated as a result of a single or short series of erosional events. The molluscs found in these deposits are listed in Table 7.17.

The author knows of no other example where deposits accumulating in a building terrace have been analysed for molluscs. However, sediment deposition would seem to occur by much the same mechanism as in dry valleys (Bell 1983), or in negative lynchets (Thomas in Bell 1977). Thus almost all material retained in the terrace is colluvial and any molluscs recovered are therefore mainly allochthonous. Unfortunately, without the aid of experimental data it is difficult to be sure of the catchment area of any sediment eroding into the terrace, and therefore of the scale of the environment hypothesised from the molluscan studies.

Preservation deteriorated with depth for no apparent reason, but despite this mollusc numbers were sufficiently high to present the data as a percentage histogram (Fig. 7.37). This shows that during most of the period in which the deposits were accumulating (Zone A), the environment was very similar, the only major change occurring in the topmost sample (Zone B). It is true that the fauna from the bottom sample is different from those above it, but as it only contains 33 individuals there is no way of telling if this difference is a factor of the differential shell preservation.

Table 7.17 Downsview, terrace 2042: Mollusc shells.

Context	2166	2167	2168	2169	2170	2172
Pomatias elegans Müller	4	4	3	1	5	2
*Carychium tridentatum*Müller			1	3		
Cochlicopa lubrica Müller	24	3		2	1	
Cochlicopa lubricella Porro		1	1			
Cochlicopa spp	12	6	8	4	3	1
*Vertigo pygmaea*Draparnaud	15	7	2	2		
Pupilla muscorum Linnaeus	534	114	60	51	15	1
Vallonia costata Müller	158	283	234	182	50	16
Vallonia excentrica Sterki	70	124	57	44	14	2
*Acanthinula aculeata*Müller	1				1	
Ena obscura Müller			1			
*Punctum pygmaeam*Draparnaud	2	2	2	2	1	
Discus rotundatus Müller		5				2
Vitrina pellucida Müller		6	11	4	1	2
Vitrea crystallina Müller		3				2
Vitrea contracta Westerlund	1	3	6	9	1	
Nesovitrea hammonis Ström	2	2	1	6		
Aegopinella pura Alder		2				
*Aegopinella nitidula*Draparnaud		3	2	2		2
Oxychilus alliarius Müller		2				
Oxychilus cellarius Müller		1	4	2	3	1
Limacidae	2		1	1	2	
Cecilioides acicula Müller	45	1				2
Clausilia bidentata Ström				2		
Cernuella virgata da Costa	1					
Helicella itala Linnaeus	39	7	5	3	1	
Monacha spp.		2				
Trichia hispida Linnaeus	18	31	32	26	5	2
Trichia striolata Pfeifer		2		3	3	
Cepaea spp.		2		3	3	
Total excluding *C. acicula*	885	613	431	34	106	33

The fauna in Zone A is dominated by *Vallonia costata*, and to a lesser extent *Pupilla muscorum* and *Vallonia excentrica*, all indicative of an open environment. Evans (1991: 83) interprets faunas characterised by *V. costata* – admittedly with *Carychium tridentatum, Trichia hispida* and the Zonitidae in lower abundance – as being indicative of instability in sheltered and cool places. It is unlikely that Coldean was sheltered and cool at this time as it is situated on a south-facing slope (and perhaps this is a reason why frequencies of *C. tridentatum*, *T. hispida* and the Zonitidae are low), but otherwise this interpretation seems very likely. Evidence in support of this theory is found in the lithological composition of the samples, which is largely of granule- and pebble-sized chalk clasts likely to have been produced by ploughing. The small 'shade-loving' component of the fauna was likely to have been living in interstices between the chalk boulders deposited in the colluvium. However, their very presence indicates that there must have been refuges of shade from which they would colonise. This could either be in the form of patches of longer vegetation, limited woodland or even the (former) settlement ditch. To summarise, it is likely that at some time after the abandonment of the building, ploughing further upslope in an unstable and open environment, albeit with some shade, led to erosion causing material to be deposited in the terrace.

Zone B has a fauna that, although broadly similar to that in Zone A, is dominated by *P. muscorum* rather than *V. costata. P. muscorum* has affinities with instability, and so the environment would seem to be similar to that in Zone A, except that *Pupilla* does not seem to be found in historic cultivation deposits (Evans 1972). Zone B is likely to date from a period after the Roman conquest as a single specimen of the post-Roman introduction *Cernuella virgata* was found. The percentage of *Helicella itala* also increases in Zone B, while that of 'shade-loving' and intermediate species decreases. This suggests an environment of a very open character, but not through arable agriculture, and therefore a grassland maintained through heavy grazing of sheep or cattle is the most likely explanation. This type of environment has through a combination of short vegetation, trampling and a steep gradient been shown to be very susceptible to erosion (Evans 1992). There is a great deal of documentary evidence for sheep in particular being an important resource on the South Downs in historic times, e.g. there were 1,000–2,000 sheep pastured in Blatchington and Shoreham in 1341 out of a total for Sussex of 110,000 (Pelham 1934).

Synthesis

The two features sampled for molluscs have produced faunas that are only similar in their broadest sense, i.e. they both indicate open country conditions. Furthermore it is not certain if accumulation was simultaneous in both features, although it is almost certain that most deposition occurred after abandonment of the Bronze Age settlement. However, if the 'shade-loving' component of the fauna is removed from the ditch fauna, the result is an almost exact replica of Zone A of the terrace fauna, which in turn suggests that they were developing synchronously, or at least under the same conditions. The 'shade-loving' component of the ditch fauna is likely to be autochthonous, while the likely source of the 'open country' element is outside, so this conclusion

Table 7.18 Downsview: Charred plant remains.

	Building Terraces									Ditches				Ponds	
	2062	2050	2042	2262				4065		2039		2423		2259	2425
Context no.	2084	2096	2167	2392/6	2804	2808	2818/19	4066	4073	2040	2041	2480	2486	2374/260	2426
Cultivated plants															
Triticum dicoccum/spelta (emmer or spelt wheat)		1					1								
Triticum sp. (wheat)				1			1			1					
Hordeum vulgare L. (hulled barley)	3	2	1			2	28	1			11	3	3		
Cerealia indet.	2	1	1	2		1	3	2		1	3	1	1		1
Vicia faba L. var *minor* (broad bean/horse bean)							125*								
Wild plants															
Stellaria media/neglecta (chickweeds)				1											
Chenopodium sp. (goosefoot)				5											
Atriplex sp. (orache)				4											
Umbelliferae indet.				2											
Polygonum aviculare agg. (knotgrass)							1								
Fallopia convolvulus (L.) A. Love (black bindweed)					13										
Rumex sp. (dock)					1										
Corylus avellana L. (hazel) nut shell fragments	1				4										
Veronica hederifolia L. (ivy-leaved speedwell)												1			
Galium aparine L. (cleavers)		3			2						1				
Sambucus nigra L. (elder)									1						
Arrhenatherum elatius (L.) Beauv (onion couch tubers)						1								1	

* = estimated

would seem valid. Thus the following conclusions can be drawn from the mollusc fauna:

1 The settlement was built in open grassland.
2 After abandonment of the site, the ditch (and possibly some other areas of the site) became overgrown, allowing the development of an autochthonous 'shade-loving' fauna.
3 At approximately the same time cultivation further upslope led to erosion, and the deposition of colluvium in the ditch and hut terrace.
4 At some time since the Roman conquest the agricultural regime changed to pastoralism, although colluviation continued.

Charred plant remains

Pat Hinton

Methods

Some of the samples were received dry, after charcoal had been extracted, and others as wet 'flot'. Some of the latter were treated with hydrogen peroxide, and were rinsed over a 250mm sieve and then dried.

Almost all of more than 60 samples contained charcoal, snails, flint and small bone fragments, but only 19 included charred plant remains other than charcoal. These were sorted by stereo microscrope at 7–40× magnification.

Except that cultivated plants are given first, order and nomenclature in Table 7.18 accords with Clapham *et al*. (1987).

Cultivated plants

The majority of the cereal grains are severely burned and the few wheat grains are in particularly poor condition. Two might be either emmer or spelt and three retain only sufficient form to be recognisable as wheat. In the absence of chaff fragments no closer identification is possible. The barley is better preserved and the angular outline of some grains indicates hulled barley (*Hordeum vulgare* L.). A few show some asymmetry which suggests the 6-row form, but there is some distortion. Other very heavily charred and damaged grains and fragments are identifiable as cereals only by the characteristic texture.

These results are comparable with others from Later Bronze Age sites in Sussex. At Itford Hill (Helbaek 1957), Black Patch (Hinton 1982) and at Mile Oak (*see* Section 2) barley was the cereal found most frequently and in greater numbers. At each of these sites emmer occurred as a small proportion, but the presence of spelt at Black Patch, and possible presence at Mile Oak and Downsview hints at this species' emergence as the principal wheat. No grains suggesting a free-threshing wheat (*Triticum aestivum s. l.*) were identified.

The number of beans in the post-hole deposit has been estimated. There are 66 more or less whole beans, 62 halves, and many fragments which vary in size from almost half a bean to small pieces. Charred beans are found less frequently in archaeological deposits, presumably because they do not require fire in their preparation prior to cooking, and perhaps also because they are not so easily recovered by flotation. The presence of beans at the same three Later Bronze Age sites in Sussex (Black Patch, Mile Oak and Downsview), however, seems to suggest that their use was not uncommon at this time, at least in this part of Britain.

Wild plants

Hazel (*Corylus avellana*) and elder (*Sambucus nigra*) are shrubs or small trees of woodland or scrub, the latter particularly on base-rich soils, and both bear edible fruits.

The other plants may all occur as weeds of arable or otherwise disturbed land. Onion couch can be troublesome as a field weed when the tubers, or swollen basal internodes, become detached during cultivation, and the two instances here may represent arable weeds. It is also possible that this grass may have been uprooted from other ungrazed areas and used, with other dry plant material, as fuel, as seems likely at Mile Oak.

The cereal grains, seeds and other plant parts, which were found in comparatively small numbers, are likely to be remnants from hearths, or other fires, which have become scattered over the site throughout its occupation. The larger number of beans, however, with some cereals and only one weed seed, concentrated in two samples from a post-hole and apparently more closely related to the feature, are probably the burned remains of a food store.

Wood charcoal

Valdis Berzins

Fifteen samples were examined, of which 6 were recovered by wet-sieving, 5 by flotation and 4 were collected by hand. The main emphasis was on examining the fills of the fire-pits: most of the other samples were from post-hole fills.

Methods

The methods used were the same as those described in the report on the charcoal from Mile Oak (*see* Section 2), except that 5mm was the minimum size of fragments examined.

An estimate of the maturity of the original wood was obtained by observing 'twigginess' in the same way as for the Mile Oak material. However, this was done at a magnification of 24×, as well as 60×. Since the field of view covers a larger area at 24× magnification, curvature of the growth-ring boundary and convergence of the rays is more easily seen: growth-ring boundaries which appear straight at 60× magnification may be seen to be slightly curved at 24× because a longer section of the boundary is visible in the field of view. Similarly, rays which appear to be parallel at 60× may be seen to converge slightly at 24× magnification. Thus some charcoal which was not close enough to the pith of the wood to appear 'twiggy' at 60× magnification may appear 'twiggy' at 24×. Charcoal from the outer parts of mature timbers or larger branches will appear 'not twiggy' at both 24× and 60× magnifications.

Results

The following is a list of the taxa identified in the charcoal, together with a list of the native British species that these taxa include:

Identified to genus level:

Oak (*Quercus*)	pendunculate oak (*Q. petraea* (Matt.) Liebl.)
	sessile oak (*Q*. petraea (Matt.) Liebl.)
Maple (*Acer)*	field maple (*A. campestre* L.)
Ash (*Fraxinus*)	ash (*F. excelsior* L.)
Elm (*Ulmus*)	English elm (*U. procera* Salis.)
	wych elm (*U. glabra* Huds.)
Hazel (*Corylus*)	hazel (*C. avellana* L.)
Dogwood (*Cornus*)	dogwood (*C. sanguinea* L.)

Identified to sub-family level:

Pomoideae	common hawthorn (*Crataegus monogyna* Jacquin.)
	woodland hawthorn (*Crataegus oxyacanthoides* L.)
	crab apple (*Pyrus malus* L.)
	pear (*Pyrus communis* L.)
	Whitebeam (*Sorbus aucuparia* L.)
	rowan (*Sorbus aucuparia* L.)
	wild service (*Sorbus torminalis* (L.) Crantz)

Table 7.19 shows the weights of charcoal of the various taxa recorded in each sample, as well as the ratios of 'twiggy':'non-twiggy' wood.

Discussion

Because of the small number of contexts, the material from the fire-pits gives only a very sketchy picture of which woods were used for fuel. Of these, hazel and ash tolerate a wide range of soil conditions and could have grown both on the chalk and on the caps of Clay-with-Flints, such as that on the hill above the site. Dogwood is restricted to the chalk and is characteristic of chalk scrub; maple also prefers soils of a high base status (Jones 1944; Rackham 1980: 204, 207). The oak could have been growing on Clay-with-Flints, or it may have been a more important component of the vegetation on the chalk than it generally is today (*see* Section 2), and beech, its main competitor on the chalk, was not found.

The fire-pit contexts all have high 'twiggy':'non-twiggy' wood ratios compared to the other contexts examined, suggesting that most of the material found in them represents immature wood. The post-holes, on the other hand, produced almost exclusively oak, and it appears, judging by the low ratios of 'twiggy':'non-twiggy' charcoal, to be from much more mature wood.

A similar pattern of context-related variation was found at Mile Oak (*see* Section 2), and in that case it was suggested that oak was being used for constructional timbers, while other woods were important for fuel. The same general conclusion can perhaps be drawn from the charcoal at Downsview.

[*NB* For further identifications (by R. Gale) of charcoal from Downsview *see* Section 9, Table 9.2 (Appendix 4).]

DISCUSSION

The Late Neolithic/Early Bronze Age

The only evidence for human activity at Downsview during the Late Neolithic and EBA is based upon finds of flintwork and pottery. Of probably Neolithic date are two core tools, an adze and an axe, recovered respectively from the upper fills of ditch 2423 and pond 2425. A plano-convex knife from post-hole 4027 (Area J) is likely to be Late Neolithic or EBA. There were two decorated Beaker sherds, one came from the upper fill of terrace 2262, the other was unstratified from trial Trench 26. These pottery sherds have been assigned to the EBA. Given their locations of discovery, all or some of these Late Neolithic and EBA finds could have moved downslope to the Downsview site by colluvial processes.

The Middle and Late Bronze Ages

The first evidence for occupation at Downsview dates to the MBA and consists of both structural and artefactual remains. Of the minimum twelve structures identified above, eight (Structures 3–5, 7, 9–12) have yielded radiocarbon dates or ceramic finds dating to the MBA. Structures 1, 2 and 6 are probably LBA, the site of Structure 11 was reused in the LBA, and Structures 8 and 10 are of uncertain date.

Fire-pit 4029 (Area L) is probably the earliest dated feature on the site (77% probable; *see* Section 9). It produced a radiocarbon date of 1680–1450 cal BC (OxA-4809; 3280±40 BP). Fire-pit 2146 of Structure 3 on terrace 2046 (Area A) produced four radiocarbon measurements which date to 1520–1435 cal BC (weighted mean of UB-3783-6; *see* Table 9.1). Structure 9 on terrace 2262 (Area I) produced three radiocarbon measurements (but from different contexts) with date ranges of 1620–1300 cal BC and 1610–1220 cal BC (GU-5430, and GU-5429 and OxA-4811; *see* Table 9.1). Post-hole 4073 of Structure 11 on terrace 4065 (Area J) provided two radiocarbon measurements and a date of 1410–1100 cal BC (weighted mean of GU-5432-3; *see* Table 9.1). Another feature (4066) on terrace 4065 produced, however, a radiocarbon date of 1050–800 cal BC (OxA-4810; 2755±60 BP). These results are statistically significantly different (T'=76.0; T'(5%) = 18.3; ν = 10; Ward and Wilson 1978) (A. Bayliss pers. comm.), which together with the pottery finds suggests that there may be at least two phases of construction on this terrace. The constructional histories associated with some of the other building terraces are also unclear, an example being the MBA round-house (Structure 7) on terrace 2050 (Area G) which was replaced (at a date unknown) by Structure 8. The precise dating of individual structures and features, and establishing the contemporaneity of the various structures, is clearly a major objective of settlement archaeology. Probably the most successful approach to this problem for Bronze Age settlement sites with few stratigraphic relationships is by radiocarbon determinations, but at Downsview there were unfortunately insufficient suitable materials available to undertake a more comprehensive study of all the major structures and features (*see* Section 9). The radiocarbon dating programme undertaken for Downsview was however, where suitable samples existed, extremely successful in establishing the most likely order of use of some of the structures (i.e. Structures 12, 3, 9 and 11) (*see* Section 9). The dating programme also

Table 7.19 Downsview: Weights of charcoal recorded (g).

				Oak (*Quercus*)	Maple (*Acer*)	Ash (*Fraxinus*)	Elm (*Ulmus*)	Hazel (*Corylus*)	Dogwood (*Cornus*)	Pomoideae	Indeterminate	Total no. of fragments	T:NT 24×	T:NT 60×
TERRACE 2046														
Fire-pit 2143		2144	WS	–	–	–	–	–	–	0.23	0.04	5	–	2.1
		2145	WS	–	–	–	–	–	–	1.63	0.22	10	4:0	3:0
		2145	WS	–	(0.59)	–	–	(3.62)	–	(6.98)	(3.46)	33	9:1	7:5
		2146	WS	–	–	–	–	0.38	–	–	0.11	10	3:0	4:1
TERRACE 2262														
Post-holes	2802:	2804	FL	(10.04)	–	–	–	(0.53)	–	–	(3.17)	18	–	–
	2807:	2808	FL	(0.27)	–	(0.06)	(0.06)	–	–	–	+	15	0:1	2:5
	2817:	2818	WS	(0.85)	–	–	–	–	–	–	(0.19)	14	0:1	0:5
	2391:	2396	WS	(3.48)	–	–	–	–	–	–	(0.09)	20	2:5	–
	2391:	2392/6	HP	(4.34)	–	–	–	–	–	–	(0.20)	33	1:7	1:16
Top fill of terrace		2263	HP	0.06	–	–	–	0.14	–	0.39	+	6	1:0	0:2
TERRACE 4065														
Fire-pit		4037	FL	(33.29)	–	(4.59)	–	–	–	+	(7.97)	28	3:3	3:2
Post-holes		4066	FL	0.01	–	–	–	–	–	–	0.02	7	–	–
		4068	HP	3.35	–	–	–	–	–	–	+	32	1:13	–
AREA K														
Fire-pit		4029	HP	–	–	–	–	–	0.48	0.57	0.21	19	6:1	7:3
AREA J														
Terrace fill		4003	FL	2.06	–	–	–	–	0.80	–	0.92	14	2:6	0:10

'HP' indicates a hand-picked sample; 'FL' indicates a flotation sample; 'WS' indicates a wet-sieved sample.

Weights in brackets are estimates of the weight of the taxon in the whole sample in those cases where a sub-sample has been taken.

Fragments of charcoal weighing less than 0.01g are not included in the weights given in the table. '+' indicates that there were only fragments of less than 0.01g. T:NT is the ratio 'twiggy':'non-twiggy' charcoal (*see* above, methods).

indicates, for the structures that were sampled, that there was a chronological shift of occupation across the site, from the earliest activity in the north (i.e. Structure 12) to the latest in the south (i.e. post-hole 4066, terrace 4065). It further indicates that the site was occupied for between *580 and 860 years*, probably starting between *1680 and 1570 cal BC* and ending between *1020 and 800 cal BC* (all at 95% confidence).

The length of occupation at Downsview is perhaps the site's most interesting aspect. Since there is no reason to think that this period of occupation had a phase of discontinuity, we need to consider the probability of a settlement which became well-established, but changed in detail (example the number, form and locations of structures) over at least 600 years. Evidence for such *continuity and change* is well known for rural settlements of much later periods, an example being many of the Sussex Romano-British villas where continuity of occupation can often be traced back to the preceding Iron Age, and where the size, form, layout and orientation of the Roman settlements sometimes changed considerably, as at Bignor Roman villa, during the course of three or four centuries (Rudling 1998).

In the absence of extensive and sensitive dating indicators at Downsview, it is very difficult to review the precise form and layout of the Bronze Age settlement at specific points in time. Thus it is assumed that the earliest dated features, fire-pit 4029 (Area L), together with adjacent post-hole 4030, were parts of an otherwise unrecorded round-house. We do not know whether this building was built in isolation, nor whether it continued in use when some of the buildings to the south were constructed (the radiocarbon dating programme results indicate, for example, a 91% probability of an overlap with Structure 3, Area A). Any of the MBA structures (3, 4, 5, 7, 9, 10 (?), 11 and 12) could have co-existed. The three buildings in Area A are presumed to represent two phases, with Structure 3 (terrace 2046) being replaced by (?) LBA Structures 1 and 2 (terraces 2062 and 2048). Similarly Structure 7 on terrace 2050 (Area G) was replaced by Structure 8, and here there was a physical overlap of parts of the two buildings. Other possible LBA buildings include Structure 6 in Area E, Structure 10 in Area J, and probably a reuse of Structure 11 (terrace 4065) in Area J.

Most of the structures were round-houses with a ring of roof-supports, an entrance facing either south or south-east, and either a single or double stake-wall. Several round-houses had fire-pits and/or traces of internal partitions. Another type of building at Downsview was Structure 4 (Area A), which probably had only two main vertical supports for a roof made of a material such as 'tanned and tallowed hides' (*see* Bareham, above). This structure is thought to be a small annexe of Structure 1. Structure 6 in Area E may have differed from the other round-houses in having two rings of posts. This difference may also have chronological implications. Finally, the post-holes forming Structure 10 (Area J) may represent two four-post arrangements, perhaps the bases of two granaries.

The possible 'pairing' of buildings, with a main house and a smaller subsidiary structure, has been suggested above for both Structures 1 and 2 (Area A) and Structures 4 and 5 (Area D). Similarly, it is also possible that some of the other major features at the settlement site were associated with particular timber buildings. The features in question are the large pits and the so-called 'ponds'. It is thus possible that (?) LBA pit 2054 (Area A) was associated with nearby Structures 1 and 2. Similarly pond 2259 may have also been associated with Structures 1 and 2 and/or with Structure 3. In contrast pond 2425 (Area F), which is thought to date from the MBA, is rather oddly located in a gap in the MBA settlement's eastern boundary and away from any of the MBA round-houses. It is possible that this feature may relate to MBA Structure 6 (Area E). LBA (?) pond 4084 (i.e. the large depression in Area K) may be associated with the reuse of Structure 11 (Area J). Evidence for fencelines/divisions within the settlement area are fairly rare, but include stake fences such as 2299 (Area D). This situation contrasts markedly from the Later Bronze Age settlement at Black Patch, where substantial fencelines formed 'yards' associated with one or more buildings (Drewett 1982b). The apparent internal 'openness' of the Downsview settlement needs to be explained in terms of the social group that resided at the site. This is a difficult task, however, given that we do not know precisely which, and how many, buildings were contemporaneous at any one time. It is possible, especially given the longevity of occupation at the site, that only one or two structures were ever occupied at the same time, and that these could have been the accommodation of a single nuclear or extended family group. Using this approach Ellison (1978) was able to reinterpret the Itford Hill MBA 'nucleated village' of eleven huts (Burstow and Holleyman 1957), as comprising three successive settlement units.

During part of the MBA (and perhaps longer) the settlement at Downsview was at least partially enclosed. The best evidence for such an enclosure/settlement boundary was ditch 2423 (Area F), although even here the southern end of the ditch had been severely truncated by plough damage. Other possible ditches/quarries for chalk to construct a boundary bank along the settlement's eastern side include features 2158, 2039, 2276 and 2437. Finds recovered from ditches 2423 and 2437 indicate that these features date to the MBA. In contrast the few ceramic finds from ditch 2039 belong to the LBA. The lack of evidence for an enclosure ditch or pits along the northern, western and southern edges of the settlement may be either the result of plough damage or the genuine absence in these areas of an enclosure bank. The lack of such a bank in these areas need not imply the absence of a boundary feature: such features could also include hedges, wattle fences, etc. It is interesting to note that short stretches of ditch similar to those at Downsview were found at the nearby MBA settlement at Varley Halls (Greig 1997: 25–7).

Insights into the economic, material culture and environmental aspects of the Downsview Bronze Age settlement are severely hampered by a general paucity of finds. This situation is partly due to the severe erosion by ploughing of the site's features and deposits and the resulting movement of material downslope, but may also be due to cultural factors, such as the discard of refuse away from the settlement area. (*NB* The comments of both Drewett (1982b: 340–41) and Greig (1997: 30) with regard to the small quantities of animal bones recovered from the contemporary settlement sites at Black Patch and Varley Halls.) The severe truncation of the various building terraces and their deposits also prevented any meaningful study of the spatial distributions of artefacts.

Aspects of the material culture of the Downsview settlement are, however, fairly well represented in terms of flintwork, stone foreign to the site, and pottery. It is assumed that sources of flint in the vicinity of the settlement were exploited by its inhabitants and used to make the scrapers, knives, flake and blade tools and hammerstones found during the excavations. The major concentration of flintwork on ter-

race 2262, and the more minor concentration on terrace 2042, may indicate a real spatial differentiation of flintworking and use within the settlement. The geological material found at Downsview also indicates that the Bronze Age inhabitants made good use of local downland stone for construction (i.e. post-packing) and food processing (grain-rubbers). Stone from further afield includes coastal beach pebbles and various types of Wealden rock, including large quantities of Wealden Iron Ore/Ironstone. Even more exotic stone includes a quartzite grain-rubber, a siltstone whetstone and the oolitic limestone mould. (*NB* The nearest source of such limestone is over 150km to the west of Downsview.) Baked clay artefacts were limited to pottery vessels. The two raw materials, clay and flint, needed to make the majority of the pottery found at Downsview were available locally on the chalk Downs within a kilometre of the site. As Sue Hamilton rightly warns us, however (*see* above), such availability of raw materials does not necessarily mean that all of the Downsview flint-tempered pottery was produced on-site, or locally. The MBA pottery assemblage, for instance, includes fine wares of Ellison Type 7 (Ellison 1978) which link it with other East Sussex sites such as Itford Hill and Black Patch, but not nearby Varley Halls or central Sussex sites such as Mile Oak and Park Brow. Some of the MBA urns from Downsview have decorative motifs associated with Hampshire and Essex, and thus indicate the possibility of even more distant contacts and perhaps exchange networks. Two of the LBA pottery fabrics found at Downsview have inclusions from further afield, coastal or riverine quartz sand and Wealden iron oxides respectively. These fabrics indicate the procurement of raw materials, or the trade of such materials or pottery, from up to 20km away.

Although the excavations at Downsview produced only two examples of Bronze Age metalwork (i.e. a copper alloy awl and a copper alloy tracer/awl), the tracer/awl was found (in 'terrace' 4003) very close to a siltstone whetstone and may thus represent a rare association of related artefacts. The oolitic limestone mould fragment is an even more important discovery and may have been used to produce an object such as a bracelet or quoit-headed pin. The finding of such a mould at Downsview suggests that metalworking may have occurred at the site. If so, who was responsible for such an activity: the inhabitants of the settlement or an itinerant smith?

Other insights into the economy of the Downsview settlement are provided by the animal and plant remains. The animal bones indicate a significantly greater importance of cattle over sheep/goat, with all major parts of cattle being present on the site. In contrast, the sheep/goat are represented mainly by the meat-bearing bones, the implication being that the sheep/goat were butchered elsewhere. Pat Stevens (*see* above) points out that this relative importance of cattle compared with sheep/goat is the reverse of that at Mile Oak. At both sites, however, the importance of pig and horse bones is identical (i.e. minimal). It is thus possible that the Downsview and Mile Oak settlements may have specialised in different types of animal husbandry. At Varley Halls (Greig 1997), which is located very near to Downsview (Fig. 7.1), the importance of cattle bones compared to sheep/goat is similar to that at Downsview, and also at Black Patch (Drewett 1982b).

The absence of any human bones from Downsview contrasts with the Mile Oak and Varley Halls Bronze Age settlements which each contained a single crouched adult inhumation, and Black Patch where a pot containing the cremated bones of a child was discovered on Hut Platform 1. The procedures for the disposal of the dead from Downsview (and generally at other Later Bronze Age settlements) are unclear. The Downsview site is, however, located in an area that contains large numbers of tumuli (*see* Fig. 7.1). Although most, perhaps all, of these barrows are likely to date to the EBA (e.g. Site 43), it is possible that some of the deceased from Downsview were buried in, or near, some of the mounds.

The plant remains from Downsview consist of charred seeds and charcoal. The seeds of cultivated plants include emmer or spelt wheat, hulled barley, 6-row (?) barley, and broad/horse beans. These discoveries are comparable to those from other Later Bronze Age settlements in Sussex (i.e. Itford Hill, Black Patch, Mile Oak and Varley Halls) and provide detail about the agricultural economy of the region. Woodland management would also have been an important component of the local economy and the large numbers of stake-holes at Downsview indicate the considerable demand for hazel rods (*see* also Bareham, above). Similarly, charcoal evidence also indicates the demand for oak posts for constructional purposes. Other woods were important for fuel.

The final category of finds, land molluscs, provides some indications about the environmental setting of the Downsview settlement. Keith Wilkinson (*see* above) concludes that the two features that were sampled, i.e. ditch 2423 (Area F) and terrace 2042 (Area D), both indicate open country conditions. He further states that the settlement was built in open grassland, and that after abandonment cultivation further upslope led to erosion and the deposition of colluvium in the ditch and building terrace. Negative lynchets 2427 (Area E) and 2493 (Area F) may date from the period of abandonment, or later.

The Iron Age and Roman periods

After the abandonment of the settlement site *c*. 800 BC, there is possibly a break in the archaeological record at Downsview until the Roman period. Possible exceptions are ditch 2430 (Areas E and F) and the two negative lynchets 2427 (Area E) and 2493 (Area F) referred to above. The limited dating evidence for ditch 2430, which may be a boundary marker, is LBA or later. Negative lynchet 2493 (Area F), probably dates to the Roman period, and finds from this area of the site include Roman pot sherds and a coin. The recovery of Roman sherds from other colluvial layers at Downsview, especially 2263 in terrace 2262 (Area 1), are additional evidence that agricultural activity took place at, and/or upslope from, the site during the Roman period. This may have been undertaken by the inhabitants of various Iron Age/Roman sites that were discovered further down the valley during the building of the Coldean Estate (Fig. 7.1).

The Post-Roman periods

The excavations yielded no finds that have been dated to the Saxon period, and it is probable that during, or after, the Roman period the agricultural system at the Downsview site changed to pastoralism. The discovery, however, of 11 Medieval sherds may indicate that later there was a limited return to arable cultivation, perhaps further upslope. Similarly, the various eighteenth and nineteenth century finds may also relate to a return to arable cultivation in more recent times further upslope.