Evidence of Sussex prehistoric ritual traditions

THE ARCHAEOLOGICAL INVESTIGATION OF A BRONZE AGE FUNERARY MONUMENT SITUATED ON BAILY'S HILL NEAR CROWLINK, EASTBOURNE

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During the summer of 1998, a prehistoric monument located on Baily's Hill, near Crowlink, East Sussex, was totally excavated in advance of its impending destruction through coastal erosion. The investigation undertaken by the University College London Field Archaeology Unit established that a number of cremation pits cut into an area of natural chalk demarcated by a shallow, possibly encircling ditch, represented a formative phase of Late Neolithic/Early Bronze Age burial at the site. No evidence for an in-situ *'barrow' or capping contemporaneous with such activity was discovered. However, all the recorded burials, including the partial remains of an adult male inhumation, were covered with an oval-shaped cairn encompassing a typical later Bronze Age assemblage of over 15,000 humanly-struck flints. The proposed date of this upstanding structure was supported by the associated presence of Late Bronze Age pottery. Yet Neolithic, Beaker and Early Bronze Age sherds were also recovered from the body of the mound. It would thus appear that residual material derived from previous activity on the downland ridge had been scraped up and incorporated into the cairn matrix. Clearly, the Crowlink monument had retained, or at least recaptured, a position of ritual significance within the local landscape many years after its period of initial use.*

INTRODUCTION

No-one involved in contemporary British archaeology should be surprised to discover that the project published here at the turn of the millennium was proposed as a matter of urgency over a decade ago. Indeed, it was back in April 1985 that a barrow located in a prominent position on the crest of Baily's Hill, Crowlink, East Sussex (NGR TV 5445 9660) was first identified as being under threat from coastal erosion.

Such a perilous situation was recognized during an archaeological survey of known prehistoric remains undertaken by the University College London Field Archaeology Unit along the cliff top between Seaford Head and Beachy Head (Holgate 1986, 243–4). As a result of this work a number of important sites were recommended for further investigation in advance of the cliff collapses that characterize the often dramatic convergence of the South Downs and English Channel. These included Seaford Head hillfort, Limekiln Bottom field system, the surviving Beaker enclosure at Belle Tout and the barrow then recorded just 10 metres from the cliff edge on Baily's Hill. As the average annual erosion rate affecting this stretch of coastline is calculated to be in excess of 0.5 metres, Holgate was clearly justified in his assertion that of all the aforementioned monuments, the burial mound was the most likely 'to be destroyed in the next five to ten years' (Holgate 1986, 243).

Fortunately, this rather bleak prognosis proved a little pessimistic. However, in 1996, Dr Andrew Woodcock, The County Archaeologist for East Sussex, informed the UCL Field Archaeology Unit that the Crowlink barrow was then within 8 metres of the cliff face and in imminent danger of intrusive coastal erosion and possible destruction. In the absence of feasible measures to ensure *in situ* preservation, Dr Woodcock concluded that the monument should promptly be subject to a detailed programme of excavation and recording. Following

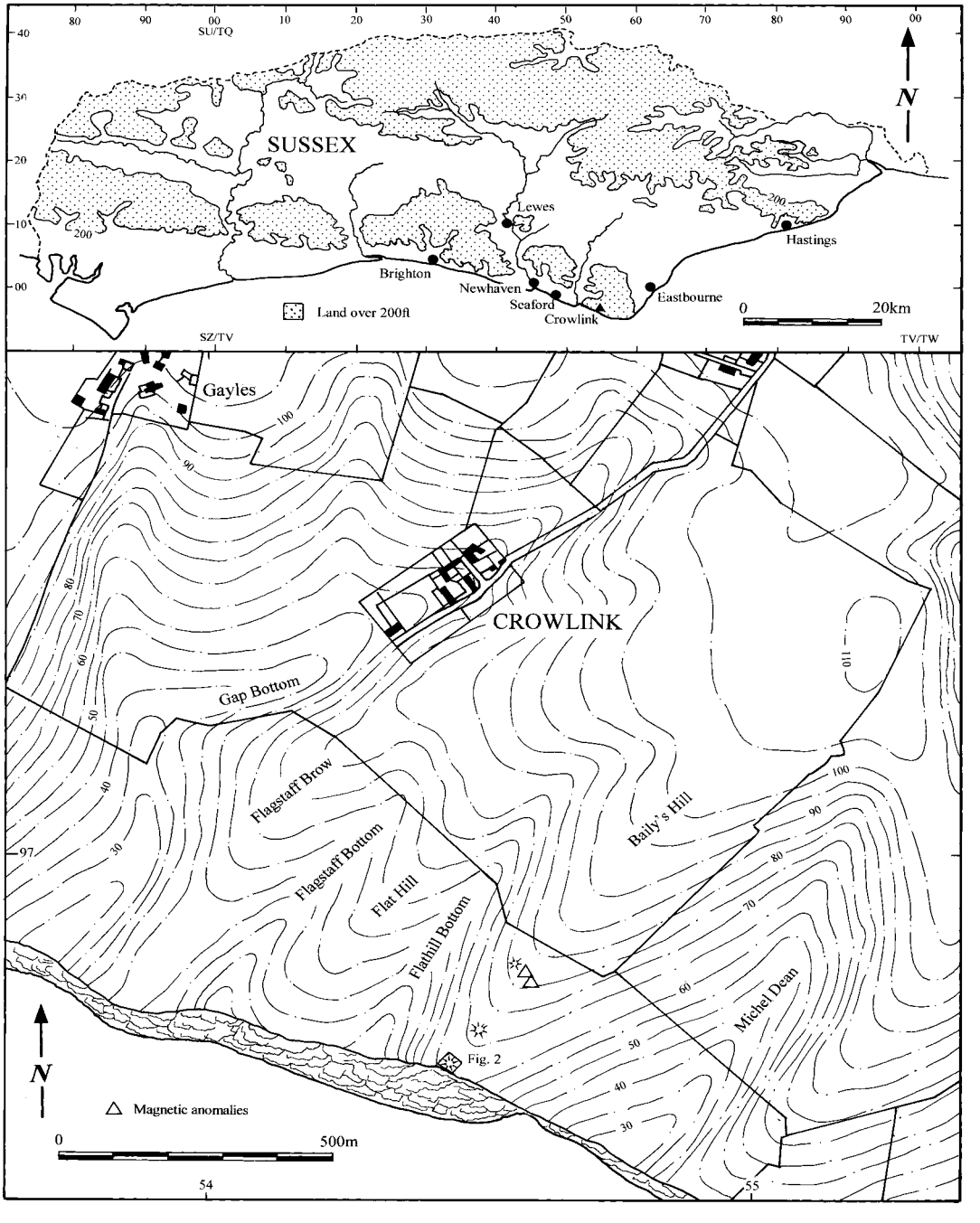

Fig. 1. Site location plan.

the subsequent agreement of a MAP 2 Project Design (Greatorex 1998), a comprehensive archaeological investigation of the site was finally undertaken during the late spring and summer of 1998. The fieldwork and post-excavation assessment costs were shared between the National Trust in its capacity as landowner, English Heritage and East Sussex County Council. The preparation of this document and constituent specialist reports was funded exclusively by English Heritage.

SITE SETTING

Baily's Hill is found within a 283-hectare (700-acre) tract of Sussex Downs managed by the National Trust and approximately one kilometre south of the few dwellings and farm buildings that comprise the secluded hamlet of Crowlink. The barrow itself lay under long-established downland turf between the 60- and 65-metre contour lines with direct views of Belle Tout to the east and Seaford Head to the west. The sub-surface geology consists of undivided Upper and Middle Chalk with patches of Clay-with-Flints.

Generally, the numerous Bronze Age barrow clusters recorded throughout southern England can be classified as linear, nuclear or dispersed, according to the spatial arrangement of their known component features. The barrow discussed here appears to have formed an approximate south-west to north-east alignment with two other scientifically unexcavated, but similar-looking mounds situated proudly on top of Baily's Hill. However, fieldwork and research have revealed that such a basic linear configuration does not in fact incorporate all of the probable prehistoric ritual/ceremonial monuments constructed across this downland ridge.

First it is perhaps instructive to note that the barrow of presumed Bronze Age date located 230 metres north-east of the excavation site was only exposed as a result of gorse clearance in 1997/8. Consequently it is not registered on the East Sussex County Sites and Monuments Record (SMR). The circumstances of this discovery are recounted as a caution to anyone prepared to analyze and interpret the spatial organization and development of a barrow cemetery from the confines of an office. Indeed, affirmation of this warning was underlined by a geophysical survey conducted along the crest of Baily's Hill by English Heritage (Linford 1998). This initial stage of the project, undertaken just a few weeks prior to the excavation, detected two particular magnetic anomalies which may represent the sub-surface remains of a fourth and fifth round barrow within the area of interest. Arguably of equal significance is Linford's observation that the hilltop accommodated 'a number' of topographic features with dimensions similar to those of the investigated monument. A detailed contour survey focusing on those points of archaeological potential highlighted by the geophysics study is required if the true number and distribution of mounds surviving on the ridge is ever to be ascertained. Only then can the results of all the fieldwork be assimilated in order to re-establish the excavated barrow within its surrounding and broadly contemporaneous monumental landscape.

Of additional interest is a rather tantalizing paper published in an early volume of the *Sussex Archaeological Collections,* which describes the opening of a 'tumulus' a few yards from the cliff edge on Baily's Hill: 'A considerable quantity of large flints had been brought to the spot, for the purpose of raising the mound, which was approximately 33 feet in diameter and 2 feet high' (Figg 1852, 208). The investigation of these upper barrow deposits yielded two crouched inhumations devoid of grave goods, while two unurned cremations, apparently cut into the chalk below the mound, were also discovered. Although the precise location of Figg's excavation is unclear, the reported position of the site in the mid-19th century indicates that this probable Bronze Age monument has since been destroyed by coastal erosion.

It is a happy coincidence that recent reassessment of the topographic features buried below the marine sediments of the English Channel has provided an insight into how the local coastline might have appeared during the late 3rd/early 2nd millennium BC (Hamblin *et al.* 1992; Woodcock forthcoming). Of particular relevance is the confirmation that the contours recorded below the sea at Eastbourne, Birling Gap and Peacehaven, plunge for over 30 metres within a kilometre of the present foreshore. The general steepness and scale of these three similar profiles suggests the presence of a 'remodelled landscape, rather than an erosional feature formed as a direct consequence of rising sea-level' (Woodcock forthcoming). Indeed, as Dr Woodcock goes on to state, it seems probable that the declination 'marks the coastal limit of this part of eastern Sussex for much of the prehistoric period'. If such a theory is correct, the current rapid retreat of the chalk cliffs

must be a relatively recent development and one likely to have obliterated numerous ancient activity sites. Clearly the original character and extent of the barrow cemetery located on Baily's Hill will never be ascertained.

The account of Figg's rudimentary 'exertion' at Crowlink will be familiar to readers acquainted with the history of antiquarian inquiry in Britain. Certainly the 'turning over' of burial mounds seems to have been a popular pastime among some higher-ranking members of Victorian society, who plundered numerous barrows with commendable spirit and vigour, but very little regard for the accurate recording of their endeavours and results. As Ashbee curtly states: '. . . the pattern and development of 19th-century archaeology shows as its main theme the collectors preoccupied with objects to fill their cases . . .' (Ashbee 1960, 20). In East Sussex a schoolmaster and 'great lover of antiquarian pursuits' by the name of Stephen Vine, opened up and described a number of barrows near Alfriston as early as the 1760s (Grinsell 1934, 230). Somewhat ironically, however, it was '. . . the intellectual climate which led to the funding of most of the county archaeological societies between 1850 and 1900 that stimulated barrow study in most areas . . .' (Grinsell 1934, 8).

Although scant details have survived of these early investigations, the signs of disturbance still visible today do confirm that a considerable proportion of round barrows located on the South Downs were indeed opened in the past. Over 70 years ago now, L. V. Grinsell, that great patriarch of barrow research in the region, was moved to declare that of some 1000 prehistoric mounds then known to exist in Sussex 'probably not more than 80 are intact'. Furthermore, the same article contains the important criticism that even those few monuments opened by 'well-meaning people, including archaeologists' had not all 'been examined with the care which is necessary for revealing the most information' (Grinsell 1934, 229 & 230). Clearly, the paucity of satisfactory records and dating evidence has rendered the current archaeological data base relating to Sussex ritual/ceremonial mounds inadequate. This latest project, therefore, provided an invaluable opportunity to impose modern standards of total excavation on one of our most recognizable, but nevertheless damaged, classes of prehistoric site.

Given these rather disheartening background circumstances, it is unsurprising that the only archaeological examination of the Crowlink barrow or its immediate environs actually recorded prior to 1998 was that conducted by Holgate during his cliff-top survey. As part of this earlier venture a number of humanly-struck flints was collected at the site from a deflation surface created by the erosive action of human feet and the seemingly relentless sea wind. The Late Neolithic or Bronze Age artefacts found adjacent to the upstanding monument comprised 27 flakes, a core and a piercer. Indeed, Holgate went so far as to suggest that the recovered assemblage might represent signs of 'domestic activity before the barrow was constructed' (Holgate 1986, 244). Such an intriguing proposition has obvious implications for any interpretation of the nature and progression of prehistoric activity on Baily's Hill. This is potentially a major topic for discussion and thus one considered later in the report.

In spite of the stated absence of any documents chronicling an earlier opening of Crowlink barrow, a modest depression was observed in the approximate centre of the mound during a preparatory site visit undertaken in 1997. The usually optimistic author had to admit that this hollow appeared ominously similar to the scars of antiquarian trenches first recorded by Grinsell in the 1930s. However, it was agreed that only the proposed programme of fieldwork could confirm or refute the strong suspicion that our particular barrow had also been disturbed and perhaps looted since its construction.

Despite extensive antiquarian and more recent agricultural/commercial destruction, the Sussex Downs are still renowned for the visible wealth of their archaeological remains. Indeed, examination of the County S.M.R revealed a profusion of prehistoric field monuments and findspots in the vicinity of Baily's Hill (sheets TV 59 NW and TV 59 NE). All Bronze Age sites of considered relevance to the Crowlink excavation are listed with grid references in the Project Archive housed with the finds at the Towner Museum and Art Gallery, Eastbourne. In spite of the dominating presence in this catalogue of over 40 round barrows, it is the significant evidence of Beaker/Early Bronze Age settlement found within the study area that really catches the eye. This testimony is of particular interest as in most parts of the country the habitation sites of the first barrow builders have proved notoriously difficult to locate. Indeed, the general scarcity of tangible domestic-type archaeology

assigned to the Early Bronze Age has prompted writers such as Parker Pearson to declare that at this time only the remains of 'the dead were fixed into the landscape; by contrast the communities of the living were fluid and impermanent' (Parker Pearson 1996, 92). However, in Sussex we are lucky that the investigation of two overlapping cliff-top enclosures at Belle Tout, only 1.5 km south-east of Baily's Hill has provided enough data to counter this commonly-held opinion.

The first of these enclosures was sampled in 1909 (Toms 1912), but as if to highlight the threat posed to Crowlink Barrow by coastal erosion, this site has since been lost to the sea. Fortunately, a famous excavation conducted many years later within the second surviving enclosure, revealed rare but convincing traces of continuous and permanent Beaker occupation in the form of at least two possible structures dating to 2000–1800 BC (Bradley 1970; 1982). The evidence for agricultural activity recovered from this apparently mixed-farming settlement included carbonized cereals and the vestiges of lynchet development. Pottery was probably made on-site, while flint scrapers and awls hint at leather, wood and bone-working. The presence of a Wealden Sandstone grinding implement and a shale bead also implies some limited external trade/exchange contacts. It does not seem unreasonable to suggest that the Belle Tout enclosures would have formed a focal point for much Beaker/Early Bronze Age activity in the region, including perhaps the supervision of sophisticated burial practices and barrow construction.

In fact, significant quantities of Beaker pottery have been recovered from two other sites found near Belle Tout, namely, Kiln Combe (Bell 1982) and Bullock Down (Drewett 1982; Holgate 1988). Although lacking structural features or pits, both of these probable domestic settlements were discovered during the Bullock Down multi-period landscape project undertaken between 1976 and 1980 by the Sussex Archaeological Field Unit UCL (Drewett 1982). This particular survey was centred on a block of chalk downland situated just two kilometres east of Baily's Hill, and even today it is still the most intensive archaeological and palaeo-environmental landscape study undertaken in Sussex. A vast quantity of valuable data concerning the often complex relationship between identified prehistoric populations and their immediate and wider surroundings was collected for the region. Indeed, when *all* the background information contained within this section of the report is considered, it becomes clear that the Crowlink Barrow should be viewed as an integral component of one of the most extensively examined regions of the South Downs.

The main attribute of any defined archaeological landscape project is that the maturation of human behaviour in terms of community socio-economic organization can be tracked from the time of earliest recorded activity right up to the present day. Reading the Bullock Down monograph reminded this particular rather blinkered prehistorian that the exploitation of chalk downland did not suddenly end after the Roman invasion of AD 43! Even on Baily's Hill itself an overlapping series of ditched fields or enclosures appear to provide evidence of fairly intensive agricultural enterprise unrelated to the prehistoric period. Although a significant number of shallow linear impressions can still be discerned on the ground, the collective patterning of these features has been demonstrated most effectively by the geophysical images produced by English Heritage (Linford 1998). A distinct rectangular enclosure recorded during this work is of specific interest, as it clearly dissects the upstanding barrow located approximately 85 metres from the cliff edge. This led Linford to suggest quite reasonably that the fields were laid out 'long after the monument ceased to be respected as part of the surrounding landscape and may perhaps be quite recent in origin' (Linford 1998, 3). However, as none of the ditches impinged upon the 1998 excavation site, their absolute dating and sequential phasing must await an independent programme of intrusive examination. Consequently, any detailed discussion of the field systems, or indeed of the additional signs of Second World War activity found on Baily's Hill, is deemed to be beyond the scope of this report. Suffice it to say here that the history of land-use across the ridge is evidently an evolving story, culminating with the area's current status as a Site of Special Scientific Interest, which guarantees a welcome haven from the forbidding advance of 21st-century urban Sussex.

PROJECT OBJECTIVES

Only rarely is the reader of an excavation report privy to the original objectives of that project. This is unfortunate, for the fieldwork programme which forms the fundamental basis of any such article will undoubtedly have been designed specifically to

satisfy a number of predetermined academic aims. These primary objectives should evoke the true balance of thought applied to a project at its genesis and thus convey what aspects of study were given full consideration prior to, and during, excavation. This intelligence is not always appreciable within an archaeological report where the emphasis of the published text may reflect a variety of factors external to the actual archaeology under discussion. These influences can, for example, include insufficient post-excavation funds and time, inescapable editorial policies regarding maximum article length or a prescribed style of writing, even an author's individual interests or specialisms.

Of course one should also be aware that the research priorities of any intrusive archaeological undertaking may be revised during fieldwork in direct response to the specific data being generated; flexibility is a key requirement of most successful excavations. While acknowledging this statement, it can still be argued that an understanding of a project's original objectives will at the very least allow a valuable insight into the dynamics of that venture to be gained most effectively.

The academic aims prepared in advance of this latest investigation at Crowlink lend credence to such an assertion. Their general tenor demonstrates that the accepted fieldwork design was based on the premise that the threatened monument comprised a fairly typical Early Bronze Age bowl barrow constructed of material derived from a ditch encircling the mound itself, a buried soil horizon and perhaps a single inhumation. However, as a cynic might have half-jokingly predicted, it did not take long for the recovered evidence to suggest a somewhat different scenario.

The inclusion of the original project objectives in this report should help to underline that archaeological excavation is not simply the formularistic accumulation of dry context details. Rather is it a receptive process inevitably prone to unforeseen frustrations, disappointments, and of course, to equally unexpected revelations. From inception to publication, every excavation has at least two interconnected stories to relate: a portrayal of the people, activities and environment that characterized the site in the past, and an account of the collection and treatment of the data upon which that interpretation was developed.

The specific project objectives are summarized below:

1. To survey and record the relevant upstanding remains before excavation;
2. To determine the physical characteristics of the barrow and the techniques employed during its construction;
3. To ascertain the chronology of monument establishment and utilization and to identify and date sequential phases of barrow development;
4. To elucidate the activities undertaken at the site, including any ceremonial/ritual aspects of monument usage. The treatment and disposal of the dead to be a central part of the programme;
5. To consider the 'cultural history' of the mound into the historic period;
6. To examine the immediate locale of the barrow and to characterize and date all features discovered external to the mound, especially those associated with monument construction and function;
7. To verify whether the mound overlay a buried land surface/cultural horizon and to scrutinize any sealed layer predating the barrow's formation for signs of human influence, including exploitation of the environment;
8. To recover suitable palaeoenvironmental remains in order to clarify the development of the local landscape and explicit aspects of natural resource utilization. The environment prior to barrow establishment, and that contemporary with its use to be of particular importance. The picture of regional land-use gleaned from the Bullock Down Project to be refined through this work.

INVESTIGATIVE METHODOLOGY

> 'Excavation is destruction, partial excavation is partial destruction and total excavation is total destruction' (Ashbee 1960, 184).

An accurate record of the extant monument was therefore a prerequisite of intrusive investigation. Consequently it was decided that the initial stage of fieldwork should be the geophysical survey conducted by staff from the Ancient Monuments Laboratory (Linford 1998). The central aims of this exercise were to place the site in the context of the surrounding archaeological landscape, to establish the presence or absence of an encircling barrow ditch, and to provide evidence for any additional activity associated with the mound.

To satisfy the first of these objectives, a block of

land covering two hectares on the crest of Baily's Hill was examined with a magnetometer — an instrument used with great success across similar mounds and geology. A smaller area (0.6 ha) encompassing the relevant location was also surveyed using an Earth Resistance Meter, this being perhaps the most effective system of locating barrow ditches on chalk (e.g. Hackmann 1976). In an attempt to penetrate further into the ground and thus detect any deeply buried features, a yet more intensive resistivity scan was then conducted over a framework 30 m^2 focused specifically upon the barrow itself. Finally, a series of topsoil samples was collected along the ridge of the hill to assess possible variations in magnetic susceptibility. (Readers with an interest in technical information are asked to refer to the Site Archive, where full details of the methodology employed during the geophysics project, including data processing and presentation, are held.)

On completion of the geophysical survey all subsequent fieldwork was undertaken by the UCL Field Archaeology Unit within an area 40 m^2 fenced off around the mound. At the outset, a site grid was established using a theodolite and Electronic Distance Meter. A contour survey was carried out using an automatic level, taking readings at one-metre intervals on the site grid, and plotted by interpolating contours representing a vertical interval of 100 millimetres (Fig. 2A). With the results of the geophysical surveys and a series of pre-excavation photographs, this mapping procedure documented the barrow before invasive research accelerated the process of erasure already induced by the sea. Even so, it was unfortunate that the actual plan was not drawn up prior to excavation. Such additional input would have enabled the better positioning of the site baulks along the true axes of the monument, which as we shall see, turned out to be somewhat oval in shape: slumping had given the upstanding mound a genuine sub-circular appearance.

A metal-detector survey of the site prior to excavation was also undertaken to ensure that any metallic artefacts located within the topsoil and upper barrow deposits were recorded *in situ*. The primary objective of this exercise was to ascertain the existence or otherwise of any important intrusive items, such as the Romano-British coins found at Money Mound (Beckensall 1967). However, as *all* metal finds regardless of character and age were catalogued at Crowlink, the work has helped to develop a picture of hilltop activity right up to the time of the late 20th-century walkers who thoughtlessly left behind their aluminium drink cans.

Once the preliminary studies had been implemented, the barrow was excavated manually by a team of Field Archaeology Unit staff, UCL Institute of Archaeology students, and volunteers, using the standard quadrant method (e.g. Ashbee 1960, 184–93; Coles 1974, 147–8). As the site was so close to the eroding cliff edge, it was agreed that the fieldwork should comprise the investigation and removal of the *whole* monument, with all located deposits being excavated and recorded *in toto*.

The barrow was thus divided into quadrants separated by baulks (0.75 m wide) in the expectation that they would provide full diametric sections across the monument. As soon as the turf had been lifted from the site and stacked along the edge of the excavation to form a welcome wind-break, the barrow deposits were stripped from each quarter in reverse stratigraphic order. The position of each piece of pottery, bone and 'foreign' geological material recovered from the body of the mound during this process was plotted three-dimensionally and given a special find number. In contrast, humanly-struck and fire-cracked flints were simply bagged up per context in large fertilizer sacks, as the sheer quantity of these artefacts precluded a more detailed treatment. It is worth noting that although most of the barrow matrix was passed through a coarse sieve, time constraints upon the project almost certainly led to a small undefined percentage of the flintwork being erroneously discarded on site.

All deposits and features found either within or below the mound were examined in stratigraphic relationship to the primary barrow structure. A search was also maintained for contexts likely to contain important palaeoenvironmental evidence. In this way investigation continued within each quadrant until only the baulks remained. These last pieces of barrow history were then themselves documented, assessed for environmental data, and finally removed to complete the main phase of manual excavation.

Each archaeological context located was planned at a scale of 1:20 and levelled with respect to a Temporary Bench Mark. The diametric barrow sections were drawn at a scale of 1:10, as were the

individual sections or profiles of those cut features not dissected by the central baulks. All cremation deposits and skeletal elements were treated in accordance with guidelines prepared by the Institute of Field Archaeologists (e.g. McKinley & Roberts 1993).

As soon as the investigation of the actual barrow structure had been concluded, an additional area of flat ground adjoining the original site to the north was also studied. Fortunately for the loyal band of archaeologists exhausted by the punishing buffeting from the sea wind, the designated trench extension was just far enough away from the cliff edge to use a JCB 3CX digger fitted with a toothless ditching bucket, in order to expose the natural chalk (Fig. 2B). It was hoped that this closing work would uncover features relating to the monument's construction, or perhaps even evidence of prehistoric ceremonial or ritual activities, such as pyres.

RESULTS

GEOPHYSICAL SURVEY

Initially a series of significant anomalies across Baily's Hill were revealed by the magnetometer survey. Indeed, the greatest contribution of this procedure was the confirmation that the mound under investigation comprised just one element of a wider multi-period archaeological landscape. Limited evidence for the survival of two previously undocumented barrows on the downland ridge is perhaps of most interest, although it must be stressed that the true nature and antiquity of such sub-surface features can only be ascertained through excavation. In addition to these discoveries, the magnetometry scan also identified a number of possible pits of uncertain character, and successfully resolved the layout of a ditched field system, apparently unrelated to the prehistoric funerary monument, that must once have dominated the hilltop.

Unfortunately, the magnetic response within the immediate vicinity of the threatened mound was obscured by the presence of intense ferrous 'noise'. This was promptly interpreted as the remains of 20th-century wartime activity. Consequently, the absence of an anomaly associated with either an encircling palisade or barrow ditch was first thought to be due to modern interference rather than a genuine indication of monument structure. However, the corresponding resistivity survey also failed to detect significant signs of such a feature.

Disappointment at these negative results was quickly dispelled on realization that the barrow itself corresponded with readings of high enough resistivity to suggest 'the accumulation of rubble to create the basis of the mound' (Linford 1998). Because the published literature suggests that this technique of barrow construction was relatively uncommon in Bronze Age Sussex, it became clear that archaeological investigation would assume an unusual and time-consuming form, not at all as anticipated.

In addition, laboratory analysis of the topsoil susceptibility samples collected from near the barrow indicated the possible action of fire. After considering this evidence and the cliff-top location of the site, Linford proposed the previous existence of a beacon, if not on top of, then at least adjacent to, the mound. Each aspect of the geophysical survey thus seemingly generated invaluable information concerning the past usage of Baily's Hill.

CONTOUR SURVEY

The site contour plan, recorded in advance of any intrusive investigation, shows a poorly-defined, rounded mound with a main 16 m long north–south axis, an east–west breadth of 14 m and a maximum height of approximately 0.5 m (Fig. 2A). However, these measurements are not thought to represent the original monument size, as the gently-sloping sides of the barrow evident on the drawing were undoubtedly the direct result of post-construction weathering and slumping. The aforementioned shallow depression suggestive of intrusive human activity was also recorded across the central, and presumably once highest part of the otherwise generally flat-topped mound. A slightly higher area to the north-east of the depression may have been the remains of an associated spoil heap. Thus although this exercise did produce an accurate topographic record of the Crowlink Barrow immediately prior to destruction, it seemed clear that any discussion of former monument size, shape and profile must await the results of excavation.

METAL-DETECTOR SURVEY

The retrieval of only a few later 19th- and 20th-century artefacts from the metal-detector scan conducted across the unexcavated barrow, is perhaps best described as an expected disappointment. Indeed, the level of excitement attained during this particular endeavour can probably be gauged

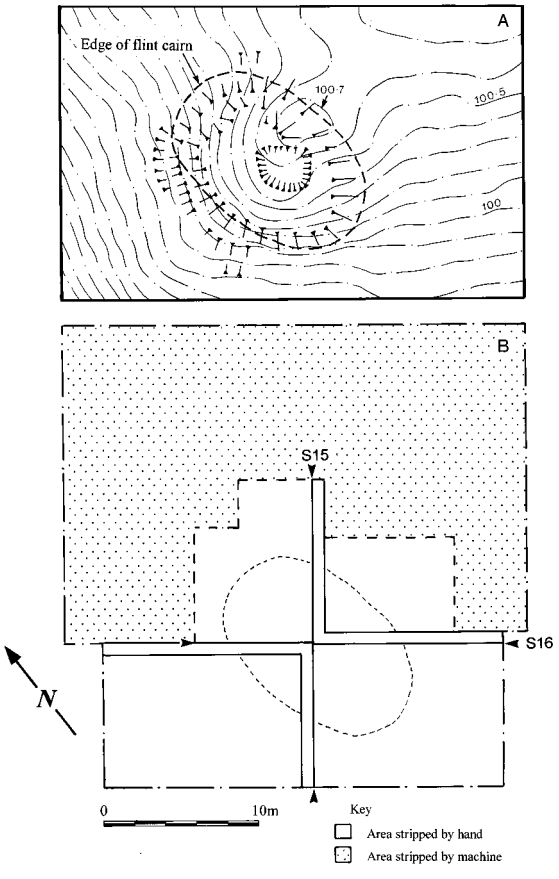

Fig. 2. A) Contour intervals in relation to selected features; B) Extent of excavation and position of main barrow sections.

through the admission that the most impressive discoveries comprised a modern shot-gun cartridge and a bent spoon. Even though these finds failed to enthuse the author and their precise locations were not recorded, the survey was still a worthwhile exercise as it meant that removal of the turf could proceed with little risk of missing any metalwork.

Once the scan had been completed, it became impossible to avoid the conclusion that the barrow was unlikely to prove a source of intrusive Romano-British artefacts, analogous with those found at Money Mound. This early suspicion was confirmed by the failure of the ensuing excavation to yield a single piece of metal from the *in situ* archaeological deposits, despite the continued and extensive use of a metal detector.

EXCAVATION

Although the main programme of investigation was undertaken during June and July, virtually the entire eight-week project became an unexpected and gruelling struggle against the elements. Under most circumstances a picturesque veil of early morning mist will not delay archaeologists hardened to the freezing rain and snow of winter. However, only the stoutest-hearted excavator would not have balked at working on the edge of a crumbling, 65-metre-high cliff in some of the impenetrable sea fogs encountered at Crowlink. Indeed, it soon became obvious why the National Trust, armed with their local knowledge, had been so keen to gain an assurance from the Field Archaeology Unit that the site should be vacated if weather conditions resulted in poor visibility. That guarantee was, of course, incorporated into the mandatory pre-excavation risk assessment.

The fact that even those fogs which shrouded Baily's Hill completely, and thus led to the suspension of work, did not take long to dissipate, seemed to represent at least one small slice of good fortune. Yet sadly, the resultant clear skies, so striking on final photographs, were largely brought about, not by a burning hot summer sun, but rather by the dispersive effects of a howling gale, which battered the site relentlessly and caused logistical problems of a quite unexpected complexion and scale. Most readers are probably unaware of an atmospheric phenomenon referred to colloquially as 'cliff-edge turbulence', but its impact will never be forgotten by those who braved the 1998 Crowlink investigation for more than a few days.

The inevitable collision of the more forceful winds coming in off the English Channel with the famous Seven Sisters headlands can cause significant air disturbance along the cliff edge. Certainly the seemingly constant barrage of flying dust and grit whisked up from spoil-heaps, shovels and buckets came as an unpleasant shock to the archaeological team. During the worst of the squalls, all but the fullest wheelbarrows refused to stay upright unless held down physically, while more than one item of equipment was blown across the hill ridge or into the sea. Indeed, there were times when the wind rendered not only the actual digging, but also the context recording, drawing and levelling of the site, well nigh impossible.

Although recognition of the dispiriting hindrances outlined above only took a matter of days, the turf was removed from those areas of the site highlighted

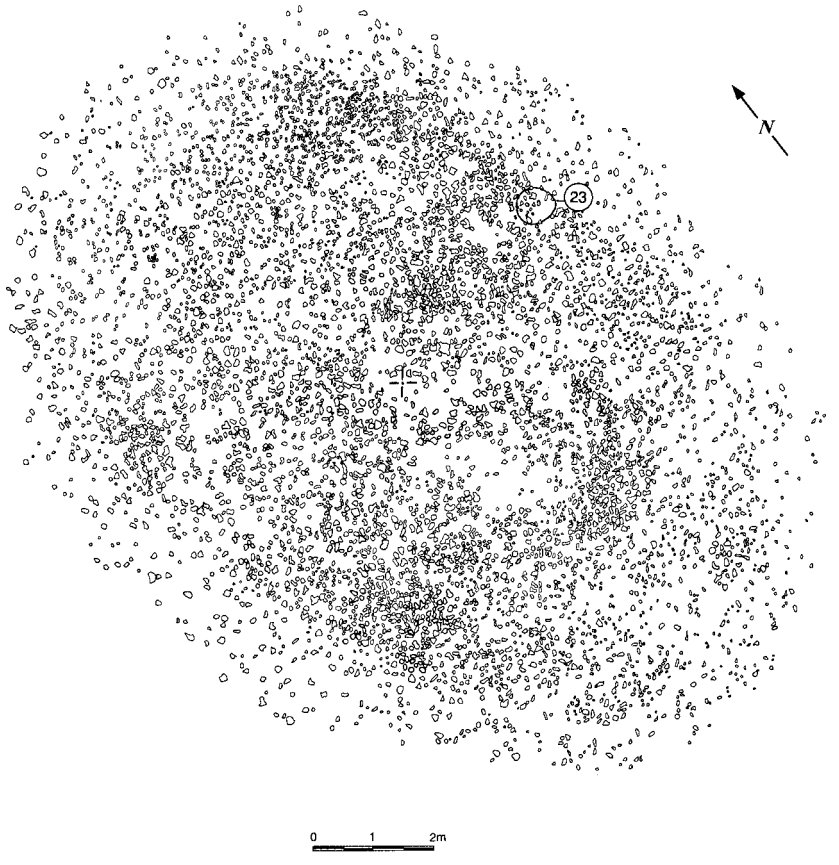

Fig. 3. A plan of the flint cairn exposed beneath the downland turf: intrusive pit 23 is also shown.

in Figure 2B in an atmosphere of good humour and optimism. This exercise did take longer than anticipated, but such slow progress was perhaps in part due to the prudent structuring of the lifted sods to provide at least some valuable shelter for the staff, and support for the expensive perimeter fencing which had quickly been uprooted, twisted and smashed by the wind.

Below the turf, a friable, dark grey-brown silty clay loam topsoil/overburden with an average thickness of approximately 0.2 m [Layer 3] was first stripped off the relatively flat terrain around the extant mound. The natural Chalk bedrock and Clay-with-Flints exposed around the barrow showed no sign of intrusive prehistoric activity. However, the recovery of pottery sherds and numerous humanly-struck flints from Layer 3 did confirm the utilization of the site, or at least the hill ridge, during the Bronze Age. The Clay-with-Flints was confined to a single irregularly-shaped patch found within the excavation's south-west quadrant. This will be discussed further in a later section of the report.

Many of the context boundaries investigated at Crowlink were difficult to define. This explains the use of dotted lines on the main section drawings (Fig. 9). They represent the best possible assessment of breaks in horizon rather than precise delineations. Ascertaining a clear-cut physical relationship between Layer 3 and the actual barrow deposits proved particularly problematical. Indeed, the interlacing of material at the foot of the slumped mound led to lenses of Layer 3 being recorded both above and below contexts associated with the monument structure (Fig. 9).

Fortunately, the friable, dark brown-grey, silty clay loam found only immediately beneath the turf lifted from the visible mound was differentiated from Layer 3 by the presence of fewer chalk pieces and considerably more flint fragments (Layer 2) (Fig. 9). Although Layer 2 yielded 19 sherds of Bronze Age pottery, the additional retrieval of 20th-century debris endorsed its initial interpretation as a second discrete overburden. Consequently, the excavation of this horizon (average thickness 80 mm) was undertaken with mattocks and shovels under the conviction that negligible significant *in situ* evidence would be lost as a result of such a comparatively coarse technique.

The removal of Layer 2 thus continued until the main body of the barrow was uncovered for the first time in centuries. A far more interesting and informative context lay below: not the anticipated heap of chalky soil, but a low flint cairn (Contexts

2/6 and 6; Fig. 3). The surprise generated by this discovery was heightened still further on realization that the revealed structure comprised literally thousands of humanly-struck flints, as well as unworked fragments and nodules. That such a conclusion could be reached before the layer's intrusive investigation illustrates the remarkable density of flint artefacts spread across the uppermost surface of this deposit. Even so, any serious consideration of original barrow construction was preceded by an examination of the cairn's still visible central depression. This, in accordance with the rules of stratigraphic excavation, took priority over all other fieldwork concerns.

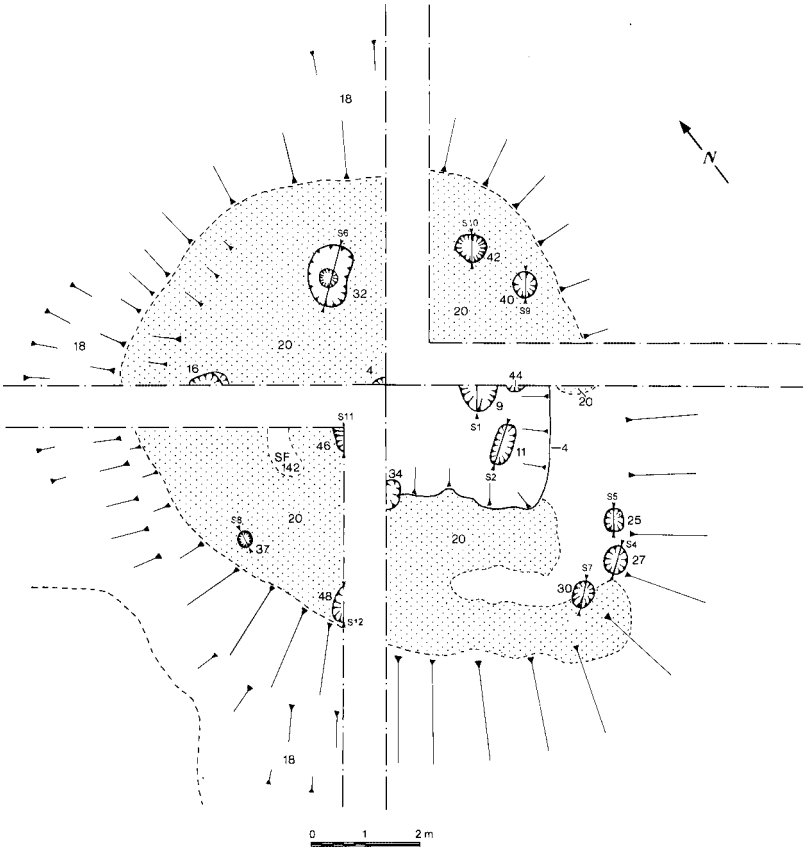

Fig. 4. The site as planned after removal of the overlying cairn.

As expected, it did not take long to confirm that a trench located predominantly within the south-east quadrant of the site had been dug through the full mound formation and slightly into the underlying chalk (Cut 4) (Figs 4 & 9). This roughly hewn, but still recognizably sub-rectangular, steeply-sided feature had a maximum length of 3.25 m, a width of 2.5 m and contained two distinct deposits (Fills 5 & 8). The loose, dark brown-grey, silty clay which characterized Fill 5, ranged in thickness from 60 mm to 0.22 m and yielded both burnt and unburnt human bone, plus a varied collection of mostly Early or Late Bronze Age pottery. On excavation, the lower 0.25 m–0.32 m thick, friable, mid grey-brown, silty clay loam (Fill 8) was also found to contain human bone and a mixed ceramic assemblage.

Thereafter, the exposure of natural geology below much of Layer 8 caused considerable disappointment. Nevertheless, it did allow the maximum height of the extant mound to be promptly recorded as 0.5 m, while the discovery that the revealed chalk had itself been dissected by at least four sub-circular features (Cuts 9, 11, 34 & 44) was clearly of significance.

The detailed description and interpretation of those non-structural contexts discovered beneath the flint cairn (Layer 6) forms a subsequent section of this report, but a number of specific observations concerning Cuts 9, 11, 34 and 44 are best made here. The destructive impact of the later trench on Cut 34 is shown most effectively in Figure 9. Indeed, the recorded evidence appears to indicate that all four negative features were truncated. Because of such severe disturbance, the precise origin of the jumbled pottery and bone fragments found within Cut 4 (Fills 5 & 8) is still a topic for debate. For example, the assemblage may include material

contemporaneous with the initial opening of the trench as well as artefacts derived from the displaced cairn matrix (Layer 6) and Features 9, 11, 34 and 44. This last possibility was supported by the excavation of Cut 34 (Fill 35), which yielded three sherds of an Early Bronze Age Biconical Urn, other parts of which were discovered in the intrusive trench fills. Cut 9 (Fill 10) also produced Neolithic pottery and burnt human bone, while additional Bronze Age sherds were retrieved from Feature 11 (Fill 12). As Contexts 9, 11 and 34 are thought to be associated with the rites of prehistoric burial, their truncation by Cut 4 would indeed explain the presence of assorted bone and broken funerary vessels within later Fills 5 and 8.

The investigation of Trench 4 in alarming weather conditions left team morale at rather a low ebb. The barrow's central interments had basically been damaged, destroyed or removed prior to scientific examination, and the subsequent location of *in situ* ritual/ceremonial deposits seemed unlikely. Nevertheless, it was obvious that a number of issues regarding the actual date and motive of the intrusive activity did merit genuine consideration.

Almost inevitably, the essential characteristics displayed by Cut 4 were very similar to those of the many substantiated antiquarian robber trenches dug across other Bronze Age burial monuments. One such example was apparently recorded during the total excavation of the West Heath Barrow Group, West Sussex, where the sand mound of Barrow VII covered a disturbed pit containing fragments of cremated bone and smashed pottery: 'a minimum of two collared urns were found by the robbers and thrown back into the grave with the backfill' (Drewett 1985, 42). At Crowlink, the nature and condition of the material recovered from Cut 4 also suggests the deliberate breakage of certain funerary vessels. But had such an act occurred during the last 300 years or so, it would have constituted a rare case of vandalism not at all in keeping with the broad picture of local antiquarian endeavour. The fact that the bases of Cuts 9, 11, 34 and 44 were left untouched by the trench cutters also needs to be considered. Of course, Context 4 *is* still most likely to have been dug in the relatively modern era and immediately backfilled on discovery of the already smashed pots. However, some aspects of the physical evidence may indicate an altogether different scenario. First, rather than the single homogeneous or mixed deposit expected as a result of comparatively recent and indiscriminate disturbance, two distinct horizons (Fills 5 & 8) were identified within the trench, Second, the only non-prehistoric artefacts recovered from these fills were a few tiny and presumably intrusive Late Iron Age/Romano-British and Saxo-Norman sherds. Finally, Cut 4 contained a significant Late Bronze Age pottery assemblage, which could in theory have been freshly introduced into the trench at the time of its original exposure. These points demonstrate the folly of blithely attributing Cut 4 to antiquarian treasure hunters, without first examining the full range of available data.

Almost 30 years ago an article by Petersen highlighted several later Neolithic and Early Bronze Age mounds in England covering burials which had seemingly been disturbed by additions or alterations in the later prehistoric period. At the core of this paper was the proposal that such activities might have involved 'a burial routine entailing the deliberate re-opening of filled graves and the disarrangement of older interments in a manner strongly recalling the analogous customs recorded from many Neolithic chambered tombs' (Petersen 1972, 27). Over the last three decades it has become increasingly clear that Bronze Age barrows were sometimes cut into during prehistory for reasons that defy current interpretation. In the view of Parker Pearson (1996, 50) 'These shallow pits were not to rob bones or grave goods, but may have been dug as part of a ceremony for communicating with the dead'.

It has therefore proved difficult to advance any verifiable conclusions concerning the actual date and objective of the Crowlink Barrow intrusion. It is true that Cut 4 *can* simply be viewed as a standard post-medieval robber trench, especially if one accepts its apparent dissection of the overburden represented by Layer 2. However, there are enough alternative lines of evidence to suggest that some rather earlier and perhaps more interesting possibilities at least merit consideration.

Even if Cut 4 is removed from the equation, incontrovertible evidence of prehistoric activity at the site after the mound had been constructed was provided by a single sub-circular pit (Cut 23) set into the exposed surface of the flint cairn (Layer 6) (Fig. 3). Over 300 pottery sherds were packed within this fairly steep-sided, flat-based cut which had an extant diameter of 0.6 m and depth of 50 mm. Although the loose, dark grey, silty clay fill (24) failed to yield

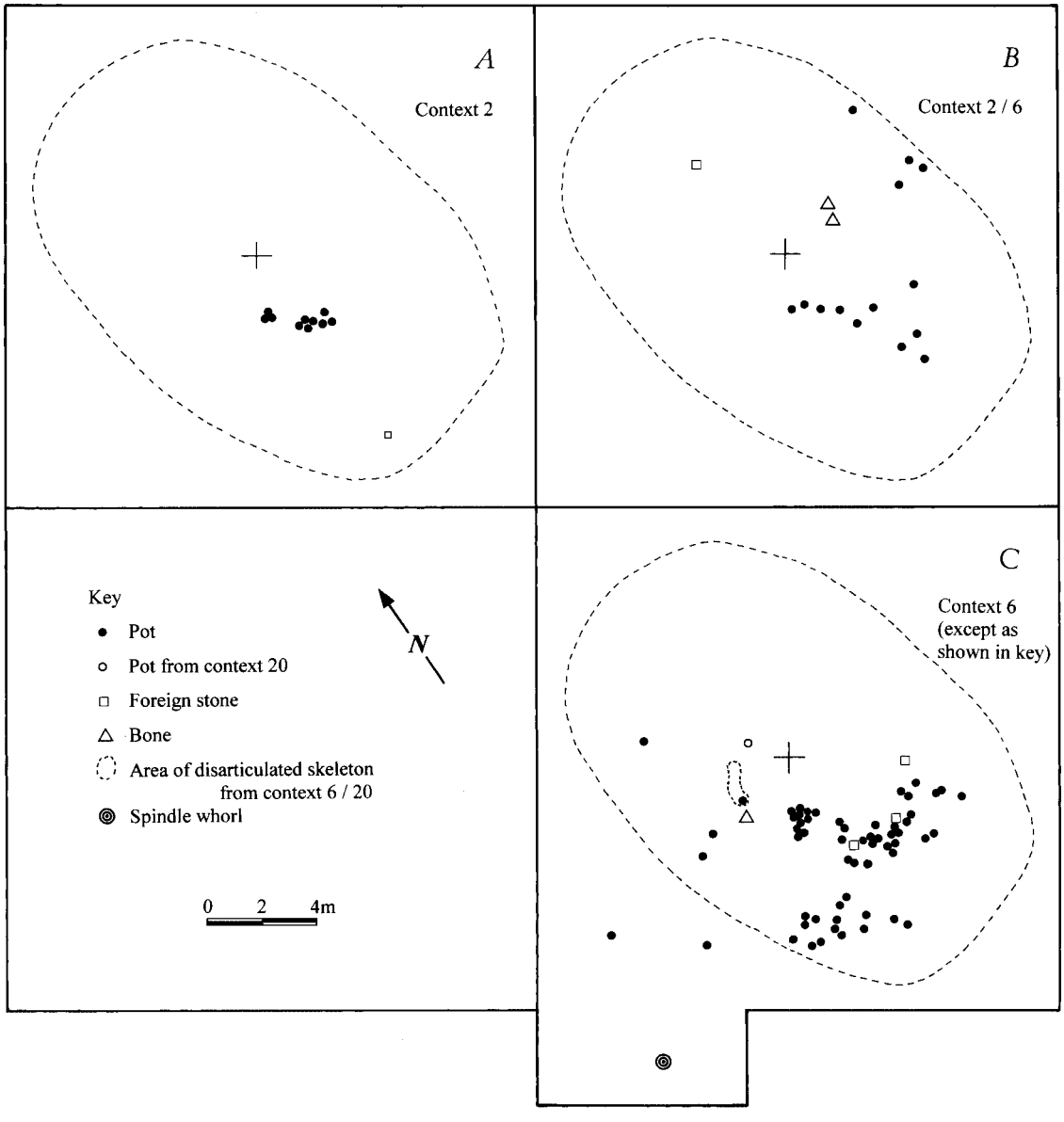

Fig. 5. The provenance of finds retrieved from the body of the cairn and associated layers.

any other finds, the recovered ceramic assemblage was largely composed of three different Late Bronze Age fabrics. The artefactual testimony clearly argues against Cut 23 representing a receptacle for a single vessel such as a cremation urn. Yet given the immediate context of the excavation, the possibility that such an ambiguous feature held some intangible ritual/ ceremonial significance must be conceded.

Palpable relief greeted the completed investigation of Cuts 4 and 23, for only at this point could the examination of actual barrow composition proceed with the requisite vigour. During the initial removal of the mound's overburden a decision had been made to assign a specific identifying tag (2/6) to all those finds retrieved from the extremely diffuse junction of Contexts 2 and 6. This was because the

Fig. 6. A view of the investigation site from the east, following excavation of the barrow cairn and possible buried soil horizon.

infiltration of Layer 2 soil particles amongst the uppermost flints of the cairn rendered impracticable any absolute determination of the interface between the two horizons. Nevertheless, most would surely agree that these particular artefacts are far more likely to have originated from the upper levels of the barrow formation (Layer 6) than from the base of the non-structural deposit above (Layer 2).

The merits or otherwise of interpreting the cultural assemblage from zone 2/6 as a fundamental element of the mound matrix can be debated. However, this topic is not discussed here as it had little impact on the smooth running of the fieldwork under consideration. Indeed, the cairn's true character was successfully revealed through the excavation in spits of Layer 6, which had a maximum recorded thickness of 300 mm at its centre but thinned out towards the edges. Figure 3 shows the main concentration of flints as an oval-shaped heap with a length of 13.5 m and breadth of 8.5 m. Although the preparation of this 'reconstruction' admittedly involved the somewhat subjective differentiation between *in situ* and loose stones at the foot of the mound, the resultant plan does differ appreciably from the sub-circular 'earthwork' recorded during the preliminary contour survey. Indeed, one unfortunate consequence of such an obvious disparity was that the site's cross-baulks, pegged out so carefully before the turf was removed with the aim of providing the best possible section exposures, were no longer aligned along the full axes of the surviving structure (Fig. 2B). Even in retrospect this regrettable situation could only have been avoided by stripping the concealing overburden off the barrow before deciding the position of the baulks.

Irrespective of any perceived failures of excavation methodology, the cairn's most striking property was without doubt the huge number of humanly-struck flints recovered from Contexts 2/6 and 6. Following comprehensive analysis, this extraordinary assemblage of over 15,000 individual pieces has confidently been assigned to the later Bronze Age, a date supported by the contemporaneous pottery found dispersed across the full horizontal and vertical stratigraphy of Layer 6. The debate does not end here, however, for the monument (Contexts 2/6 and 6) yielded a diverse collection of ceramic types incorporating some sherds of Neolithic and Beaker origin. It would thus appear that at the time of cairn construction during the later Bronze Age, material scraped up or amassed to add substance to the flint mound contained artefacts derived from an earlier phase of activity presumably on, or near, the site. Holgate's theory of multi-period prehistoric archaeology surviving along the ridge of Baily's Hill, expressed more than ten years ago, is thus confirmed (Holgate 1986, 244).

Other finds retrieved from Contexts 2/6 and 6 comprised seven fragments of unburnt human bone, a small quantity of marine shell, fire-cracked flint and three possible quartzite polishing stones. An unfinished chalk spindle whorl was also discovered within the flint material which over the preceding centuries had spread beyond the foot of the main cairn structure. The two-dimensional distribution of all pottery, bone and foreign stone located across the mound formation is demonstrated by Figure 5. Each symbol shown on this drawing simply records the presence of a particular artefact type. No attempt has been made to indicate the quantity of material (e.g. number of pottery sherds) in every find-spot. Furthermore, it should be noted that the excavation

of those cuts either dissecting or sealed beneath Layer 6 is not represented. Despite these limitations, Figure 5 does illustrate the relatively high density of objects recovered from the barrow's south-eastern quadrant, the significance of which, if any, remains unclear.

As well as the artefacts described above, a number of notable features, including the indistinct traces of a horseshoe-shaped ditch or gully (Cut 18) were first exposed on removal of the flint cairn and its constituent mid-grey-brown, silty clay loam matrix. In plan the gully (Context 18) was only identified within the site's south-west and north-west quadrants. However, this is perhaps not so surprising if one considers the intermittent and shallow nature of the surviving cut, which may have once assumed a rather more circular form than is implied by Figures 4 and 7. Because of the limited evidence, any portrayal of the original ditch configuration as, say, annular, penannular or even multi-causewayed, would represent mere speculation. Indeed, during the fieldwork the gully was revealed most clearly, not in horizontal plane, but at the north-eastern end of the main south-west/north-east barrow section. Here the profile of a feature, 1 m wide and 170 mm deep with relatively steep sides and a flattish base could just be discerned (Fig. 9). Slight dips in the chalk bedrock are also recorded towards the opposite end of the same drawing and close to the north-western limit of the corresponding south-east/north-west section.

The only finds retrieved from the friable, mid-grey-brown, silty clay loam (Fill 19) contained within Cut 18 were fire-cracked and humanly-struck flints. Although the latter assemblage comprises a mere 220 individual pieces, its careful post-excavation examination provided information central to any interpretation of the monument's development (*see* the specialist report by Chris Butler below). His study revealed that the tools, cores and flakes associated with Context 18 possess a group profile typical of the Late Neolithic/Early Bronze Age. Thus, the ditch or gully was almost certainly open many hundreds of years before the construction of the cairn (Layers 2/6 and 6) commenced during the later Bronze Age.

The artefacts recovered from Cut 18 represent just one strand of the recorded evidence for pre-cairn activity at the site. Another was a spread of compact but friable, light grey-brown, silty clay loam (Layer 20) located immediately below Context 6: this yielded a small Late Neolithic/Early Bronze Age flint assemblage and one small sherd of Neolithic pottery. Based on the following indubitable facts, the author interprets this deposit as a buried prehistoric soil, rather than a cultural or structural horizon. Layer 20 lay directly above the chalk bedrock and did not cover/seal any other features or deposits. Yet the disturbed remains of a skeleton were found apparently lying on the surface of the extant matrix which had itself been dissected by thirteen cuts including at least eight cremation burials. Finally, the admittedly fragmentary data recovered from the excavation's south-west and north-west quadrants suggest that Layer 20 was perhaps once encircled, if only partially, by Ditch 18, which was broadly contemporary.

The funerary deposits remarked upon above are described and discussed later. However, attention is here turned towards a meeting of English Heritage specialists convened after the discovery of Layer 20, in order to adopt an appropriate environmental sampling strategy for the remainder of the fieldwork. The conclusions drawn from this site discussion proved invaluable, if a little downbeat. It is unfortunate that any constructive comments regarding the nature of this particular horizon were limited by the rootlet penetration and animal burrowing which precluded the layer's sedimentological study. In fact, there was general agreement that none of the profiles or layers observed at Crowlink merited either geoarchaeological or palynological analysis. In contrast, those cut features sealed beneath the flint cairn (Layer 6) were considered suitable for a preliminary assessment of charred plant remains, small vertebrates and molluscs. On conclusion of the site meeting, the prospects for establishing even a basic palaeo-environmental background to the excavation in line with Project Objective No. 8, looked bleak.

Despite the introduction of such pessimistic thoughts, due concentration was soon refocused upon the ongoing archaeological investigation of those deposits revealed on removal of Context 6. Reference has already been made to the cutting of the immediately underlying horizon (Layer 20) by 13 discrete features. Yet the complete picture is a little more complex than this, as eventually 16 sub-circular or oval-shaped contexts were found dug into the natural chalk located below the once upstanding mound (Cuts 9, 11, 16, 25, 27, 30, 32, 34, 37, 40, 42, 44, 46, 48, 50 & 52) (Fig. 7) The undeniable fact that all but one of these features (Cut 16) had at

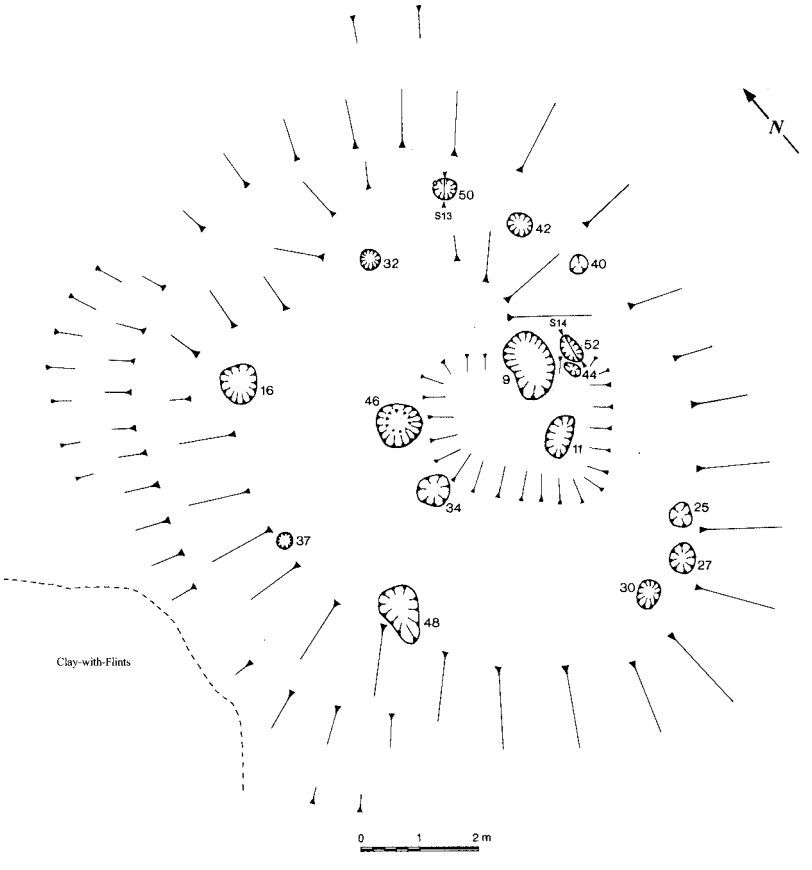

Fig. 7. The post-excavation plan of the monument.

some point during the later Bronze Age been sealed/buried beneath the flint cairn warrants persistent reiteration. Indeed, the importance of this discovery cannot be overemphasized, for the sequence of events so established must clearly constitute a crucial foundation of the monument's interpretation. Unfortunately, an accurate definition of the physical relationship between Cut 16 and Layer 6 proved elusive and the likelihood of Contexts 44 and 52 both representing the disturbed remains of a single original feature perhaps also warrants recognition (Fig. 7).

Figure 7 shows a central cluster of six cuts around which the remaining 10 features are spaced unevenly in a roughly circular arrangement. The significance, if any, of such a pattern, set within the projected perimeter of Ditch 18 remains unclear. Nevertheless the component contexts, excluding those presumably truncated by Trench 4 (Cuts 9, 11, 34 & 44, together with 52) had surviving diameters ranging from 0.3 m (Cut 37) to 1.12 m (Cut 32) and depths varying between 0.1 m (Cuts 25 & 50) and 0.4 m (Cut 46). The profiles of all 16 features are presented in Figures 8 and 9. Unless otherwise described in the ensuing text, the deposits within the cuts comprised homogeneous, friable, light to dark grey-brown, silty clay loams.

Whilst excavation proceeded, the somewhat predictable conclusion that all of the sub-circular/oval cuts located below the flint cairn were in some way associated with the ritual treatment and disposal of the dead became inescapable. Consequently, an illustration showing the presence of human bone, charcoal, fire-cracked flint and pottery within each of the relevant features has been prepared as a useful accompaniment to the written description and interpretation (Fig. 10).

The only other identified artefacts were a few humanly-struck flints; the absence of any obvious grave or pyre goods proving a not unexpected disappointment. The entire bone assemblage is discussed in a later section of this report. However, mention should be made here of the representation at Crowlink of both sexes, children and adults. The bones found in eight of the cut features (9, 16, 30, 32, 37, 40, 42 & 46) satisfactorily establish that these particular features contained cremation burials. Just two pieces of Neolithic pottery from Cut 9 (Fill 10) and one Late Bronze Age sherd from Cut 32 (Fill 33) were recovered. That, plus a lack of evidence for other organic containers (e.g. bags), implies that the confirmed skeletal deposits were placed directly into the unburnt, chalk-dug receptacles.

Although superficially problematic, the failure of the investigation to retrieve a single human bone

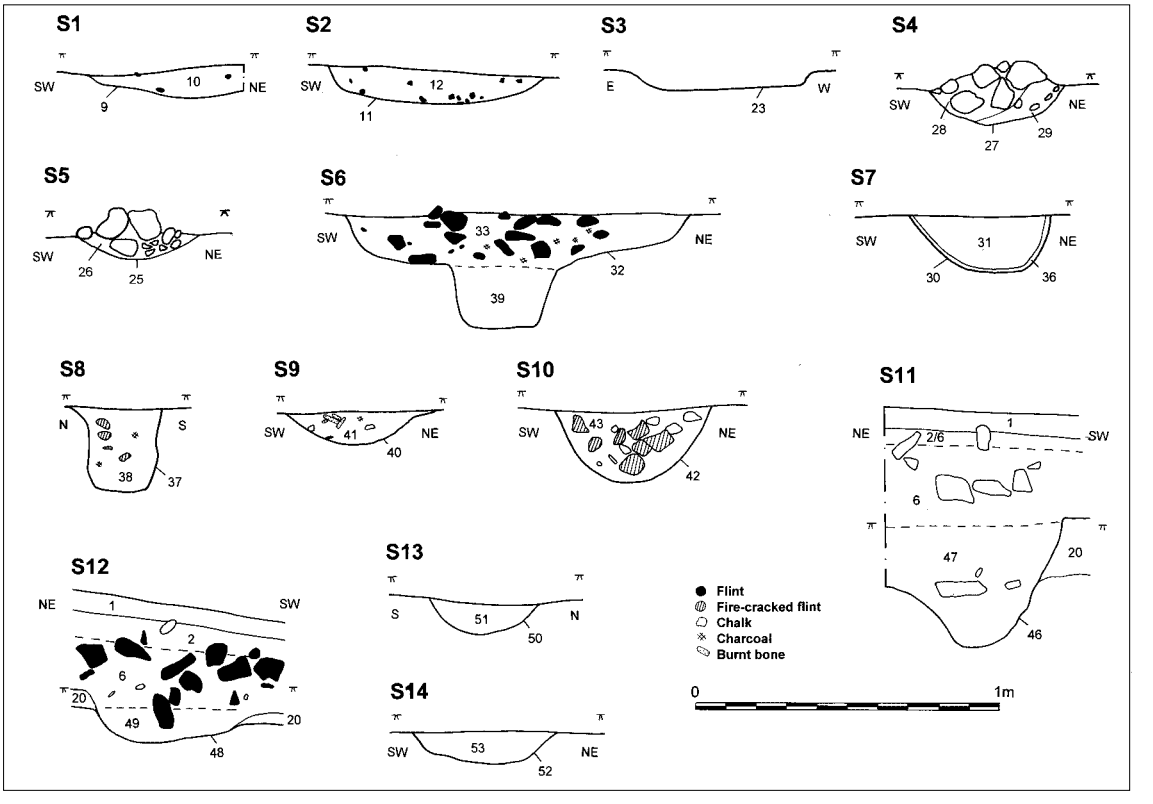

Fig. 8. Section drawings of revealed sub-circular features.

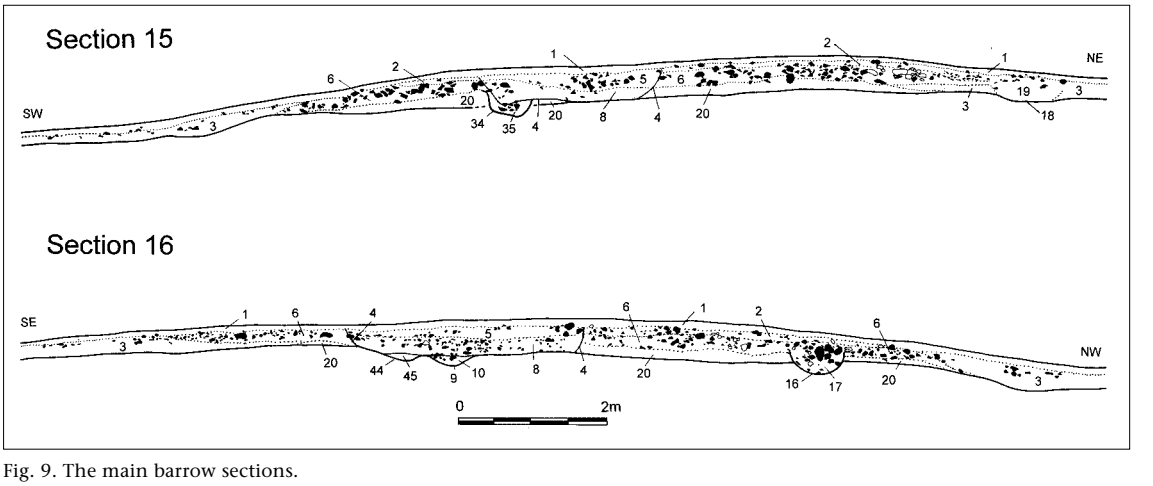

Fig. 9. The main barrow sections.

from Cuts 11, 34, 44 and 52 is less of a mystery if account is taken of their apparent truncation by Context 4. As noted above, the discovery of jumbled human bone and pottery within the intrusive trench (Fills 5 & 8) surely indicates that the four features under consideration once held funerary deposits subsequently disturbed by later activity. Indeed, the 15 sherds of Early Bronze Age pottery salvaged from Cut 11 (Fill 12) strongly support such a theory and may even indicate the original existence at the site

of at least one in-urned cremation. The excavation of Feature 34 (Fill 35) also yielded three fragments of an Early Bronze Age vessel; other parts of which were found in Contexts 2, 5 and 6.

The remaining features (25, 27, 48 & 50) contained very little charcoal and fire-cracked flint and were completely devoid of human bone. A noticeable characteristic of the Crowlink monument as a whole was the relatively tiny quantity of burnt bone recovered, even from the eight certain cremations identified during the excavation (Cuts 9, 16, 30, 32, 37, 40, 42 & 46). Although McKinley has recently stated that the entire remains of a body were very rarely collected from prehistoric pyres (McKinley 1997, 130), her earlier study of *c.* 4000 multi-period adult burials did procure a range of between 57 g and 2200 g of incinerated bone (McKinley 1994). At Crowlink, however, only two of the relevant contexts produced more than 100 g of such material (Cuts 32 & 40), four others each retained less than 10 g (Cuts 9, 30, 42 & 46). Perhaps we are dealing here with deposits of an essentially *token* nature. If this hypothesis is accepted, the proposition that Features 25, 27, 48 and 50 also contained fills once representative of specific rituals or individuals does not appear so fantastic. Of course, one would still expect the recorded archaeological data to indicate that the desperately small human bone assemblage gleaned from the confirmed burials was in fact simply another consequence of postliminary mound construction and consequent displacement of the 'finds'. Yet, the surprising, but total absence of burnt bone encompassed within the actual body of the flint cairn (Contexts 2/6 and 6), rather negates any theory of large-scale cremation disturbance beyond the confines of Trench 4.

The exposition of both Features 25 and 27 is further complicated by the densely-packed chalk pieces which appeared to cap them. Over the decades a modest number of Bronze Age cairn excavations in Sussex, such as those at Alfriston Race Course (Smith 1870) and Barpham Hill (Barr-Hamilton 1980), have encountered inhumation and cremation graves protected by localized domes of flint, below the main mound deposits. However, an exhaustive trawl through the *Sussex Archaeological Collections* only identified one similarly situated *chalk-covered* feature seen as being even vaguely analogous with Cuts 25 and 27. Most remarkable though is the revelation that this discovery was also made on Baily's Hill during the opening, previously mentioned, of a barrow, since lost to the sea. The almost 150-year old report of the opening depicts a circular form 'surrounded by a series of fragments of large chalk boulders or masses of chalk' (Figg 1852, 208). At the time these remains were construed as a hearth, despite the mention of associated 'fragments of bones charred' which may today suggest a cremation burial. Unfortunately, the absence of accurate records of Figg's exertion precludes any realistic functional or temporal comparison of the two investigated Crowlink monuments. Nevertheless, it is just conceivable that the rare chalk-lined/capped features portrayed above represent a local tradition. Even though Cuts 25 and 27 cannot be dated by artefacts, their juxtaposition and structural affinity hint at their intra-site contemporaneity.

Before a fresh topic for consideration is addressed, three additional strands of evidence may help explain why the ostensibly plausible interpretation of Contexts 25 and 27 as structural features (i.e. post-holes) has here been rejected. It should firstly be noted that the distinctive chalk inclusions contained within these cut features were not found in configurations typical of either undisturbed or collapsed post-packing. Secondly, no indication of any timber slot or staining was discerned, and finally, the two features under review shared an unusual characteristic with one of the definite cremation burials: a rock-hard, dark-grey, basal deposit of clay extraction. This last substance was recorded in irregular patches across the base and sides of Cuts 25 and 27 (unclear in section) and as a primary fill of Cut 30 (Fill 36) (Fig. 8). No documented parallels could be found for these discrete, but visually and textually similar contexts. Sadly these at present defy obvious explanation.

Nevertheless, the unburnt skeletal remains of an adult male (Special Find 142) discovered at the interface of Layers 6 and 20 clearly confirm that cremation was not the only burial rite practised on site. Careful examination failed to detect any signs of a grave cut associated with these bones, which were in effect supported by a matrix indistinguishable from Deposit 20. If this latter problematic context does indeed represent a buried soil as discussed above, our skeleton can be added onto a fairly exclusive list of bodies apparently laid out on pre-barrow surfaces, rather than in pits or under actual

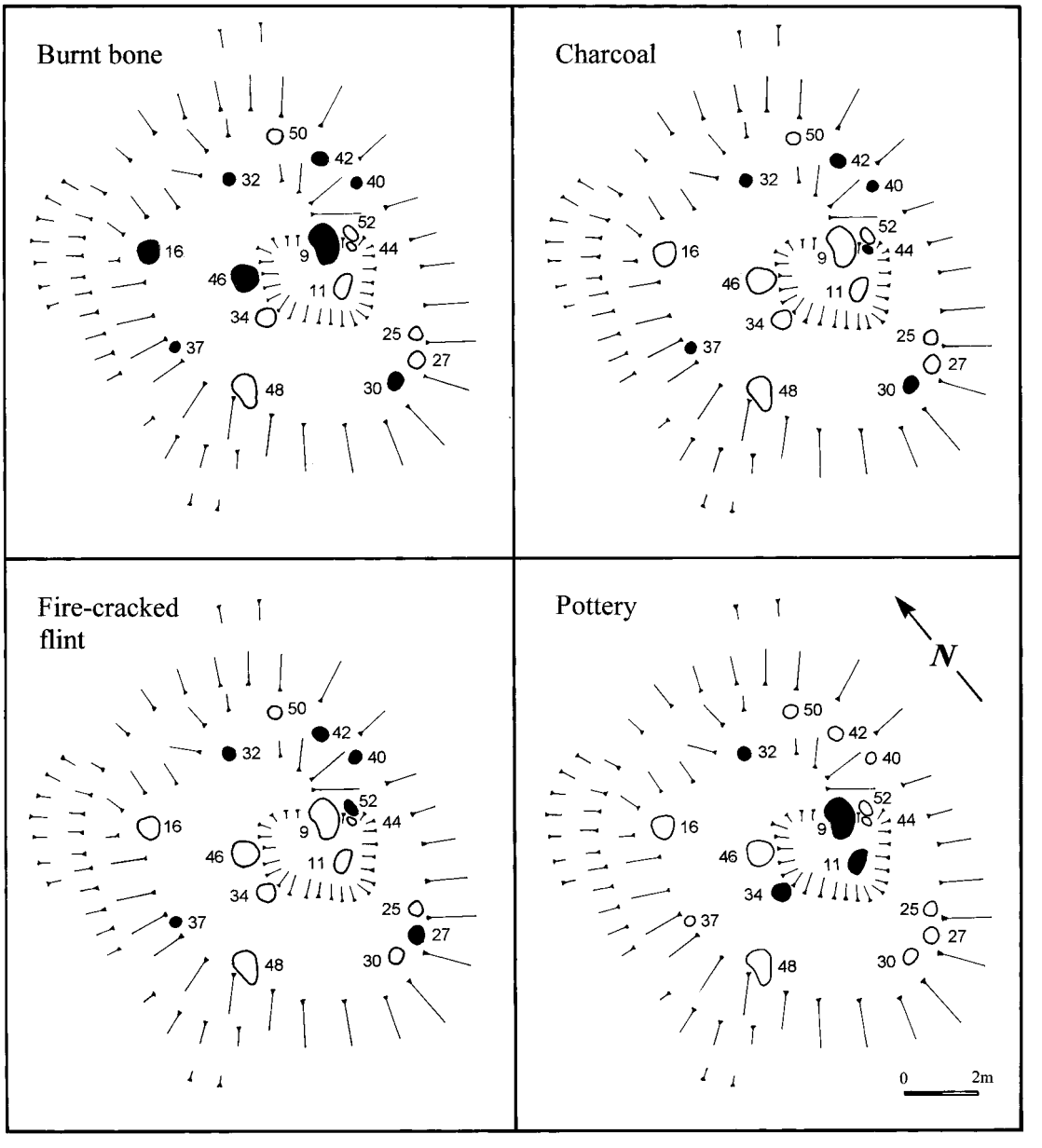

Fig. 10. The source of finds recovered from cuts located beneath the flint cairn.

mound formations. The most famous example of such a custom is the fabulously furnished male inhumation located beneath the huge Bush Barrow, near Stonehenge (Hoare 1812–19). Unfortunately, no artefacts accompanied the Crowlink specimen, which although at least partially articulated, was far too disturbed and incomplete for the original burial posture to be postulated. Missing and displaced bones are characteristic of many British Bronze Age interments; a general indication perhaps of initial

'exposure of the dead, possibly on wooden platforms' (Parker Pearson 1996, 94). Yet the development of any theories concerning the treatment of the Crowlink example prior to burial is precluded by the likely, though admittedly unproven, disruptive impact that the later cairn construction had upon these remains. The presence of a few scattered pieces of non-cremated human bone within Contexts 2/6 and 6, as well as in Trench 4 (Fills 5 & 8) provides tangible evidence for the occurrence of at least some skeletal derangement across the site. The additional more modern disturbance caused through animal burrowing and rootlet penetration has been noted already.

The only other unburnt human bones found during the excavation were those of an adult female recovered from the primary fill of Cut 32 (39). This matrix also yielded 391 g of cremated material and thus may once have held two 'individuals', each representative of a different post-mortem ritual. It is not clear whether a small quantity of cremated bone apparently contained within the latest surviving deposit (33) of the same feature constituted another discrete burial, or was simply part of that assigned predominantly to the immediately underlying context (39).

On completion of fieldwork two *Pomoideae* charcoal fragments from Cut 32 (Fill 39) and two onion couch tubers from Cut 40 (Fill 41) were sent for radiocarbon dating at the Research Laboratory for Archaeology and the History of Art, Oxford University. The pivotal results of this exercise are tabulated below. Readers requiring further procedural or statistical details should consult the Project Archive.

Although both deposits plainly contained organic elements of varying ages, samples CRW98 39A and CRW98 41A are thought to have provided a reliable *terminus post quem* for their respective contexts. Despite a pronounced break in feature profile suggestive of recutting, the Late Neolithic/Early Bronze Age date thus associated with the primary fill of Burial Pit 32 and its integral skeletal remains (Fill 39) is supported by the flintwork garnered from the overlying matrix (33). This collection of 73 humanly-struck flints constitutes the largest such assemblage retrieved from the recorded cremation receptacles, and possesses measured attributes typical of the Late Neolithic/Early Bronze Age. Fill 33 also yielded one presumably intrusive sherd of Late Bronze Age pottery.

Table 1. Crowlink Barrow radiocarbon dates.

Laboratory date no.	**Sample reference**	**Radio-carbon age (BP)**	**Calibrated range 95% confidence)**
OxA-8979	CRW98 41A	2990±39	cal. BC 1380–1050
OxA-8980	CRW98 41B	3145±40	cal. BC 1520–1310
OxA-8981	CRW98 39A	3820±45	cal. BC 2460–2130
OxA 8982	CRW98 39B	4015±45	cal. BC 2830–2460

A disappointing lack of suitable material meant that the contrasting and unexpected Later Bronze Age origin advanced for Burial Cut 40 (Fill 41) could not be tested through standard archaeological finds analysis. Indeed of the 16 sub-circular/oval-shaped features located below Layer 6, only Cuts 9, 11, 32 and 34 contained artefacts to which an absolute date was subsequently assigned. In addition to the flintwork and pottery described above from Cut 32, these items comprised just two Neolithic sherds (Cut 9/Fill 10) plus a small quantity of Early Bronze Age ceramic types (Cut 11/Fill 12 & Cut 34/Fill 35). Consequently, any definition of the precise ancestry of Features 16, 25, 27, 30, 37, 40, 42, 44, 46, 48, 50, 52 (Fig. 7) and the disturbed inhumation found at the interface of Contexts 6 and 20 proved impossible. Clearly, the true sequence of burial at Crowlink will remain a matter of conjecture unless the charcoal and/or bone retrieved from many of the currently undated cuts are submitted for radiocarbon appraisal. This pragmatic statement explains why the use of terms such as 'primary', 'secondary' and 'satellite' has been avoided during all discussion of the confirmed interments. However, even the most frustrating limitations forced upon the interpretation of the monument cannot negate the fact that five of the features located below the mound have provided dates which extend from the Late Neolithic/Early Bronze Age (Cuts 9, 11, 32 & 34) to the later Bronze Age (Cut 40). They must, therefore, represent more than one phase of activity prior to construction of the cairn.

In accordance with received advice, the fills of each of the following features were bagged up for post-excavation palaeoenvironmental examination (Cuts 9, 11, 16, 25, 27, 30, 32, 34, 37, 40, 42, 46, 48, 50 & 52). When all the cremated bone had been separated from these contexts, the potential presence and value of carbonized plant remains, small vertebrates and molluscs was subjected to preliminary evaluation by relevant specialists. It was concluded that none of this evidence merited further

detailed study, thus confirming the impossibility of ascertaining the immediate environment within which the monument was founded and utilized. The basic assessment reports are presented at the back of this report; the unsuitability of Crowlink's human skeletal material for DNA analysis should also be noted.

Once the investigation of all of the negative features and skeletal remains associated with the barrow had been completed, the removal of Layer 20 commenced with an enthusiasm fuelled by a sense that the end of the project was at last in sight. As well as the Late Neolithic/Early Bronze Age flint assemblage and Neolithic pot sherd already mentioned, this exercise yielded five pieces of fire-cracked flint, one small sarsen fragment (not plotted) and marine shell. Although none of these finds aided the interpretation of the approximately 250-mm-thick context, the chalk bedrock located below Layer 20 was exposed at a noticeably higher level than the surrounding geology. The most likely explanation for such a disparity of course revolves around the localized protection from erosion provided by the actual cairn structure. Yet the use and development of natural knolls for burial during the Bronze Age is a well-documented phenomenon. One of the better known Sussex examples is a turf barrow excavated at Minsted (Drewett 1975a). The adoption of extant topographic features could have facilitated the building of prominent artificial mounds visible from considerable distances. It is also worth reflecting upon the proposition that many of these raised locations constituted significant landmarks or foci for activity, prior to monument construction. An influential body of contemporary research undertaken by theorists and fieldworkers alike has advanced the concept of a prehistoric 'world' where natural forms, perhaps rocks or streams, possessed an ascribed symbolic importance (e.g. Tilley 1994). Indeed, a recent paper even introduced as a topic fit for future inquiry (Field 1998) the possibly deliberate placing of burial sites in perceived harmony with an existing sacred landscape.

Such conjecture is beyond the scope of this report. Here we must concentrate more mundanely on the large spread of Clay-with-Flints exposed within the site's south-west quadrant. As no archaeologically significant contexts were found in association with this natural deposit, it alone appears to have been responsible for a strong, apparently corresponding, magnetic signal registered during the initial geophysical evaluation of Baily's Hill (Linford 1998). The implications of such a logical deduction will surely impact upon the future analysis of any magnetometer surveys conducted across the chalk downland of south-east England. Indeed, it may cast doubt on the author's earlier contention that two other magnetic anomalies identified at Crowlink may represent a discrete pair of hitherto unrecorded barrows. Certainly, the inherent hazards of pre-excavation archaeological interpretation are demonstrated by the rejection of Linford's theory concerning the possible use of the once upstanding cairn as a beacon or focus of intrusive 20th-century wartime activity.

As soon as the main barrow structure and spatially-related contexts had been documented, a mechanical digger successfully stripped the topsoil from the area highlighted on Figure 2B, revealing the underlying chalk bedrock. This exercise might seem rather a minor adjunct to the main investigation, but was actually an important aspect of the fieldwork programme, enshrined in Project Objective Number 6, for the immediate environs of Sussex Bronze Age 'burial mounds' are a potentially valuable, but still often neglected, source of information. Unfortunately, the results of our particular endeavour will probably not inspire many similar undertakings, as no negative features or deposits of any description were found. Theoretically, the absence at this site of either settlement or pyre structures could indicate the *exclusive* prehistoric utilization of Baily's Hill for burial. The serious proposal of such a theory, however, would require the examination of a much larger tract of land encompassing the barrow cemetery in all directions. Although at Crowlink this option has of course largely been removed by coastal erosion, the fact that the ground scrutinized between a group of nine excavated mounds at West Heath, West Sussex was also devoid of archaeological features should be noted (Drewett *et al.* 1988, 80).

On completion of machining and cleaning, the barrow was reinstated as a roughly sub-circular mound, and the entire area of investigation relaid with all the turfs that had not blown off the cliff edge. Somewhat ironically, considering the complete destruction of the original site in the name of archaeology, this brand new field monument is somewhat taller than its predecessor and displays no sign of having been disturbed or robbed during antiquity.

A SITE SYNTHESIS

'. . . one should remember that while interpretations change, facts remain . . .' (Ashbee 1960, 193). If the following 'synoptic history' of the excavated Crowlink Barrow does not gain the acceptance or support of all readers, the context records, drawings, photographs, specialist reports and 'finds' which make up the Project Archive will be useful for any future consideration of the site.

The earliest recovered artefacts comprise a small collection of humanly-struck flints dated to the Mesolithic and Early Neolithic periods. Although unassociated with any archaeological features, these items indicate the transient exploitation of Baily's Hill by small bands of roaming hunter-gathers before *c.* 4300 BC and some activity during the Neolithic. It was not until many centuries later during the Late Neolithic/Early Bronze Age that a possibly circular ditch (Cut 18), dug upon the ridge, became a focus for funerary activity and ritual. The date of two of the eight definite cremation burials found within the encompassed area has been established. Cut 9 contained Neolithic pottery, while Cut 32 produced a Late Neolithic/Early Bronze Age worked-flint assemblage and a radiocarbon date of 2460–2130 cal BC (OxA-8981). Both pits cut an enigmatic deposit of silty clay loam which also yielded a number of Late Neolithic/Early Bronze Age flints, plus one Neolithic pot sherd from Layer 20. The author still prefers to interpret this layer, 'encircled' by Ditch 18 and situated immediately above chalk bedrock, as a buried soil. Of course, such a theory implies that the horizon was in some way protected from the elements soon after the deposition of Cremations 9 and 32. Sadly, no evidence for any *in-situ* contemporaneous mound or 'barrow' could be discerned. Indeed, Context 18 was clearly too ephemeral to have provided anywhere near enough material for an appropriately-sized structure. Nevertheless, an absence of post-holes dug into the base of the ditch precludes the feature's addition on to a recent list of later Neolithic/Early Bronze Age palisade trenches of Dorchester type (Harding & Lee 1987, 24) compiled by Miles Russell (1996). Cut 18 did not form part of a timber enclosure; it simply delineated an area chosen for Late Neolithic/Early Bronze Age burial.

The Bullock Down Landscape Project established the chalk hills south-west of Eastbourne as a region of unusually dense Late Neolithic/Early Bronze Age settlement (Drewett 1982, 58). In fact, the small farming groups inhabiting the Beaker sites at Belle Tout and Kiln Combe used pottery with decoration similar to that of examples found at Crowlink, suggesting a temporal and possible direct social link between these three loci.

Subsequently the monument became a centre of renewed funerary activity, when at least one cremation, radiocarbon dated to 1380–1050 cal BC (OxA-8979), was placed into a pit (40) dug through Layer 20. All of the burials recorded during the investigation were then covered with an oval-shaped cairn containing a typical later Bronze Age assemblage of over 15,000 humanly-struck flints (Contexts 2/6 & 6). The proposed date of this structure was supported by the discovery of 32 Late Bronze Age pottery sherds in association with the flintwork. However, Contexts 2/6 and 6 also yielded Neolithic, Beaker and Early Bronze Age fabrics, indicating that residual material derived from earlier activity at the site (perhaps even an obliterated Late Neolithic/Early Bronze Age mound), was 'scraped-up' and incorporated within the new cairn matrix.

The possible disturbance of certain burial deposits through postliminary barrow construction merits consideration, although the provenance of the partial skeleton found at the interface of Layers 6 and 20 remains unresolved. Another unanswered question concerns the proportion of struck to unworked flints integrated into the later Bronze Age structure. Nevertheless, an impression of monument size, shape, and profile can be obtained from Figures 3 and 9. The post-excavation examination of the retained flint collection is presented below.

A small sub-circular pit (23) cut into the top of Layer 6 and holding 308 Late Bronze Age sherds may demonstrate that the cairn maintained a position of ritual significance after its initial establishment within the local landscape. Indeed, the overwhelming evidence denoting activity of such a date at Crowlink was rather unexpected, as Drewett (1982, 212) concluded that 'the absence of any pottery of 1500–500 BC . . . argues for a desertion of Bullock Down during this period'. Beyond the boundaries of Peter Drewett's survey, signs of local chalkland occupation broadly contemporaneous with the final stage of barrow construction are limited to a few reported Late Bronze Age/Early Iron Age artefacts. These were recovered from a 1920s excavation of four 'huts' located on nearby Fore Down, Littlington (Curwen 1937, 216 & 230). The important timber platform and associated causeway found within the

waterlogged deposits of the low-lying Willingdon Levels, Eastbourne, and utilized between *c*. 900–800 BC is perhaps also worthy of mention (Greatorex forthcoming). Yet despite the conclusion that this part of the South Downs was 'marginal land rather than a focus of activity' (Drewett 1982, 208), the future discovery of a Later Bronze Age settlement in the vicinity of Baily's Hill should not be discounted.

Palaeoenvironmental studies undertaken across Bullock Down indicate that sizeable tracts of the investigated area were cleared for agriculture during the Late Neolithic/Early Bronze Age. However, unlike other regions of Sussex chalk brought under the management of organized farmsteads from *c*. 1700 BC, the apparent lack of succeeding Middle/Late Bronze Age occupation in this locality may have enabled shrub regeneration and the slow recovery of ridgeland soils. Sadly, owing to a paucity of evidence suitable for analysis, no conclusions can be drawn regarding the specific environment within which the Crowlink burial monument was founded, utilized and developed. This deficiency was the biggest disappointment of the project.

At some point during the site's later history, a sub-rectangular trench dug right through the centre of the cairn had disturbed a number of features, which cut the underlying bedrock. These included at least one cremation burial (Cut 9). The recorded intrusion is most easily interpreted either as a robber pit, or as the result of well-meaning, but undocumented, antiquarian endeavour during the last few centuries. Nevertheless, a number of alternative theories outlined previously merit serious consideration. On completion of the undefined activity associated with Cut 4, the upstanding monument appears to have been left undisturbed, until Holgate's 1985 survey initiated the series of events culminating in the production of this report.

SUSSEX LATER NEOLITHIC AND EARLIER BRONZE AGE POTTERY: THE EAST SUSSEX CROWLINK BARROW ASSEMBLAGE, ITS IMPLICATIONS AND REGIONAL CONTEXT

By Sue Hamilton

SUMMARY

The Crowlink assemblage of later prehistoric pottery was stratigraphically disturbed, but collectively it particularly evidenced Late Neolithic, Beaker, Early Bronze Age, and Late Bronze Age activities on, or near, the site of the barrow. Given the rarity of Late Neolithic pottery (Peterborough tradition) in Sussex and the, albeit slight, possibility of a Beaker cairn having been used in the construction of the Bronze Age barrow, the assemblage suggests that the Crowlink barrow marked a place of long-term, and pre-existing significance or special meaning.

The Crowlink pottery assemblage is doubly important: it requires a wider survey of East Sussex earlier prehistoric pottery, due to the fact that the latter lacks recent synthesis; it also throws fresh light on the possibly composite histories of South Downs' Bronze Age burial mounds.

THE CROWLINK POTTERY

The excavated pottery from Crowlink is a relatively small assemblage of 652 sherds, which weighs 5.2 kg. By weight, the Early Bronze Age pottery comprises 59% of the assemblage. This percentage is indicative of the large sherd size and the moderately complete nature of the Early Bronze Age vessels. Their relative completeness reflects the pottery's status as a generally *in-situ* assemblage associated with the barrow. When expressed in percentages of total sherd count, however, the prehistoric pottery assemblage as a whole comprises Neolithic (2%), Beaker (1.8%), Early Bronze Age (38%), and Late Bronze Age types (56.6%). This is a thought-provoking range for an ostensibly Early Bronze Age funerary monument. Collectively this pottery mixture raises several issues concerning: i) the placement of the dead in locations which had previously already been used; ii) the potential ideological potency of using artefact-rich building material (for the mound) in the construction of a burial monument; iii) the chronology of the mound, as distinct from the dating of the burials covered by the mound; and iv) the nature of activity at the mound after its primary construction.

THE STRATIGRAPHIC IMPLICATIONS OF THE CROWLINK POTTERY

The stratigraphic units of the barrow, and the possible land surface on which it was placed, are associated with distinct combinations of pottery. These phases (earliest to latest) are discussed below, and outlined in Table 2.

The excavated area off the mound (Context 3)

This area produced small quantities of both Beaker

Table 2. Quantification of the Crowlink pottery fabrics.

Context	2	3		2/6		5		6			8		10	12	20	24			33	35
Neolithic																				
fabric						S1		F1	S1	S2			S1		F1		S1			
no. of sherds						2		2	2	3			2		1		1			
g						39		7	18	9			18		3		2			
Beaker																				
fabric		G1	G2	G2				F1	G2	G3	G2			S1						
no. of sherds		1	1	1				1	5	1	1			1						
g		4	1	3				9	15	2	7			1						
Early Bronze Age																				
fabric	G1			G1		G1	G2	G1	G2		G1	G2		G2		G1				G1
no. of sherds	18			6		78	18	83	6		26	13		15		1				3
g	242			41		1185	60	584	20		557	70		85		7				211
Late Bronze Age																				
fabric	F1	F1		F1	F3	F1		F1	F2	Q1	F1					F1	F3	F4	F1	
no. of sherds	1	1		5	2	21		21	3	1	7					5	35	268	1	
g	2	2		34	13	162		84	8	1	76					11	164	1457	1	
Late Iron Age/ Romano-British																				
fabric						G1														
no. of sherds						1														
g						4														
Saxo-Norman																				
fabric						MG1														
no. of sherds						3														
g						9														

and Late Bronze Age sherds which corresponds with the evidence for the use of the barrow area before the Early Bronze Age and for subsequent Late Bronze Age activity.

Possible pre-cairn surface (Context 20)

The surface on which the cairn was situated/built produced a single, small flint-gritted (Fabric N/F1) sherd. This sherd is difficult to date, but both its thinness and its stratigraphic location suggest a Neolithic date. Its fabric is different to that of the Early Bronze Age urns, and also differs from that of the Beaker pottery from the barrow.

The cremation cuts and their fills

Cremation Pit 9 (fill: Context 10)

This feature contained two shell-tempered Neolithic sherds. These may be residual sherds relocated from the body of the cairn during the intrusion of the robber trench (*see* below). Alternatively, they may have derived from the possible original surface when the cremation pit was made.

Cremation Pit 32 (top fill: Context 33; lower fill: Context 39)

No pottery was recovered from the lower fill of this feature. One Late Bronze Age sherd in the upper fill is consistent with the more general evidence of Late Bronze Age activity at the site.

Cremation Pit 34 (fill: Context 35)

The fill of this feature produced three large body sherds from an Early Bronze Age Biconical Urn decorated with diagonal, applied cordons and an applied cordon girth (Fig. 13:20–24). This inurned cremation had been much disturbed. Parts of the vessel (notably from the rim and the shoulder) were found in the body of the cairn (Context 6: rim and shoulder sherds) and the robber trench (Contexts 5 & 8: only shoulder sherds). The presence in the cairn of these rim sherds could suggest that the urn was placed base-down in the cut, and that the upper part of the vessel was protruding until the cairn was *subsequently* constructed around it. A body sherd from the lower half of the urn was recovered from the fill of the cut. No base sherds were, however, identified from the cut, and the redeposition of some of the vessel in the robber trench suggests that the cairn was already denuded, or/and quite disturbed by the robbing.

Discussion

The cremation pits were only visible as penetrating the original land surface below the cairn. The mound itself lacks evidence of more than one construction phase. It seems unlikely, however, that all of the

cremations were exactly contemporary, and thereby concurrently available for coverage in a single stratigraphic act of mound construction. This collectively raises three questions, whether:

i) the cremations were stored elsewhere, as part of a primary burial tradition, until the time that the cairn was built;
ii) the cairn was too disturbed to permit recognition of the sequential cutting of cremation features through it;
(iii) an original mound was destroyed during construction of the later flint cairn.

It is interesting that locally, at Bullock Down, a Collared Urn was found set upright in a shallow-cut chalk pit and, although it did not contain a cremation, was alongside two small pits each of which contained a cremation but no pottery. The Bullock Down Collared Urn appears to have been buried alongside the cremations as part of a primary burial rite, which did not involve the construction of a barrow (Drewett 1982, 59). This find highlights the possibility that the Crowlink barrow may have covered a pre-existing *in-situ,* or regrouped, collection of inurned cremations, a possibility which is particularly suggested by fragmentation pattern of the urn from Cremation Pit 34 (*see* above).

The cairn (Context 6)

The cairn (Context 6) was the only stratigraphic unit to contain both Neolithic and Beaker pottery. The Beaker sherds (Fig. 11:2–5) are eroded and derive from several vessels. The Neolithic pottery importantly comprises a few sherds from a Peterborough tradition Mortlake bowl (Fig. 11:1) and some flint-gritted body sherds. Together these finds suggest *residual* pottery derived from former sites in the proximate vicinity, or actual location of the cairn. The re-use of Beaker cairn material in the construction of the Crowlink barrow is one possibility.

Pit in top of the cairn (Pit 23: Fill 24)

This feature produced one Neolithic sherd, one Early Bronze Age sherd, and a substantial number of Late Bronze Age sherds (Table 2). The latter mostly come from the lower part of a single pot, but body sherds from other vessels are also present. Given the absence of later material in this feature, this suggests some form of Late Bronze Age activity focused on the mound. The pit may relate to a pot or an inurned cremation (no longer apparent) which was set into the mound.

Robber Trench 4 (top fill: Context 5; lower fill: Context 8)

The upper fill (Context 5) of the robber trench mostly comprised Early Bronze Age sherds. A very few Neolithic and quite a few Late Bronze Age sherds were also present, together with a single example of East Sussex Ware (Late Iron Age/Early Romano-British) and three Saxo-Norman sherds.

The inurned cremation at the base of the trench's lower fill (Context 8) contained substantial quantities of Early Bronze Age pottery, together with some Late Bronze Age and Beaker sherds. The quantities of Early Bronze Age pottery most likely relate to the disturbance of an Early Bronze Age inurned cremation at the base of the trench.

Ploughsoil (Context 2)

Finds of Early and Late Bronze Age sherds probably relate to the spread and erosion of the mound material into the ploughsoil.

THE CROWLINK POTTERY FABRICS AND THEIR ASSOCIATION WITH DIAGNOSTIC FORMS AND DECORATION

Methodology of analysis

The primary grouping and period definition of the assemblage was by fabric in conjunction with the identification of diagnostic forms and decorated sherds for each fabric group. All inclusion/temper sizes given below are classified using the Wentworth sedimentary scale and descriptive terms (Prehistoric Ceramics Research Group 1992, 35). Density charts (Prehistoric Ceramics Research Group 1992, appendix 3) were used to standardize assessment of the quantity of inclusion/temper present in the fabric matrices.

Fabrics

Neolithic fabrics (13 sherds)

Flint-tempered fabrics

N/F1:	Common flint-tempered.
Contexts:	6, and 20.
Crowlink diagnostic forms:	None.
Fabric description:	Moderate to common (15%–20% density) small granule-sized (*c.* 4 mm), calcined flint grits. Buff, oxidized surfaces and grey unoxidized core.
Body sherd thickness:	9–10 mm.

Shell-tempered fabrics

N/S1	Common shell- and sparse calcined flint-tempered.
Contexts:	5, 6, and 10.
Crowlink diagnostic forms:	Fig. 11:1.
Fabric description:	Moderate (10% density) to

common (20% density) medium sand-sized (1 mm) to small granule-sized (5 mm) shell, together with sparse (7% density) coarse sand-sized grey-white calcined flint grit. Dark grey unoxidized core and often red oxidized surfaces. Rough surface finish. Body thickness 10 mm.

N/S2: Sparse shell-tempered.
Context: 6.
Crowlink diagnostic forms: None.
Fabric description: Sparse (5% density) coarse sand to small granule-sized (1.5 to 4 mm) shell pieces. Surfaces are oxidized buff to red in colour and cores are unoxidized dark grey in colour. Body sherd thickness: 5 mm.

Beaker fabrics (12 sherds)

Flint-tempered fabrics

B/F1: Sparse flint-tempered with quartz sand.
Contexts: 6.
Crowlink diagnostic forms: Fig. 11:2–3.
Fabric description: Rare (2% density) to sparse (3% density) fine (0.5 mm) to medium (1 mm) sand-sized white calcined flint grits and sparse (3%–7%) medium sand-sized (0.5 mm) quartz sand. Surfaces and core are oxidized red to orange in colour. Body sherd thickness: 6 mm.

Grog-tempered fabrics

B/G1: Grog- and medium flint-tempered with quartz sand.
Contexts: 3.
Crowlink diagnostic forms: None.
Fabric description: Sparse (3% density) medium (1 mm) to coarse (3 mm) sand-sized white calcined flint grits, together with sparse (5% density) to moderate (10% density) angular medium (1 mm) to coarse (3 mm) sand-sized grog, and sparse (3%–7% density) medium sand-sized (0.5 mm) quartz sand. The core and surfaces are oxidized and red to orange in colour. Body sherd thickness: 6 mm.

B/G2: Grog- and fine flint-tempered with quartz sand.
Contexts: 2/6, 3, 6, and 8.
Crowlink diagnostic forms: Fig. 11:4, 5 & 6.
Fabric description: Rare (2% density) to sparse (3% density) fine (0.5 mm) to medium (1 mm) sand-sized white calcined flint grits, together with sparse (5% density) to moderate (10% density) angular medium (1 mm) to coarse (3 mm) sand-sized grog, and sparse (3%–7% density) medium sand-sized (0.5 mm) quartz sand. Surfaces and core are oxidized red to orange in colour. Body sherd thickness: 6 mm.

B/G3: Sparse grog-tempered.
Context: 6.
Crowlink diagnostic forms: None.
Fabric description: Sparse (5%–7% density) coarse sand to small granule-sized (1–4 mm) red grog in an oxidized buff-coloured paste. Both interior and exterior surfaces are smooth. Body sherd thickness: 5–6 mm.

Shell-tempered fabrics

B/S1: Shell- and flint-tempered.
Context: 12.
Crowlink diagnostic forms: None.
Fabric description: Moderate (10% density) to common (20% density) medium sand-sized (1 mm) to small granule-sized shell pieces with sparse (7% density) coarse sand-sized grey-white calcined flint grits. The exterior surface is oxidized and buff in colour. The interior surface and core are unoxidized and grey in colour. Body sherd thickness: 6 mm.

Early Bronze Age fabrics (267 sherds)

Grog-tempered fabrics

EBA/G1: Grog- and medium flint-tempered.
Contexts: 2, 2/6, 5, 6, 8, 24, and 35.
Crowlink diagnostic forms: Fig. 11:7–8, Fig. 12:9–12, and Fig. 13:20–25.
Fabric description: Rare (<1% density) medium sand-sized calcined flint grit with sparse (3% density) to moderate (10% density) coarse sand-sized (0.5–1.5 mm) grog. The most visible grog protrudes slightly above the surface of the matrix, and is pinkish-buff in colour. Surfaces are oxidized buff, and the core is unoxidized dark grey. Several sherds have weathered surfaces (e.g. from Context 2). Where preserved, the surfaces are smooth. Body sherd thickness: up to 15 mm.

EBA/G2: Medium and coarse grog-tempered with very rare shell.
Contexts: 2/6, 5, 6, 8, and 12.
Crowlink diagnostic forms: Fig. 12:13–19.
Fabric description: Moderate (10%–15% density) medium (0.5 mm) to coarse (1.5 mm) sand-sized sub-angular to sub-rounded grog. Very rare (1% density) medium (0.5 mm) sand-sized shell pieces. Both the shell and the grog are clearly visible in the very dark grey unoxidized core. The interior and exterior surfaces are oxidized to a pink/buff colour. Body sherd thickness: 7–10 mm.

Late Bronze Age fabrics (371 sherds)

Flint-tempered fabrics

LBA/FD1: Medium flint-tempered.
Contexts: 2, 2/6, 3, 5, 6, 8, and 24.
Crowlink diagnostic forms: Fig. 14:26–28.
Fabric description: Moderate (10% density) fine (0.5 mm) to coarse (2 mm) sand-sized white calcined flint grits, with rare(1% density) fine (<0.5 mm) quartz sand. Surfaces and core are unoxidized dark grey-brown to very dark grey in colour. Body sherd thickness: up to 8 mm.

LBA/F2: Fine flint-tempered.
Context: 6.
Crowlink diagnostic forms: None.
Fabric description: Moderate (10% density) fine to coarse sand-sized (0.5–l mm) calcined flint grits. The core is unoxidized dark grey coloured, and the surfaces are oxidized buff to orange in colour. Body sherd thickness: 5 mm.

LBA/F3: Sparse medium flint-tempered with some grog temper.
Contexts: 2/6, and 24.
Crowlink diagnostic forms: None.
Fabric description: Sparse (3%–5% density) coarse sand-sized (l mm) to granule-sized (7 mm) grey and white calcined flint grit. The grog temper is well bonded into the sherd matrix and it was not possible to quantify it. The exterior surfaces are oxidized buff, and the core and inner surfaces unoxidized dark grey. Body sherd thickness: 8 mm.

LBA/F4 : Sparse fine flint-tempered with grog.
Context: 24.
Crowlink diagnostic forms: Fig. 14:30.
Fabric description: Sparse (7% density) coarse sand-sized (l mm) and small granule-sized (5 mm) grey and white calcined flint grits. The grog is again difficult to quantify, being fully bonded into the fabric matrix. The surfaces are oxidized to a buff colour and the cores are unoxidized and dark grey in colour. Body sherd thickness: 13 mm.

Sandy fabrics

LBA/Q1: Quartz sand-tempered.
Context: 6.
Crowlink diagnostic forms: Fig. 14:29.
Fabric description: Common (20% density) fine and medium-sized (<0.5–l mm) quartz sand. The surfaces and core are oxidized dark red in colour. Interior and exterior surfaces are burnished. Body sherd thickness: 4 mm.

Late Iron Age/Romano-British fabrics (1 sherd)

Grog-tempered fabric

LIA-RB/G1: East Sussex Ware (also known as Cooking Jar Fabric).
Context: 5.
Crowlink diagnostic forms: None.
Fabric description: This fabric characterizes the Late Iron Age and Early Romano-British period of East Sussex. It is grog-tempered, with a burnished finish and variously occurs in patchy oxidized and unoxidized states. It is a recognized Sussex fabric type and is fully described and detailed by Green (1977; 1980).

Saxo-Norman fabrics (3 sherds)

Multi-gritted fabric

SN/MG1: Multi-gritted.
Context: 5.
Crowlink diagnostic forms: None.
Fabric description: The most predominant feature of this fabric is the presence of sub-angular pieces of flint belonging to coarse to medium sand-sized grades. These are multi-coloured white, red, pink, or grey, and are slightly polished. The fabric is akin to Bishopstone Anglo-Saxon Fabric 2 (*see* Bell 1977, 227 for a more detailed description).

THE ILLUSTRATED SHERDS (Figs 11–14)

The illustrated sherds are grouped by period and vessel, rather than by context. The contexts of individual sherds are, however, noted on the illustrations. This format was favoured to respect the integrity of individual cremation urns, and to emphasize both the disturbed nature of the mound and its original stratigraphy, and also the diverse origins of the pottery in the mound material.

Neolithic pottery

All diagnostic form and decorated sherds are illustrated.

Fig. 11

Sherd no. Description

1. Extended rim from a Mortlake bowl decorated with whipped twisted cord impressions. The surfaces are unoxidized except on extended rim. Fabric: N/S1; Context: 6.

Beaker pottery

All diagnostic form and decorated sherds are illustrated.

Fig. 11

Sherd no. Description

2. Decorated body sherd with a zigzag decoration produced by impressing a rectangular-toothed comb. Oxidized brick red surfaces and core. Fabric: B/F1; Context: 6.

3. Flat base sherd. Oxidized brick red surfaces and core. Fabric = B/F1; Context: 6.

4. Decorated body sherd with three horizontal lines, produced by impressing a rectangular-toothed comb. Oxidized brick red surfaces and core. The sherd is weathered. Fabric: B/G2; Context: 6.

5. Base sherd decorated with three horizontal lines produced by impressing a rectangular-toothed comb. Oxidized brick red surfaces and core. Fabric: B/G2; Context: 6.

6. Body sherd decorated with three horizontal lines. The two lowermost lines are incised. The uppermost line comprises a blurred twisted-cord impression, smooth unoxidized interior surface and core. The exterior surface is oxidized brick red to buff. Fabric: B/62; Context: 6.

Early Bronze Age pottery

All vessels with diagnostic form and decorated sherds are illustrated. The full number of rim and shoulder sherds from each Collared Urn and Biconical Urn are not illustrated.

Fig. 11

Sherd no. Description

7. Sherd with curving horizontal raised or applied cordon from Biconical Urn. The cordon is somewhat curved, but appears to have been positioned at the point of carination in the vessel profile. Some brush smears are apparent on the external surface. The interior and exterior surfaces are oxidized and buff coloured. The core is unoxidized and dark grey in colour. Carbonate precipitate obscures the external surface. Fabric: EBA/G1; Context: 5.

8. Sherd with curving horizontal raised or applied cordon from the same Biconical Urn as no. 7. Fabric and form characteristics are as described for Fabric: EBA/G1; Context: 5.

Fig. 12

Sherd no. Description

9. Internally bevelled rim sherd from a Collared Urn. The upper body of the vessel is decorated with two diagonal lines of cord impressions and one horizontal cord-impressed line immediately below the rim. The top of the rim is decorated with two parallel cord-impressed lines. A cluster of crescent-shaped fingernail impressions is also evident. Oxidized buff interior and exterior. Dark grey unoxidized core. Smooth, but lumpy surfaces. Part of same vessel as nos 10, 11 and 12. Fabric: EBA/G1; Context: 5.

10. Internally bevelled rim from a Collared Urn decorated with two diagonal cord-impressed, and one horizontal cord-impressed, lines immediately below the rim. There is a possible trace of a crescent-shaped fingernail impression. Fabric and finish characteristics are as described for no. 9. Part of same vessel as nos. 9 and 11–12. Fabric: EBA/G1; Context: 8.

11. Decorated body sherd from the same Collared Urn as nos 9–10 and 12. The decoration comprises a criss-cross formed by two impressed cord lines, with one further diagonal cord-impression line, which suggests that it is part of a lattice pattern. Fabric and finish characteristics are as described for no. 9. Part of same vessel as nos 9–10 and 12. Fabric: EBA/G1; Context: 5.

12. Decorated sherd from the base of the collar of a Collared Urn. The impressed cord decoration comprises three diagonal lines springing from a single, horizontal line. Part of the same vessel as nos 9–11. The fabric and finish characteristics are as described for no. 9, *see* above. Fabric: EBA/G1; Context: 8.

13. Internally bevelled rim sherd from a small Collared Urn. The decoration beneath the rim comprises a diagonal line formed by twisted cord impressions. The top of the rim also has a diagonal line formed by twisted cord impressions. Oxidized buff-coloured interior and exterior surfaces and dark grey unoxidized core. Smooth but somewhat lumpy surfaces. Part of the same vessel as nos 14–19. Fabric: EBA/G2; Context: 8.

14. Internally bevelled rim sherd from a small Collared Urn. There is slight evidence of decoration (stabbed circular depressions) produced by impressing a (bird's?) bone. The sherd is part of the same vessel as nos 12–15 and 17–18. The sherd has the same fabric characteristics as described for no. 13. Fabric: EBA/G2; Context: 6.

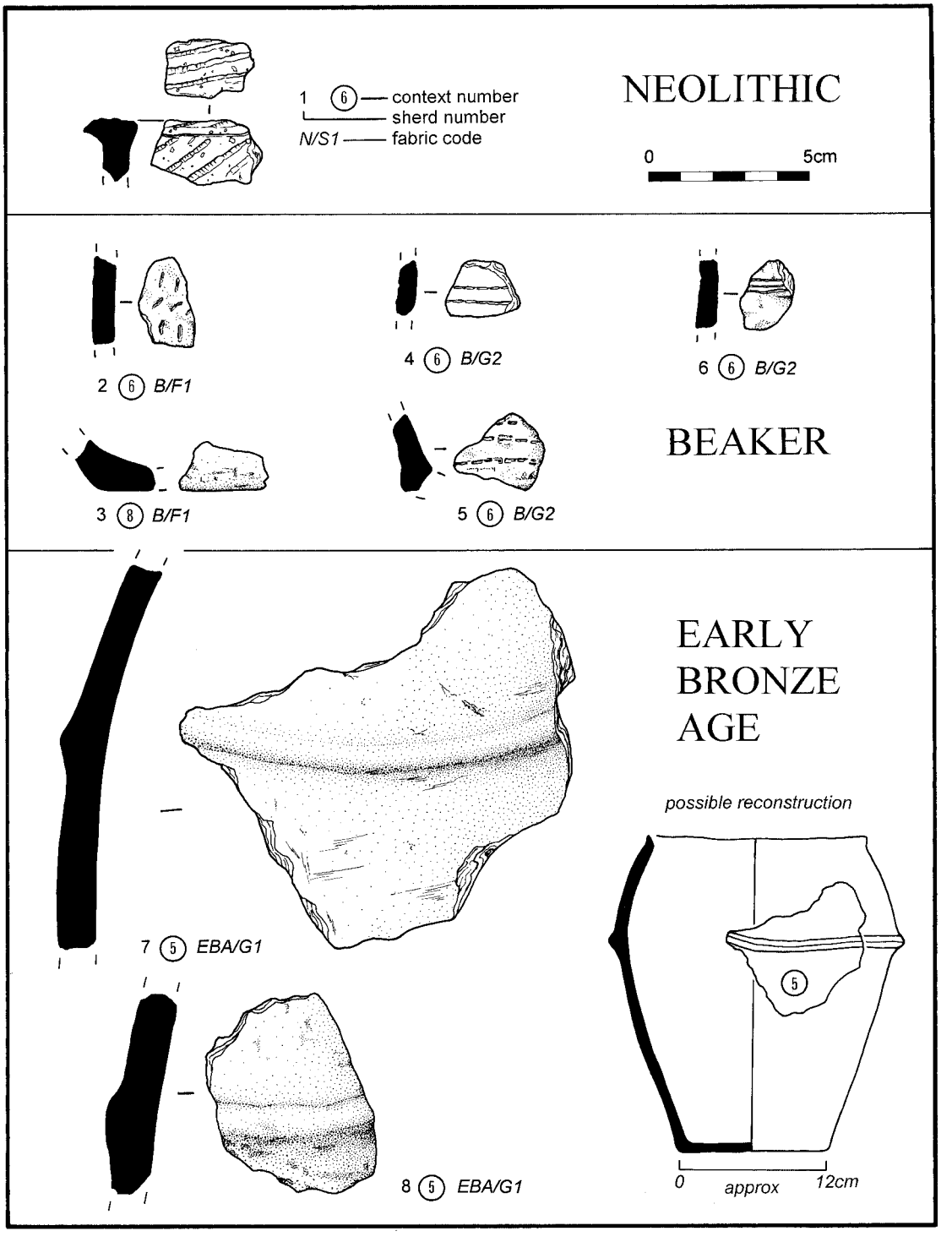

Fig. 11. The pottery: Neolithic/Beaker/Early Bronze Age.

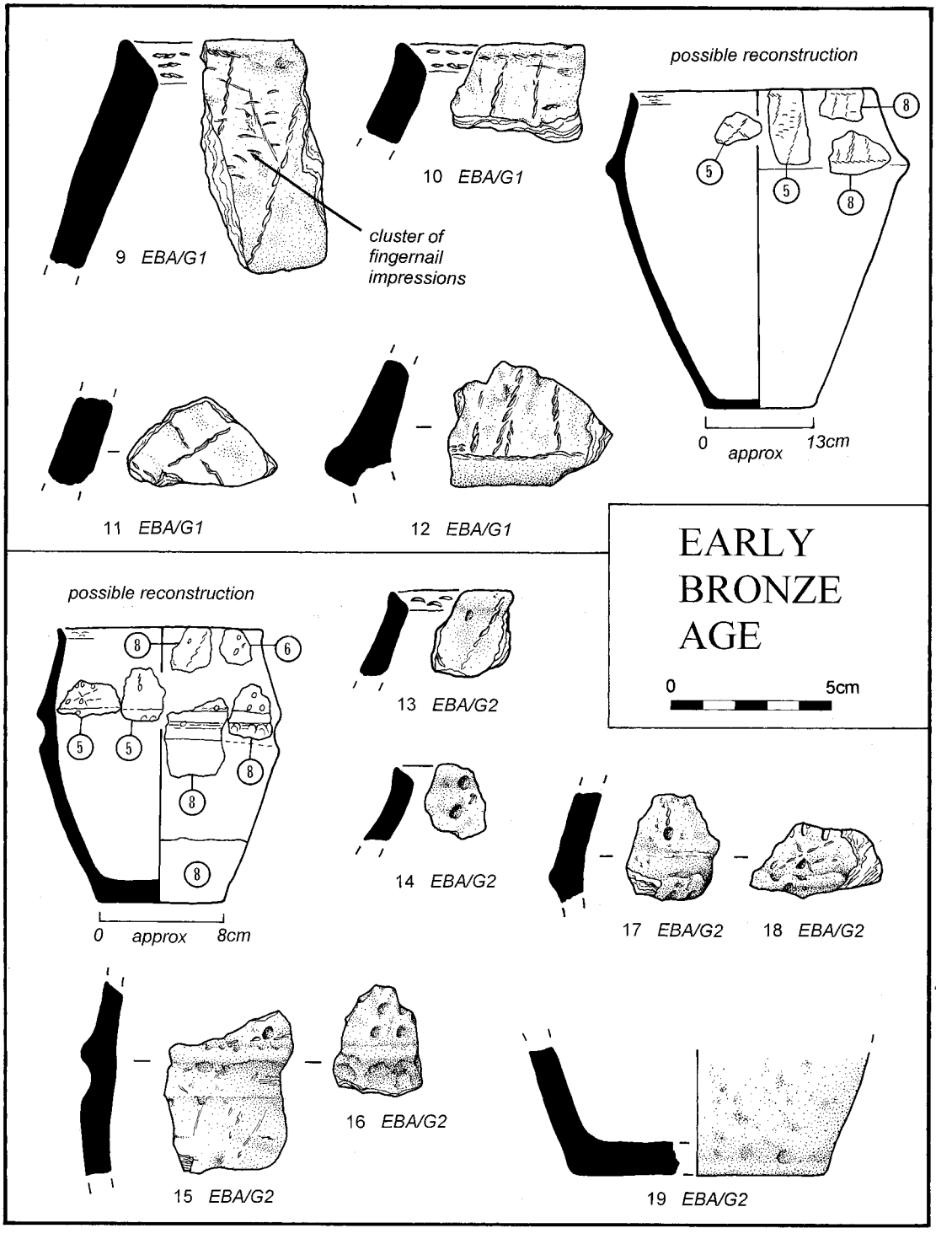

Fig. 12. The pottery: Early Bronze Age.

15. Decorated sherd from the collar of small Collared Urn. There is slight evidence of a decoration of stabbed circular depressions produced by impressing a (bird's?) bone. Part of the same vessel as nos 12–15 and 17–18. The sherd has the same fabric characteristics as described for no. 13. Fabric: EBA/G2; Context: 8.

16. Decorated sherd from collar of small Collared Urn. There is slight evidence of decoration (stabbed circular depressions) produced by impressing a (bird's?) bone. Part of the same vessel as nos 12–15 and 17–18. The sherd has the same fabric characteristics as are described for no. 13. Fabric: EBA/G2; Context: 8.

17. Decorated sherd from base of collar of small Collared Urn. The decoration is of two horizontal lines formed by twisted cord impressions and one round (bird's?) bone impression just above. The sherd is part of same vessel as nos 13–15 and 19. It has the same fabric characteristics as are described for no. 12 above. Fabric: EBA/G2; Context: 5.

18. Decorated sherd from base of collar of small Collared Urn. The decoration is a criss-cross produced by impressing a twisted cord. There are possible traces of a round (bird's?) bone impressions. Part of same vessel as nos 13–17, and 19. The sherd has the same fabric characteristics as are described for no. 13. Fabric: EBA/G2; Context: 5.

19. Flat base sherd from a small Collared Urn. Part of the same vessel as nos 13–18. The base has the same fabric characteristics as are described for no. 13 above. Fabric: EBA/G2; Context: 8

Fig. 13

Sherd no. Description

20. Everted rim from a Biconical Urn. The surfaces are oxidized buff in colour, and the core is dark grey and unoxidized. Surfaces are weathered. Part of the same vessel as nos 21–25. Fabric: EBA/G1; Context: 2.

21. Everted rim from a Biconical Urn. The sherd is part of the same vessel as nos 20 and 22–25. It has the same fabric characteristics as are described for no. 20. Fabric: EBA/G1; Context: 6.

22. Shoulder sherd from a Biconical Urn with one applied diagonal cordon on the shoulder and an applied girth cordon at the point of the vessel's carination. It is part of the same vessel as nos 20–21 and 23–25. It has the same fabric characteristics as are described for no. 20 above. Fabric: EBA/G1; Context: 5.

23. Sherd from immediately below the everted rim of a Biconical Urn. There is a rough area on the exterior surface, which is keying material remnant from a now-detached, cordon fillet. Part of the same vessel as nos 20–22 and 24–25. It has the same fabric characteristics as are described for no. 20 above. Fabric: EBA/G1, Context: 6.

24. Shouldered sherd from a Biconical Urn with two diagonal cordons. It is part of the same vessel as nos 20–23, and 24–25. It has the same fabric characteristics as are described for no. 20 above. Fabric: EBA/G1, Context: 5.

25. Body sherd from near the base of a Biconical Urn. The sherd is part of the same vessel as nos 19–23. It has the same fabric characteristics as no. 19 above. Fabric: EBA/G1, Context: 35.

Late Bronze Age pottery

All Late Bronze Age diagnostic form sherds are illustrated.

Fig. 14

Sherd no. Description

26. Round-topped rim sherd from a shoulder bowl or jar. The interior has finger depressions from the shaping of the rim. Slight fingering and wiping marks are present on the exterior from surface finishing. It is part of the same vessel as no. 27. It has unoxidized dark grey to brown surfaces and core. The surfaces are rough. Fabric: LBA/FA; Context: 5.

27. Base sherd with foot-ring and diagonal fingernail impressions on the underside of the foot-ring. It is part of same vessel as no. 26, *see* above. It has the same fabric characteristics as no. 26 with some additional areas of surface oxidization to a buff/orange colour. Fabric: LBA/F1; Context: 5.

28. Rounded, out-turned rim from shouldered jar. The surfaces and core are unoxidized dark brown/grey in colour. Fabric: LBA/F1; Context: 2.

29. Upturned rim sherd probably from a fine ware bi-partite bowl. The surfaces and core are oxidized dark red. The surfaces are burnished. Fabric: LBA/Q1; Context: 6.

30. Rim sherd from shouldered jar with a finger-impressed rim top. The surfaces are oxidized to a buff colour. The core is unoxidized and dark grey in colour. Fabric: LBA/F4; Context: 6.

THE REGIONAL CONTEXT OF THE CROWLINK POTTERY: FORMS, DATING AND AFFINITIES

Given the diverse chronological and typological range of prehistoric pottery recovered from the Crowlink barrow, it is appropriate to assess the characteristics of this pottery against our current knowledge of earlier prehistoric pottery from Sussex, and East Sussex in particular. The pottery in use in Sussex before the Middle Bronze Age (before use of Deverel-Rimbury type pottery became widespread) however lacks a modern overview. Past collation of this pottery comprises Musson's (1954) *Illustrated Catalogue of Sussex Beaker and Bronze Age Pottery,* Longworth's (1984) Sussex listings in his *Collared Urns of the Bronze Age in Great Britain,* Ellison's (1978;

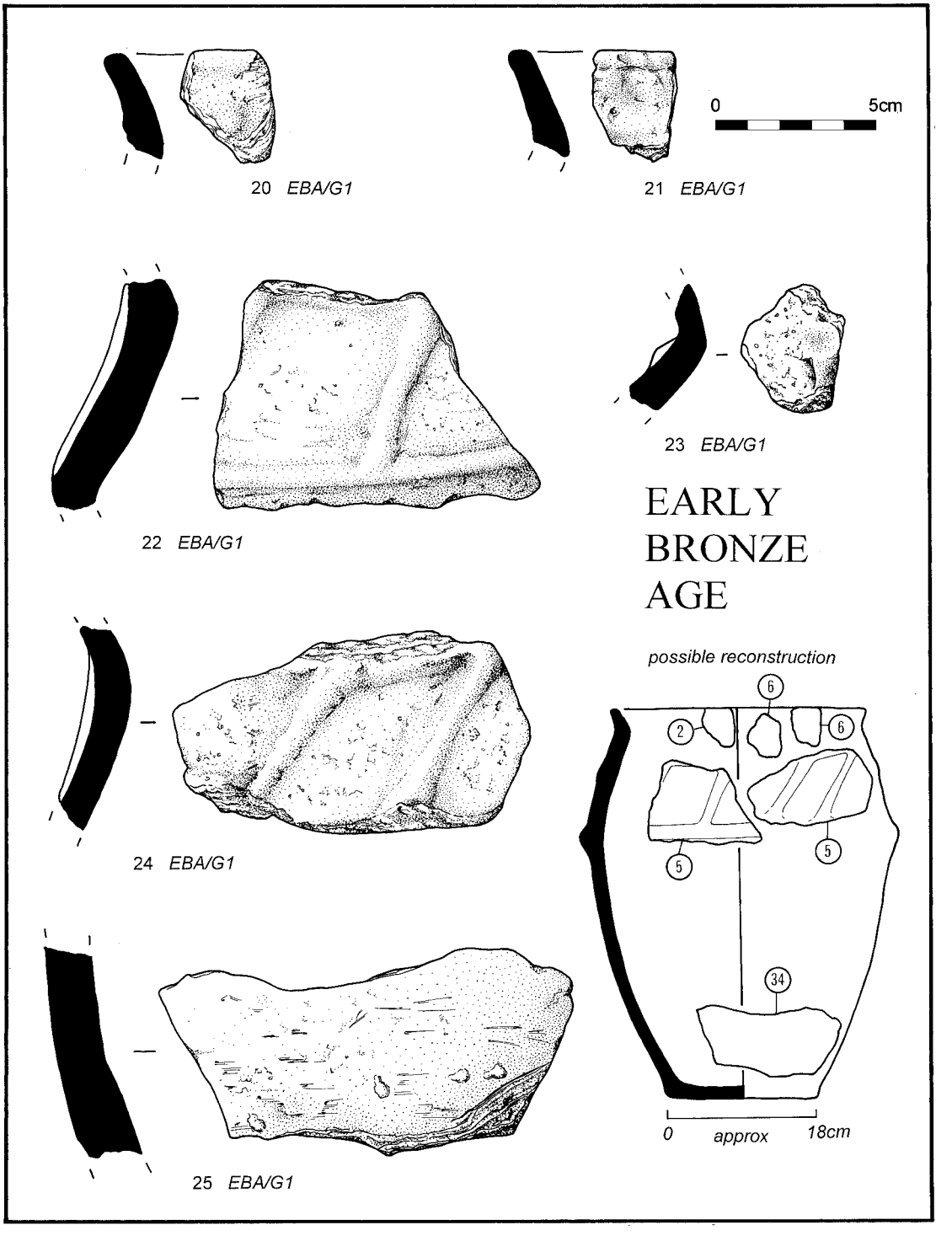

Fig. 13. The pottery: Early Bronze Age.

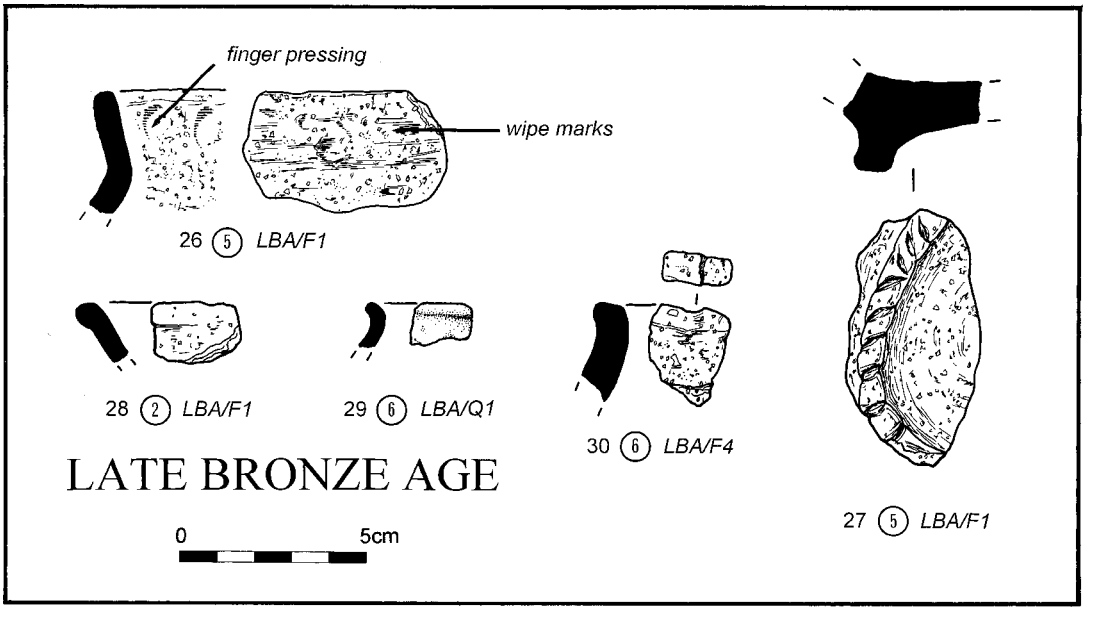

Fig. 14. The pottery: Late Bronze Age.

1980) summaries of Sussex Bronze Age pottery, and Drewett's (1980) summary of Sussex Neolithic pottery. The discussion given below incorporates the contemporary data base with the information provided by these preceding syntheses.

Sussex Late Neolithic pottery and the Crowlink Mortlake bowl

In contrast to its earlier Neolithic ceramic traditions (Drewett 1980, 28), Sussex lacks major pottery assemblages which can be assigned to the Late Neolithic (*c.* 3300–2500 BC). The pottery of this period is characterized by Peterborough ware (impressed decorated pottery), and Grooved ware (grooved, incised and cordon-decorated pottery). The single identifiable Crowlink Neolithic vessel is in the Mortlake tradition of Peterborough ware (Fig. 11:1). It is thus attributed on the basis of its decoration of twisted cord impressions, and its form. Its neck has a cavetto beneath the rim. The rim has a flat, heavy top, which gradually slopes down and outward (Gibson 1986, 19, fig. 7.2). Sussex as a whole has produced minimal quantities of Peterborough pottery. The sherds are often small body sherds and are consequently difficult to attribute to specific traditions of Peterborough ware. Peterborough-type sherds from East Sussex include those from Malling Hill (Allen 1995, fig. 6), Alfriston (Drewett 1975b), Selmeston (Drewett 1975c, fig. 11:4) and Offham (Drewett 1977, fig. 2:3). The Sussex pottery which can be specifically ascribed to the Mortlake tradition includes: the rim and upper part of an undecorated bowl from Selsey Golf Links Lane (unstratified: White 1934, fig. 1); a decorated rim and body sherds from Lavant (archive, Chichester Museum); at least five sherds from a late Neolithic settlement spread at Bullock Down (Site C: Drewett 1982, 47, fig. 13, sherds 7 & 22); and a few sherds from Kiln Combe (Bell 1983, 127, 129), Castle Hill, and Friston (Drewett 1980, 28). Other identified variants of Peterborough ware have a very limited presence in Sussex. Three grooved collar sherds of Fengate Style bowls (heavy collared, truncated profile and a flat base) occur at Bullock Down alongside the Mortlake style sherds (Site C, Drewett 1982, fig. 13:8 & 13:16). Combe Hill, near Eastbourne has produced some Ebbsfleet ware (Musson 1950, 110–14) and there is also a small quantity from Whitehawk near Brighton. Grooved ware is even rarer in Sussex, and is represented by a few sherds at Belle Tout, Findon, High Rocks and Playden (Drewett 1980, 28). The Crowlink Mortlake bowl therefore continues to emphasize a concentration of later Neolithic pottery finds from east of the Cuckmere in Sussex, albeit from a limited number of sites.

Beaker pottery

Sussex Beaker pottery

Beaker pottery has been recovered from both the West Sussex Coastal Plain and the South Downs (Ellison 1980, fig. 10). The Sussex Beaker pottery dates to Case's (1977) middle and later Beaker styles. Complete Beaker vessels from Sussex are illustrated by Musson (1954, nos 000–081). The only major assemblages recovered since Musson's 1954 catalogue are those from the Beaker settlement at Belle Tout (Bradley 1970), colluvial finds from Kiln Combe (Bell 1983), and isolated finds from Bullock Down (Drewett 1982), and the Pyecombe Beaker barrow (Butler 1991). The sherds from Bullock Down were probably derived either from prehistoric manuring of fields, or from plough-disturbed burials.

Crowlink Beaker sherds

The Crowlink Beaker sherds (Fig. 11:2–6) are all small body sherds. They are identifiable as Beaker sherds on the basis of their fabric, their vessel profile, and four decorated sherds (Fig. 11:2 & 4–6). The fabrics are of characteristic brick red colouring and grog is the predominant filler. The curvature of the sherds suggests that they come from vessels with straight sides and almost vertical necks, rather than from more globular forms. This straight-sided version is closest to Clarke's Type VII (1970). One of the Crowlink sherds has incised horizontal girth lines (Fig. 11:6). Such girth lines are common on Beaker vessels and form the borders to bands of decoration. Locally, they occur on Beaker sherds from Belle Tout (Bradley 1970, figs 12:10 & 13:14, 18, 38). The majority of the Belle Tout pottery belongs to Clarke's East Anglian style (commencing in Case's middle phase) which is additionally characterized by zoned comb-impressed decoration. Of the 17 complete Sussex beakers, only five are beakers of East Anglian type. These come from Pyecombe, Cissbury, Kingston Buci, Shoreham and Slonk Hill (Butler 1991, table 1). The toothed-comb impressions on the Crowlink sherds are from a comb that had teeth of narrow rectangular cross-section. This type of comb impression also occurs locally at Kiln Combe (Bell 1983, fig. 7). The blurred cord-impressed decoration, combined with incised lines on one of the Crowlink sherds (Fig. 11:6) is unusual for Sussex, but likewise forms a minor part of the Belle Tout Beaker assemblage. At the latter site it is attributed to either an East Anglian, or a slightly earlier, 'Late All Over Corded' tradition (Bradley 1970, fig. 13:14 & 33).

Early Bronze Age pottery

Sussex Early Bronze Age fabrics

Most Sussex Early Bronze Age fabrics are characterized by soft soapy fabrics fired at low temperatures (Ellison 1980, 33). Most fabrics contain sand (probably natural to the clay), and the most common filling agent is grog, although calcined flint does occur. The Crowlink Early Bronze Age assemblage falls wholly within this general fabric tradition.

Sussex Collared Urns and the Crowlink examples (Fig. 12:9–19)

Finds of Early Bronze Age pottery in Sussex are restricted to the South Downs. The vessels mostly derive from barrow excavations of the last century (Ellison 1980, 34) and are predominantly Collared Urns (*c.* 50 examples). Of these the majority can be ascribed to Longworth's (1984) Secondary Series, which develops from *c.* 1400 BC. The bi-partite form of the Crowlink Collared Urns and their inner profile which has a continuous unbroken curve from rim to base, belong to the secondary series. Their use of twisted cord decoration (Fig. 12:9–19), and their lack of decoration below the collar are all typical features of Longworth's Secondary Series South-eastern style (Form BI or BII) (Burgess 1986, 344–5, 348; Longworth 1984, 35–40). Just over 20 urns in Sussex are attributed to the South-eastern style (Longworth 1984) The nearest parallel to the slanting twisted cord decoration on both of the collars of the Crowlink Collared Urns is on the Collared Urn associated with a secondary cremation from Black Patch barrow 7 (Holgate 1987). A Collared Urn with similar proportions, and twisted cord decoration on the collar and the internal bevel of the rim also occurs locally at Bullock Down (Drewett 1982, fig. 2). The latter was recovered from a chalk-cut pit adjacent to two pit cremations (Drewett 1982, 59), discussed above.

A localized cluster of crescent-shaped fingernail decoration, on one of the Crowlink Collared Urns (Fig. 12:9) is echoed in a line of fingernail impressions on a Collared Urn from Cuckoo Bottom, Lewes (Musson 1954, no. 360; Longworth 1984, no. 557; *contra* Charmandean as stated by Tomalin 1995, 107). Two other examples of clusters of fingernail impressions on Collared Urns are noted by Tomalin (1995, 107: from Yately in Hampshire and Easton Down, Wiltshire) who suggested that they are potters' signatures. Overall the decoration on both Collared Urns is inconsistent: around the circuit of each vessel criss-crossing cord-impressed decoration is interspersed with parallel lines of cord

impressions. Such mixtures are not uncommon on Sussex Collared Urns (e.g. Cuckoo Bottom, Lewes: Longworth 1984, no. 557; Falmer: Longworth 1984, no. 550). The stabbed dots towards the base of the collar on one of the urns (Fig. 12:15–18) are less common. There is one example of the latter decoration on an urn from Lewes which Longworth ascribes to his Primary Series (Longworth 1984, no. 559), and one example from Stanmer (form not fully clear, Longworth 1984, no. 566). This decorative trait is associated with vessels of Continental *deckeldose* type or affinity and in Britain is a rare deviation from the limited repertoire of Collared Urn decorative traditions (Tomalin 1995, 108). In Britain the motif is associated with a few Somerset and Wessex examples of Collared Urn and perhaps mirrors the *pointillé* decoration of the southern British Arreton tradition of Early Bronze Age metalwork (notably the gold-wire nail *pointillé* decoration on the pommels of bronze daggers) (Gerloff 1975). Other East Sussex examples of the south-eastern style of Collared Urn are those from the Caburn (Musson 1954, no. 345), Green Street Eastbourne (Musson 1954, no. 352, Longworth 1984, no. 547), and Oxteddle Bottom (called 'Oxsettle' by Musson 1954, no. 353).

Sussex Biconical Urns, and the Crowlink examples (Figs 11:7–8, & 13:20–25)

The only Early Bronze Age urn-type found nationwide is the Collared Urn (Gibson 1986, 46; Longworth 1984), but additionally there are a number of urn-types with local distributions. Of these, Biconical Urns are found in south and south-west Britain. Biconical Urns are, however, rare in Sussex, and Ellison (1980, 33) lists only five examples. In addition to Collared Urns, the Crowlink barrow produced part of two Biconical Urns (Figs 11:7–8 & 13:20–25), which is *de facto* a significant contribution to the small number of Biconical Urns from Sussex. The Crowlink examples both have applied girth cordons located on their carinations. Of these, only one of the vessels has identified rim sherds (Fig 13:20–21). These are everted, resulting in a vessel with a concave rather than straight neck. This form is a Wessex variant of Biconical Urn. Additionally, the same vessel has applied diagonal, raised cordons decorating its shoulder (Fig. 13:22–24). The closest *Sussex* parallel to the vessel, both in form and the presence of a raised cordon girth, is that from Charmandean (but the shoulder decoration is different: Musson 1954, no. 390). However, a closer parallel is a Biconical Urn from Sturminster Marshall, Dorset (Calkin 1962). The somewhat inconsistent spacing of the diagonal cordons on the Crowlink vessel suggests that uniformity of decoration was not a priority. The second Biconical Urn from Crowlink (Fig. 11:7–8) has an applied cordon around its carination. The latter has a highly deviant curvature in relation to the horizontal curvature of the vessel. These inconsistencies of decoration mirror those already noted for the Collared Urns.

Late Bronze Age pottery (Fig. 14:26–30)

Sussex Late Bronze Age pottery has received modern synthesis and therefore does not require general collation here (Hamilton 1997). Of the 371 sherds of Late Bronze Age pottery (Table 2) recovered from the Crowlink barrow, only five were diagnostic in form or decoration. Four of the sherds are rims (Fig. 14:26 & 28–30). These rims are all from shouldered bowls or jars, which are typical forms of the early 1st millennium BC (Late Bronze Age/Early Iron Age). The characteristic technology of forming by finger-pressing and finishing by wiping surfaces is particularly evident on one of the rim sherds (Fig. 14:26). Such technological traits are recurrent in Late Bronze Age assemblages from Sussex (Hamilton 1993). East Sussex examples occur in early 1st-millennium BC assemblages from Bishopstone (Hamilton 1977) and Heathy Brow (Hamilton 1982). The rim decorated with finger impressions (Fig. 14:30) suggests a post 8th-century BC dating. The fingernail-decorated foot-ring (Fig. 14:27) is unusual within earliest 1st-millennium BC assemblages. Foot-rings are a later feature of early 1st-millennium BC assemblages and become prevalent through the Early Iron Age. Collectively these diagnostic sherds suggest a dating which falls within the 7th to 5th centuries BC. While a Late Bronze Age dating is probable, the foot-ring may make the dating a little later. The quartz-tempered fine ware bowl (Fig. 14:29), together with the smallish size of all the vessels (as suggested by the rim sherds), perhaps suggests eating and drinking activities, rather than a more general pottery assemblage derived from redeposition of settlement rubbish.

CONCLUSIONS

This conclusion maximizes the potential implications of the Crowlink pottery as a multi-period assemblage associated with a funerary site. In doing so, the Crowlink pottery raises, but does not resolve, some fundamental issues concerning the sequence of the

events which led to Early Bronze Age inurned cremations being placed within, or covered by, cairns. The location of the Crowlink cairn may have been a place of significance of some time depth, as is suggested by the late Neolithic and Beaker pottery finds. Each of the Crowlink cremation urns (at least two Biconical Urns and two Collared Urns) is of a distinctive style. This suggests that personalized pots were used, or produced, for individual cremations, effectively making the cremated persons identifiable prior to concealment by the cairn. It is possible that each inurned cremation was buried sequentially at the barrow location *prior to* the construction of the cairn. Alternatively, the inurned cremations may have been stored elsewhere until the time for construction came. These options evoke very different concepts relating to the passage of 'the dead' from 'the world of the living', compared to the immediate concealment of cremations by, or within, a cairn. The Crowlink cairn was, however, too disturbed to be wholly confidant that there were no cremation-cuts through the mound, or that the mound did not have more than one phase of construction. On the basis of the presence of small vessels and fine wares, the subsequent Late Bronze Age activity at the cairn may have been of a non-domestic nature, such as feasting at a site of enduring significance.

Acknowledgements
Mike Seager Thomas carried out the preliminary post-excavation analysis of the pottery.

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OTHER FINDS

THE FLINT By Chris Butler

Summary of the stratigraphy, dating and regional implications of the flint assemblage

The flintwork recovered during the excavations at Crowlink suggests that there are three distinct phases of flint-working at the site.

The first phase is represented only by the residual pieces of flintwork which date from the Mesolithic and Early Neolithic periods. This material was found scattered through most contexts during the excavation, and probably represents occasional hunter-gatherer activity in the vicinity during these periods. Similar early activity was found at Belle Tout (Bradley 1972a; 1982; Butler forthcoming a).

The second phase is associated with initial interment, the utilization or construction of Context 20 and the shallow ditch. The flintwork from these features is similar, and can be separated from the rest by characteristics, which will be summarized below. Context 33 is particularly interesting as it is also associated with the earlier radiocarbon date from cremation pit 32. This context produced 73 pieces, mainly hard hammer-struck flakes (of which two are fire-fractured), but also chips, fragments and shattered pieces. This small assemblage, which appears all to be knapping debris, can clearly be linked with this second phase of activity at the site. It may be possible to attribute to this phase a later Neolithic/Early Bronze Age date.

The third phase of flintwork is associated with the main barrow mound. It is possible that an initial barrow mound was originally much larger than that remaining today, and contained natural nodules of flint, which could easily have become a source of raw material for flint knapping during the later Bronze Age, as at Micheldever Wood (Fasham & Ross 1978). This could account for the large accumulation of flint that was then added to the barrow mound as the waste was discarded during the knapping process, probably over a long period of time. Alternatively, the natural flint lying around the monument during its second phase may have remained a source of raw material throughout the Bronze Age. The debitage from the later phase of knapping, together with discarded implements, would then have accumulated with the earlier material that was already lying on the ground surface. At some occasion, or occasions, during the later Bronze Age, the cairn as represented by Contexts 2/6 and 6 was constructed or increased in size and the flintwork lying around the barrow collected up and added to the mound, possibly to cover the interments. One further possibility could be that, as part of the burial ritual during the later Bronze Age, flint nodules were collected and knapped, simply to add the waste to the barrow mound. However, the proportion of debitage to implements and utilized pieces is not inconsistent with that noted at other later Bronze Age sites, ritual or otherwise (Table 3), so it seems that the material used to make the barrow mound was simply residual material from normal domestic or industrial activity.

Assuming that the use of the discarded flintwork to construct the barrow mound was secondary to its original purpose, is it possible to establish whether the primary purpose of the later Bronze Age flintwork was industrial or domestic? The ratio of cores to flakes at Crowlink was 1:236. This compares to 1:36 at Micheldever (Fasham & Ross 1978), where it was suggested that, at least in some phases, the site was essentially industrial in nature. Other Sussex sites have produced 1:327 at the Pyecombe Barrow (Butler 1991), 1:58 at Round-the-Down (Butler 1995), 1:50 at the Cornish Farm Barrow (Butler forthcoming d) and 1:196 at the Varley Halls settlement (Greig 1997). Bradley suggested for the Itford Hill barrow, where there was a disparity between the number of cores and flakes similar to that at Crowlink, that cores were only being initially worked at the site and then being taken to another place for further working (Bradley 1972b). This might also have been the case at Crowlink where, in addition to the large ratio of flakes to cores, some 71% of all the flakes have some cortex remaining, thus indicating that primary flaking occurred here, any secondary flaking occurring elsewhere. The

low ratio of flakes to cores, when taken together with the low proportion of implements to debitage, seems to suggest that the main purpose of the site, from the point of view of the Late Bronze Age flint assemblage, was industrial, and predominantly concerned with the procurement of flint (Brown & Edmonds 1987).

The raw material (Table 4)
The worked flint recovered during the excavation is summarized in Table 4. Most of the flintwork recovered was manufactured from a white patinated flint with occasional grey to buff patches, and a thin light brown cortex. This material is typical of flint found in the immediate vicinity of the barrow, and elsewhere along the South Downs. Smaller quantities of a black and blue-grey flint were observed amongst the debitage, and probably originate from local Clay-with-Flints deposits. Only one context (13) produced a significantly higher proportion of blue-grey flint pieces: 28% of the hard hammer-struck cortical flakes were of this colour. Few implements or retouched pieces were manufactured from the black or blue-grey flint other than the small number of Mesolithic pieces. No beach pebble flint was seen in the assemblage.

The debitage (Table 4)
Over 99% of the flintwork recovered during the excavation was debitage, predominantly hard hammer-struck flakes; less than 1% were soft hammer-struck. Approximately 1% of the debitage is made up of blades, again predominantly hard hammer-struck, and amongst the hard and soft hammer flakes are a small number of longer, almost blade-like flakes. Some of the soft hammer-struck flakes and blades, and a very small quantity of the hard hammer-struck material, show evidence of platform preparation. They are similar to the earlier phase of material from Belle Tout (Butler forthcoming a). This suggests that they could be dated to the earlier Neolithic period. There were also seven axe-thinning flakes and three crested blades amongst the debitage, a fact which is supportive of an earlier Neolithic date for some of the material at Crowlink.

During the analysis of the measured sample, those flakes which had hinged during flaking were noted: 23% of the flakes from Context 6 had hinged, 20% of those from Context 19, and 15% from Context 20.

a) Comparison of cortical and non-cortical flint (Table 5)
The flakes were divided according to presence or absence of cortex. The aim was to try and establish whether the flint-working process used at Crowlink involved predominantly primary reduction of flint nodules, in which case most of the debitage would have cortex present. Alternatively, if secondary reduction of cores had been made after the cortex had been removed, that suggests a greater level of care and precision in the production of the flakes used for manufacture into implements. The result of this analysis for the major contexts is shown in Table 5.

The analysis shows that Contexts 3, 2/6 and 6 are all fairly similar in profile. The proportion of hard hammer-struck flakes with cortex ranges from 70 to 75.8%, of those without cortex from 24.2 to 30%. When based on weight, the cortical flakes represent between 80 and 84.5%, and non-cortical 15.5 to 20%. If Contexts 2/6 and 6 are added together, the proportions for the combined context are, 71% cortical and 29% non-cortical based on number; 80% cortical and 20% non-cortical based on weight. Context 20, however, produced the following proportions: by number, 77% cortical and 23% non-cortical; and by weight: 94% cortical and 6% non-cortical.

This appears to show a slightly higher proportion of cortical hard hammer-struck flakes, by both number and weight in Context 20, although the overall number of flakes from Context 20 is small compared to that of the other contexts. Context 19, the fill of an encircling ditch, also produced proportions similar to those of the combined Context 2/6 & 6 analysis: 71% cortical flakes by number and 81% cortical by weight.

It can reasonably be concluded, therefore, that there is no overall difference in the make-up of cortical and non-cortical hard hammer-struck flakes between the major excavated contexts. However, the proportion of cortical/non-cortical flintwork can indicate the date of the assemblage. The excavated later Bronze Age assemblage from Wolstonbury had

Table 3. The Crowlink flint compared with that from other Bronze Age sites.

Site	**% Debitage**	**% Implements**
Crowlink barrow	99.2%	0.8%
Pyecombe barrow	96.0%	4.0%
Round-the-Down barrow	96.6%	3.4%
Cornish Farm barrow	96.3%	3.7%
Itford Hill barrow	>99.0%	<1.0%
Wolstonbury	99.4%	0.6%
Varley Halls settlement	97.3%	2.7%
Potlands Farm burnt mound	95.2%	4.8%
Micheldever Wood barrow	98.6%	1.4%

Table 4. The flintwork by type.

Cortical hard hammer-struck flakes	12,591
Non-cortical hard hammer-struck flakes	5067
Soft hammer-struck flakes	132
Hard hammer-struck blades	176
Soft hammer-struck blades	44
Soft hammer-struck bladelets	3
Axe-thinning flakes	7
Crested blades	3
Fragments	588
Shattered	210
Spall	1
Chips	47
FF flakes	21
FF fragments	4
Single-platform flake cores	43
Two-platform flake cores	24
Three-platform flake cores	9
End scrapers	39
Side scrapers	20
Hollow scrapers	7
Horned scraper	1
Backed knife	1
Notched flake/blades	20
Retouched flakes	51
Piercers	19
Miscellaneous retouched pieces	2
Choppers	2
Utilized natural flake	1
Hammerstones	4
Total	**19,139**
FF Flints	1189

Table 5. Summary of hard hammer-struck flakes by context.

Summary of Context 2/6	**2/6 SEQ**	**2/6 SWQ**	**2/6 NEQ**	**2/6 NWQ**	**Total 2/6**
Number of cortical flakes	4077	394	3228	598	**8297**
Weight (g)	82,480	9250	74,380	12,000	**178,110**
Average weight (g)	20.23	23.48	23.04	20.07	**21.47**
Number of non-cortical flakes	1910	77	1214	328	**3529**
Weight (g)	24,095	1156	16,255	3000	**44,506**
Average weight (g)	12.62	15.01	13.39	9.15	**12.61**
Total hard hammer flakes	5987	471	4442	926	**11,826**
Weight (g)	106,575	10,406	90,635	15,000	**222,616**
Average weight (g)	17.80	22.09	20.40	16.20	**18.82**

Summary of Context 3	**3 SEQ**	**3 SWQ**	**3 NEQ**		**Total 3**
Number of cortical flakes	155	159	457		**771**
Weight (g)	3060	4380	9700		**17,140**
Average weight (g)	19.74	27.55	21.23		**22.23**
Number of non-cortical flakes	95	82	68		**245**
Weight (g)	1286	1138	709		**3133**
Average weight (g)	13.54	13.88	10.43		**12.79**
Total hard hammer flakes	250	241	525		**1016**
Weight (g)	4346	5518	10,409		**20,273**
Average weight (g)	17.38	22.90	19.83		**19.95**

Summary of Context 6	**6SEQ**	**6SWQ**	**6NEQ**	**6NWQ**	**Total 6**
Number of cortical flakes	682	748	120	1141	**2691**
Weight (g)	11,240	13,600	2220	17,820	**44,880**
Average weight (g)	16.48	18.18	18.50	15.62	**16.68**
Number of non-cortical flakes	208	269	37	456	**970**
Weight (g)	1990	2800	412	3732	**8934**
Average weight (g)	9.57	10.41	11.14	8.18	**9.21**
Total hard hammer flakes	890	1017	157	1597	**3661**
Weight (g)	13,230	16,400	2632	21,552	**53,314**
Average weight (g)	14.87	16.13	16.76	13.50	**14.70**

Summary of Context 20	**20 SEQ**	**20 SWQ**		**20 NWQ**	**Total 20**
Number of cortical flakes	12	12		24	**48**
Weight (g)	263	275		706	**1244**
Average weight (g)	21.92	22.92		29.42	**25.92**
Number of non-cortical flakes	8	4		2	**14**
Weight (g)	48	20		10	**78**
Average weight (g)	6.00	5.00		5.00	**5.57**
Total hard hammer flakes	20	16		26	**62**
Weight (g)	311	295		716	**1322**
Average weight (g)	15.55	18.44		27.54	**21.32**

Table 6. The flintwork: summary of the length/breadth analysis.

		Context 6		**Context 19**		**Context 20**		**Context 33**	
L/B Index		**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
0–0.5		0	0	0	0	0	0	0	0
	Broad								
0.6–1.0		40	40%	27	27%	10	21%	10	27%
1.1–1.5		45	45%	49	49%	20	43%	18	49%
	Medium								
1.6–2.0		13	13%	23	23%	14	30%	9	24%
2.1–2.5		2	2%	1	1%	3	6%	0	
	Narrow								
2.6+		0	0	0	0	0	0	0	0
Total		**100**	**100%**	**100**	**100%**	**47**	**100%**	**37**	**100%**

a similar split of cortical (72.4%) and non-cortical flakes (27.6%) (Butler forthcoming b). The assemblage from Belle Tout, however, had a much higher proportion of non-cortical flakes (43%), which probably represents the Early Neolithic and Early Bronze Age dates associated with this site (Butler forthcoming a). A comparison of the proportion of cortical/non-cortical flintwork from five sites in Wessex, dating from the Middle Neolithic through to the Middle Bronze Age, shows an increase in the proportion of cortical pieces over this time, with the two Middle Bronze Age sites having 80% and 75% cortical flakes respectively (Fasham & Ross 1978). The composition of the assemblage at Crowlink would suggest a Middle to Late Bronze Age date for the construction of the barrow mound.

b) Comparison by weight (Table 5)
The analysis shows firstly that the cortical flakes are heavier than non-cortical flakes across the whole assemblage, irrespective of the context and secondly, that there are differences between some of the major excavated contexts. Context 20 has the heaviest average of cortical flakes, and the lightest average of non-cortical flakes, whilst the flakes from Context 2/6 are generally heavier than those from Context 6. Finally, there are similarities in the profiles between Contexts 6 and 19, and also between Context 2/6 and 3.

c) Comparison by quadrant (Table 5)
Analysis of Contexts 2/6 and 6 shows some differences between them. The south-east quadrant produced the largest quantity of flakes overall (44%), but a smaller proportion of them came from Context 6. Whereas the north-west quadrant of Context 6 produced 43% of the flakes, the same quadrant in Context 2/6 only produced 7.8%. The opposite occurs in the north-east quadrant with Context 2/6 producing 37.5% of the flakes, but the same quadrant in Context 6 only produced 4.3%. If the material from both contexts is added together, it is clear that more flakes (74%) came from the south-east and north-east quadrants. The smallest number came from the south-west quadrant. This disproportion is also reflected in the distribution of implements, although the north-west quadrant of Context 6 also contained a high proportion of implements. Given that the prevailing wind comes onto the site from the south-west, these percentages may simply reflect a preferred, sheltered position in which to knap flints.

d) Comparison of length/breadth (Table 6)
The results from Context 6 have some similarities with the results from Context 114 at Friars Oak, Hassocks (Butler 2000) which had similar proportions in all the categories (Broad 34.9% and Medium 56.6%), and was dated to the later Bronze Age. Also Context 20 at Crowlink has some similarities with Context 128 (Broad 18.2% and Medium 63.6%) at Friars Oak, which was dated to the Early Bronze Age. There are no direct matches with the assemblages from Belle Tout or Wolstonbury. However, as seen on these other sites, the trend appears to be reflected at Crowlink whereby an increasing proportion of flakes fall into the 'broad' category, and the number of 'narrow' and 'longer' medium-category flakes is reduced. This represents a movement towards a broader shorter flake type. At Crowlink, Contexts 19, 20 and 33 have a similar profile, and may represent the initial phase of the site, i.e. excavation of a ditch (19), initial interment (33), and perhaps even the construction of an initial barrow mound (20). It would be sensible, therefore, to assume that Context 6, with its different profile, represents a later construction phase in the history of the site. Similar proportions have been noted in other Sussex sites with later Bronze Age dates. (e.g. Butler 2000)

Cores
All the cores were used to produce flakes: the most common type was the single-platform flake core (56% of all cores found). Two- and three-platform flake cores make up the remainder. (Fig. 16).

There was no evidence for platform preparation on any of the cores found. No core rejuvenation pieces were found amongst the debitage; only three crested blades, and a few flakes with evidence of core rejuvenation were identified. The analyses of the cores showed that cores with single platforms tended to have more cortex and fewer flake scars, whilst those with more platforms had less cortex and a generally greater number of flake scars. This pattern has been seen with other Bronze Age flint assemblages (Fasham & Ross 1978).

Most of the cores had originated from small nodules, but two large flakes had also been reused as single-platform cores. Two cores had been reused as hammerstones, and one core may have been reused as a scraper.

Almost all of the cores were recovered from the contexts of the main barrow mound. No cores were recovered from Context 20, but Context 19, the ditch fill, produced two two-platform cores and a single three-platform core.

The dominance of single-platform flake cores in the assemblage, together with the presence of cortex on most of the cores, and evidence that the majority had been discarded after the removal of just a few flakes, are all indicators for a Bronze Age date, when more casual flaking methods were being used. Although small in number, the three more complex cores in the ditch fill may indicate that this feature belongs to an earlier phase of the site's history.

Catalogue and discussion of major flint types

Implements
The scrapers make up the largest category of implements, accounting for 57% of all the implements (excluding retouched flakes). They have been divided into four sub-types, depending upon the extent and location of the retouch.

Fig. 16
End scrapers (39). Illustrated examples, Fig. 16:1–9
The end scrapers were mostly manufactured on smaller rounded hard hammer-struck flakes, although four are on long flakes/blades, and three are on large hard hammer-struck flakes. Two of the end scrapers are fire-fractured. The abrupt retouch normally extends around the convex distal end of the flake, although in a few cases it also extends further along one or both sides. On a small number of pieces the retouch is minimal, if present at all; the scraping edge having been abraded through use. Cortex is frequently still present, but on the better-made examples, the cortex has generally been removed.

Side scrapers (20). Illustrated examples, Fig. 16:10–11
Side scrapers were manufactured on slightly longer hard hammer-struck flakes, with abrupt retouch along one side to form a scraping edge. Most of these still have some cortex present.

Hollow scrapers (7). Illustrated examples, Fig. 16:12–14
The flakes were abruptly retouched to form a concave scraping area extending wholly or partly along one side.

Horned scraper (1). Illustrated example, Fig. 16:15
A single, and rather crudely made, horned scraper. It was manufactured on a thick hard hammer-struck, with a deep concave area of retouch at its distal end resulting in two projecting 'horns'. Horned scrapers are quite rare pieces, with a distribution centred on the Alfriston/Seaford area (Butler forthcoming c), although one is known from Wolstonbury (Butler forthcoming b), where it was associated with the lower rampart deposit, and two came from the excavation of a Bronze Age round barrow at Cornish Farm (Butler

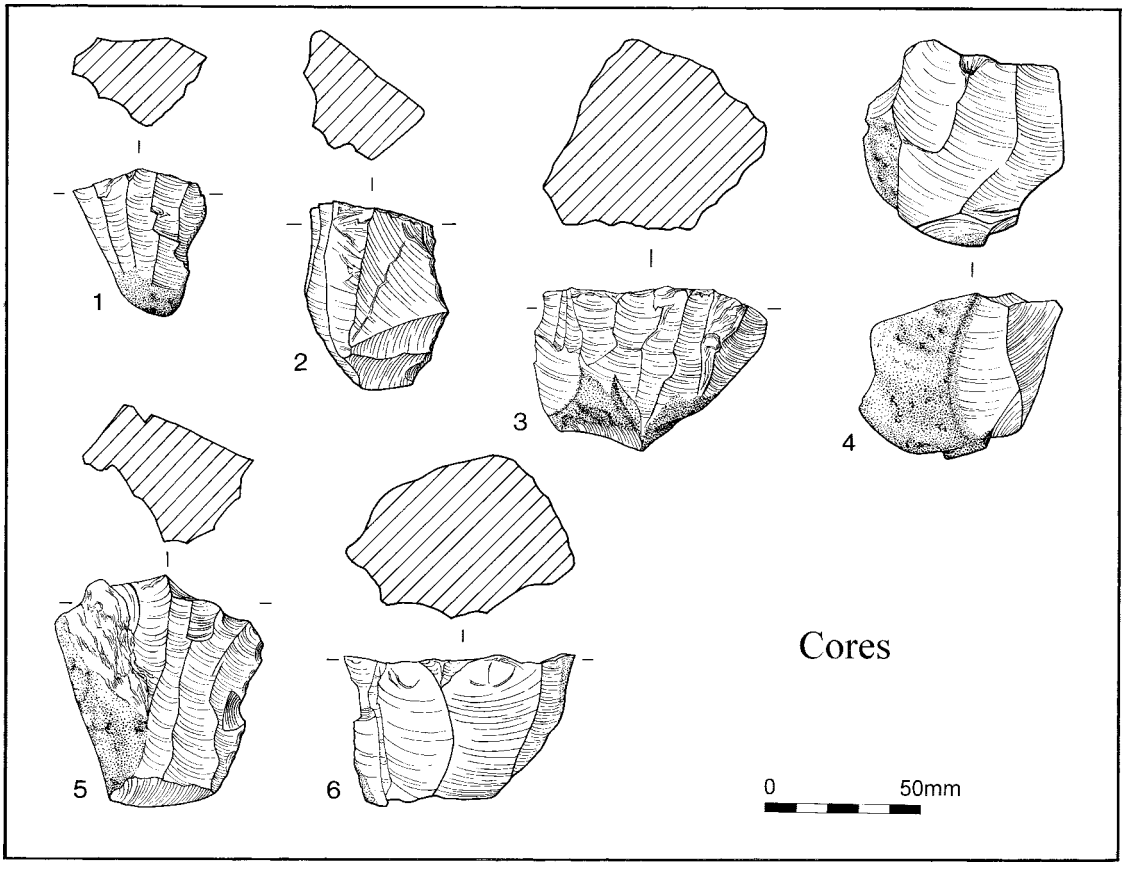

Fig. 15. The flint: cores. 1, 3–6: Context 2/6; 2: Context 6.

forthcoming d). This is perhaps a later Bronze Age implement type (Butler forthcoming c).

Notched pieces (20). Illustrated examples, Fig. 16:16–18
These pieces were manufactured mostly on smaller stubby hard hammer-struck flakes, with a minority of pieces manufactured on longer flakes, and only one on a blade. Each piece has a small area of concave retouch on one edge, forming a notch. There is rarely any other retouch on these pieces. Most of these pieces would not be out of place in a Bronze Age assemblage.

Fig. 17
Piercers (19). Illustrated examples, Fig. 17:19–26
The examples vary in size and shape, and were all manufactured on hard hammer-struck flakes, most of which still retain some cortex. A few pieces appear to have the point initially shaped by a burin-style removal and then retouched along one edge of the point only to achieve its final shape.

Retouched pieces (51). Illustrated examples, Fig. 17:27–32.
Although belonging to no specific implement type, the 51 retouched flakes do make up a significant proportion of the retouched pieces in the assemblage. They generally have small areas of abrupt retouch along one or more edges. Most of the flakes are hard hammer-struck, although three are blades, and one is a flake fragment.

Choppers (2). Illustrated example, Fig. 17:33
The example illustrated is bifacially worked. It has retouch around the chopping edge, and an abraded platform, presumably to make it a more comfortable fit into the hand, or for hafting in a handle. Later Neolithic/Early Bronze Age date?

Knives/cutting flakes. Not illustrated
Two knives or cutting flakes were recovered, together with a backed knife. The first two pieces are long flakes which have invasive retouch along one edge, whilst the backed knife has abrupt retouch blunting one edge whilst the opposite, cutting, edge is not modified.

Other implements. Not illustrated
Two miscellaneous retouched pieces, a utilized natural flake, and four hammerstones make up the remaining implements (Table 4).

Flint weight? (1). Illustrated example, Fig. 17:34
A nodule of flint with a hole pierced through it was recovered from Context 13. The cortex and patina are intact, confirming

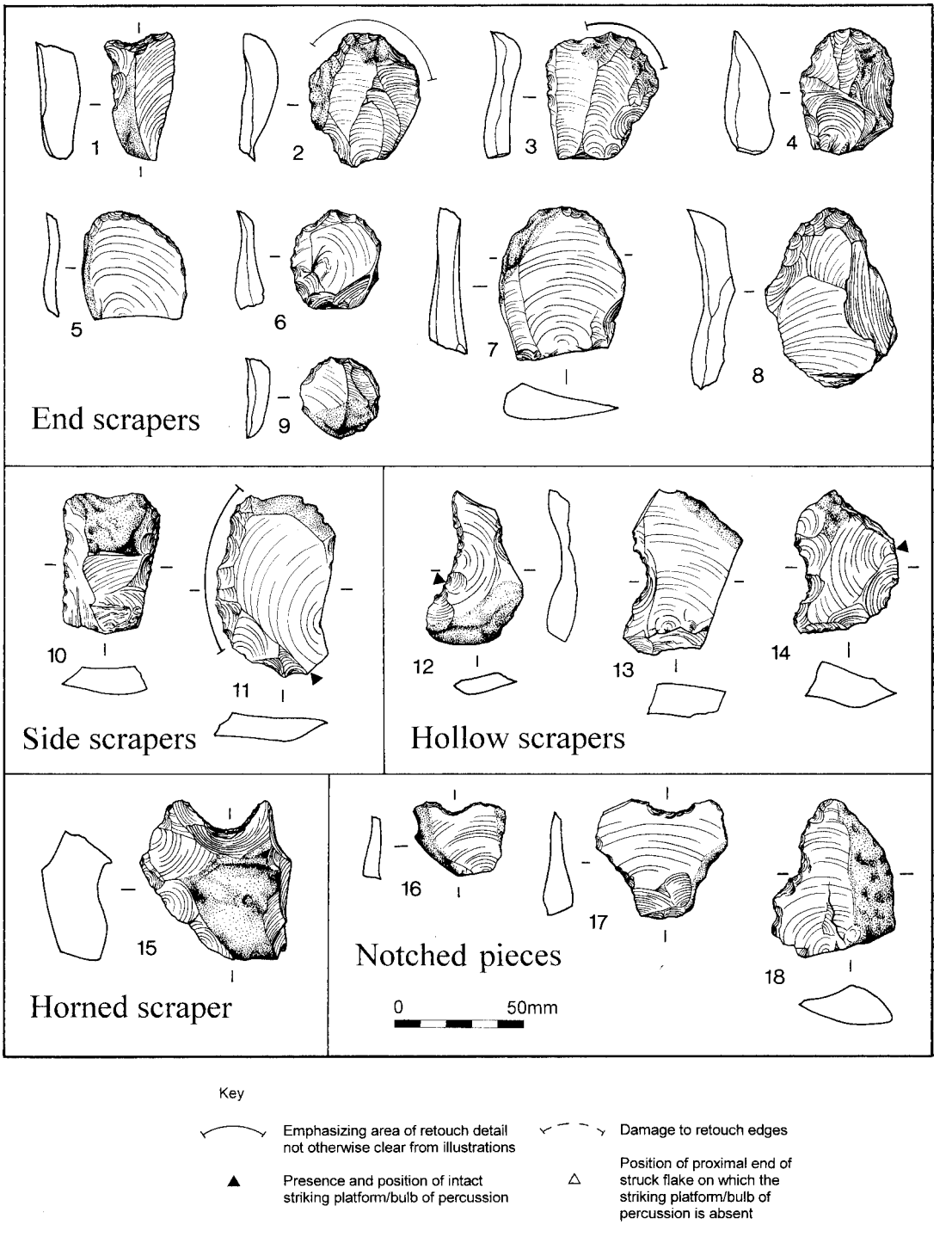

Fig. 16. The flint: scrapers and notched pieces. 1, 4–6, 8, 10, 12–14, 17, 18: Context 2/6; 2, 3, 7, 9, 16: Context 3; 11: Context 6; 15: Context 19.

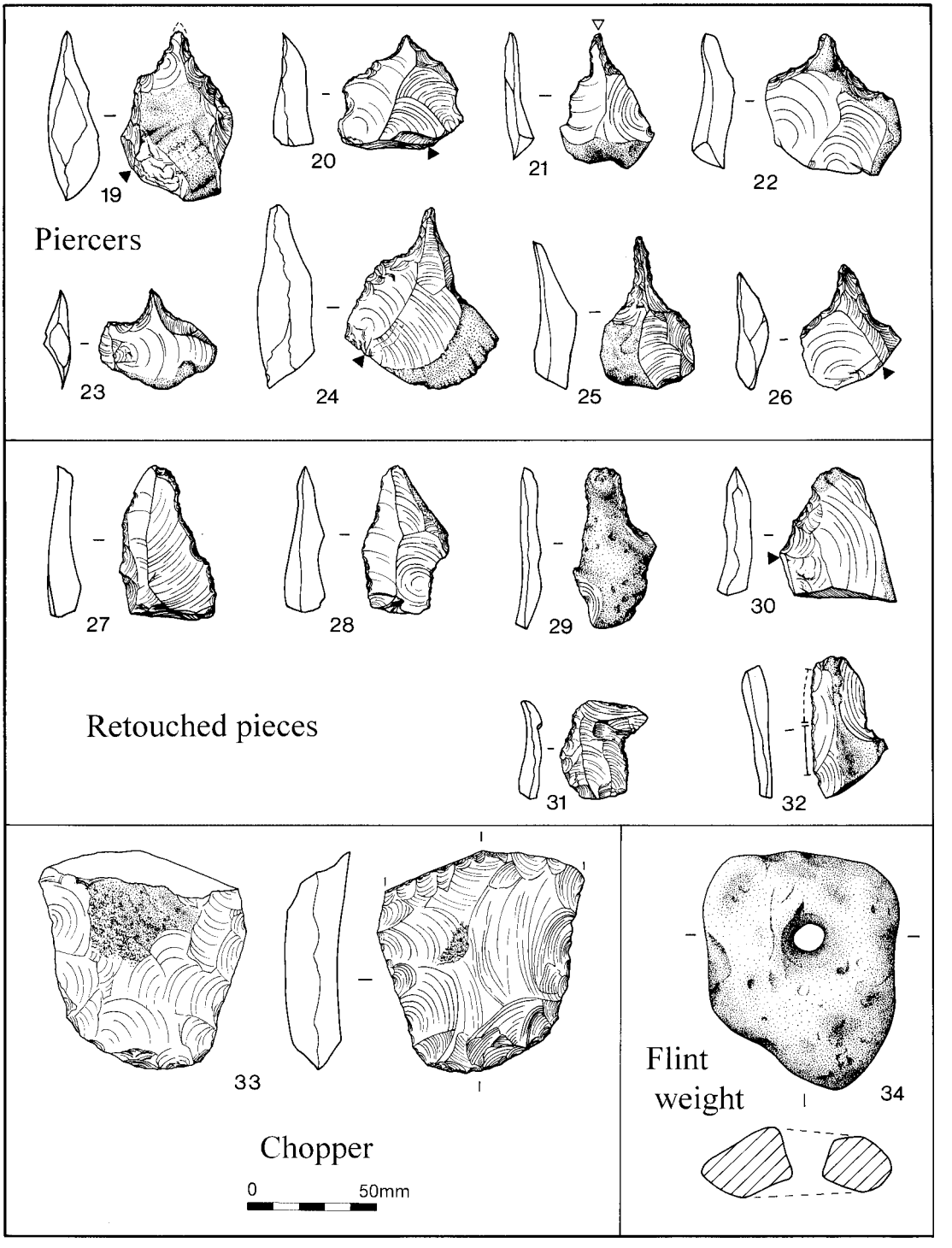

Fig. 17. The flint: piercers, retouched pieces, chopper and weight. 19–20, 23, 25–7, 30–31: Context 2/6; 28: Context 3; 21–2, 24, 29, 32–3: Context 6; 34: Context 13.

that the hole appears to be completely natural. However, there may be some wear around the hole, suggesting that it may have been utilized as a weight.

Summary of the implements and suggested date of the Crowlink flint assemblage

The number and type of implement types present on a site can be used as an indication of its dating (Ford *et al.* 1984). Analysis of flint from other sites suggests that a larger number of types are present on earlier Neolithic, and later Neolithic/Early Bronze Age sites, than on later Bronze Age sites. Neolithic sites show a predominance of scrapers and knives/cutting flakes as at Bullock Down (Holgate 1988), or serrated flakes as at Bishopstone (Bell 1977). However, scrapers, piercers and notched pieces predominate in later Bronze Age assemblages (Butler 1991; 1995).

At Crowlink there are essentially only four different implement types: scrapers, knives, piercers and notched pieces, which, on the basis of a limited range of types and a predominance of scrapers, piercers and notched pieces suggests a Bronze Age date. Furthermore, the lack of any distinguishable typically Early Bronze Age implement or barbed-and-tanged arrowhead, suggests a later Bronze Age date. Two exceptions came from Layer 20. That contained a knife/cutting flake and a bifacially worked chopper both of which would fit an Early Bronze Age date.

Burnt flint

As well as the small number of burnt flakes and fragments (Table 4), 1189 pieces of fire-fractured flint were recovered, weighing 46 kg (average individual weight: 38.7 g). The north-east and south-east quadrants of Context 2/6 produced the greatest quantity. The fill of cremation pit 40 also produced 62 pieces each weighing an average of 5 g.

The archive

All cores and implements, together with samples of flakes, measured and not measured, from Contexts 6, 19, 20 and 33, and all the excavated flintwork from the smaller contexts have been retained in the archive, which also contains a full account of the methodology employed in the analysis. After analysis, all the remaining debitage was discarded.

THE GEOLOGICAL MATERIAL

By Luke Barber

Six pieces of 'foreign' stone from four contexts weighed 338 g. All the material has been recorded on *pro formae* for the archive. Three different stone types were present. All could have been collected within a close radius of the site.

Two elongated and flattened pebbles of Upper Greensand came from Contexts 2 (55 g) and 6 (9 g). These were undoubtedly collected from the beach. None showed characteristics of having been utilized for polishing. Three pieces of quartzite present had probably been collected from the beach.

A circular, flattened, fine-grained quartzite pebble from Context 2/6 (126 g), showed no distinctive repetitive wear, but had almost certainly been used as a polishing stone. The presence of quartzite pebbles has been noted at numerous other prehistoric sites in Sussex (e.g. Varley Halls: Greig 1997). The other two pieces of quartzite (Context 6), one fine-grained (14 g), the other coarse-grained (36 g), are shattered pieces from water-worn pebbles, probably also utilized for polishing. The remaining piece of stone consists of a small (98 g) fragment of Sarsen from Context 20. Although there is a trace of two opposed and smoothed faces, the unplotted fragment is too small to determine if it was from a quern.

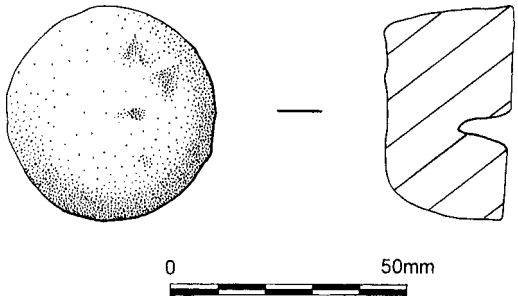

Fig. 18. An unfinished chalk spindle whorl.

The spindle whorl (Fig. 18)

A chalk cylindrical 'spindle whorl', weighing 52 g, was recovered from Context 6 (SW quadrant). The piece is well cut with a sharp base angle. An aborted hole, with conical profile has been drilled upward from the base. It can only be assumed that the off-centre positioning of the drilled hole resulted in the abandonment of the piece.

THE HUMAN SKELETAL MATERIAL FROM CROWLINK BARROW (Tables 7 & 8)

By Lucy Sibun

Discussion

The excavations produced small quantities of human skeletal material. This material, articulated and disarticulated, cremated and non-cremated, was recovered from fifteen contexts (2/6, 5, 6, 6/20, 8, 10, 15, 17, 31, 33, 38, 39, 41, 43, 47). Whilst the demography of the population cannot be ascertained, it is evident that both child and adult remains are present, and possibly both males and females. The presence of both inhumed and cremated skeletal material indicates that a mixture of burial rites is associated with the site.

From a study of the colour of the cremated bone fragments tentative conclusions can be made regarding the cremation process associated with these burials. In the majority of contexts the cremated material ranges from that which has been slightly charred (blackened edges), to that which has been completely calcined. This would suggest an ineffective cremation process, one in which the intense heat needed for oxidation was only achieved in a small area of the cremation. This is perhaps best indicated by Context 39, which contains a large quantity of non-cremated material as well as calcined bone. It is possible, however, that this deposit may contain the remains of two individuals, perhaps resulting from two distinct post-mortem treatments.

Also of interest is the insignificant amount of cremated bone recovered from contexts that were located beneath the flint capping of the barrow. There is no immediate explanation for this; bone preservation on site was not good, but neither was it bad enough to account for so few remains being recovered. The weight of bone recovered from undisturbed adult cremations has been found to vary enormously, but the reason for this is not, as yet, ascertainable (McKinley 1997, 139). It is possible that the amount of cremated bone in the deposit reflects the recovery method used during the Bronze Age. McKinley notes that cremated remains are rarely, if ever,

collected in their entirety from pyre sites, and suggests that the amount of time spent collecting bone from the pyre site might have reflected the 'status' or popularity of the deceased (McKinley 1997, 131 &142).

Methodology

All cremation deposits were collected and bagged separately on site in order that the cremated bone could be recovered with more care during post-excavation work. The deposits were gently wet-sieved on to a 0.25 mm mesh. The residue was passed through a 4 mm mesh and collected on a 0.5 mm mesh. All cremated material was hand collected from the 4 mm mesh whilst still damp. The remaining fraction was further divided into 2 mm and 0.5 mm and retained. This process should have ensured maximum recovery of cremated material.

The human remains by context

The material from all contexts has been fully quantified and is shown in tabular form below and is laid out in full detail in the site archive.

Eleven contexts (2/6, 6, 6/20, 17, 31, 33, 38, 39, 41, 43, 47) were 'undisturbed'. The remaining contexts had been heavily disturbed and the value of the material recovered from within them is therefore greatly reduced. This is due either to their position within the robber trench or to animal activity. Apart from Context 10, the human skeletal material from these contexts has been quantified, but has not undergone further analysis. Contexts 17, 31, 33, 38, 43, 47, although undisturbed, are insignificant in terms of sample size, greatly diminishing the value of further analysis. Material from Contexts 10, 6/20, 39 and 41, which is more abundant or contains clearly identifiable fragments, has been analyzed further and is discussed below.

Context 10

All the material from Context 10 was cremated. Although only a small quantity of material was present (less than 3 g), the nature of the material made age estimates possible. The assemblage included both deciduous teeth and the forming crowns of permanent molars. Based upon this information, and using data produced by Gustafson and Koch (1974), it is possible to estimate the age of the individual as being 2–3 years.

Context 6/20

Context 6/20 represents the articulated, but disturbed, remains of a human skeleton. The bone was in a poor state of preservation. Long bone shafts were evident, as were cranial bones, but the spine and skeletal extremities did not survive. From the skeletal elements present it was not possible to estimate the sex of the individual with confidence. However, the supra-orbital ridges and the ischial tuberosity displayed male characteristics. The completed fusion of femoral heads and distal epiphyses of the tibia indicate an adult individual. Despite the poor survival of the material, it is possible to suggest the presence of mild osteoarthritis affecting the right elbow. This is evidenced by eburnation on the articular surface of the humeral capitulum, and mild osteophytes on the margins of the coronoid process and radial notch of the ulna.

Context 39

Both cremated and non-cremated human skeletal material was recovered from this cremation, but only non-cremated remains were identifiable. Most long bones were present, as were cranial fragments, but the spine (with the exception of the odontoid process) was absent.

It was not possible to determine the sex of the individual represented, but the supra-orbital ridges displayed female characteristics. Adulthood is suggested by the presence of permanent teeth showing signs of wear. The skeleton displayed metopism, a congenital variant.

Context 41

This burial pit contained material ranging from partially charred to completely calcined. Amongst the material the fully formed roots of a permanent upper molar were identified,

Table 7. Cremated human bone by context.

Context no.	Weight (g)	Colour	Fragment Size (mm)
5	8	white/black	9 < 36.0
8	13	white	8 < 39.9
10	3	white, grey	9 < 11
15	8	blue/grey	9 < 40
17	73	white, blue/grey	5 < 42.1
31	1	grey/black	1 <18
33	20	white, blue/black	5 < 24.1
38	68	white, white/black	1 < 27
39	391	white, blue/grey, grey/black	1 < 84
41	364	white	5 < 50.1
43	3	white	5 < 25
47	8	white	3 < 32

Table 8. Non-cremated human bone by context.

Context no.	Fragment count
2/6	2
5	23
6	5
8	1
39	partial skeleton $^1/_4$–$^1/_2$ complete
6/20	articulated skeleton $^1/_2$-$^3/_4$ complete

Table 9. The marine shell by context.

Context	No. of whole shells	No. of fragments
SW 2/6	21 × *Lithorina littorea*	1 × *Patella vulgata*
	1 × *Patella vulgata*	
NW 6	1 × *Patella vulgata*	
SW 6	6 × *Patella vulgata*	
	4 × *Patella vulgata*	
SE 6	29 × *Patella vulgata*	
	2 × *Lithorina littorea*	
	1 × *Buccinum undatum*	
	1 × *Cerastodema edule*	97 × *Patella vulgata*
SE 10	2 × *Patella vulgata*	
SW 20	3 × *Patella vulgata*	2 × *Patella vulgata*
	3 × *Lithorina littorea*	1 × *Patella vulgata*
39	1 × *Patella vulgata*	

Key: *Patella vulgata* - Limpet
Buccinum undatum - Common whelk
Cerastodema edule - Common cockle
Lithorina littorea - Periwinkle

suggesting an adult individual.

THE FAUNAL REMAINS

By Dale Serjeantson with additional comments by Lucy Sibun

The excavation produced only two fragments of animal bone.

Methodology

The residues derived from the environmental samples were collected on a 0.5-mm mesh. Whilst damp, this material was passed through a 4-mm mesh and the residue hand-sorted for artefacts and bone. The rest of the deposit was discarded. The residue which had passed through the 4-mm mesh was then put through a 2-mm sieve on to a 0.5-mm mesh. The resulting fractions were dried and examined separately. The 2-mm fraction was found to contain fragments of cremated bone. These are presumed to be human rather than animal, but are too small for this to be ascertained with certainty. Neither fraction contained evidence of small vertebrate remains.

Context 8

Femur, shaft only, probably pig. The bone is eroded and lacks both articular ends. Unburnt; no butchery marks visible.

Context 39

Phalanx 1. Pig. The bone is eroded and lacks the proximal articular end. It is from a large pig, so probably adult. Unburnt; no butchery marks visible.

THE MARINE SHELL

By David Dunkin

The vast majority came from the main body of the barrow (Context 6) in the southern quadrants (SE/SW). Four edible species of marine molluscs were found. Three: limpet, whelk and periwinkle, would typically be found within the littoral zone in the immediate vicinity of the site. Common cockle has a mudflat/estuarine habitat whose nearest location is within 2 km to the west at Cuckmere Haven. The relative quantities retrieved (Table 9) suggest that at least the limpet was being targeted as a supplementary source of food.

Only an extremely small proportion of the marine molluscs came from the northern quadrants of the barrow (NW/NE).

MOLLUSCS

By Mark Robinson

Land snail shells were present in most of the flots. They were heavily encrusted, but potentially identifiable if washed. The species present were predominantly those of open habitats, particularly *Pupilla muscorum* and *Vallonia excentrica*. A loose substrate is suggested by *Pomatias elegans*, but shells of *Candidula* or *Cernuella* sp. were present in at least some of the flots. These species are regarded as medieval introductions, and their occurrence would suggest that some of the shells are intrusive.

CHARCOAL AND OTHER CHARRED PLANT REMAINS

By Gill Campbell

Discussion

Onion couch tubers were recovered from two contexts (Fill 38/Cut 37, and Fill 41/Cut 40), both of which also produced cremated bone. These tubers are often recovered from Bronze Age sites (Greig 1991, 304) and are particularly associated with cremations (Robinson 1988). However the dates obtained on tubers from Fill 41 would suggest that these particular remains may be of varying ages and thus not necessarily associated with the cremations.

Large charcoal assemblages were also recovered from features producing burnt bone. The dates obtained on material from two of these contexts (Table 1) suggest that they may comprise material of varying ages. Thus further work would not provide meaningful results.

Methodology

Fifteen samples consisting of the entire fill of all circular cut features at the site, except Feature 44, were taken. These samples were floated onto a 300 micron mesh with the residue being retained on a 0.5 mm mesh. Part, or all, of each flot was assessed by scanning using a binocular dissecting microscope. The condition, character and estimated quantity of any remains found were recorded.

Results

The flots all contained large numbers of modern rootlets, and much of the charred material still had chalk adhering to it. Two samples, one from Fill 41 (Cut 40) and one from Fill 38 (Cut 37) produced *Arrhenatherun elatius* spp. *bulbosum* (Wild.) Schübler & Marten (onion couch) tubers. Cremated bone was also recovered from these fills.

Large assemblages of charcoal were also recovered from several contexts: Fills 33 and 39 (Cut 32), Fill 36 (Cut 30), Fill 38 (Cut 37), Fill 41 (Cut 40), and Fill 43 (Cut 42). Six fragments of charcoal from Fill 39 were identified as Pomoideae type prior to being submitted for radiocarbon dating, while charcoal from Fills 41 and 43 appears to be mainly oak.

Acknowledgements

The UCL Field Archaeology Unit gratefully acknowledges English Heritage, East Sussex County Council, and the National Trust for funding the excavation and associated studies. Particular thanks must go to English Heritage Project Officer Dr Helen Keeley, Sarah Mann, the National Trust's regional Countryside Manager, and Dr Andrew Woodcock, East Sussex County Archaeologist.

The extra expertise and reports provided by specialists Luke Barber, Alex Bayliss, Chris Butler, Matthew Conti, Gill Campbell, David Dunkin, Sue Hamilton, Jenny Heathcote, Neil Linford, Jaqui Mulville, Simon Mays, Mark Robinson, Dale Serjeantson, Lucy Sibun, Vanessa Straker and Mark Spigelman are also much appreciated. Lucy Sibun would like to thank Simon Mays for commenting on an initial draft of the report on the human skeletal material.

The author would like to express his personal thanks to the fieldwork supervisor, Lucy Sibun, to Michael Peavy, and of course to all those people who worked on the site in often less than ideal weather conditions. Ian Greig and Chris Derham conducted

the pre-excavation contour survey of the barrow, and except where noted the published drawings were prepared by Jane Russell. The Field Archaeology Unit Project Manager was David Rudling, who edited the text prior to submission to *Sussex Archaeological Collections*.

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Abbreviation: *SAC* = *Sussex Archaeological Collections*

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