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Prehistoric Landscapes of Cumbria

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Volume II

Submitted for the degree of Doctor of Philosophy
Faculty of Arts
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July 2005

Chapter 8: Burial and depositional traditions

Introduction

Discussions in previous chapters have established some of the ways monuments related to how people moved around and understood the landscapes in which their lives played out. Seasonal journeys between landscape zones became increasingly marked by monuments into the Early Bronze Age. Drawing on aspects of the natural world, and formalising and embellishing places that had seen earlier use, monuments tied into the maintenance of social identity and tenurial ties. But how do their contents relate to their settings? Burial and other sorts of depositional practice have seen limited discussion in previous chapters as they were common practice at different 'types' (and scales) of monument. In this chapter, the focus is on the character of deposition itself and exploration of the relationships between people, monuments and the natural world. As with other elements of the prehistoric record in Cumbria, there is no synthetic account or interpretation of burial and depositional practice. This chapter sets out the evidence, and discusses how it articulates with the themes established in earlier chapters.

The first section outlines the character of the evidence, and problems with the ways it has been interpreted in the past. This is followed by a discussion of Neolithic funerary practice, leading to a reassessment of the 'single grave' burial traditions of the Neolithic-Bronze Age transition. The third section concerns funerary and depositional practice into the Bronze Age. Focussing on the deposition of human and cultural remains in areas away from ceremonial complexes, this allows consideration of how 'token' deposits can be interpreted in the context of seasonal occupation. Through discussion of depositional traditions and monuments associated with natural features, the final section outlines the ways people forged and maintained connections with particular places, drawing on the dead and other 'transformed' substances at different social and geographical scales.

Character of the evidence

The majority of evidence for prehistoric burial in Cumbria is derived from antiquarian sources. Given the character of those investigations that reached publication, it is apparent that the data are skewed in a number of ways. That the majority of investigations were focussed on recovering 'central' burials means it is likely that cut features and deposits and structures outside central excavation areas were overlooked. Although early attention was predominantly focussed on easily accessible features, most associated with major monumental complexes, Collingwood's (1933) 'call to arms' prompted the excavation of many upland monuments.

Records of these are relatively detailed and provide structural and loose stratigraphic information. However, interpretations were set within culture historical frames of reference with emphasis placed on the identification of material culture styles rather than the understanding of stratigraphic sequences. More recent investigations, of which there have been few, have revealed monuments with rich and complex histories. Providing scientific dating, detailed analysis of burial deposits and material culture assemblages, this information indicates the major loss of detail which characterises most early investigations.

Academic approaches to prehistoric burial in northern England have been based on the classification of common denominators; particular types of funerary site associated with specific 'packages' of burial furniture and material culture (e.g. Clare 1973; Kinnes 1979, Annable 1987; Barnatt 1996a). Although these sorts of approach, often based on statistical analysis, have added to understandings of chronology and material culture associations, they have commonly brushed over the complexities inherent to funerary and depositional practice. As with aspects of monument architecture, elements of the 'burial' record in Cumbria slip through traditional classification schema. Although what we might call 'formal' burial traditions in 'classic' monument forms are apparent, less easily interpreted token deposits of charcoal and material culture are much more common. As a result, previous analyses have failed to find anything but a small degree of quantitative patterning in the available data (e.g. Annable 1987).

The chronology of Neolithic and Bronze Age burial in Britain is apparently well understood; in the Early Neolithic, long cairns, often associated with wooden and stone chambers, were repositories for the communal burial of disarticulated bone. During the Final Neolithic and Early Bronze Age this gave way to articulated inhumations in cists or cut graves, often accompanied by beakers. During the Bronze Age, burial turned to cremation, associated with urns and food vessels. Cremations were often found to be 'secondary' burials, inserted into barrows built to cover earlier central 'primary' inhumation graves. Although this narrative does suggest a broad overall chronology it is inherently problematic. Reliant on long held ideas concerning the increasing stratification of prehistoric society, such accounts also result from 'grand narrative' approaches where patterns of variability are compressed in order to produce neat syntheses of the national 'story'.

Traditional interpretations, based on the 'fact' that burial during the Final Neolithic and Early Bronze Age focussed on single, central inhumations, are derived from early antiquarian excavations (Peterson 1972). Increasingly, the evidence suggests that single phase monuments account for only a limited proportion of those constructed. Where burial cairns have seen detailed excavation, single 'primary' burials are often impossible to identify, with many

deposits associated with the original ground surface (Peterson 1972; Barnatt 1996a). Evidence for stake circles, 'mortuary houses', boxes or cists, ring ditches and kerbs sealed beneath barrows is well known from the Neolithic onwards (e.g. Lynch 1972, 1979, 1993; Kinnes 1979; Barnatt 1996a; Woodward 2000). In many cases, the addition of a covering cairn or mound was merely a constructional episode, finalising the use of an open site and providing a focus for later insertions and structural additions.

The existence of protracted mortuary and funerary rituals over the Neolithic and Early Bronze Age is also well established (e.g. Barrett 1988b, 1990, 1991, 1994; Thomas 2000; Brück 2001). During the Early Neolithic, excarnation and the movement of bone between different sites was apparently common (e.g. Mercer 1980; Thorpe 1984). In some regions, movement and curation of human remains is suggested by the emphasis, in specific assemblages, on long and skull bones with smaller body parts poorly represented. During the Later Neolithic and Bronze Age partially and fully disarticulated burial, primarily of skull and long bone fragments is also well attested, as is the existence of excarnation platforms (Barnatt & Collis 1996; Turnbull & Walsh 1996). Evidence for large pits containing multiple burials of different phases and disturbed and re-used cists (Peterson 1972; Barnatt & Collis 1996; Woodward 2000; Owoc 2001) are also common, suggesting the movement and mixing of human remains after what may be perceived archaeologically as their 'final' deposition. To constructed mortuary and burial monuments can be added the token deposition of human remains in caves, fissures and natural mounds (Edmonds & Seaborne 2001; Mullin 2001; Barnatt & Edmonds 2002).

Chronological distinctions traditionally drawn between inhumation and cremation have been overstated, as particularly over the Neolithic-Bronze Age transition, cremations, disarticulated and articulated inhumations are well represented, often in the same contexts (Peterson 1972; Kinnes 1979; Annable 1987; Barnatt 1996a). The evidence also suggests a degree of continuity in that cremation ritual was an extended process. By definition the practice involves at least two phases; the cremation itself, and deposition of the remains (Barrett 1990, 1991; Barnatt 1996a). The presence of unburnt bone and cremation deposits in association with excarnation platforms (e.g. Barnatt & Collis 1996; Turnbull & Walsh 1996; Mullin 2003) suggests mortuary practice was even further protracted, possibly including the cremation of excarnated bone. Pyre remains and pits containing cremations and charcoal deposits are commonly found in open structures sealed beneath cairns and in association with the tops of cairns which saw subsequent phases of construction (Barnatt 1996a; Williams & Howard Davies forthcoming). Pyre sites, illustrated by post settings and areas of burnt ground are relatively common and in some cases, scorched pits suggest that burial took place whilst cremations were still hot (e.g. Barnatt 1994). Where pyres have not been identified, it is possible that cremation took place at some distance. The deposition of 'cold' cremations in perishable containers or urns also

suggests that cremated remains were curated. As with many inhumations, both urned and unurned cremation deposits (where these have seen modern analysis) often represent more than one individual (McKinley 2003). Token deposits of cremated and unburnt remains are common and it may be that elements of the same individual saw deposition in a number of different contexts. This suggests that in some cases mortuary rites and burial were neither spatially nor temporally connected.

Further complications arise from pottery classification. Such analyses focus on three main phases; beaker inhumations are thought to have been superseded by cremations associated with food vessels and food vessel urns, leading to the collared urn tradition and the use of 'accessory' vessels. Within these typologies, regional and chronological traditions have been identified, based on decorative and morphological traits, in particular of collared urns (Longworth 1984). Radiocarbon dated excavation evidence from Cumbria and other regions suggests these presumptive chronologies do not hold, with collared urns dating to very early in the Bronze Age (Longworth 1992; Wild 2003). Furthermore, where collared urns were used as containers for cremations, food vessels are usually 'accessory' vessels associated with unurned cremations or token deposits. Both often occur in the same contexts and it seems likely, rather than being chronologically distinctive forms, particular vessels were deemed suitable for specific types of deposition.

Beyond problems of typology, where burial deposits were not found in association with datable material culture, similarities between funerary practice across the Neolithic and Bronze Age and into later periods means that chronological resolution is difficult. Roman and Saxon inhumations and cremations have been identified in prehistoric monuments (e.g. Greenwell 1877), some solely as a result of radiocarbon determinations (Olivier 1987). Single inhumations placed in limestone hollows at Levens have recently produced Iron Age dates (Hodgson 2004). Although these are significant problems, it is possible to outline a broad chronology of burial and depositional practice.

Neolithic cairns

Although little is known of Neolithic burial traditions in Cumbria, evidence from other areas of northern Britain has suggested traditional understandings, based on long mounds, have been overstated. In East Yorkshire the earliest Neolithic round cairns were contemporary with many long cairns (Harding 1996). Both 'types' of monument were associated with crematoria or disarticulated burials within linear structures as well as individual inhumations with grave goods (Kinnes 1979; Harding 1996).

Raiset Pike, Greenwell's Crosby Garrett CCXXVII (1877), is perhaps the best known 'long cairn' in Cumbria. Formed in fact of two conjoined round cairns (Clare 1979) it has been subject to many interpretations (Manby 1970; Ashbee 1970; Kinnes 1979; Masters 1984; Kinnes & Longworth 1985; Annable 1987). In the eastern cairn, a wooden and stone mortuary house containing disarticulated burials had been burnt *in situ*. The western end of the structure was marked by a standing stone placed transversely to the line of the monument, as was the western end of the second cairn. Constructed with larger rocks than that to the east, the western cairn contained many unburnt deposits of scattered human bone, principally of children, both on the original ground surface and throughout the body of the monument. Many deposits were discrete, placed under flagstones.

The oval 'long cairn' at Skelmore Heads saw excavation in the 1950s prior to which it had been subject to the attentions of an antiquarian group who recorded the presence of pottery and bones (Powell 1972). Two stone uprights project from the mound towards its eastern end and Powell's investigation revealed a further two within the cairn. The large transverse slab adjacent to the destroyed burial deposit has been taken to correspond to the structure at Raiset Pike (*ibid.*; Manby 1970; Masters 1984). These monuments share similarities with other oval and round cairns, also likely of Neolithic date, on the southern and eastern limestones.

Greenwell's (1877) excavation at Crosby Garrett CLXXIV revealed inhumations with Later Neolithic grave goods (Kinnes 1979) as well as burnt and unburnt disarticulated burials. The oval cairn was made up of half a metre of material added to a limestone outcrop (Greenwell 1877). About a dozen scatters of human remains were identified at its north, with the 'distinct' inhumations at the south. Although the stratigraphy is unclear, the majority of scattered burnt and unburnt bone was within a discrete cluster and the inhumations were associated with the original ground surface. Like at Raiset Pike, this suggests the monument saw a number of stages of construction and deposition.

On the southern and eastern limestones there is a tradition of round 'pavement' cairns, deposits within which have much in common with the western cairn at Raiset Pike. At Crosby Garrett CLXXIII, a round cairn covered an area of limestone slabs "placed together in the most regular order, overlapping each other, commencing from some laid quite flat at the centre and upon the natural surface of the ground" (Greenwell 1877: 387). Deposits of disarticulated and fragmentary bone represented largely by skull and long bone fragments were located at different levels, and in different areas of the cairn. As at Raiset Pike West and Crosby Garrett CLXXIV, animal bones were dispersed throughout, many associated with burial deposits.

Birkrigg Disc Barrow exhibits some striking similarities to Crosby Garrett CLXXIII. A wall of

limestone slabs 'the shape and size of a doorstop' were arranged in a circle *c.* 18 metres across with the central area roughly paved with limestone (Dobson 1927). Two phases of deposition comprised 17 mixed deposits of disarticulated human and animal bone. The later deposits, one of which was associated with a boar's tusk and a piece of ornamented bronze, were sealed beneath limestone boulders. The earlier deposits were more randomly scattered with the majority containing the fragmentary bones of more than one individual, many including juvenile, neonatal or foetal material. As at Crosby Garrett CLXXIII skull and long bone fragments formed the majority of the skeletal material identified.

The evidence available for these monuments is less than clear. However, partial excavation and reanalysis of material recovered from a 'pavement' cairn on Sizergh Fell suggests something of their nature. The initial excavation of 'Tumulus 2' revealed a cairn *c.* 17 metres in diameter, covering a central platform of limestone slabs surrounded by a rubble wall (McKenny Hughes 1904b). Deposits of bone within the cairn were believed to comprise four adults and a child, interred within small stone settings (*ibid.*). Re-analysis of the skeletal material illustrated that a minimum of 13 individuals were present (Start 2002). In addition to the five initially recorded, the remains of eight infants were identified, ranging from a 36 week foetus to a child of six months (*ibid.*). Partial re-excavation revealed that the cairn sealed an internal wall of large quarried limestone slabs and a rough kerb of boulder erratics (Evans & Edmonds 2003, figures 8.1, 8.2). These suggest the wall surrounded the central platform, which remained open before the covering mound was added (*ibid.*). McKenny Hughes' (1904b) description of the excavation, together with his stylised section drawing (figure 8.3) and the skeletal material suggest the monument saw several phases of construction and deposition. Two of the burials recorded by McKenny Hughes were situated on top of the boulder platform, with the remaining three at higher levels. A number of bone fragments were also found scattered *beneath* the platform. Although McKenny Hughes believed these had percolated from above, it seems likely these represent the primary use of the monument for exposure (Evans & Edmonds 2003).

The disarticulated deposits at the western cairn at Raiset Pike, and those at Crosby Garrett CLXXIII (Greenwell 1877) have been dated to the Neolithic on the basis that mixed disarticulated burials, including children, were deposited beneath slabs or in association with rough 'paving' (Kinnes 1979). Worked and unworked animal bone is also common, a feature again attributed to Neolithic monuments (*ibid.*). However disarticulation alone cannot be used to ascribe a Neolithic date (Peterson 1972) and these features all appear to be the products of several different phases of use. The presence of bronzework and a boar's tusk with a disarticulated deposit in the final phases of Birkrigg Disc Barrow and finds of a Later Neolithic date (Kinnes 1979) with articulated inhumations at Crosby Garrett CLXXIII suggest however, that these monuments had their roots in the Neolithic.

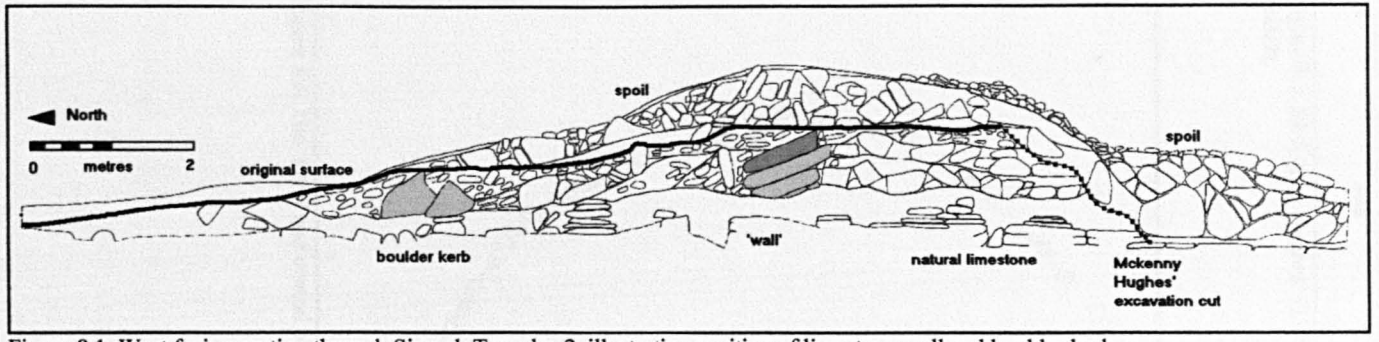


Figure 8.1. West facing section through Sizergh Tumulus 2, illustrating position of limestone wall and boulder kerb.

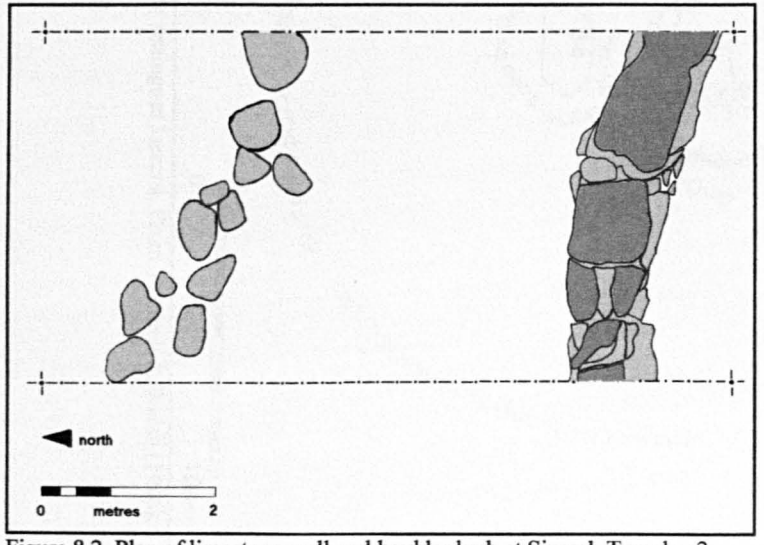


Figure 8.2. Plan of limestone wall and boulder kerb at Sizergh Tumulus 2.

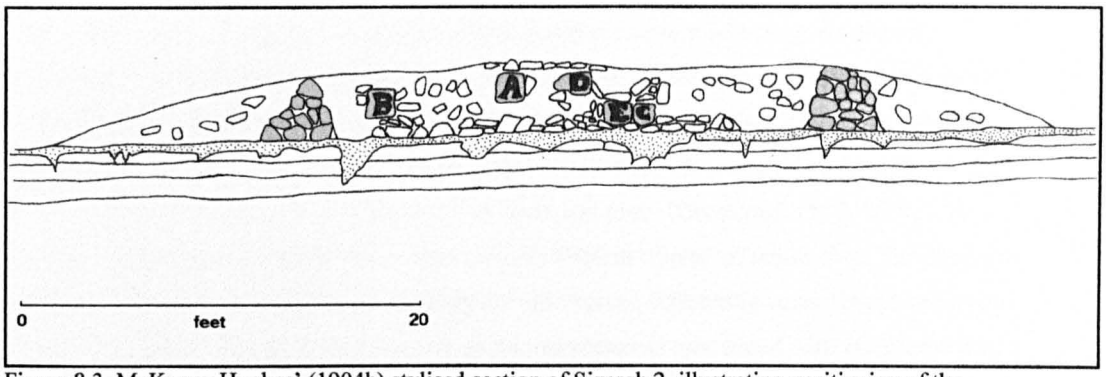


Figure 8.3. McKenny Hughes' (1904b) stylised section of Sizergh 2, illustrating positioning of the burials.

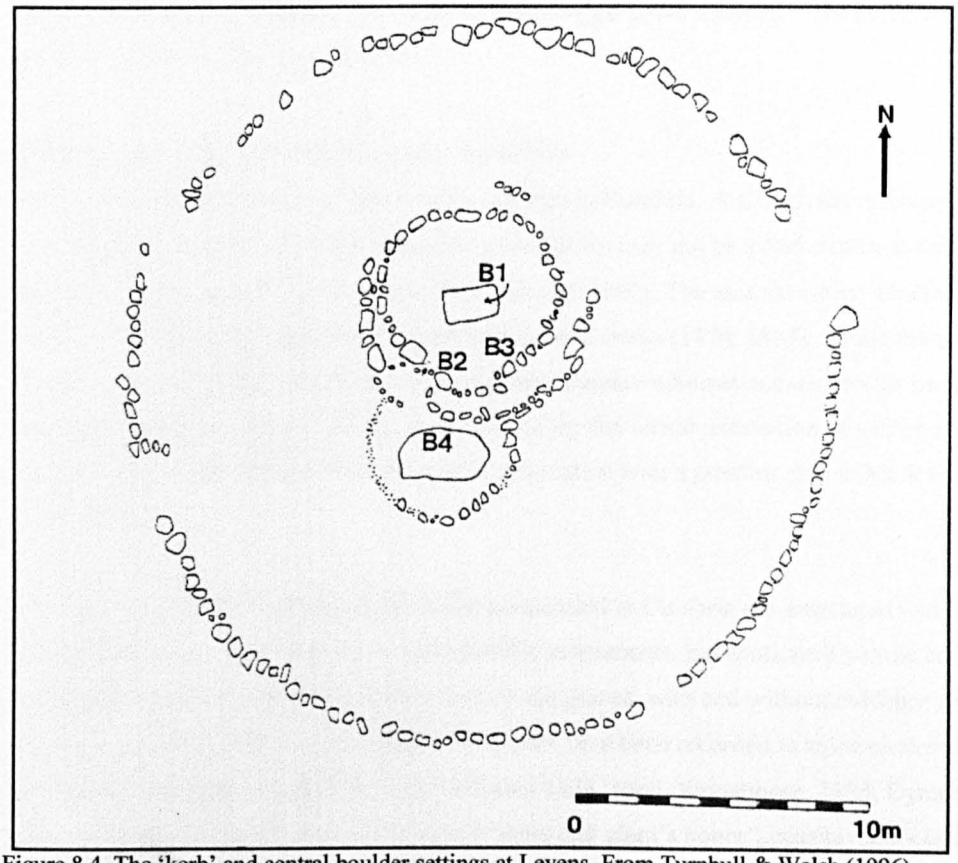


Figure 8.4. The 'kerb' and central boulder settings at Levens. From Turnbull & Walsh (1996).

The emphasis on partial disarticulated deposits suggests funerary rites were complex and extended, and that bones may have been mixed, curated and moved between different monuments. The emphasis on larger and more distinctive bones such as skull and long bone fragments also suggests these sorts of practices. At Crosby Garrett CLXXIII "There was no appearance of a body in its entirety ever having been placed within the mound, nor were there any of the smaller bones, such of those of the hand and foot" (Greenwell 1877: 387). It is possible these monuments may have seen use for different 'types' of deposition. The common emphasis on children may suggest individuals were treated differently according to principles of age and perhaps gender. It may have been that monuments associated with children's bones and the partial remains of adults were used for exposure, with some deposits, particularly of larger and adult bones, removed to be interred elsewhere. At a national scale, exposure, the movement and curation of human bone is commonly believed to have ended in the Final Neolithic with the introduction of beakers and the 'single grave tradition'. The evidence from Cumbria, however, suggests otherwise.

Beakers, cists and the 'single' grave tradition

Individual beaker inhumations appear relatively rare in Cumbria. Although the majority of those recorded are from the Eden valley this distribution may not be a real cluster as has been supposed (Collingwood 1933; Clough 1968; Annable 1987). The area saw many nineteenth century excavations, in particular by Greenwell whose works (1874, 1877) remain the primary source. In west Cumbria, that there are no published beaker inhumations may result from the lack of recorded excavation. This is also suggested by the recent excavation of a cairn near Aspatria where three beakers were located in association with a possible grave (Mark Brennand pers. comm.).

The majority of beaker and single inhumations recorded in Cumbria are associated with open circular structures, many close to or within earlier monuments. Excavations illustrate both disarticulated and articulated remains in cists or cut graves, with and without evidence for a covering mound. As discussed in chapter five, cists have been recorded in stone circles at Gamelands, Gunnerkeld and Brats Hill (Williams 1856, cited. Waterhouse 1985; Dymond 1881). At Long Meg there is a reference to a 'body and giant's bones', possibly associated with an internal cairn (Aubrey 1650; Dymond 1881). The early investigation and ploughing in the interior of many stone circles may mean burials in such contexts are under-represented.

Downslope of Sizergh Tumulus 2, on the banks of the river Kent close to Morecambe Bay, a large cairn at Levens Park revealed a complex structural sequence and a number of inhumations. As the excavation was not completed, the phasing of the monument is unclear and a number of sequences have been postulated (Sturdy 1972; Turnbull & Walsh 1996). Later

Mesolithic/Early Neolithic lithic material on the original ground surface was identified both within and outside the structure, some of which was associated with charcoal spreads (Turnbull & Walsh 1996; Cherry & Cherry 2000). On the basis of the excavation plan (figure 8.4), it is possible that a grave (B4) cut into the original ground surface towards the centre of the structure, surrounded by a ring of boulders and later covered by a cairn, either predated or was contemporary with what has been interpreted as the 'primary' burial (B1). This was described as a 'disturbed' inhumation (Sturdy 1972) in a grave cut through the charcoal spreads, accompanied by two beakers and two flint knives. The grave lay within an unexcavated circular boulder structure 8 metres in diameter which was later infilled and saw the deposition of two further inhumations (Turnbull & Walsh 1996). A cairn of 25 metres in diameter, from which stray cremated bones were recovered, sealed the whole structure *(ibid.)*. Although the sequence is far from clear, large kerbed circles with central graves are relatively common, not only in Cumbria, but also in areas such as the Scottish Highlands (see Bradley 1998).

The internal structure at Levens was interpreted (Sturdy 1972) as a Neolithic house on the basis of the charcoal layers and lithic scatter which it overlay. A site at Borwick, associated with Early Bronze Age inhumations and a bronze axe, overlay a similar lithic assemblage (Olivier 1987). Funerary monuments with such associations are relatively common across Britain (Gibson 1982) but remain poorly understood, interpreted as occupation sites fortuitously or purposefully sealed beneath barrows. Although the internal kerb at Levens was a funerary related structure, the setting and architecture of the external kerb suggests it may have been a freestanding or embanked stone circle in a lowlying coastal setting similar to Grey Croft. If so, its construction formalised the use of an area, on a river bank close to an estuary, which had formed the focus for gathering in the past. As with many 'open' monuments, such places saw a shift in focus during and after the Later Neolithic, with increased emphasis on ceremonies and structures associated with the treatment of the dead.

At Oddendale, beaker material was associated with boulder settings sealing the post pits which had contained the Neolithic timber circles (Turnbull & Walsh 1997; figures 8.5, 8.6). Although the evidence is equivocal, it is likely that an inhumation accompanied by a beaker sherd saw deposition in a grave at the centre of the structure at a similar time. Cremated bone and crushed pottery within the grave was thought likely to represent a secondary insertion (*ibid.*). The later phases of the monument (figure 8.6) included the construction of a ringcairn and the deposition of human bone, collared urn and food vessel fragments in its fabric. An excarnation platform associated with uncremated bone was constructed against the southern perimeter of the ringcairn, together with a boulder facade (*ibid.*; see below).

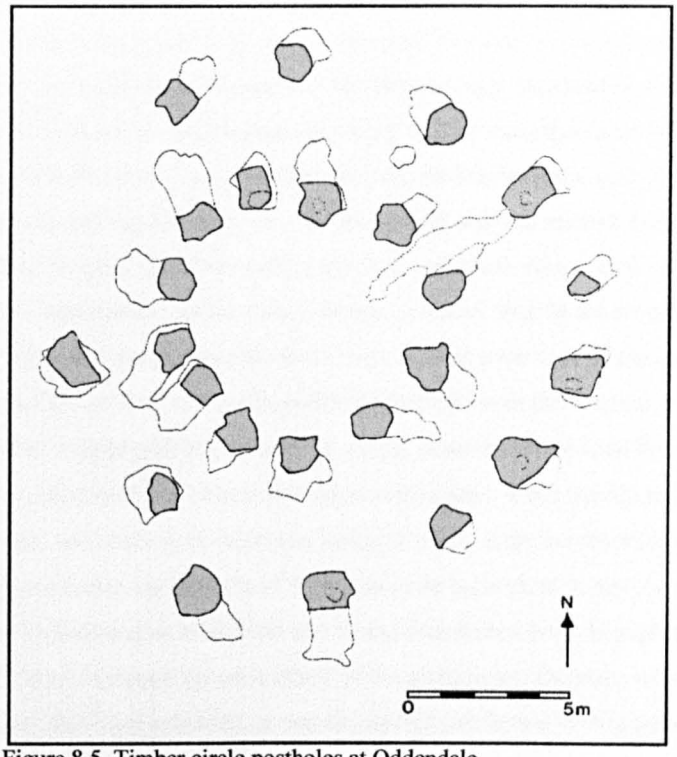


Figure 8.5. Timber circle postholes at Oddendale.
From Turnbull & Walsh (1997).

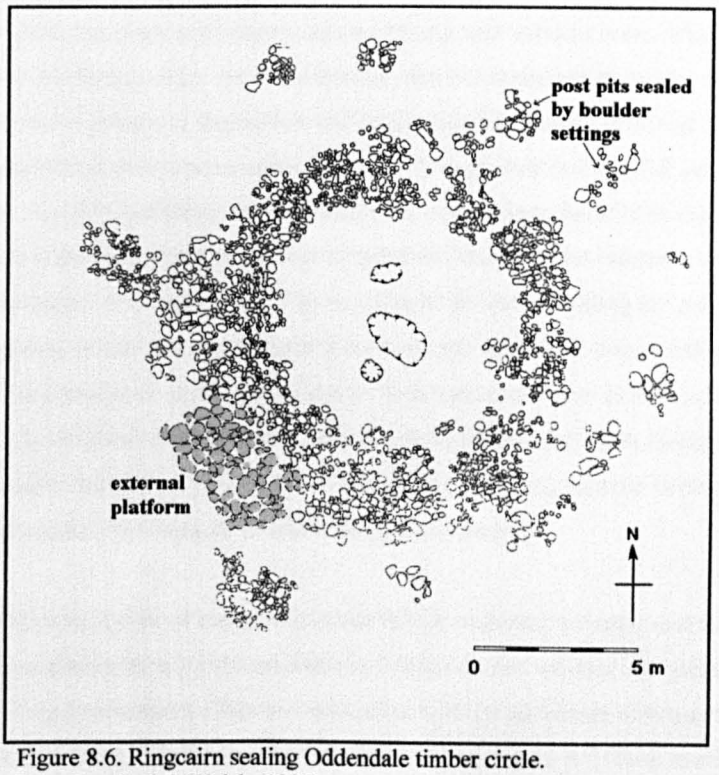


Figure 8.6. Ringcairn sealing Oddendale timber circle.
From Turnbull & Walsh (1997).

Less than a kilometre south west of the Oddendale ringcairn a monument at Hardendale Nab suggests similar practices. The excavation demonstrated that a variety of different structures within a given area were in use at the same time and also that funerary traditions associated with 'Neolithic' monuments continued into the Bronze Age. Hardendale Nab illustrated four main phases of construction and deposition, likely to date from the Later Neolithic and more consistently into the Bronze Age (Williams & Howard Davis forthcoming). The first phase was an open limestone cist supported by an earthen mound, and the second, the construction of a ringcairn with an integral cist surrounding the earlier feature. Associated with the primary phases were two rectangular paved stone settings, situated outside the ringcairn structure. These were empty, but burnt, and may have been used as pyre sites or excarnation platforms (*ibid.*). The third phase involved the deposition of rubble over the internal and external features to form a low flat topped platform. Later the whole structure was sealed beneath a cairn. Each phase was associated with individual and token cremations, some associated with urn and food vessel fragments, and scatters of burnt and unburnt bone, many mixed with animal remains. Many of these contained the remains of more than one individual, a high proportion of which were children. Human and animal bone was found distributed both throughout and cut into the limestone rubble which made up each phase of the monument. Deposits of cremated infant and animal bone had also been scattered across the monument between structural phases (*ibid.*).

Hardendale Nab illustrates important points relating to the continued deposition of disarticulated inhumations and token scatters of burnt and unburnt bone, often representing children, into the Bronze Age. As at Oddendale, the site remained in use for several centuries, and saw numerous phases of deposition and structural elaboration. Although such practices probably occurred at other monuments, it is only through detailed and full area excavation these can be clearly established. Partial, token and mixed deposits of both cremated and unburnt bone deposited within particular monuments illustrate the existence of complex and protracted mortuary and burial rites. This is a crucial to understanding the nature of funerary ritual, and practices that structural features such as cists and other stone settings might represent. The remains of small vertebrates such as vole and shrew in the cist at Hardendale Nab suggest it remained open and was used as a roost by hunting birds (Stallibrass 1991). The cremation within the cist may have been a 'secondary' deposit, interred in the feature following its use for exposure (Williams & Howard Davis forthcoming).

Central or off-central cists or cut graves occur within a number of large and small kerbed settings. The majority have produced disturbed deposits, and evidence suggestive of the use and re-use of open structures. Cists are associated with small kerbed settings, many of which, such as Iron Hill South, Little Meg and Bleaberry Haws (figure 5.5) have traditionally been identified as small stone circles. It seems likely these structures were similar to the primary

phase of Hardendale Nab. Whilst some were infilled, some remained open and others saw further structural elaboration and deposition.

Excavation of Broomrigg C (Hodgson & Harper 1950) revealed the first phase of the structure was a kerb with a diameter of 4.3 metres containing an empty cist (figures 8.7, 8.8). The addition of a kerbed structure with a diameter of *c.* 15 metres partially destroyed the structure surrounding the cist. This larger circular monument, within which was a second probable cist, formed the focus for urned and unurned cremations associated with the original ground surface (*ibid.*).

Similar themes were evidenced in a funerary cairn at Hackthorpe Hall, Lowther (Mawson 1876). Excavation revealed a sealed kerb within which two cists, less than a metre apart, occupied the central area. One was completely empty and the second, surrounded by four unurned cremation burials cut into the original ground surface, contained a large quantity of fragmentary bones. A number of urned and unurned burials were identified, in pits neatly spaced along the north western and south eastern perimeter of the kerb (figure 8.9). An external cobble surface similar to the features at Hardendale Nab and Oddendale was identified at the north west of the kerb, inside which the ground was heavily burnt (*ibid.*).

The kerbed structures at Broomrigg C and Hackthorpe Hall illustrate common themes. Both were apparently open, with cut features and finds associated with old ground surface. Other monuments in the region exhibit similarities; at Wilson Scar, cut graves and scattered cremated deposits were contained within a kerbed monument (Sievking 1984) and the kerbed structure at Glassonby (Collingwood 1901) contained an empty cist. The presence of 'paired' cists at Hackthorpe Hall and Broomrigg C is also evidenced at Clifton, close to Mayburgh, where two beaker cist burials were recorded beneath a barrow (Taylor 1881). Both cut into the original ground surface, the first contained a crouched inhumation with a beaker and a bone pin. The second, less than a metre to the north, contained fragmentary bones and two beakers (figure 8.10).

Empty cists at Hackthorpe Hall, Glassonby and Broomrigg suggest these features were not initially 'meant' for burial, but played a role in specific stages of mortuary ritual. Cists and cut graves, either empty or containing disturbed and/or secondary burials have been identified in Cumbria and other regions (Barnatt 1996a; Owoc 2001). Whilst in some cases this may be attributable to earlier excavations, many have been found sealed beneath extant monuments and it is likely these were disturbed in antiquity. The small and larger kerbed features with which cist and beaker burials are commonly associated have traditionally been regarded as stone circles and often occur within ceremonial complexes.

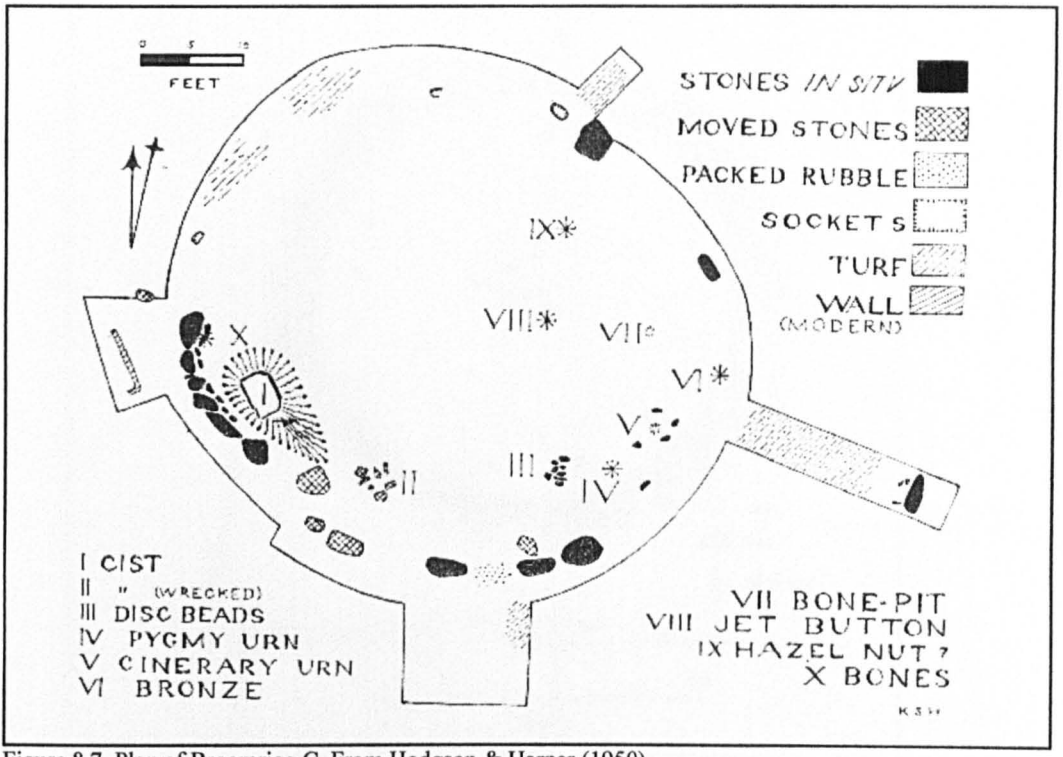


Figure 8.7. Plan of Broomrigg C. From Hodgson & Harper (1950).

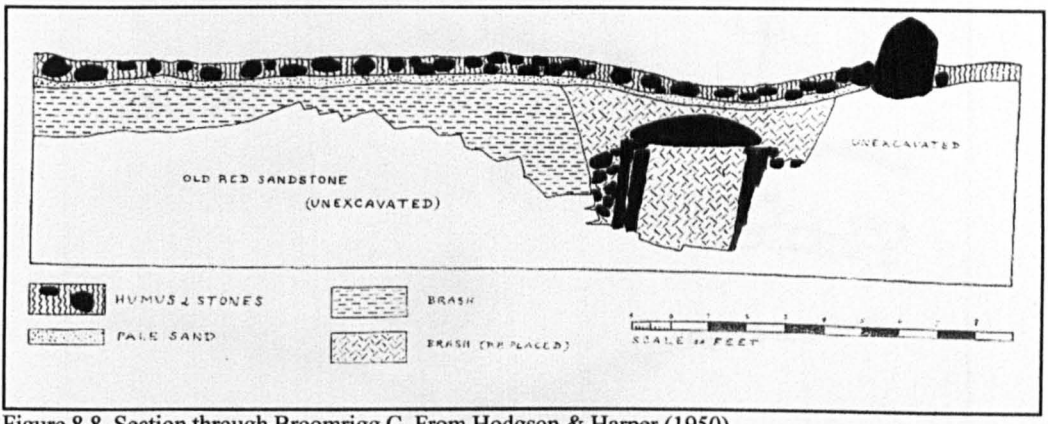


Figure 8.8. Section through Broomrigg C. From Hodgson & Harper (1950).

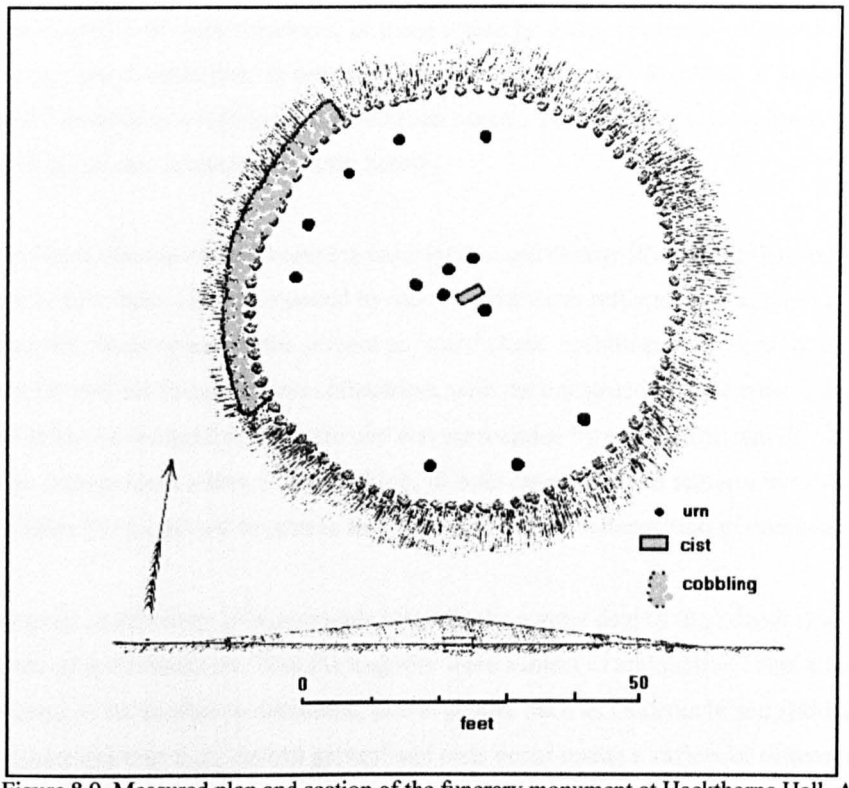


Figure 8.9. Measured plan and section of the funerary monument at Hackthorpe Hall. A second central cist had been removed prior to the full excavation of the monument. Drawing after Mawson (1876).

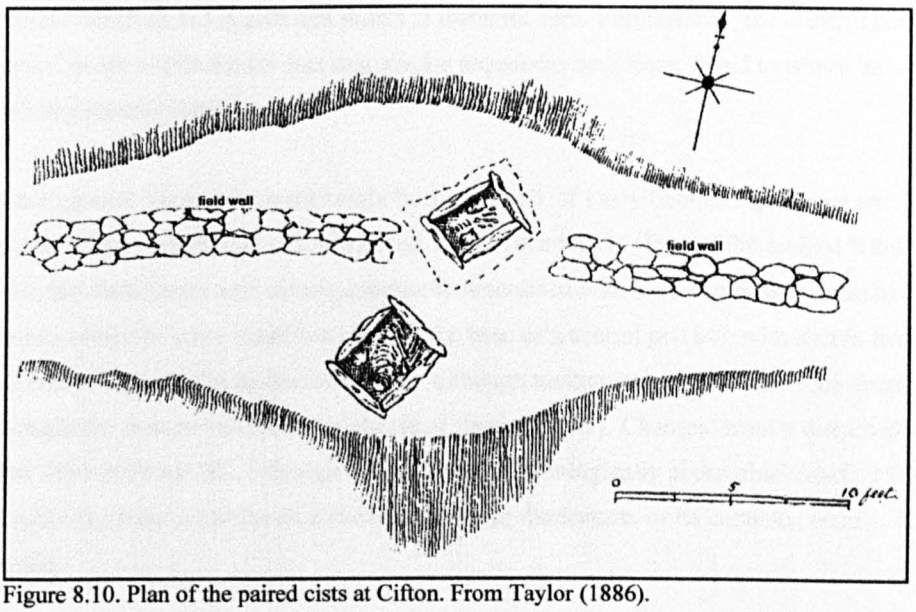


Figure 8.10. Plan of the paired cists at Cifton. From Taylor (1886).

These features are reminiscent of 'earlier' excarnation platforms and can be shown to have been associated with open structures, or those which by their architecture allowed access postdating their construction. In terms of cists, the provision of lids (either of stone or more perishable materials) would have allowed such access. The evidence also suggests that many buried deposits saw re-excavation (see below).

The structures discussed have complex associations and clearly illustrate different histories. What may have been cists surrounded by stone and/or earth settings such as those at Little Meg and Iron Hill South appear in the present as 'stand alone' monuments. In some cases, such features formed the focus for later elaboration, with the construction of circular monuments around them. At Hardendale Nab, the cist was surrounded by a ringcairn, and that at Broomrigg was also incorporated within a circular kerb. In both cases, the later features involved the construction of second cist structures and formed foci for the deposition of cremation deposits.

The external morphology of monuments often masks a great deal of time depth and architectural embellishment. That the majority were subject to antiquarian excavation means this phasing is impossible to determine, however sites such as Oddendale and Hardendale Nab demonstrate not only that 'central graves' and cists occur inside a variety of different circular settings, but also that the monuments surrounding and covering them cannot be taken to be contemporary. Morphological classification is therefore inappropriate as these monuments represent stages of 'projects' comprising many episodes of use, deposition and structural elaboration which ended at different points at different sites. Furthermore, the classification of built monuments overlooks the fact that similar sequences have been found to centre on geologically natural features.

At Ewanrigg near Maryport, twenty eight burials largely of Early Bronze Age date were associated with a natural knoll (Bewley *et al.* 1992; figure 8.11). Two of the earliest features illustrate the disturbance and mixing commonly associated with cists and beaker deposits. Fragments of beaker were identified close to the base of a central pit (84), with sherds from a second vessel higher up in its disturbed fills. Although no human remains were recovered, it was thought the feature had seen two phases of 'burial' (*ibid.*). Charcoal from a disturbed fill, dated to 3350-2920 cal BC, although deemed 'not archaeologically acceptable' (*ibid.*: 351) could relate to an earlier phase of activity with which the feature, or its contents, were associated.

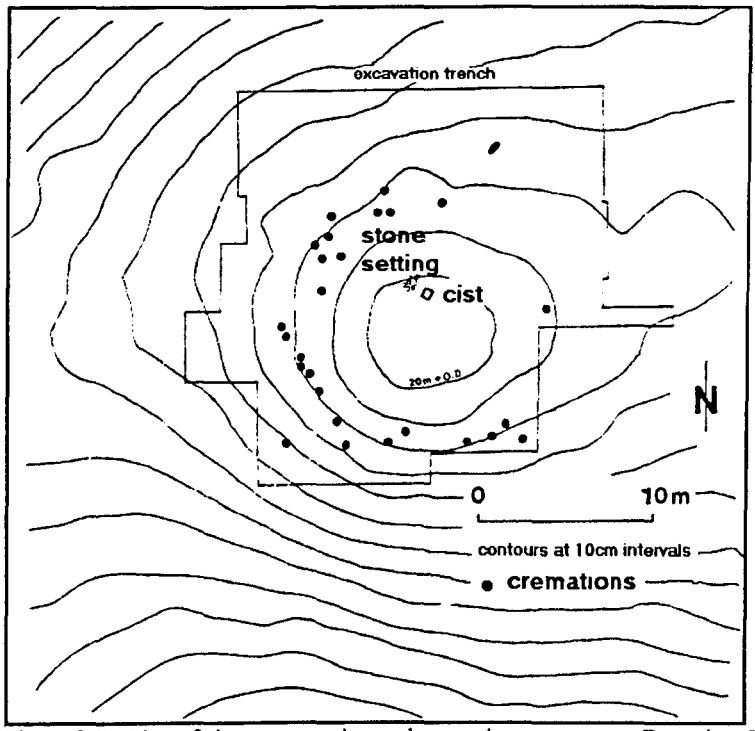


Figure 8.11. Plan of cist, stone setting and cremation cemetery at Ewanrigg. From Bewley *et al.* (1992).

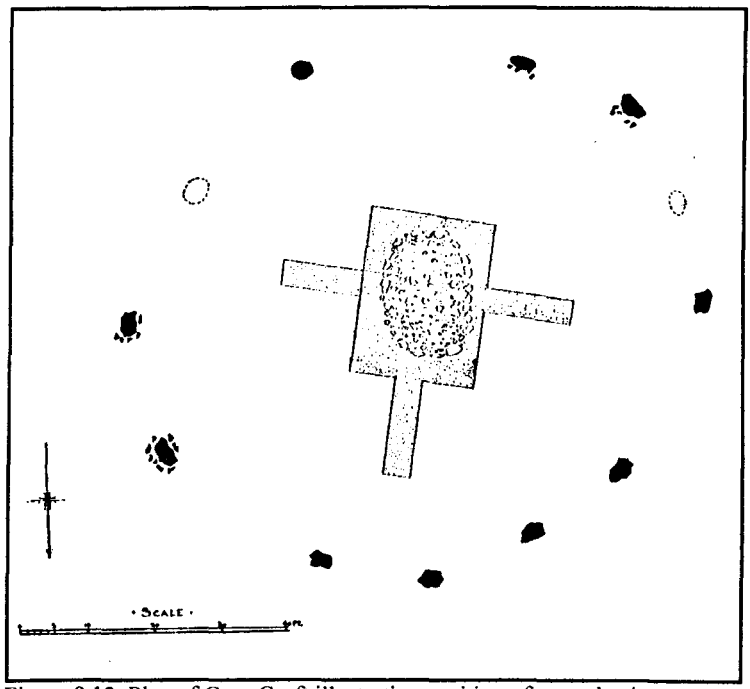


Figure 8.12. Plan of Grey Croft illustrating position of central cairn. After Fletcher (1956).

The central cist was covered by a small cairn associated with food vessel fragments. Illustrating evidence of robbing, the cist contained a secondary deposit of unburnt human bone and a food vessel urn. The fill of its construction trench contained fragments of human bone, suggesting an earlier deposit had been truncated. The cist was surrounded by a ring of pit cremations similar in plan to those within the kerbed circle at Hackthorpe Hall. That the Ewanrigg cist formed the focus for an *unenclosed* cremation cemetery leaves us with the possibility that 'stand alone' structures such as that at Little Meg and Iron Hill South, of which only the central elements have seen excavation, may have been the foci for similar deposits.

Into the Bronze Age: monument complexes and the wider landscape

So far, this discussion has focussed largely on evidence derived from monuments in ceremonial complexes, many of which appear to have had their roots in the final stages of the Neolithic. Although the individual monuments discussed illustrate different sequences and constructional histories, most were open, and most saw deposition and structural elaboration into the Early Bronze Age. This section concerns the character of this activity and its relationship with burial and depositional practice across the wider landscape. First however, it is necessary to recap the evidence for Early Bronze Age use of the monuments discussed above. Together with the evidence from cists, the presence of stone platforms to the exterior of Hardendale Nab (Williams & Howard Davies forthcoming), Oddendale (Turnbull & Walsh 1996) and Hackthorpe Hall (Mawson 1876) suggest the exposure and curation of human bone. Where burning has been identified, it is possible that excarnated bone was also cremated. Urned and unurned deposits are represented on ground surfaces, as are scatters of burnt and unburnt bone, often associated with sherds of collared urn and food vessel. Scattered bone and urn fragments are also common in the bodies of open monuments and within covering cairns (Olivier 1987; Turnbull & Walsh 1996, 1997). Evidence for similar practices have been identified in other areas of northern and western Britain (Barnatt 1996a; Mullin 2003) and the derivation of some may result, as at Hardendale Nab (Williams & Howard Davies forthcoming), from the scattering of bone in the open air, across the tops of extant monuments which later saw structural addition.

Freestanding circles were also utilised into the Early Bronze Age. Although the nature of this use in unclear it is illustrated by central structures built to contain areas used for the deposition and treatment of human remains. The internal element of Birkrigg stone circle saw a complex sequence of events, including the deposition of several layers of cobbles, both sealing and cut through by pits containing urned and unurned cremations and deposits of pyre debris (Gelderd & Dobson 1912; figure 9.41). Lacking evidence for burial *per se*, the internal elements of Lacra B and Grey Croft may have been used as pyre sites. At Lacra B a ring of stones sealed a mound covering a layer of burnt earth and charcoal. Beneath a pile of stones on the old ground surface

were a few fragments of burnt bone. The excavators believed the mound had once contained a burial with the stones "..thrown here to mark the spot from which the central burial had been taken" (Dixon & Fell 1948: 16). Similar deposits were recorded within Grey Croft where a cairn of layered stones (figure 8.12), some burnt, overly burnt bone fragments mixed with partially fused sand and charcoal sealing "thick layers of black unctuous material" (Fletcher 1957: 5).

These examples illustrate the changes in focus established in earlier chapters; the growth of ceremonial complexes, the elaboration of individual monuments and the shift in focus towards funerary ritual around the Neolithic-Bronze Age transition. The complex nature of deposits within stone circles and other monuments suggest that into the Early Bronze Age, human remains were curated and moved around and that protracted mortuary rituals took place. Although elements of these traditions drew clearly on the past, they also have much in common with those associated with 'new' monuments constructed in upland contexts.

Whilst ceremonial complexes remained in use into the Early Bronze Age, their significance altered alongside the proliferation of monuments into all areas of the occupied landscape. The following discussion seeks to establish how the depositional traditions in such contexts compare with those in ceremonial complexes, and how this might illustrate the articulation of different scales of community discussed in earlier chapters. If small scale monuments in the 'occupied' landscape were constructed and used by individual descent groups (e.g. Peterson 1972; Garwood 1991; Barrett 1990, 1994; Barnatt 1996a, 1999, 2000), then how do the depositional practices with which they were associated illustrate the ways that localised concerns articulated with those of the wider world?

Cairnfield cairns and token deposits

Although funerary cairns can be identified in association with cairnfield areas, excavated evidence from Cumbria and other areas illustrates that the classification of cairnfield monuments as equating either to funerary or agricultural use is untenable (Brück 1999; Johnston 2000, 2001; see below). As discussed previously, the settings of upland monuments suggest communities were increasingly concerned with marking their connections with places in the occupied landscape. However, the depositional record illustrates that rituals associated with these monuments were not solely concerned with human burial. Although cremated and uncremated remains have been identified, deposits and artefacts *indirectly* associated with human burial predominate, alongside token charcoal deposits either in pits or associated with old ground surfaces. Before establishing the likely nature of these deposits and how they might best be interpreted, it is necessary to set out the available evidence.

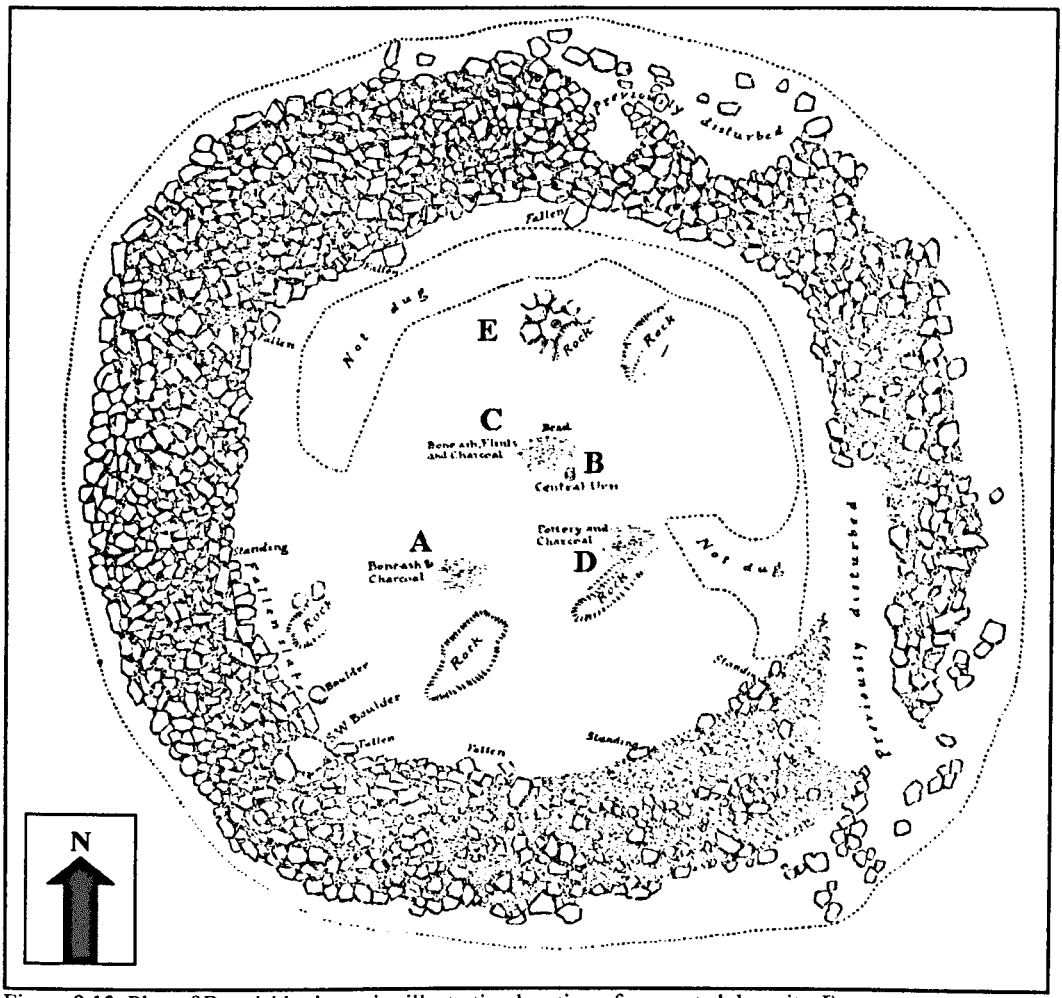


Figure 8.13. Plan of Banniside ring cairn illustrating location of excavated deposits. From Collingwood (1912).

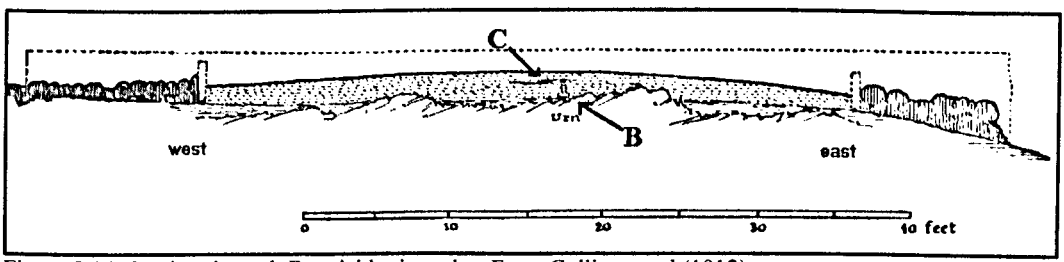


Figure 8.14. Section through Banniside ringcairn. From Collingwood (1912).

Recorded excavations of upland funerary monuments are few and far between, with the Banniside ringcairn (Collingwood 1912) perhaps the best known example. Although the bank remains unexcavated two phases of deposition were identified within the internal area (*ibid.*; figures 8.13, 8.14). The first consisted of two deposits associated with the original ground surface; an off-central collared urn cremation (B), and a deposit of 'bone ash' and charcoal (A). These were covered with a layer of clay, above which were two further deposits. A spread of 'bone ash' with flints and a clay bead (C), was situated above the collared urn (B) and a charcoal deposit, burnt *in situ,* was associated with a piece of haematite and food vessel and collared urn sherds (D). A collared urn (E) was placed in a hole beside an outcrop. Within the urn was an adult female cremation (*ibid.*), an accessory cup containing an infant, and a food vessel sherd.

South west of Banniside, a funerary cairn at Bleaberry Haws (Swainson Cowper 1888a C; see chapter seven) contained a similar range of deposits. South west of a central disturbance from which 'old bones' had previously been removed (*ibid.*) a cist contained a deposit of burnt bones. Outside it were fragments of undecorated pottery. At the north of the cairn, a pit sealed by a cobble contained burnt bones, food vessel sherds, a bone 'whistle' and a flint flake (*ibid.*). A second charcoal filled pit was identified to the east. Although no outer kerbing was recorded (possibly due to the excavation methodology) all of the features were cut into the natural ground surface, suggesting an open structure. Scatters of burnt bone were recorded in the body of the covering cairn.

At Mecklin Park, of the three cairns known to have seen investigation, two produced cultural material, but no human remains were located (Spence 1937; Fletcher 1985). A single beaker sherd was located in the material of a kerbed cairn which covered a central area of brushwood charcoal and a cluster of quartz pebbles (Spence 1937). A second denuded monument produced over a hundred jet beads, food vessel sherds, a barbed and tanged arrowhead, a whetstone, haematite, flint scrapers and a plano-convex knife (Fletcher 1985). Hollows in the side of the monument were infilled with charcoal and ash. Cairns in similar contexts in the region have been found to contain similar empty or infilled 'pocket holes' (Hodgson 1928; Cross & Collingwood 1929; Spence 1935a).

Although little is known about their context, urns, pottery fragments and burnt bones were recovered from cairns at Barnscar by Lord Muncaster (Dymond 1892). Walker later excavated ten of the four hundred or so cairns on the fell (figure 1.7) however "no artifacts other than the cairns themselves were encountered" (1966b: 54). Excavations revealed that prior to cairn construction, the ground had been stripped, with pits likely produced through the removal of boulders or treeroots infilled with burnt stones and charcoal, probably a result of clearance

related burning (*ibid.*). A layer of clay capped these features, to which was added a cairn. The deposition of rammed or burnt earth has also been identified in cairns on Carrock and Corney fells (Spence 1935a; Barker 1951; Ward 1977). Funerary deposits have also been recorded in such contexts; on Carrock Fell a cairn sealed a pit containing burnt bones and charcoal (Barker 1934), and at Bolton Wood a cairn overlay a boulder sealing a deposit of black earth and burnt bone (Spence 1937). Similar deposits were identified on Hawkshead Moor. On his first attempt, Swainson Cowper (1888a) cut two trenches across a cairn, recording a possible circle of stones and a pit containing a cremation with a flint knife. The cairn later saw complete excavation, revealing six charcoal deposits on the natural ground surface (Swainson Cowper 1888b).

As discussed in chapter six, at Birrell Sike, a small stone ring and four clearance cairns saw excavation (Richardson 1982). The perimeter bank of the ring feature sealed charcoal deposit and scatters and concentrations were identified within its central area, one of which was sealed by a stone slab. Charcoal from a stone lined hole was dated to 1720 ± 100 b.c (*ibid.*). The excavation revealed the kerb was contained within a cut trench, suggestive that the structure was built for a specific purpose, rather than being solely of a 'clearance' function as has been suggested (Quartermaine & Leech forthcoming). Four further cairns were excavated, all exhibiting differences in structure and deposition. Cairn 13 was bounded by a kerb at the centre of which a slab covered a charcoal deposit dated to 1690 ± 100 b.c (Richardson 1982).

These examples have much in common with upland monuments across western Britain which have been the subject of recent discussion (e.g. Lynch 1993; Barnatt 1994; Johnston 2000, 2001). As in Cumbria, charcoal deposits in such features are not restricted to any specific monument type, occurring in ringcairns, funerary cairns and sealed beneath 'clearance' features. Lynch (1972, 1979, 1993) has done much to bring the differences between different 'types' of cremated deposit into focus, illustrating that deposits *not* containing human remains were more significant in number, and were in many cases earlier in date than cremation burials in the same monuments (Lynch 1979, 1993). That charcoal pits contained hazel and alder, whereas those containing cremated bones were predominantly oak, led to proposals that two different kinds of ceremony took place (Lynch 1979, 1993). Radiocarbon dates from charcoal pits in different stratigraphic positions at the Brenig 44 ringcairn spanned almost five hundred years beginning early in the Bronze Age (Lynch 1979). The longevity of the depositional sequence at Brenig 44 may be at odds with token deposits in cairnfield cairns, which may have been the product of single events. Given that these sorts of deposits occur in a variety of contexts, it seems likely that similar types of ceremony took place both at features built as a specific event, and the overtly ceremonial monuments used over longer periods. The repetitive activity at Brenig 44, alongside the existence of analogous deposits beneath and within the

bodies of cairnfield cairns suggests the ties formed between people, monuments and the places that they were constructed were affirmed and reaffirmed, perhaps related to cyclical activities.

Using evidence from cairnfield excavations in Cumbria and Northumberland, Johnston (2000, 2001) argued that token deposits within clearance cairns were related to the legitimation of tenure. Whilst the structural elaboration of many 'clearance' cairns incorporated reference to formal funerary monuments, token deposits associated with them incorporated *metaphors* to burial, marking the history of communities and their links with particular places. Johnston suggested token charcoal deposits were linked to ceremonies associated with "breaking new ground" (2001: 105). These types of practice were replicated in different ways at different sites, some of which included the more conspicuous and formalised token burial of human remains:

> "...there is evidence in the structure of some of the small cairns, for instance the incorporation of token burials, to suggest that they are implicated in establishing, asserting or maintaining rights to land by acting as temporal markers to critical moments in the history of the field" (Johnston 2001:104).

Given the increasingly 'local' focus of monument construction and upland clearance after the Neolithic-Bronze Age transition, the conduct of rituals based around clearance events is not surprising. If token deposits can be interpreted as spatial and temporal markers asserting the connections between people and place, then the logical extension of this argument would be that *all* types of deposit performed similar roles. The question is, how do the token deposits in cairnfield areas, likely related to repetitive and cyclical events, relate to those in other contexts? Together with discussion of deposition associated with natural places, exploration of this issue forms the basis for the remainder of this chapter. First, however, we need to discuss how Early Bronze Age funerary deposits can be understood in the context of seasonal occupation practice.

The evidence suggests that mortuary and funerary rites were extended, with cremations deposited in urns, bags or other perishable containers, as well as in pits, often but not exclusively associated with pyre debris. In cases where detailed analysis has taken place, burial deposits have been found to incorporate the remains of either more, and often rather less than a single individual. Token deposits of cremated and unburnt bone are common in monuments of *all* 'types' across *all* areas of the landscape. That these appear to have been curated and moved around suggests that what may be perceived archaeologically as 'burial' may have only been a phase of mortuary activity which took place in many different contexts.

Similar sorts of activity are common in other areas; at the Moel Goedog ringcairn in Wales, two pits containing charcoal and token deposits of burnt bone were excavated (Lynch 1979). Adhering to the bone in one case was a grey and in another case a brown soil, both very different to the natural on site (*ibid.*). This suggests the bone was dug up, transported some

distance from its 'original' context, and reburied in the ringcairn. At Eagleston Flat in the Peak District a cremation cemetery included both urned and unurned burials recovered from 'cold' and 'scorched' pits (Barnatt 1994). Pyres associated with unurned burials in scorched pits suggested that whilst some cremation did take place on site, those burials associated with urns, and no identifiable pyre sites were brought in from elsewhere. Pollen spectra from one such feature were noticeably different from the site sequence and suggested the deposit had been imported (*ibid.*).

In Cumbria, although urned and unurned cremations are common in monuments associated with ceremonial complexes, relatively few have been identified in cairnfield contexts, a situation also evidenced in areas to the north, south and west (Mullin 2003; Yates 1984; Waddell 1970). That the majority of cremations at Eagleston Flat were in flat graves in an area of open ground surrounded by cairnfield not only demonstrates that funerary and agricultural features were unambiguously combined (Barnatt 1994), but also suggests the likelihood that flat or unenclosed cemeteries exist in cairnfield contexts in other areas. These examples beg further questions; if some at least of the token deposits in cairnfields were imported, where were they imported from? And given that upland occupation was probably seasonal, what evidence is there for funerary monuments in lowland areas?

Flat cemeteries and natural places

As discussed in earlier chapters, upland funerary monuments were commonly situated close to prominent natural features and watercourses. Not only did such features hold totemic significance, they marked out the physical organisation of communities across specific areas. If the token deposits identified in upland contexts were associated with tenurial issues, and such concerns were linked with the use and appropriation of natural features, how did these themes play out across the Cumbrian lowlands?

Most of the burial urns identified in lowland contexts have been located close to modern settlement areas. Consistently near springs and rivers, the majority have been found in association with geological features not marked or enclosed by built monuments. Although the presence of Deverel Rimbury flat cemeteries in domestic contexts is well documented in southern England (e.g. Barrett 1994) such associations remain to be established in the north, where the collared urn tradition appears to have been maintained (Barnatt 1994). At Herding Nab, Seascale, an urned cremation was found on a shingle terrace close to occupation attested by lithic scatters (Parker 1926; Cherry 1967) and at Trough Head, Walney, food vessel and Peterborough ware have been found eroding from a sea cliff together with Later Neolithic/Early Bronze Age lithics (Barnes 1970; see chapter nine). On Walney North End, beaker and grooved ware have been found in association with flint scatters and small amounts

of human bone (Barnes 1956, 1970). Like in the uplands, these finds illustrate that as in other areas, during the Bronze Age burial and ceramics associated with the dead became increasingly tied to the domestic sphere (Bradley 1984; Barrett 1994; Brück 1999, 2001).

The urn cemetery at Ewanrigg was discovered during fieldwalking of a Romano-British occupation site. Situated on a sandstone knoll above a fossilised bend in the river Ellen (Bewley *et al.* 1992), the site produced ten collared urn burials and sixteen unurned cremations. The burials at Ewanrigg were arranged in a rough circle around the disturbed central cist (figure 8.11). Scorched pits in two instances illustrate the cremations were hot when deposited. Of all the graves, burial 5 was the most complex. A circular arrangement of postholes was identified at the base of a scorched pit, charcoal from which produced a date of 2290-1750 cal BC (*ibid.*). A collared urn contained the remains of an adult male and an accessory cup, together with other finds including a 'connecting rod' thought to be from a bronzeworking furnace (*ibid.*). Although the majority of deposits contained only one individual, Burial 18 comprised an inverted collared urn containing an adult male, an adult female and a child. Charcoal from the pit dated to 2450-1830 cal BC (*ibid.*).

At Church Road, Allithwaite, ten burials were located in a limestone gryke adjacent to a spring (Wild 2003). One of the four unurned cremations was believed to have been deposited in a perishable container, with four cremations in inverted collared urns (figure 8.15). Two of the unurned deposits were pyre debris rather than 'formal' cremations (McKinley 2003). At least twelve and probably fifteen individuals were represented and a high proportion were immature, including a neonate, a young infant and four or five juveniles (*ibid.*). Most deposits comprised two, and in one case, three individuals, the majority of which were female adults with children. A date of 2027-1741 cal BC was derived from an urned cremation containing an adult female, a juvenile, and an infant (Wild 2003). The deposition of pyre debris at Allithwaite may imply cremation was undertaken nearby however no areas of burning were identified, nor was there any evidence of scorching (*ibid.*). That a number of deposits were within containers may suggest these were brought in from elsewhere. Although adult females and children may have died at the same time, it is possible that remains, particularly of children, saw curation until the 'right kind' of social death could be conferred on them.

Male and female, young and old were represented at the Allithwaite cemetery, which may suggest a familial burial area. At Ewanrigg (Bewley *et al.* 1992), although the radiocarbon dates derived were similar to those from Allithwaite, the demographic spread was noticeably different (Wild 2003). Here only one double cremation was identified, with the majority of burials comprising a single adult. This would suggest there were no 'hard and fast' rules concerning burial in these contexts. Given the lack of comparable deposits excavated under

laboratory conditions, the high proportion of dual burials at Allithwaite could be either an unusual departure from 'normal' practice, or a rare survival of it (McKinley 2003). The evidence from Hardendale Nab, where the majority of 'individual' deposits contained more than one individual, often an adult associated with a child (Williams & Howard Davies forthcoming), alongside an adult female and a child deposited together at Banniside (Collingwood 1912) may suggest the latter.

Unenclosed lowlying cemeteries such as Ewanrigg and Allithwaite may appear atypical yet many urned and unurned burials have seen deposition in natural features. Two further urns have been located in Allithwaite; one during quarrying, and a second in 'Yew Tree field' (Stockdale 1864) possibly associated with the Church Road cemetery (Wild 2003). At Ireleth Mill on Furness, several urns arranged in a straight line were found during the excavation of a reservoir (Spence 1935b) and a similar line of urns was recorded near Cartmel (Stockdale 1864).

The majority of urns have been found during quarrying; at Garlands, near Carlisle, twenty one urns and six accessory cups were discovered in a sand pit in 1861 (Hodgson 1957). The Netherhall collection, consisting of at least nine vessels from Maryport may represent a similar cemetery group (*ibid.*). At Stainton Head on Furness, two collared urns, one associated with an accessory cup and one with a bronze knife were recovered during sand quarrying (Fell 1957; see chapter nine). A number of burials were discovered in a sand quarry at Waterloo Hill, Aglionby (Hodgson 1956). Two areas of deposition were located; the first comprised two collared urns. The second, a fragmentary urn with scattered cremated bones, was close to a fragmentary inhumation. A further two urns, surrounded by blackened material, were recovered together with unurned deposits found in heaps "as if they had been deposited in skin bags" (*ibid.*:15).

The locations of the urn cemeteries identified illustrate a strong concern with prominent natural features associated with water. The Ewanrigg cemetery was located within a bend on the fossilised course of the River Ellen, and Aglionby with a hillock close to a delta associated with the Eden. At Springfield, Ainstable, an enlarged food vessel was discovered in a gravel pit at the confluence of Croglin Water with Briggle Beck (Fell & Hogg 1962). These associations have much in common with the location of upland monuments and concerns with springs and confluences were clearly echoed in lowland contexts. The deposition of urns in natural places was part of a long tradition of depositing human and other cultural remains in and building monuments on, or with close reference to important aspects of the natural world. The very act of deposition is an extension to the act of building; addressing ideas about the renewal or assertion of tenurial concerns through reference to the dead and through reference to locally

significant places. It is the nature of these references, and to the places to which they referred that we now turn.

Caves and grykes

There is strong evidence for the deposition of cultural material and human remains in natural features in Cumbria, particularly in the caves and grykes of the Morecambe Bay limestones (see chapter nine). Such concerns can be traced back the earliest evidence of occupation, and continued into the historic period. Across much of Western Europe, the character of caves and deep fissures, allowing the entry of individuals or the deposition of material culture 'into the earth' suggests their significance went beyond burial (Bradley 1998, 2000a; Edmonds & Seaborne 2001; Barnatt & Edmonds 2002). Dating non-typological artefacts and human and animal bones within cave deposits are problematic, however in North Wales and the Peak their use during the Neolithic and Bronze Age is well established (Barnatt & Edmonds 2002).

A number of caves have seen excavation at Allithwaite, less than a kilometre downslope of the cremations found within a limestone gryke (Wild 2003). At Kirkhead, flint and bronze artefacts, prehistoric pottery, Romano-British coins, as well as undated human and animal bones have been recovered. That the cave saw earlier use is testified by a Palaeolithic date from an antler (Salisbury 1997; Young 2002). Fragments of human skulls and long bones associated with prehistoric pottery, flints and animal bones have been recovered from the nearby Whitton's Cave and a similar assemblage from Kents Bank Cavern (Salisbury 1992, 1997). Other caves and fissures have produced a similar range of human remains and cultural material. These are mainly undated but illustrate finds from the Palaeolithic to the Early Medieval period. Although a small number of stone axes and axe fragments have been identified in caves together with pottery and human remains (Jackson 1913; Atkinson 1926), many more saw deposition in limestone outcrops and wetland areas. As will be discussed below, the deposition of human remains and material culture in caves and limestone outcrops consistently occurs close to Neolithic and Bronze Age monuments. First, however, it is necessary to explore some of the reasons why such material may have been placed in these contexts, then to relate this back to discussion of early Bronze Age depositional practice.

'Pieces of places'

Using the Langdale quarries as an example, Bradley argued that stone axes may have been understood as 'pieces of places' (2000a: 85-90). The character and location of the working sites in Cumbria seem to have been as important as the material found there. Many quarries were chosen for their inaccessibility, and people who acquired axes at a distance obviously understood that they came from 'unusual' locations (Bradley & Edmonds 1993; Bradley 2000a). Not only is the deposition of Cumbrian axes common in contexts such as causewayed

enclosure and henge ditches (Edmonds 1993; Pryor 1999; Harding 2003), many have been found in association with 'natural' features. In Ireland for example, 43% of the Langdale axes identified had been deposited in rivers and bogs (Cooney & Mandal 1998). The character of axe deposition in Cumbria is rarely considered in academic interpretations. If stone axes were considered as 'pieces of places' as Bradley (2000a) suggested, it would be remarkable if this was not drawn on within Cumbria, where their sources in the central fells are visible from many areas.

Axes were understood in different ways, relating to their sources, their biographies and those of the people that carried them (Edmonds 1995, 2004). It seems likely therefore that other types of deposit, artefacts or materials with their own individual histories and associations, may have represented events such as funerary, mortuary and other rituals. Understood as pieces of the places, and reminders of the times and people with which these were connected, these could be understood as the 'metaphors to burial' (Johnston 2000, 2001) suggested by token deposition in cairnfield contexts.

As discussed above, beaker sherds not seemingly related to 'formal' burials have been found in various contexts. Cairns covering the infilled postholes of the timber circle at Oddendale contained beaker material (Turnbull & Walsh 1997) and at Sizergh, beaker sherds were recovered from a limestone gryke (McKenny Hughes 1904a). A beaker sherd was recovered from a cairn at Mecklin Park (Spence 1937) and at Ewanrigg, sherds of different beakers were found in a disturbed pit (Bewley *et al.* 1992). Such material is reminiscent of the food vessel and collared urn fragments in token deposits at other monuments. It seems likely this material represents the use of fragmentary vessels as part of extended funerary ritual not always directly connected to the deposition of human remains. Mortuary and funerary rites took place in a variety of contexts spread over different areas of the landscape; at ceremonial complexes, in monuments and natural mounds close to upland and lowland occupation areas and in caves, grykes and fissures. Given the spectrum of places with which the dead were associated, it may be that tokens of different individuals (either skeletal remains or material associated with the funerals of particular people) saw 'burial' in all areas of the seasonally exploited landscape.

The deposition of skeletal material, axes and pottery have assumed importance in archaeological interpretations. However, the use and deposition of 'natural' materials have been awarded lesser significance as these substances fit less easily into our classification schema. Deposits of charcoal, burnt earth and stone were important elements of the ceremonies associated both with built monuments and natural features. Such deposits, where recognised, suggest that these too may have been the 'pieces' of places, and tokens of events which occurred away from the context of their final deposition. Beaker material at Mecklin Park

(Spence 1937) and Ewanrigg (Bewley *et al.* 1992) was associated with quartz pebbles and at Birkrigg 1, over thirty deposits of dark earth and charcoal, likely to have been placed in bags or boxes, were placed within a kerbed monument (Gelderd *et al.* 1914). Each deposit contained one or two quartz and feldspar pebbles, described by the excavators as 'alien stone' (*ibid.*: 469).

Together with the deposition of quartz and token charcoal deposits in other areas (e.g. Lynch 1993; Owoc 2001; Cummings & Whittle 2004) the evidence suggests such material was transported some distance prior to its deposition. Analysis of charcoal from sites in Wales and the Peak has illustrated many of the tree species represented were not evidenced in contemporary pollen spectra and it seems likely deposits of 'special' charcoal were brought to monuments in containers and tipped into pits (Lynch 1993; Barnatt 1994). These deposits exhibit striking similarities with practices suggested by the burial record; not only were they curated and moved between different places, they illustrate concerns with the transformation and fragmentation of matter by fire. A deposit of 'dark earth' deposited within Birkrigg stone circle, itself close to a copper source, contained a high percentage of magnesium oxide (Gelderd & Dobson 1912). The compound is used as an alloy in metalworking. However, that it is also used as a laxative means establishing a link between its presence and the deposition of 'transformative' materials associated with bronzeworking is problematic.

Making monuments from places

'Pieces of place' are also evidenced in materials used in the construction of monuments. Although the majority of freestanding circles are made from locally available stone, as discussed in chapter seven, many incorporate a single stone of a different raw material. Although their exact geological derivation is unknown, some may have been transported greater distances than others. This use of 'alien' stone is most clearly evidenced in funerary monuments. The kerb at Glassonby was formed of red and white sandstone, blue whinstone, greenstone and granite (Collingwood 1901). Some of the Shap burial circles are composed of pink granite, locally available but a striking contrast to the white limestones on which they were set. At Oddendale, pink granite was used to backfill the postholes of the timber circle (Turnbull & Walsh 1997) and the same material was used for the entrance to the Hardendale Nab ringcairn (Williams & Howard Davies forthcoming). As discussed in chapter seven, some erratics and prominent stones within kerbed structures bore rock art motifs and illustrated alignments to astronomical events. Through the use of colourful and sparkling stones, monuments such as passage graves, stone circles, ringcairns and burial cairns, particularly in Ireland and Scotland, illustrate similar concerns (Lynch 1998; Bradley 2000b).

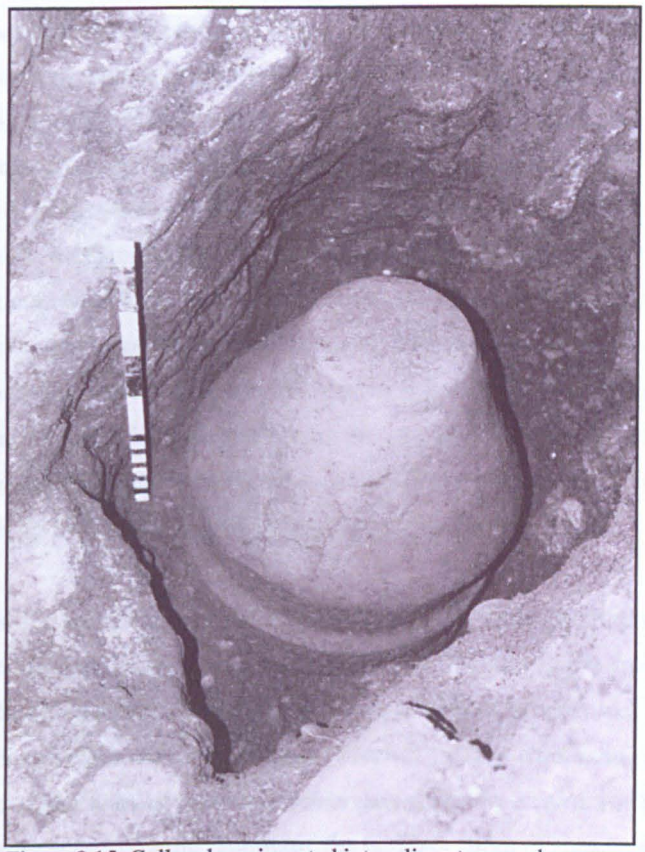


Figure 8.15. Collared urn inverted into a limestone gryke at Allithwaite. From Wild (2003).

Figure 8.16. The Langdale Pikes on the skyline from Sizergh Fell.

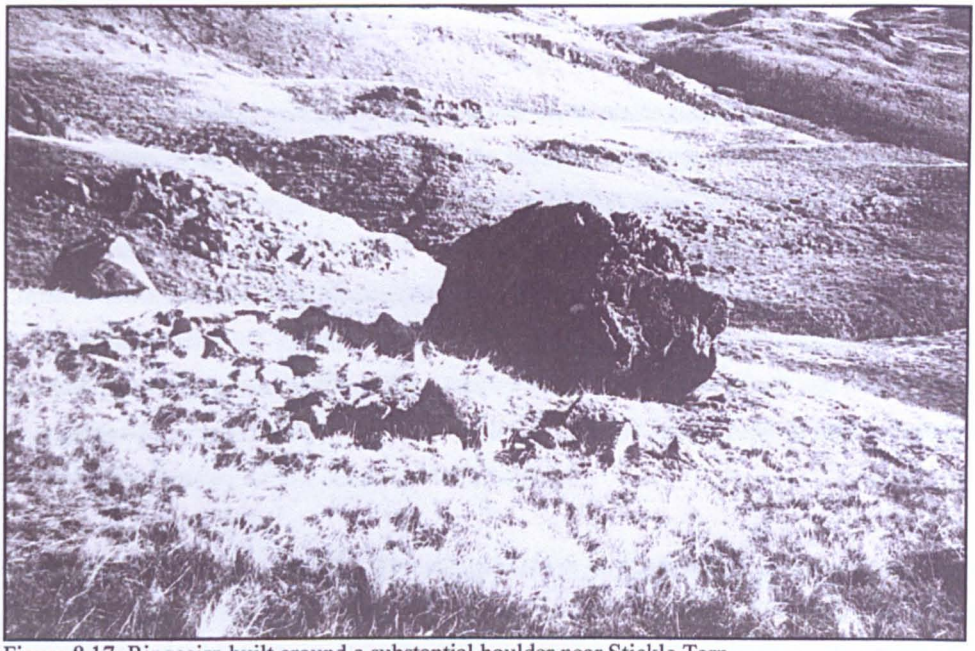


Figure 8.17. Ringcairn built around a substantial boulder near Stickle Tarn.
From Rogers (2000).

Figure 8.18. Funerary cairn on The Tongue, Troutbeck.

The deposition of transformed skeletal, ceramic and geological material within built monuments and limestone grykes beneath a prominent local outcrop within clear view of the central fells illustrates a clear crossover between the 'natural' and the 'cultural' landscape in which these activities took place.

Lithic materials used in monument construction, the deposits placed inside them and in their environs drew on an array of references to the landscape. Recent work in other areas has stressed similar traditions (e.g. Barnatt & Edmonds 2002; Tilley 1994, 1996; Tilley & Bennett 2001; Bradley 1998, 2000a). Not only were fissures and caves used for deposition, the construction and location of monuments often appropriated or referenced aspects of the natural world. Interpretations of upland Cornish landscapes have illustrated similarities between tors and tombs, stressing that the sharp distinctions often drawn between built and natural features misrepresents the ways prehistoric communities understood the formations they encountered (Tilley 1996; Bradley 2000a; Tilley & Bennett 2001).

On Bodmin Moor, Tilley (1994, 1996) recognised the relationship between tors, outcrops and monuments changed over the Neolithic and Bronze Age. Neolithic long cairns were located and oriented with reference to prominent tors which may already have been significant. In Cornwall, not only did the construction of Neolithic dolmens mimic that of the tors, and often included raw materials taken from them, monuments were situated with reference to, but at a 'respectable' distance from these features (Tilley & Bennett 2001). Over the Later Neolithic and Early Bronze Age however, there was a change in focus, with many burial cairns built on stone stacks, outcrops and earthfasts.

One of the reasons little is known about Neolithic monuments in Cumbria results from their similarity to natural features. A number are formed partially from outcrops, and some may be entirely natural. Crosby Garrett CLXXIV was built on a limestone outcrop and both Sizergh Tumulus 2 and Birkrigg Disc Barrow were situated on outcrops of the same material. The use of platforms in 'pavement' cairns is also significant in that these directly overlay and mimicked the natural limestone pavement below, and were likely themselves quarried from these same outcrops. Sealing burials beneath such features, or exposing bones on top of them probably had direct association with deposition in caves and fissures.

As discussed previously, banks delineating enclosures also incorporate distinctive natural features (figure 6.2). The Green Howe enclosure surrounds a natural feature reminiscent of a long cairn (Horne 2000; RCHME 2000) and much of the western perimeter of the Carrock Fell enclosure (RCHME 1996a) is formed by precipitous rock outcrops. At Skelmore Heads (Powell 1963; RCHME 1996b) around half of the enclosure is formed by outcropping

limestone, as is that at Howe Robin (RCHME 1996c; figure 7.3). Howe Robin also incorporates a number of shake holes (natural limestone depressions formed by surface collapse). Deposition within, and the construction of monuments in association with such features is not uncommon in the British Isles (Bradley 2000) again providing a strong link with practices associated with caves, grykes and fissures.

During the Later Neolithic and Bronze Age, in common with examples in Cornwall (Tilley 1996; Tilley & Bennett 2001), many monuments in Cumbria were constructed on top of prominent outcrops and incorporated earthfast stones. In some cases these appropriated the landmarks referenced earlier monuments (see chapter nine). Similar associations have also been discussed in relation to rock art and the embellishment of natural features with built monuments. The inclusion of earthfast stones in monuments is part of a similar process; incorporating places already of significance more overtly into the 'cultural' world. Banniside ringcairn has a large earthfast on its southern perimeter (figure 8.13), and many small stone rings in the central Lakes were built around 'monumental' natural boulders (Rodgers 2000; figure 8.17). At Lacra D, the massive block of stone central to a kerbed monument is reminiscent of examples from Cornwall, where large earthfasts have been found beneath excavated cairns (Tilley & Bennett 2001). Many funerary cairns in Cumbria were built on prominent stone outcrops located on summits, scarps and ridges, and other examples likely remain sealed by extant cairn material. The prominent summit cairn on Bleaberry Haws was constructed on a natural outcrop (Swainson Cowper 1888) (figure 7.56) and alongside many other examples, two funerary cairns on The Tongue, Troutbeck, incorporated distinctive rock outcrops to the extent that cairn material is difficult to separate from natural scree (figure 8.18).

Similarities between cairn material and outcropping rock means it is often difficult to determine whether particular features are the result of geological processes or human agency. There is a long history of misidentification of such features; during the nineteenth century, a number of 'barrow' excavations in the region revealed natural outcrops or mounds (Greenwell 1874, 1877; Ferguson 1888) and more incursions likely remain unpublished. Although excavations at Sizergh revealed natural limestone hummocks, at least two of these had been used for deposition (Edmonds *et al.* 2002). Using nineteenth and twentieth century investigations of such features across Britain, Mullin (2001) suggested their use during the Bronze Age was a result of misidentification and that the histories and associations of particular landscape features had been forgotten. There are many problems relating to modern understandings of the importance of natural features to prehistoric communities, perhaps the most critical of which results from modern classification. Twentieth century 'common sense' is a stumbling block in that we draw sharp lines not only between nature and culture, but also geology and archaeology. In prehistory, such distinctions may have been drawn rather

differently if at all, and the evidence suggests a very blurred line between the 'found' and the 'made' (Barnatt & Edmonds 2002; Edmonds *et al.* 2002). These issues have also seen discussion in relation to stone circle 'architecture' (chapter seven). Aspects of the geological world were humanised, transformed into overtly symbolic cultural objects such as axes, pottery and elements of monument architecture. Many constructed burial mounds echo the forms of natural features (e.g. Richards 1996a) and it is likely that caves, outcrops and natural mounds were the antecedents of, as well as being used in conjunction with built monuments (Barnatt & Edmonds 2002). There was a change in the use and appropriation of such features as monuments over the Later Neolithic and Early Bronze Age. However rather than the invention of entirely 'new' traditions, these illustrate increased concerns with marking out and reasserting the tenurial connotations of already important markers and places in the landscape.

Conclusion

As has been stressed in earlier chapters, classification schema imposed on both monuments and their contents are problematic in a number of ways. Not only have academic grand narratives stressed neat and simplistic sequences at a national scale, over reliance on interpretations derived from antiquarian investigations are clearly fraught with Victorian and modern western perceptions of the lines between nature, culture, geology and archaeology. Reliance on presumptive typology and the perception that sharp lines could be drawn between different burial traditions, material culture and monument types overlook not only the extended nature of mortuary and burial practice, but also a great deal of continuity across the Neolithic and Bronze Age. Concentrating on period or type specific classification denies consideration of the longer term processes that monuments, deposition and funerary practice represent, across periods and across local and regional landscapes.

The classification and typological schema commonly utilised in the interpretation of burial traditions mask a wide array of mortuary, burial and other rituals, in particular the curation and transportation of human remains and cultural material between different places. Whilst limited evidence from individual monuments might imply such practices, it is only through looking at different 'types' of monuments and natural features in different landscape settings across the region that it becomes apparent these were commonplace.

There are significant problems with understanding the aspects of continuity and change characterising Neolithic and Bronze Age funerary traditions. Although 'new' burial furniture and pottery forms appear during and after the Later Neolithic, mortuary and funerary rites remained based largely on earlier traditions. Not only were deposits of human remains and other materials curated and moved around, some monuments may have seen different elements of mortuary activity to others. That the evidence illustrates the use and significance of

individual monuments changed over time means excavated deposits likely relate to a jumble of different activities and concerns connected to the localised histories of individual monuments and the places they were located. Such diversity is common if under-acknowledged across northern Britain (e.g. Peterson 1972; Yates 1984; Annable 1987; Barnatt & Collis 1996; Woodward 2000; Mullin 2003) but is by no means a new idea:

> "The study of these ancient interments in this part of the country [the Eden Valley] seems to indicate that the practice of inclosing the calcined bones in an urn, and that of depositing the burnt remains on the ground without an urn, were contemporaneous. It would appear also that the ceremony of cremation, and that of inhumation and cist burial were both practised by the same races, at the same period of time. It might be said even that these separate usages were practised indifferently by the same people; at least it does not seem clear how we are to differentiate the conditions which determined the selection of one order of interment or the other, for it is not very unusual to meet with both burnt and unburnt remains, side by side, as it were, in the same barrow" (Taylor 1881:93).

Both individual monuments and the constituents of monument complexes suggest the working and reworking of particular places over long sequences. Sometimes this reworking was structural, and sometimes it took the form of deposition. Both structural and depositional practices also drew on aspects of the natural topography, in many cases appropriating natural features already referenced by earlier monuments. Over time, that such concerns are illustrated across the landscape suggests not only that these practices tied closely into the relationship between people and the natural world, this also demonstrates the ways that different scales of community articulated into the Early Bronze Age.

During the Neolithic, and into the Neolithic-Bronze Age transition, the dead, or parts of the dead, were brought to 'intermediate' areas of the landscape occupied by complexes including Neolithic long and round cairns, enclosures, stone circles and henges. Whilst many such complexes focussed on large scale monuments, cists and smaller kerbed forms were constructed in prominent locations in their environs. These often drew on and appropriated the architecture and setting of earlier forms and although many 'appear' to be Bronze Age, radiocarbon dated material has illustrated at least some had their roots in the Later Neolithic.

After the Neolithic-Bronze Age transition, rather than being closely focussed in the environs of ceremonial complexes, mortuary and funerary ritual took place, in archaeologically visible ways, in all areas of the landscape. Many monuments were constructed to appropriate natural features; in the uplands, outcrops and earthfasts were used as the basis for ringcairns and funerary cairns, and in lower lying areas, natural mounds and limestone grykes were used as cemeteries. These places were already recognised points of reference, with their use as monuments formalising and appropriating their local significance. With a clear emphasis on token deposits, the dead were drawn on in a variety of different contexts and settings. Whilst such practices may well have occurred in earlier periods, and would have been equally

important, the proliferation of monuments into the Early Bronze Age suggests explicit statements were being made, marking out the histories of and connections between small scale communities and particular areas. Commonly located close to water sources, the arteries of communication across the landscape, such features not only signified tenurial concerns but also made conspicuous reference to the relationship between the local, the seasonal and the wider world.

As discussed in chapter seven, the distributions and settings of monuments suggest that local and wider scales of community combined and dispersed on a seasonal basis. Monuments in ceremonial complexes, upland and lowland contexts contain token deposits of human bone and demonstrate concerns with the transformation of 'natural' substances, often but not always through the use of fire. Alongside elements of some Later Neolithic and Bronze Age monuments illustrating alignments to particular celestial events, such deposits appear to be related to the cyclical and seasonal symbolism of death, rebirth and fertility. It seems likely that practices surrounding funerary rites occurred at places, and times of the year when communities came together at ceremonial complexes, themselves replete with symbolic associations to movement, seasonal and social transition. There is evidence of pyre sites within freestanding stone circles and other open monuments. Such highly visible and potent ceremonies, like the re-excavation or burial of fragmentary bones or cremated remains brought from elsewhere, suggests it was important that members of the wider community conferred 'social' death on particular individuals. At other times, when these groups dispersed, tokens of burials and other symbolic rites were transported between seasonal occupation areas, seeing deposition in other landscape settings in order to maintain stability, fertility and connections to particular places. Whilst this is particularly evident in the Early Bronze Age, such practices may represent the increasing formalisation and visibility of earlier traditions.

Many monuments, in particular those within ceremonial complexes, incorporated carefully selected constructional materials, suggesting that particular types of stone were regarded as 'pieces of places'. Stone axes were placed in natural features close to monument complexes and a number of monuments have been found to contain deposits of quartz and other 'alien' pebbles. Whilst some sorts of stone may have been locally available in the glacial drift, these were no less important than others brought in from greater distances. The setting and architecture of monuments incorporated many references to their places, and times, within the local and wider world, as did the deposits with which they were associated. The deposition of both 'pieces of places' and 'pieces of people' may then have been inextricably linked in time and space, used in a variety of processes and ceremonies concerned with the reaffirmation of both familial and broader social ties.

Chapter 9: Nature and scale of occupation: a case study from the Furness Peninsula

Introduction

One of the key themes established over the previous chapters is that monuments, although drawing on wider inter-regional processes, were the products of localised traditions and landscape histories. Not only this, their settings and uses illustrate something of the character of occupation and how this changed over time. As discussed at the outset of this thesis, it is only through integrated analysis of all aspects of the prehistoric record that it is possible to explore the relationships between people and the landscapes in which their lives took place. Through analysis of the lithic occupation record together with monuments and depositional practice across the Furness Peninsula, this chapter seeks to address the ways the themes established in earlier chapters played out across an individual valley system.

Not only has Furness seen a substantial collection of fieldwalking data characterised and interpreted as part of this study, the area's prehistoric record includes many chance finds, excavated monuments and evidence for deposition. Although some examples have been discussed in previous chapters and used in interpretations of specific types of evidence, the following case study has provided the opportunity to fully integrate a variety of data and explore it in the context of local landscape occupation.

Chapter three outlined the character of the lithic record in Cumbria. Through a critique of the published evidence it was demonstrated that problems with the ways assemblages have been characterised in the past could be resolved through close analysis of assemblages from Furness. Contrary to earlier interpretations, analysis of reduction technology illustrated that there are relatively clear distinctions between scatters dating from the Later Mesolithic/Early Neolithic and those of the Later Neolithic/Early Bronze Age. Based on these, it is possible to explore how the occupation sequence unfolded in relation to the themes established in earlier chapters.

The following is split into four sections. Following an introduction to Furness, the first sets out evidence for Later Mesolithic/Early Neolithic lithic material in different settings across the peninsula, and establishes the likely character of landuse and occupation they represent. The second section is concerned with the monument and depositional record, following the process of monument construction and the use and appropriation of natural places from the Neolithic into the Bronze Age. Exploring themes of continuity and change suggested by the monument

record, the third section sets out the Later Neolithic/Early Bronze Age lithic evidence and demonstrates the changing structure and scale of occupation. The final section, drawing on the differential use of lithic raw materials, explores the ways different scales of community articulated across the peninsula and related to the wider world.

The Furness Peninsula

Furness is defined by the estuarine coastlines of the Duddon and Morecambe Bay (figure 9.1). Its north western coast supports a thin strip of littoral, with the land rising steeply to the Furness fells before dropping again to Ulverston, Dalton and Barrow. Low Furness is characterised by glacial valleys and drumlins, in the Urswick area punctuated by a high limestone ridge. Although there are no major rivers, becks flow through the valleys towards the flats and mosses of the Morecambe Bay estuary, which in some areas extend into the valley floors. Many of the mosses have been drained and together with the lowlying valleys are now used for arable and grazing. The industrial town of Barrow is surrounded by high land to the north east and in all other directions by estuarine flats and the sea. Walney Island is characterised to the north and south by coastal gravels and sand dune systems which flank the lowlying narrow strip of boulder clays and marine alluviums. Separated from main body of the peninsula by Walney and Piel Channels, the island shelters Barrow harbour which has been of great historical and economic importance. After the use of the natural harbour formed by Roe and Piel islands in the medieval period, Barrow Island harbour and docks have seen heavy reworking associated with the shipbuilding industry.

Although the peninsula appears isolated, its place in relation to other areas of Cumbria means it has formed a link between the central Lakes, Lancashire and the west coast. At low tide, the traditional and often dangerous route between these areas was across the sands of Morecambe Bay and the Duddon. The journey is attested to in historical records including those pertaining to Henry IV's visit to Furness Abbey, which he thought was on an island (Hindle 1984). Furness Abbey was amongst the richest and most powerful of the Cistercian houses. Pivotal to both the industrial and agricultural history of the region, its location on the peninsula drew on its perceived marginality, but also on the availability of a rich array of natural resources and a harbour from which to trade.

Character of the evidence

Evidence for prehistoric occupation on the peninsula owes much to its relatively recent history, with the majority resulting from the industrial and agricultural boom of the nineteenth and early twentieth centuries. The development of new housing, as well as quarrying and clearance associated with enclosure brought to light chance finds including burials, bronzes, polished and perforated stone axes (Gaythorpe 1897, 1900, 1904, 1906; Cowper 1907).

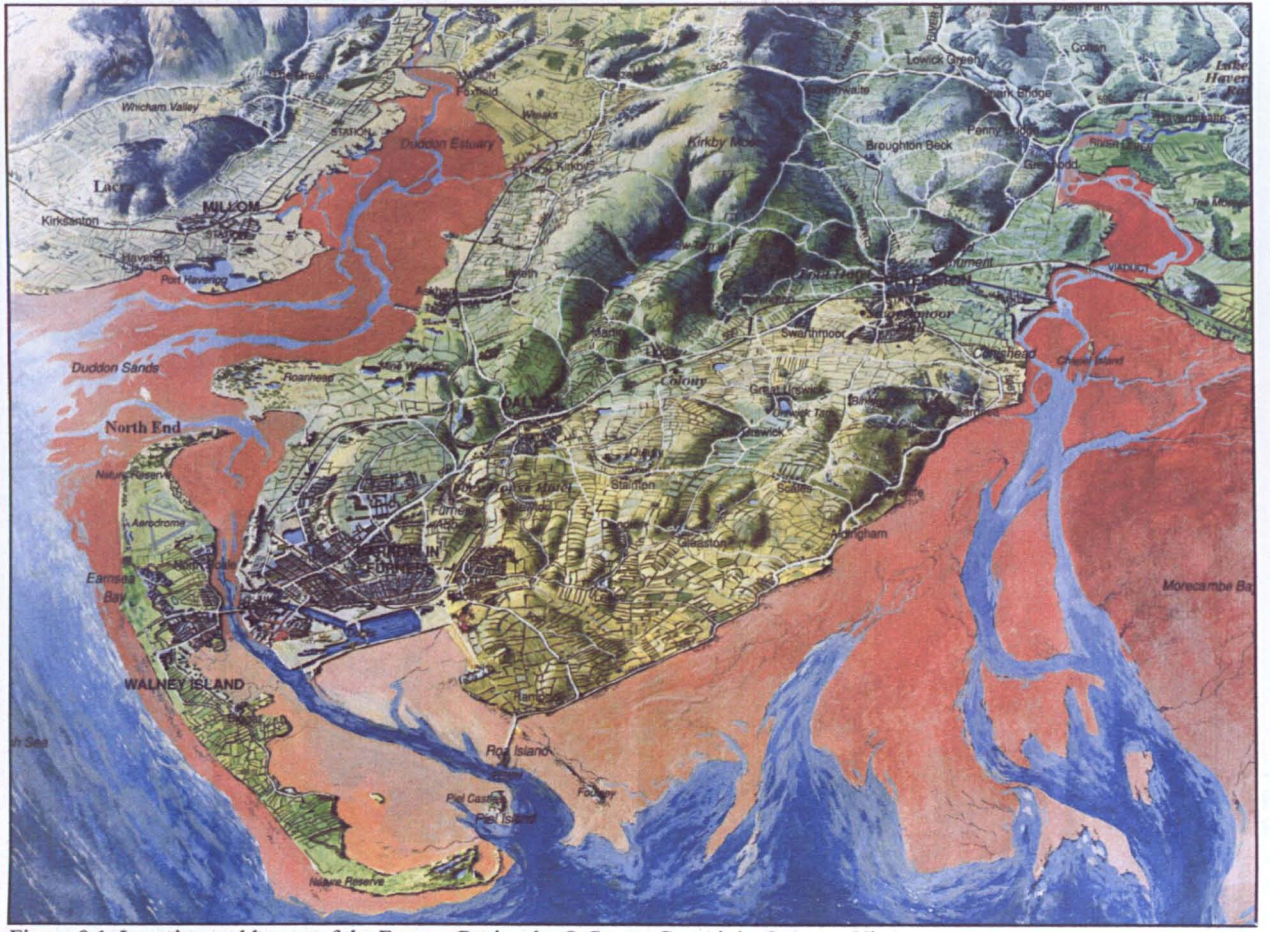


Figure 9.1. Location and layout of the Furness Peninsula. © Crown Copyright © Artec, Ulverston.

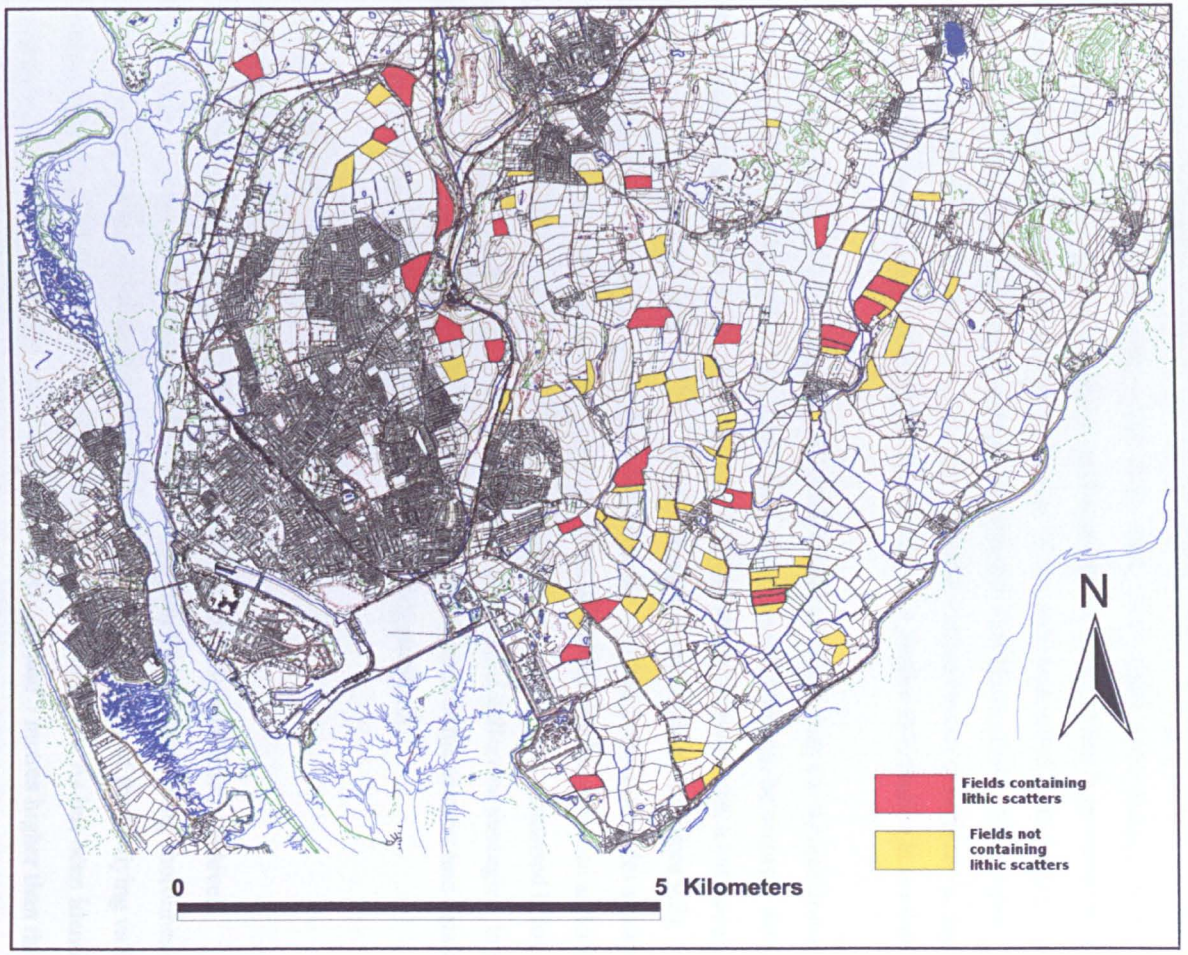


Figure 9.2. The Furness transect survey, illustrating presence and absence of lithic finds.

The attentions of the Barrow Naturalists Field Club, itself symbolic of the urban middle class 'Victorian ideal' of the industrial boom are also worthy of note, including excavations around Urswick (Dobson 1907, 1912, 1914, 1927; Gelderd & Dobson 1912; Gelderd *et al.* 1914).

One of the first major prehistoric occupation sites to be recognised in Cumbria was on Walney North End where coastal erosion revealed hundreds of lithic implements, stone axes, hearths and middens. The published reports are a product of their time, being anecdotal and lacking in contextual description (Cross 1938, 1939, 1942, 1946, 1947, 1949, 1952; Barnes 1955). Further evidence from Walney remains even less well understood. Material has been recovered from eroding seacliffs (Barnes & Hobbs 1952; Barnes 1970), and unrecorded assemblages, many associated with hearths, have been collected from South End Haws (Dave Coward pers. comm.). Much cannot now be traced, and the curatorial circumstances of collections deposited at Barrow museum means beyond published records, little further information is available.

Constructing a synthesis and interpretation of the evidence in line with the themes drawn from earlier chapters is problematic in that much is poorly recorded, little can be securely dated, and the evidence is physically dispersed. However, as discussed in chapter three, a surface survey transect over the southern Furness Peninsula has recently been undertaken (figure 9.2). Covering areas where material has been recovered in the past, the project provides a context from which to reintegrate and interpret this data. Also demonstrating the presence and absence of lithic material across specific areas, the transect illustrates the scatters discussed below reflect 'real' patterning rather than being products of differential collection strategies. In the following, assemblage codes are in parenthesis. The constituents of the scatters and details of the characterisation methodology utilised are detailed in appendix 5.

Later Mesolithic/Early Neolithic scatters

The coastal lowlands

As outlined in chapter three, over the Later Mesolithic and Early Neolithic, sea level fluctuations exposed and inundated wide areas of land. On the seaward facing shorelines of Furness, raised and storm beach deposits can be identified, and many of the lowlying valleys leading from the coast are characterised by marine alluviums and silts. As has been identified in other areas of Morecambe Bay, sea levels were between 3 and 5 metres higher than the present day and in the Winster and Gilpin valleys reached four and two miles inland respectively (Smith 1958, 1959; Tooley 1978, 1980).

Lithic evidence for lowland occupation during the Later Mesolithic/Early Neolithic transition is clustered between 20 and 30 metres AOD, along ridges overlooking the coastal wetlands (figure 9.13). Many mosses, today retaining evidence of fossilised saltmarsh creeks, are likely

to have been characterised by a mosaic of habitats; willow, birch and alder carr, interspersed with shallow standing pools or slow moving water. Macrofossil analysis at High Hyton on the south west Cumbrian coast illustrated that such environments, like today, included populations of yellow flag iris, water mint, sedges, rushes, bramble and stinging nettle (Wilkinson *et al.* 1997; Clare 2000).

The exploitation of these areas is evidenced by macrofossil analysis from Holbeck, where blackberry and elderberry seeds (suggesting autumnal occupation) were present in the fill of an Early Neolithic tree throw pit, together with carbonised wheat, burnt hazelnuts and oak charcoal (OAN 2002). The pit contained 106 sherds of Early Neolithic pottery, a rod microlith, two retouched flakes, three pieces of bladeworking debitage and 34 chips of burnt flint. Two flakes of volcanic tuff were recovered, one of which had been retouched (*ibid.*). Other features included shallow pits containing no artefacts and another tree throw.

A similar site at Roose Quarry (Moorhead) was situated on a ridge close to a coastal inlet (figures 9.3, 9.13) near to where a polished stone axe was recovered in the nineteenth century (Gaythorpe 1897). A pit contained sherds of an Early Neolithic bowl, a fragment of polished tuff, two leaf shaped arrowheads and a retouched blade (Jones 2001). The charcoal rich fills included a wheat grain, fire cracked quartz pebbles and lumps of squeezed clay. A clay lined pit was also excavated and a second polished tuff flake was recovered from topsoil above one of two postholes. Four further pits, all empty, were identified further to the north west.

The excavations at Holbeck (OAN 2002) and Roose Quarry (Jones 2001) were small scale evaluations ahead of development. As of 2005, neither has gone to full excavation and no radiocarbon determinations are available. However, the features containing material culture at both sites are unequivocally Early Neolithic in date, with the Holbeck tree throw demonstrating the use of microliths after the Mesolithic. The Roose site was ploughed following evaluation and the opportunity was taken to compare the results of fieldwalking with material derived from the excavation. The fieldwalking assemblage (MD) consisted of 28 pieces, 19 of which were identifiable tool types. These included an awl, three edgeworn flakes, three retouched flakes (one on tuff), a retouched blade and a backed blade with opposed notches on its long edges. Six heavily worked broken retouched pieces were also present, alongside six chunks of burnt flint and a single tuff waste flake. Compared to the relative lack of fine forms, the presence of two leaf shaped arrowheads and a finely worked flint blade in the pit may illustrate, as suggested by Healy (1987), that high quality implements saw deposition in different ways to 'everyday' tools.

A small scatter at Westfield (WF), 1.5 km south of Moorhead, was situated on a scarp overlooking a valley sloping towards a coastal inlet and Walney Channel (figure 9.13). The scatter included a leaf shaped arrowhead and a side/end scraper. Inland and 0.5 km to the east of Moorhead/Roose Quarry, an assemblage from Moorhead Cottages (MC) was situated along the same ridge, and may represent a continual scatter separated by unploughed fields (figure 9.4). Unlike Moorhead and Westfield however, Moorhead Cottages has an east facing aspect looking down a shallow valley towards Morecambe Bay and north towards the Furness fells (figure 9.5). Clustered along a high scarp above the mosses, the scatter was dominated by edgeworn and retouched flakes and blades, with a number of broken blades and bladelets represented alongside five blade cores, waste chunks and spalls.

Further inland a number of valley bottom scatters have been identified. Situated within the same contour range as the scarp scatters, these are slightly set back from the coast. A scatter at Dungeon Lane (DL) was located on a flat sheltered valley floor surrounded by mosses (figures 9.6, 9.7). The assemblage comprised 52 pieces including 22 identifiable tools. A blade core, a core rejuvenation reused as an awl and two small flake cores were identified alongside waste chunks and spalls. Tools included side/end scrapers on blades, a backed blade, retouched blades and flakes, together with broken fragments of bifacially worked implements including two leaf arrowhead tips. Concretions of ironpan on some implements suggests their derivation from ploughed out subsoil features. Inland from Dungeon Lane (figure 9.8) a concentration at Stank (STA) was situated on a sheltered flat area on the same valley floor. Located between the lowland mosses and the higher ground of the Stank valley (figures 9.9, 9.10) the assemblage included nine exhausted single and opposed platform blade and bladelet cores, alongside four core rejeuventaions. Identifiable tool types included side/end scrapers, retouched blades and flakes, retouched bladelets and a denticulate.

Figure 9.3. Moorhead/Roose Quarry, facing south towards the coast, which is obscured from view by Barrow gas terminal. The lithic scatter was focussed on the scarp visible to the right of the picture.

Figure 9.4. Moorhead Cottages, facing north east. The lithic scatter was concentrated on top of the scarp.

Figure 9.5. View from Moorhead Cottages scarp, looking north west to Morecambe Bay and the central fells. Part of the scatter was located in the foreground.

Figure 9.6. Dungeon Lane (ploughed field in centre) surrounded by higher ground. The valley leads to the coast, which is visible to the south.

Figure 9.7. Dungeon lane, facing north. The lithic scatter clustered around and above the water filled hollow visible to the left.

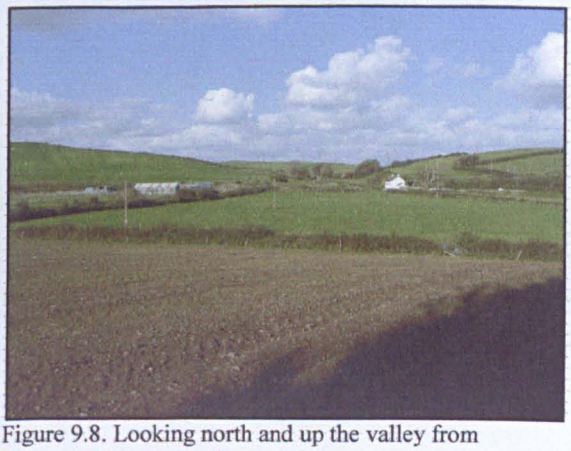


Figure 9.8. Looking north and up the valley from Dungeon Lane to Stank.

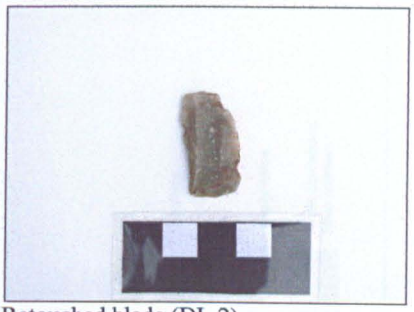
Figure 9.9. Stank, facing north west. Lithic scatter was clustered on the flat sheltered area of land.

Figure 9.10. Stank valley, facing north west. Lithic scatter was from the field with stubble at the right of the picture.

Location	Height AOD	No.	tools	waste	blades	flakes	Chunks/ spalls	Blade cores	Flake cores
MD	20m	52	22	25	7	17	24	0	0
MC	30m	28	19	6	2	18	7	0	0
STA	20m	51	23	22	10	16	21	3	1
WF	10m	37	11	24	1	11	16	0	0
DL	30m	10	6	2	0	5	5	0	0

Figure 9.11. Summary data of lithic scatters from coastal lowlands.

Multiuse awl and cutting tool (DL 12).



Retouched blade (DL 2).

Notched retouched blade (MC 49).

Opposed platform bladelet core (STA 11).

Multi-use cutting tool/end scraper (WF 2).

End/side scraper (DL 36).

Figure 9.12. Selection of blade based material from coastal scarp scatters.

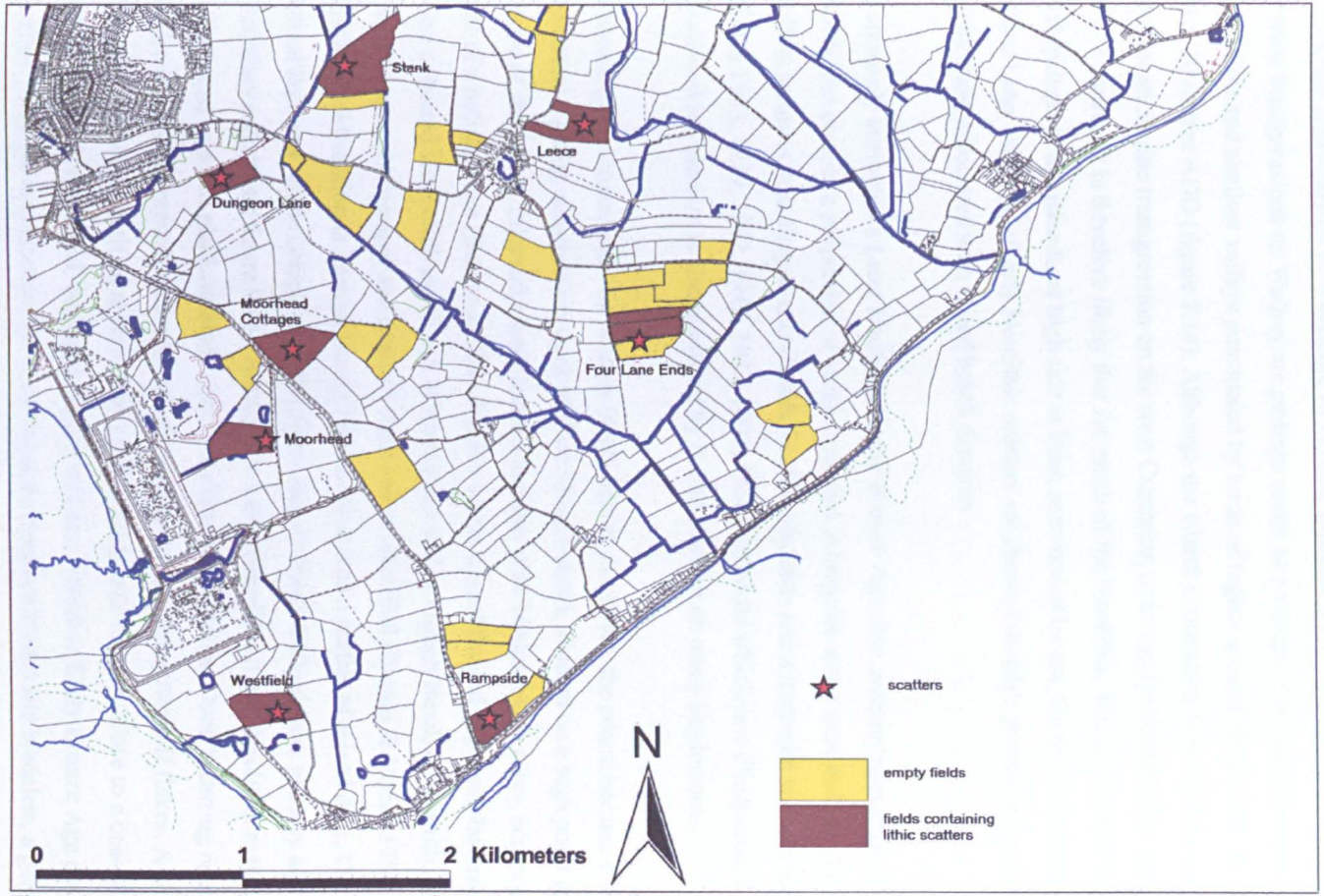


Figure 9.13. Location of scatters and empty fields along the coastal scarp.

Walney Island

One of the main problems with understanding the settings and chronology of lithic scatters on the coastal lowlands is that it is difficult to visualise the impact changing sea levels had on a landscape characterised by a network of valleys, hillocks and drumlins. The effects of the marine transgressions on Walney are perhaps easier to envisage. The island is characterised by low inlets and shallow valleys punctuated by areas of higher ground, themselves never much over 10 metres AOD (figure 9.14). Although the island's formation is poorly understood, the maximum marine transgression on the west Cumbrian coast can be identified by raised beaches at *c.* 8 metres. It is therefore likely that for much of the Neolithic, Walney formed an archipelago of dry islands, at high tide at least, surrounded by sea. On the main body of the island Later Mesolithic/Early Neolithic scatters are situated on high ground and on its north and south ends, associated with raised beach deposits.

Commonly attributed a Later Neolithic/ Early Bronze Age date, assemblages from Walney North End contain a proportion of earlier material. Alongside stone axes and axe fragments, hollow scrapers, leaf shaped arrowheads, blades, bladelets and a microlith were collected (Cross 1938, 1939, 1942, 1946, 1947, 1949, 1952). Of those which saw illustration, a bladeworking element is also exhibited by dorsal scarring on many implements.

Following the 'discoveries' on Walney North End in the 1940s, the island became a focus for collectors. During construction work at West Shore School, situated on a high point at the centre of the island, microliths were located together with blades, blade cores, scrapers and the butt of a polished axe (Barnes 1970b). Further south, microliths and opposed platform cores were collected from cliffs at Hillock Whins (*ibid.*) and at Trough Head, a microlith, blades, blade cores, a side scraper and two tuff flakes were identified (Barnes & Hobbs 1950; Barnes 1970b). Fieldwalking at Trough Head (TH) has produced a scatter of mixed date. The assemblage as a whole comprised 140 pieces, largely waste derived from primary and secondary reduction (figure 9.44). Identifiable Later Mesolithic/Early Neolithic material included an opposed platform blade core and a number of blades. Dorsal scarring relating to bladeworking was present on a number of implements, including two tuff flakes. A similarly mixed scatter was identified at Mulgrew's (MUL), adjacent to a tarn close to a coastal inlet on the east shore of the island. Although largely of Later Neolithic/Early Bronze Age date, an 'earlier' presence is suggested by edgeworn and retouched blades and bladelets, a geometric microlith, a single platform blade core and a hollow scraper. All the pieces identified were of pebble flint with the exception of four tuff forms; the cutting edge and butt of the same polished stone axe, and two large flakes detached from axes, one of which was polished (figure 3.16).

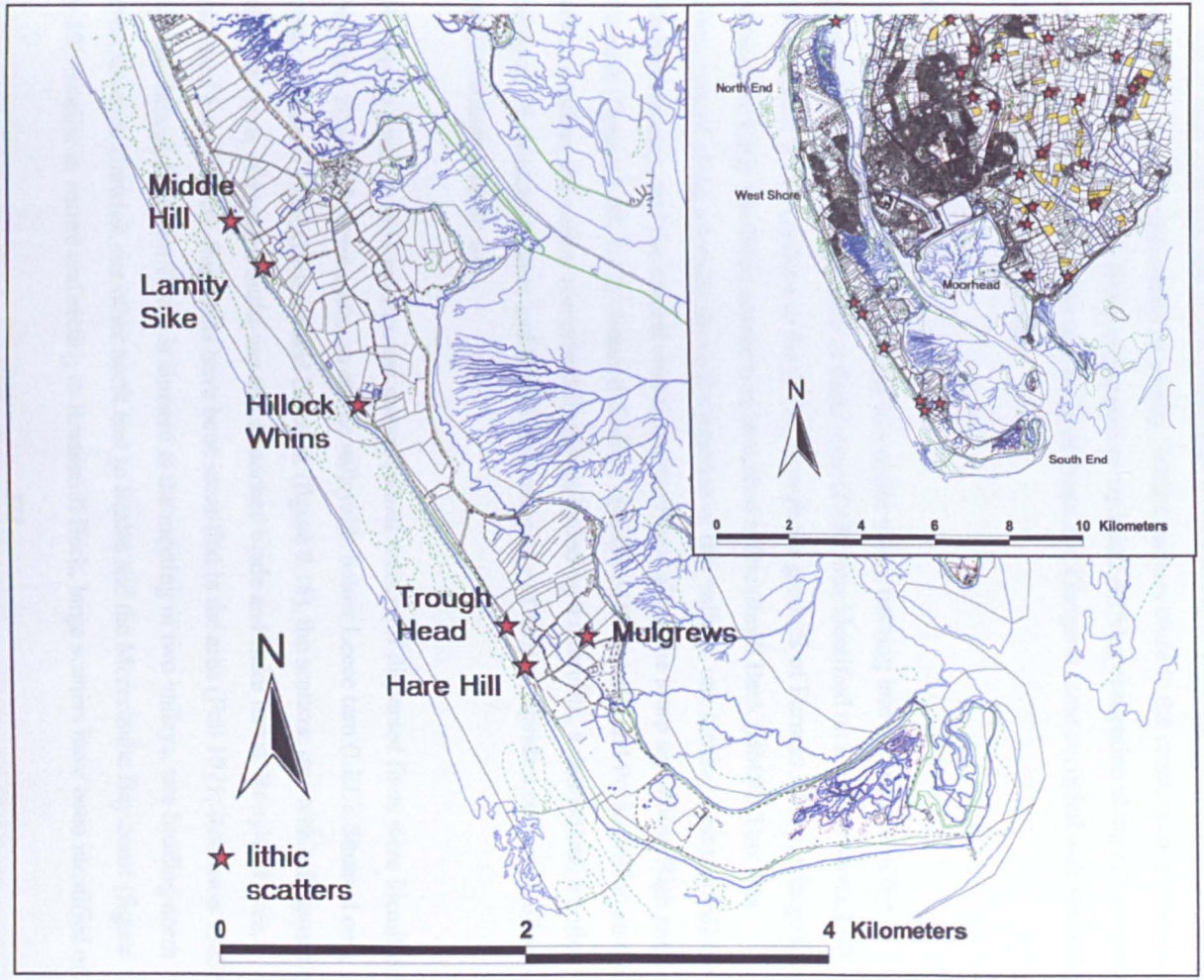


Figure 9.14. Location of lithic scatters on south Walney. Inset: Walney in relation to Barrrow and lithic scatters on the mainland of the Furness peninsula.

So what do scatters from the coastal environs of the Furness peninsula suggest about the character of occupation during the Later Mesolithic/Early Neolithic? Although the evidence from Walney is problematic, small amounts of Later Mesolithic/Early Mesolithic material are represented in what are predominantly later scatters. The spreads are relatively small and dispersed along high points, possibly the product of people periodically crossing Walney Channel at low tide to collect and work flint from the coastal shingle.

On the peninsula itself, occupation was focussed in localities from which a variety of resources could be exploited. Scatters are located along ridges of light glacial sand overlooking mosses, and often close to coastal inlets. Areas characterised by saltmarsh and moss, once established, would have provided wild resources including water fowl, and when the water table permitted, extensive areas of grazing for both wild animals and domesticates. The presence of cereal grains at both Holbeck and Roose/Moorhead (Jones 2001; OAN 2002) may suggest small scale agriculture was being undertaken nearby. Whilst scatters close to the coast, such as Moorhead, Moorhead Cottages and Westfield appear to represent shifting occupation along ridges above mosses where valleys met the sea, those at Stank and Dungeon Lane occupied well defined and sheltered flat areas further inland.

Following the valleys

Inland from the coast, along the sides of a major valley running into the interior of the peninsula, a blade based scatter at Parkhouse (PAR) was identified on a terrace above Mill Beck (figure 9.15). Upslope to the north, through the grounds of Furness Abbey, a large Later Mesolithic/Early Neolithic scatter was identified at Breastmill Beck (BMB). This was concentrated along a terrace above the junction of two valleys, one turning west towards the Duddon estuary, and the second continuing north east along the scarp separating High and Low Furness (figures 9.16, 9.17). Situated directly upslope of Breastmill and Poaka becks, on the 50 metre contour, the scatter comprised 89 pieces including a microlith, a denticulate, a hollow scraper, 15 retouched flakes and blades (including two of tuff) alongside a collection of waste and a retouched blade core.

Returning south to the Low Furness mosses, small scatters of dispersed finds were identified between 20 and 30 metre contours on the valleyside below Leece tarn (LEE). Situated on a route between Leece, Gleaston and Urswick (figure 9.18), the scatters, one with a fragment of a roughout axe, comprised multi-use and retouched blade and flake forms. Roughout axes, polished axes and axe fragments have been identified in the area (Fell 1971; Robinson 1985). Further inland, Gleaston Castle is situated at the meeting of two valleys, one heading north west towards Urswick, the other north east to Scales and the Morecambe Bay coast (figure 9.19). Similar in nature and setting to Breastmill Beck, large scatters have been identified on

terraces above the valley floor. The assemblage from Gleaston 8 (GLE 8) was situated directly adjacent to Gleaston Castle, and overlooked a prolific spring and the becks which meet on the valley floor (figures 9.20, 9.21). Located in a sheltered area at 30 metres AOD, a total of 80 lithic pieces were identified. Identifiable tool forms included two geometric microliths, three retouched bladelets, two microlithic scrapers, retouched flakes and blades and waste including eight blade cores. To the immediate south west, a continuation of GLE 8 was identified in sloping fields overlooking the valley floor (GLE 6 & 7; figure 9.22). Mixed in technological character, this included retouched and edgeworn blades and flakes, two geometric microliths, two retouched bladelets, a hollow scraper, a fragment of a polished axe and a tuff thinning flake. Further axes and lithic finds have been identified in the valley between Gleaston and Scales (Dave Coward pers. comm.)

The valley meetings at Gleaston and Breastmill Beck formed the foci for repeated episodes of occupation and activity along routeways between inland and coastal areas, between which small scatters cluster along the valley sides. What is clear from the locations of these scatters is that they were situated in different environments. Inland from the coast, pollen records suggest lowlying areas were wooded, although their altitudes and proximity to tarns and waterways means they would have been conducive to occupation. The lower fells and their margins supported a thinner canopy, and on the limestones of Gleaston and Urswick, lime, hazel, holly, ivy and other climbers would have flourished in the light areas provided by thin soils and outcropping pavement.

Pollen records from Urswick Tarn, 2 kilometres north of Gleaston, illustrate Later Mesolithic/Early Neolithic activity (Oldfield & Statham 1963). Although the sequence is not closely dated it is in some ways similar to those from other areas of the coastal plain. Situated at the foot of Skelmore Heads, pollen from the tarn illustrated minor woodland disturbances preceding an elm decline at the zone VIIa/b boundary (*ibid.*). The first took the form of a drop in elm, and the subsequent expansion of pine. The second more intensive episode was characterised by the almost equal reduction of oak, elm and pine. The lack of cereal pollen or arable weeds, along with very high values of plantain and grasses suggest clearance for pasture rather than cultivation (*ibid.*).

As discussed in chapter three, it is likely that both grazing and woodland management were undertaken in clearance contexts. In grazed areas, pollards would be out of the reach of animals, and trees may have also been coppiced to provide browse and winter fodder. Alongside occupation close to valley floors, such activities may be represented by lithic scatters in their higher reaches. Small clusters around the 70 metre contour (figure 9.24), at the heads of valleys and close to localised water sources, may represent activity episodes

connected to woodland management, grazing or hunting. Scatters from New Close (NC) and Stainton (ST) included retouched and edgeworn blades and flakes, together with two blade cores from New Close and a tuff endscraper from Stainton. A blade based scatter at Muttons 1 (MUTT) included a heeled tortoise core (figure 3.19) and one from Leece (LE 1) included a finely worked backed blade.

Scatters of Later Mesolithic/Early Neolithic date illustrate different types of occupation in a range of specific places and environments; on the scarps separating the coastal mosses from the glacial sands of the coastal plain, at the meetings of valley systems and in localised areas of upland. Whilst pebbles were exploited from coastal shingle on Walney, denser scatters on the mainland suggest occupation was valley based, shifting across the scarps and ridges close to the coast, and up and down valleys. During the Earlier Neolithic, macrofossil cereal remains from pits on the coastal plain may suggest arable agriculture took place on the glacial sands, with clearance for pasture in the inland valleys.

Environmental evidence from west Cumbria illustrates cereal cultivation on the coastal plain during the Early Neolithic. Occupation at Williamson's Moss (Bonsall 1981; Bonsall *et al.* 1986, 1989, 1994) likely represents repeated episodes of activity from the Later Mesolithic into the Bronze Age. Perhaps akin to Walney North End, occupation at Williamson's Moss was focussed on a major estuary. Along the western coastal strip, scatters strung along and above former shorelines (Cherry & Cherry 1983, 1984, 1985, 1986) are situated in analogous contexts to those above the Furness mosses. Although little is known of inland occupation in west Cumbria, the evidence from Furness suggests transitory movement between landscape zones, following the lines of major through routes. As on the west coast, the valley based distribution of axes in Furness is comparable with the lithic evidence (figures 9.25, 9.26). Whilst some places were used only sporadically, others, in areas close to predictable resources, were visited regularly over long periods. Communities may have combined and separated at different times of the year, with smaller groups splitting off, to follow wild animals, lead domesticated ones, to tend crops, pollards and coppice, and to collect resources from both woodland and coastal contexts. The physical character of the main Furness valleys provided contexts in which scattered and dispersed communities would have routinely come together close to the coast, and where the valleys meet again on the Urswick limestones.

Figure 9.15. Mill Beck valley, looking south towards the coast. Site of the Parkhouse scatter is visible to the right of the picture on a plateau above the valley floor.

Figure 9.16. Looking north west towards Breastmill Beck, field with stubble beyond the steep wooded valley. Black Coombe and the Duddon estuary visible in the background.

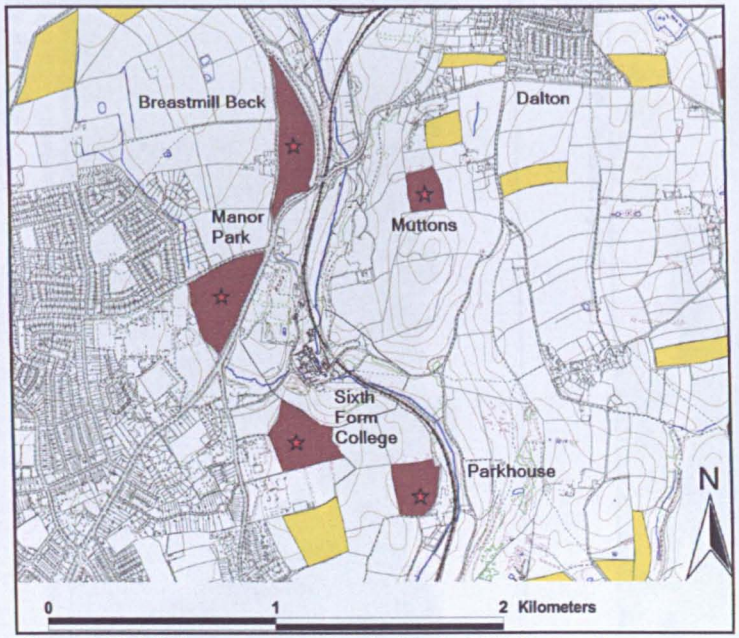


Figure 9.17. Lithic scatters associated with the Mill Beck valley.

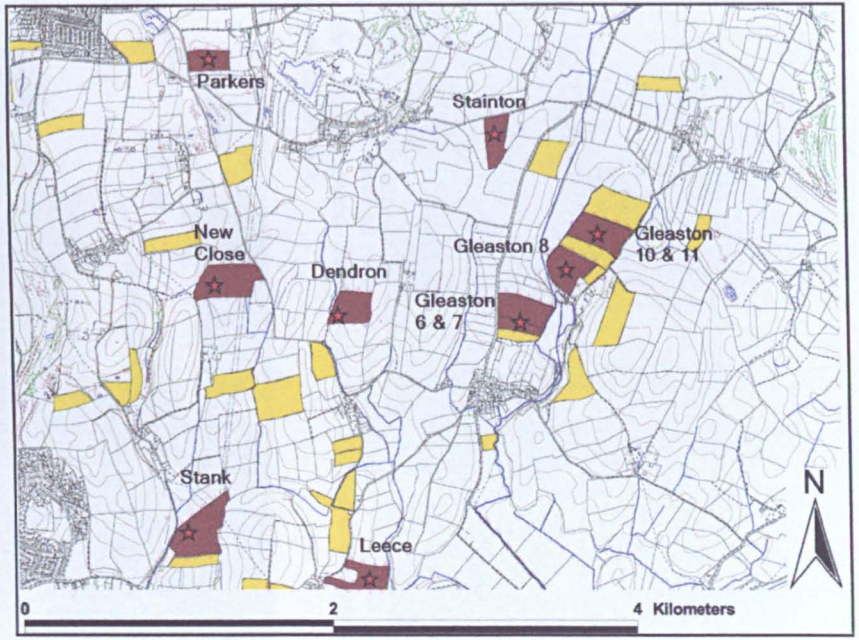


Figure 9.18. Lithic scatters at Gleaston and its environs.

Figure 9.19. The Gleaston valley, looking north west, with Black Coombe visible in the background. Valleys to the west and east of Gleaston Castle run towards Urswick.


Figure 9.20. Gleaston spring.

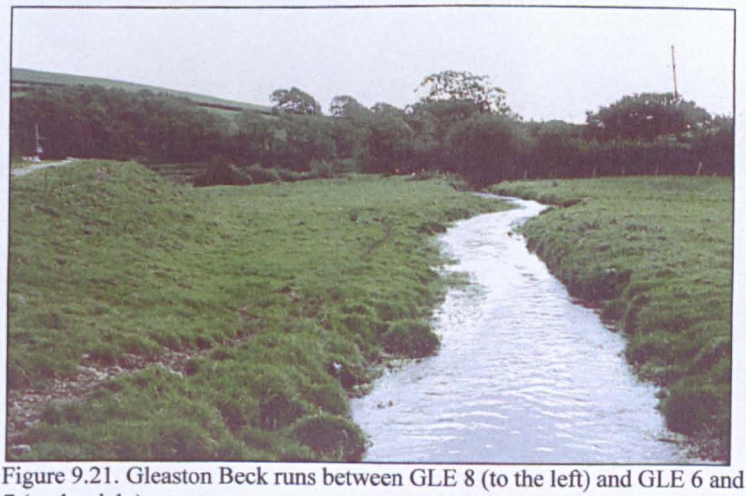


Figure 9.21. Gleaston Beck runs between GLE 8 (to the left) and GLE 6 and 7 (to the right).

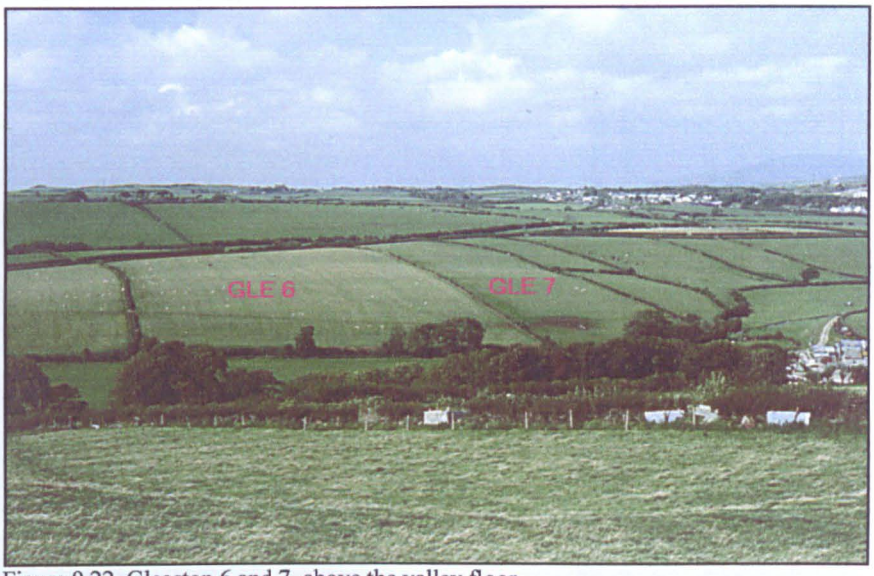


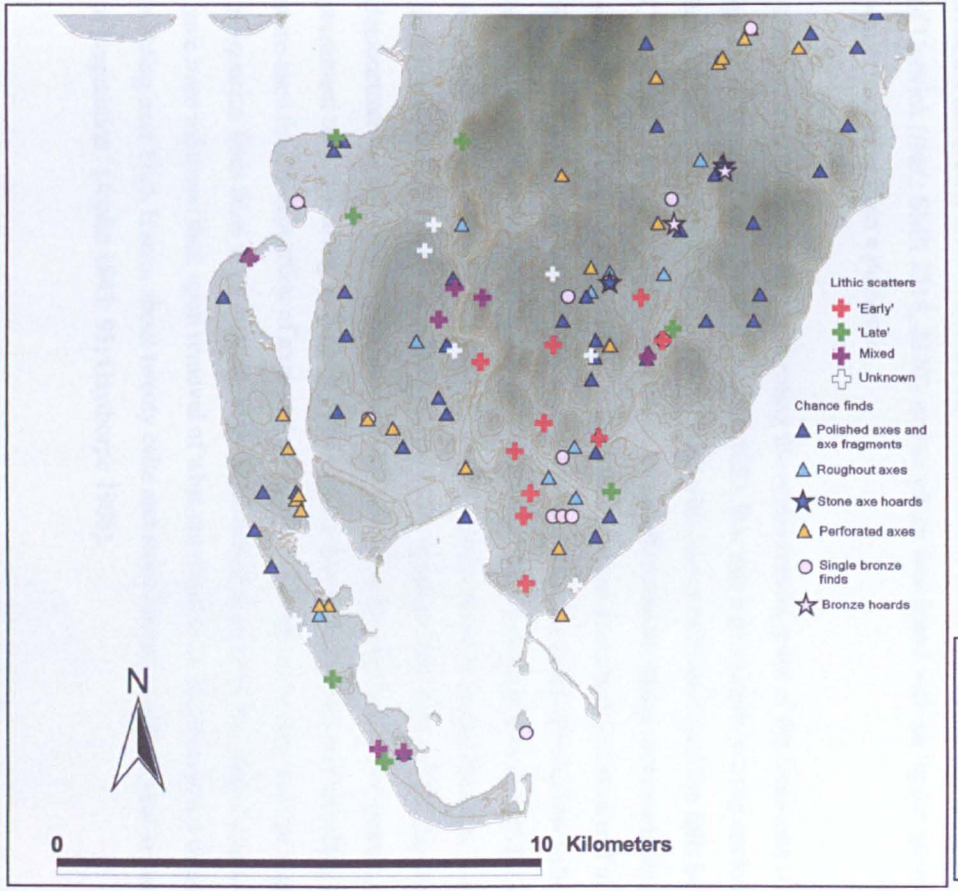
Figure 9.22. Gleaston 6 and 7, above the valley floor.

Location	Height AOD	No.	tools	waste	blades	flakes	Chunks/ spalls	Blade cores	Flake cores
Parkhouse	30m	12	6	4	1	6	3	0	0
Breastmill Beck	50m	89	44	36	13	38	35	1	1
Leece	30m	32	15	14	5	12	13	0	2
Gleaston 8	40m	80	52	21	17	29	21	8	0

Figure 9.23. Summary data of blade based valley scatters.

Location	Height AOD	No.	tools	waste	blades	flakes	Chunks/ spalls	Blade cores	Flake cores
New Close	70m	18	8	4	2	3	6	2	0
Stainton	70m	5	3	1	3	1	1	0	0
Muttons	70m	26	18	6	2	11	10	2	1

Figure 9.24. Summary data of blade based scatters on higher ground.



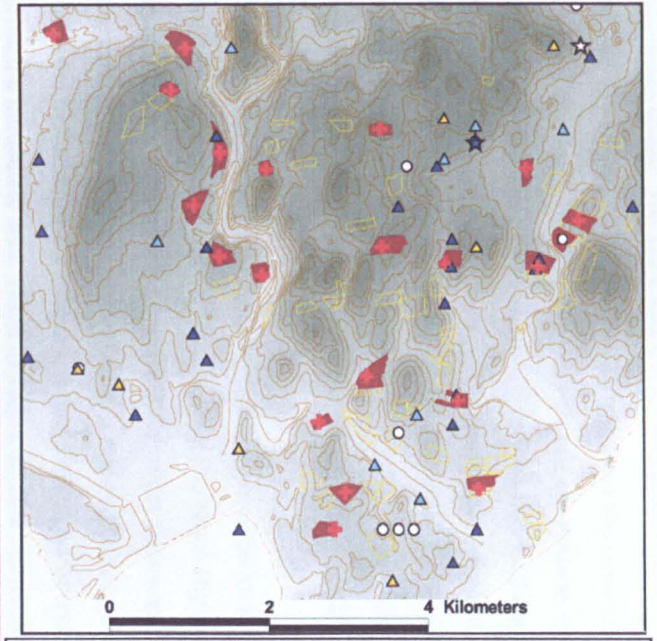


Figure 9.25 (left). Distribution of lithics and finds of stone axes and bronzes across the Furness Peninsula.

Figure 9.26 (right) Closeup of the Furness survey transect illustrating that fields containing scatters and those without suggest that 'presence' and 'absence' of finds represent real activity clusters along the lines of the two main valleys.

Life and death on the limestone ridge

Following the Gleaston valley inland, upslope of Urswick tarn is the hilltop enclosure of Skelmore Heads. The hill forms the northernmost extent of a limestone scarp which, at between 90 and 130 metres AOD, shelters and encloses the Urswick valley (figures 9.1, 9.28). To the south of Skelmore Heads are the valleys of Low Furness and on a clear day, the central mountains are visible to the north. To the east the coast and the Leven estuary are obscured by Birkrigg Common, and to the west the land rises towards the Furness Fells. Skelmore Heads long cairn is situated downslope of the crest of the hill in a shallow east-west orientated valley, which to the west forms a natural route over the Furness Fells. To its east, the Leven estuary is visible beyond the slopes of Birkrigg common (figure 9.29).

The northern extent of Skelmore Heads is delineated by a bank and ditch, with its southern and western perimeters formed of outcropping limestone (figures 9.29, 9.30). A hoard of roughouts in a limestone outcrop which partially forms the enclosure, within clear view of their source in the central Lakes, attests to its importance during the Neolithic. A stone axe has been recovered from the fields below the hilltop (Barnes 1963), and further less clearly provenanced examples from the immediate area. These include a number recovered from limestone grykes to the south of Urswick (*ibid.*; SMR 2318, 2320), one of which was found with an 'upper quernstone' which may have been a polissoir.

South west of Skelmore Heads, forming the southernmost point of the limestone ridge is a quarry at Stone Close. Above 80 metres AOD, this was a prominent outcrop enclosed by a bank of uncertain date (Dobson 1912). With wide views of Furness and the fells beyond, Stone Close was the highest point in the immediate neighbourhood. Many prehistoric finds were located during quarrying, including at least twelve stone axes, both polished and in roughout form and a polissoir (*ibid.*). Downslope of the quarry, at the head of a shallow valley, a cluster of lithic finds included a tuff endscraper and a multi-use tool on pebble flint (ST). To the north west, below Bolton Heads, a second cluster included a finely trimmed bladelet. A number axes have been identified in the area (Gaythorpe 1900; Spence 1940; Fell 1971). These finds demonstrate not only that the limestone ridge the focus for small scale occupation, but also that prominent outcrops along its highest points, likely free of tree cover and affording wide views, were used for the deposition of axes and polissoirs. Such practices may also be suggested by antiquarian finds from High Haume, at the southernmost point of the High Furness ridge; "We have been informed that, upon removal of what appeared to be the foundation of and old building near High Haum, about twenty celts and stone hammers were found in various states of preparation" (Joplin 1843: 95; Gaythorpe 1906).

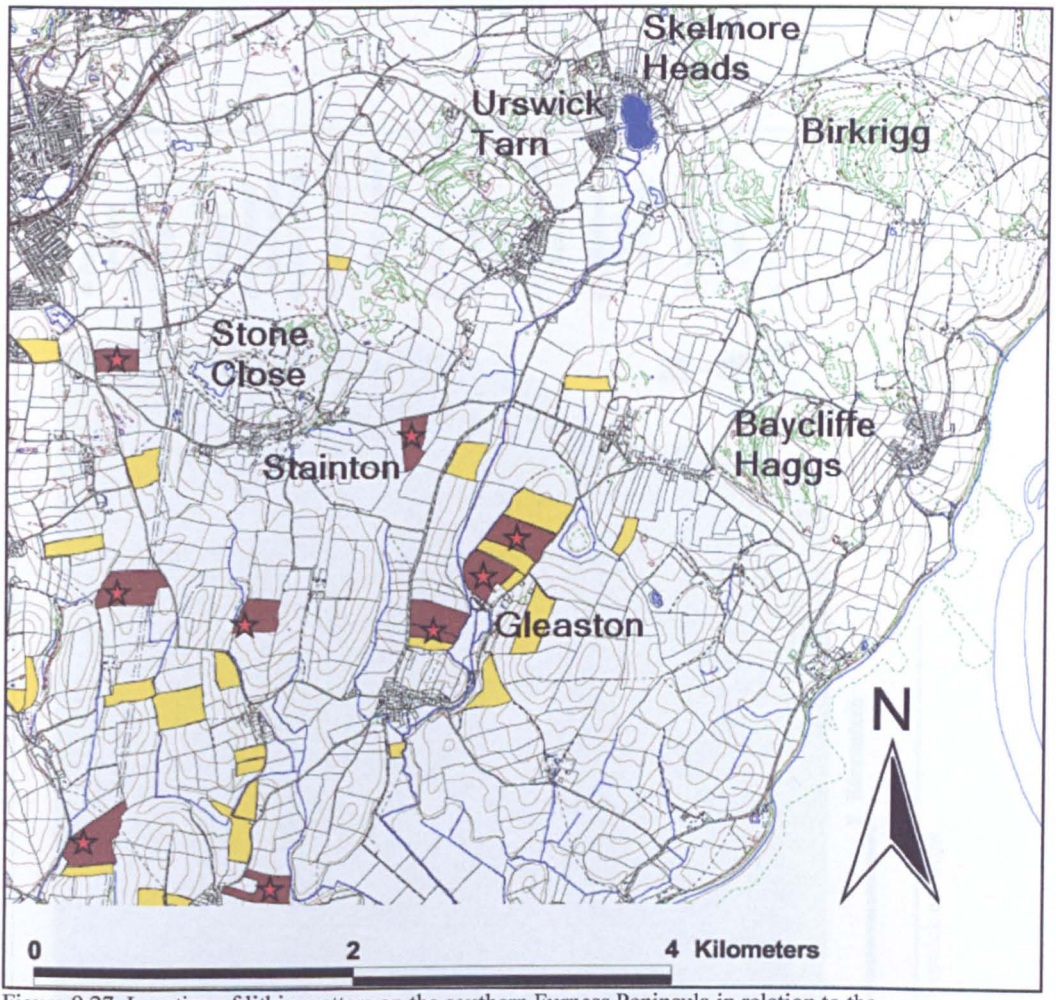


Figure 9.27. Location of lithic scatters on the southern Furness Peninsula in relation to the Urswick limestones (shown in green).

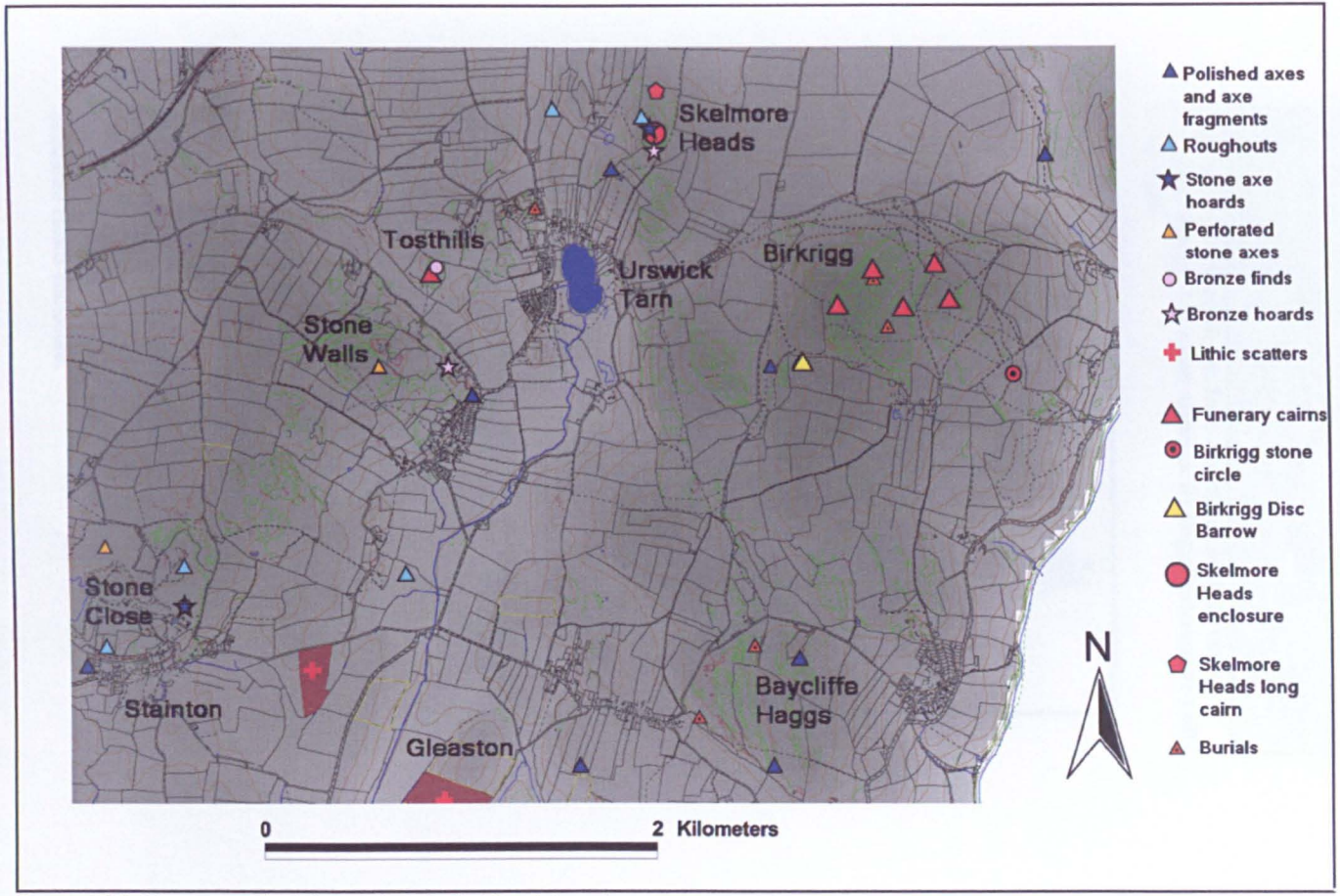


Figure 9.28. Monuments, burials and finds in the Urswick environs.

Figure 9.29. View north east from Skelmore Heads towards the Leven estuary. The lower slopes of Birkrigg Common are visible to the right.

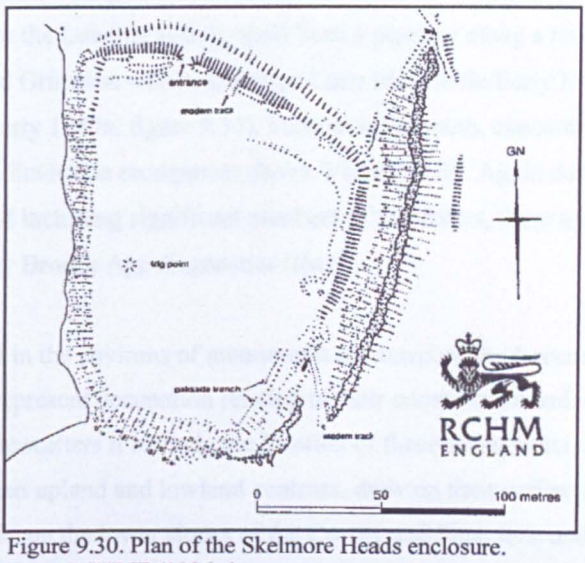


Figure 9.30. Plan of the Skelmore Heads enclosure. From RCHME (1996c.)

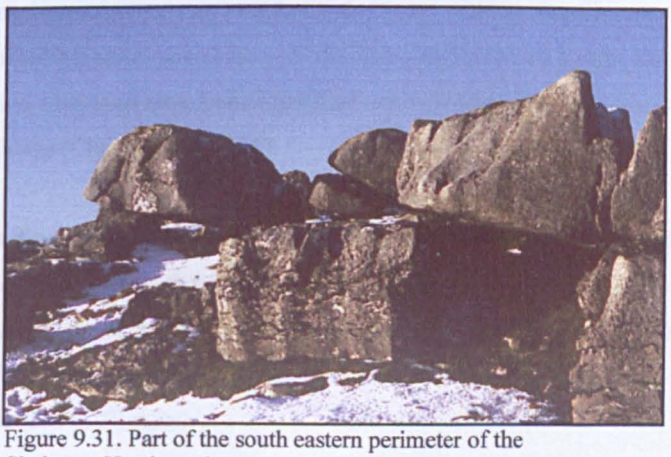


Figure 9.31. Part of the south eastern perimeter of the Skelmore Heads enclosure.

As the Furness transect did not cover the limestone north of Gleaston, there is little information regarding the character of occupation in the Urswick environs. However, evidence from the eastern uplands can suggest the nature of occupation on limestones chosen for the construction of Neolithic monuments. Whilst the two areas are different in physical character, they share similar monument traditions and comparison between them can also illustrate something of the nature of wider patterns of landuse (see below). Raiset Pike long cairn is situated close to a prominent natural outcrop on a lowlying shoulder between the Crosby fells and a route between the Lune and Eden valleys. Close to the cairn, clustered along localised ridges and becks, twelve scatters yielded nearly two thousand lithic pieces (Cherry & Cherry 1987a; figure 9.32), the majority of Later Mesolithic/Early Neolithic date. Upslope and to the west is Gamelands stone circle, to the south and north west of which a number of lithic scatters have been identified (Cherry & Cherry 1987a; figure 9.33). As at Raiset Pike, the scatters were dominated by a comprehensive range of Later Mesolithic/Early Neolithic forms, with later diagnostics also present. In the Lowther valley, spoil from a pipeline along a river terrace close to Kemp Howe revealed Grimston ware and a large Later Mesolithic/Early Neolithic assemblage (Cherry & Cherry 1987a; figure 9.34). Further to the south, concentrations were identified at the foot of the limestone escarpment above Wicker's Gill. Again dominated by a blade based technology and including significant numbers of tuff forms, these also contained Later Neolithic/Early Bronze Age diagnostics (*ibid.*).

Some material in the environs of monuments clustered on the lower slopes of the eastern uplands may represent occupation relating to their construction and use. However, given the character of the scatters it is likely the location of these monuments, along watercourses and on terraces between upland and lowland contexts, drew on their earlier significance. Upslope of the monuments, on the lower slopes of the Crosby and Shap fells and overlooking the valleys below, clusters of lithic material have been identified on scarps and sheltered areas close to outcropping limestone pavement (Cherry & Cherry 1987a). Smaller assemblages have been collected from higher exposed areas of the fells. At the Howe Robin enclosure, fragments of both tuff and flint axes have been identified, alongside a leaf shaped arrowhead and sherds of Grimston ware (Cherry *et al.* 1985).

Whilst not directly analogous to occupation evidence from Furness, collections from the eastern uplands illustrate that limestone escarpment close to Neolithic monuments formed a focus for extensive occupation, some of which likely pre-dated their construction. Clustered on scarps, valley heads and along watercourses, such assemblages illustrate similar themes to those evidenced in Furness.

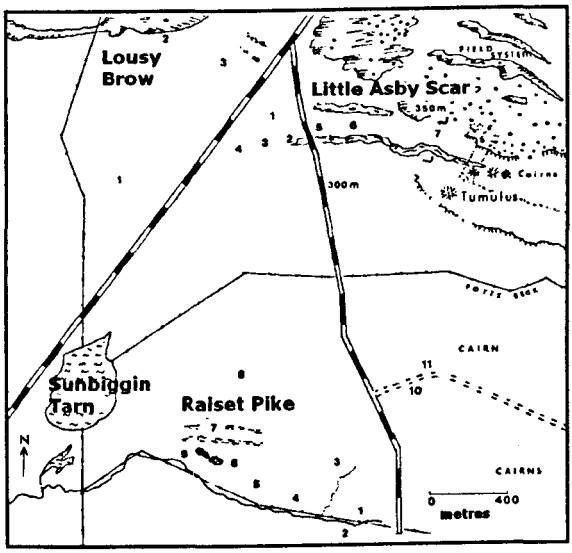


Figure 9.32. Lithic scatters in the environs of Raiset Pike. After Cherry and Cherry (1987a).

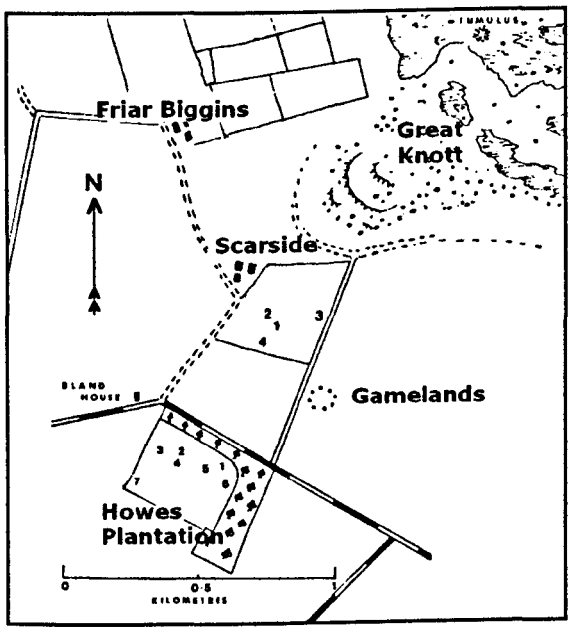


Figure 9.33. (left). Lithic scatters in the environs of Gamelands. After Cherry and Cherry (1987a).

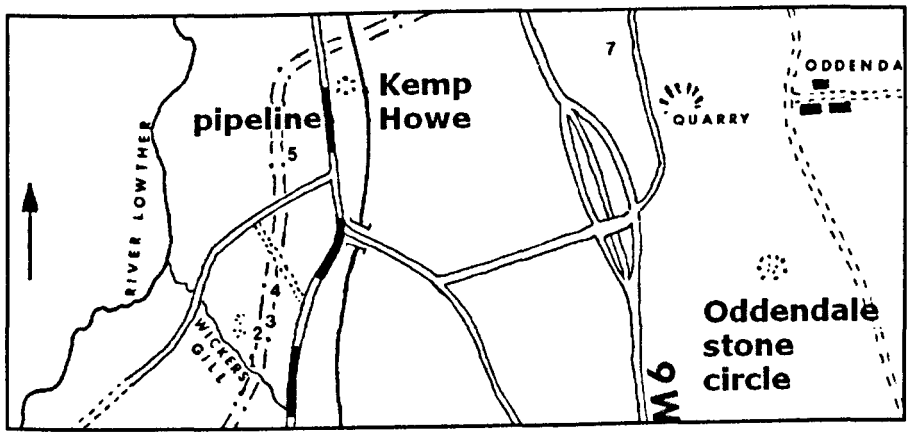


Figure 9.34 (bottom). Lithic scatters in the environs of Kemp Howe. After Cherry and Cherry (1987a).

Environmental evidence from the eastern limestones also bears some similarity. Downslope of Raiset Pike, pollen evidence from Sunbiggin Tarn (Webster 1969, cited. Cherry & Cherry 1987a) illustrated the clearance of trees and spread of grassland after the elm decline, but as at Urswick (Oldfield 1963), no cereal pollen was identified. Upslope and to the north of Sunbiggin, at Bank Moor (see chapter three), the fells were predominantly clear of trees during the Early Neolithic and characterised by species rich grassland (Skinner 2000). Lithic finds from the area are dominated by arrowheads alongside evidence for small scale occupation (Cherry & Cherry 1987a). Taken together with occupation of the Furness valleys, the evidence suggests the limestone fells and their environs were utilised for hunting, and provided grazing for both wild animals and domesticates.

The common association between axes and enclosures suggests these distinctive high points, enclosed by limestone outcrops and overlooking valley systems, formed foci for activities centred around the deposition and possibly the exchange of stone axes. Their location in upland areas used for grazing and hunting, away from the lower-lying fertile valleys of the Pennine foothills and the Furness coastal plain, may indicate such areas were what might be described as 'common land'. At particular times of the year these were central to the occupational ranges of a number of different communities, likely coming into these areas from different directions.

Caves, grykes and Neolithic monuments

Long cairns and enclosures in Cumbria, whilst being located in association with natural routeways and valley systems, drew on prominent natural features. Although the significance of these features is often based on supposition, on the Morecambe Bay peninsulas there is clear evidence for deposition in limestone caves and fissures close to monuments. At Haverbrack, across Morecambe Bay from Furness, Dog Hole formed the focus for deposition into the early medieval period (figure 9.35). Excavations in the shaft produced the remains of at least three children and eighteen adults, some of which illustrated cut marks (Jackson 1914; Benson & Bland 1963; Bland 1994). Situated on a limestone ridge above the Kent estuary, Dog Hole is less than 100 metres from the Haverbrack long cairn. Close to a probable prehistoric enclosure at Wharton Crags, on limestone above the Keer estuary, the Badger Hole cave produced human and animal remains together with a Langdale axe, Later Neolithic pottery and beaker sherds, an antler pick, a chert scraper and flint flakes including a possibly Palaeolithic bladelet (Jackson 1913; Hodgson 2004).

On the Urswick limestones the earliest evidence for cave use is from Bart's Shelter, to the east of Birkrigg Common (figure 9.28). Overlooking Morecambe Bay, Mere Tarn and the Gleaston valley, the cave contained human and animal remains, lithics dating between the Early Mesolithic and the Bronze Age and a Bronze Age brooch.

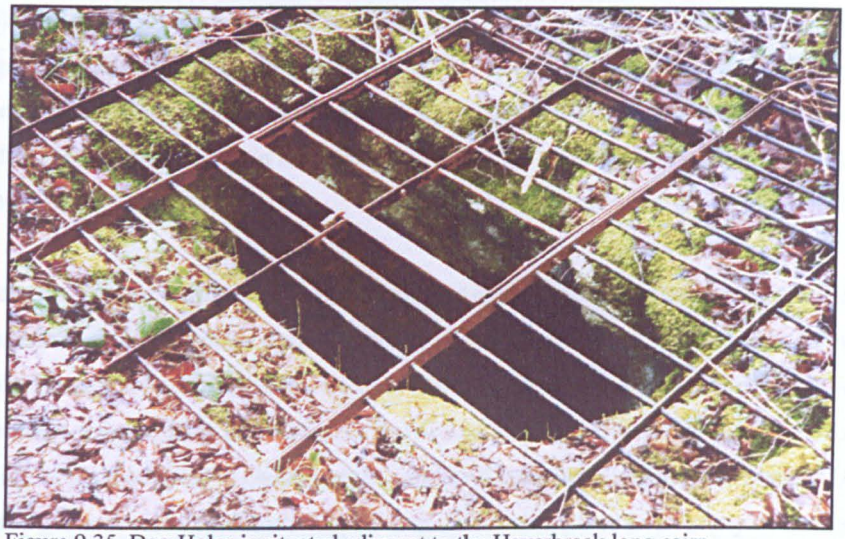


Figure 9.35. Dog Holes is situated adjacent to the Haverbrack long cairn.

Figure 9.36. Tosthills, on the Urswick limestones.

A bone point from the Bart's Shelter assemblage produced a date of 6110-5883 cal BC (Hodgkinson *et al.* 2000). Close by, two caves have revealed analogous assemblages. At Bonfire Scar excavations revealed closely packed human skulls and longbones (Atkinson 1926). A number of finely worked flint implements and the butt of a stone axe were recorded alongside pottery sherds, oyster shells and animal bone (*ibid.*). Upslope and to the east, a stone axe recovered from limestone on Baycliff Haggs (Dobson 1914) may have drawn on the significance of a small cave in the same locality which contained a number of human skulls (Barber 1869).

Human remains were deposited in limestone fissures over long periods, and with the exception of diagnostic artefacts within chronologically mixed assemblages, the majority are not closely datable. However that the environs of these features often saw the construction of Neolithic monuments suggests they drew on what may be termed as the 'natural' monuments of the Mesolithic. As discussed in chapter eight, similarities between practices illustrated by cave assemblages and burial traditions suggest deposition took place in a variety of contexts. Although such practices might be more clearly evidenced during the Early Bronze Age, drawing on concerns with the entry of human bone and material culture 'into the earth', it is likely that Neolithic monuments drew on, and continued traditions already focussed on significant natural places (Barnatt & Edmonds 2002).

South of Urswick, the Tosthills dolmen is a chamber formed of two limestone uprights supporting a capstone of the same material (figure 9.36). Situated close to a valley floor between two ridges of outcropping limestone, little is known of the structure, although a bronze knife has been recovered from its environs (Dobson 1912). Monuments of similar form are common along the Irish Seaboard (Lynch 1997; Tilley 1994; Cummings & Whittle 2004). Whilst their close dating is enigmatic, the use of uprights to support heavy capstones quarried from nearby outcrop can be seen as analogous to the use of limestone caves and fissures.

Below the summit of Birkrigg Common, Birkrigg Disc Barrow is situated on the northern end of a prominent limestone ridge overlooking Skelmore Heads. Before the covering mound was added, the monument was a circular platform of limestone (Dobson 1926) which overlay and mimicked the natural pavement below. As discussed in chapter eight, the platform may have been used for excarnation during the Neolithic. Given the fragmentary and disarticulated nature of the excavated deposits (Dobson 1926) and its proximity to the Skelmore Heads enclosure, long cairn and the Urswick caves, it is possible deposits were transported between these sites.

Across Morecambe Bay, the Sizergh Fell 'pavement' cairn drew on similar themes. Similar in form and nature to Brikrigg Disc Barrow, Sizergh Tumulus 2 (Mckenny Hughes 1904a, 1904b;

Edmonds *et al.* 2002, Evans & Edmonds 2003) was set beneath a locally prominent outcrop on the end of a distinctive limestone ridge overlooking the Kent estuary. As discussed in chapter eight, grykes in the immediate environs of monument, and the outcrop on which it was focussed, saw the deposition of beaker material less than fifty metres from a gryke into which had been placed a broken stone axe, tuff flakes and a polissoir.

Across the Morecambe Bay limestones, stone axes were placed in limestone grykes on the high points allowing clear views of the central mountains, and often the coast. As discussed in previous chapters, these places, and these *sorts* of places were chosen for the construction of monuments across the region. Depositional practices evidenced on the limestones, together with the construction and use of monuments made a variety of references; to localised natural features, to the stone sources and uplands of the central fells and the estuaries coming together into Morecambe Bay and the Irish Sea.

On Birkrigg

Close to the farm hamlet of Sunbrick, Birkrigg stone circle was constructed on a west facing shoulder directly below the summit of Birkrigg common, the highest point on the Furness limestone ridge. Situated 2 km south east of Skelmore Heads long cairn, the circle drew on similar locational themes, being set between landscape zones along the same route between the coastal lowlands and the Furness fells. Compared to the long cairn, the location of the circle illustrates a shift in focus with reference being made to its place within, and connections to the wider world. Birkrigg Common is characterised by areas of outcropping pavement visible for many miles around. The prominent ridge likely acted as an indicator not only of the location of the monument and may have assumed totemic significance (see chapter seven).

The construction of the circle beneath the summit of the common meant visibility of the Furness valleys, Skelmore Heads and Birkrigg Disc Barrow were obscured (figure 9.37). Downslope of the monument the land drops sharply towards the coast, with its setting promoting a wide view over the Leven Estuary and Morecambe Bay (figure 9.38). As with many circles in the region, its location, although addressing similar concerns with the movement suggested by long cairns, drew on localised landscape features and micro-topopgraphic changes to promote particular views of the landscape; between upland and lowland areas, between valley systems, and between land and sea. A second stone circle may once have existed on the common (Joplin 1846; figure 9.40). As discussed, 'paired' circles drew on and physically stressed themes and concerns already inherent to the location and setting of these monuments. Progression between circles acted as metaphorical transition between landscape zones. Such monuments, akin to earlier enclosures, formed arenas within which concerns with seasonality, exchange, physical and social transformation were mediated.

Figure 9.37. Birkrigg stone circle with the summit of Birkrigg obscuring the view inland.

Figure 9.38. View of the Leven estuary promoted by the setting of Birkrigg stone circle.

Figure 9.39. View of the Leven estuary and the fells beyond from the Birkrigg summit cairn.

The Final Neolithic and Early Bronze Age saw burial monuments constructed close to ceremonial complexes and across the occupied landscape. On Birkrigg, the stone circle and the Birkrigg Disc Barrow formed the foci for a cairn cemetery. Five have seen excavation (Geldred *et al.* 1914), four of which were located along the summit of Birkrigg, effectively appropriating this distinctive landscape feature (figure 9.39). Of these one was completely empty, and a second revealed a green slate boulder sealing a deposit of dark earth (*ibid.*). A third was composed of an earthen mound sealing a similar deposit, with the covering cairn made of glacial erratics (*ibid.*). Like the cairn of volcanic erratics covering the beaker deposit at Sizergh, the monument was in clear view of the central fells.

Birkrigg 1 was located to the north-eastern end of the ridge, on Appleby Hill, commanding a wide view over Morecambe Bay, north towards the mountains, and west to Black Coombe and the Isle of Man (figure 9.39). The earliest phase of the monument, a small stone circle with a diameter of *c.* 4 metres (Gelderd *et al.* 1914). After the deposition (and likely removal) of a central deposit comprising human teeth and potsherds scattered on the ground surface, the circle was infilled. That the stones remained proud is suggested by over thirty token depositons within the extent of the circle. As discussed in chapter eight, many were found to contain a white quartzite pebble which "in practically every case was associated with two pieces of alien stone. One piece was red porphyry, the other a greenish stone" (Geldred *et al.* 1914: 469). These deposits were later covered by a cairn, into which two partial inhumations were inserted. The first was fragments of skull and teeth interred within a stone setting and the second a disarticulated inhumation with a bronze awl (*ibid.*). A disarticulated inhumation of skull and longbone fragments may have been inserted into the Birkrigg Disc barrow at a similar time, which suggests its primary phases had come to a close. The burial was accompanied by a boar's tusk and a piece of ornamented bronze (Dobson 1927).

A central kerb was added to the internal area of Birkrigg stone circle, probably in the Early Bronze Age (figure 9.32). Excavation revealed both the inner and outer areas of the circle had been roughly paved (Geldred & Dobson 1912). Within the inner circle, two distinct layers of cobbling were identified, separated by a thin layer of soil, and sealing a complex sequence of deposits. The central element of the circle was used repeatedly for the deposition of cremated remains (figure 9.41). Upslope of the stone circle, a burial cairn at Appleby Slack, almost hidden in a shallow bowl defined to the east by a limestone outcrop, revealed a similarly complex sequence (Geldred *et al.* 1914).

Like the 'earlier' funerary sites of Birkrigg Disc Barrow and Birkrigg 1, deposits at Appleby Slack and the internal element of Birkrigg stone circle illustrate emphasis on the token deposition of human remains. This is illustrated at Appleby Slack in particular, where a high

proportion of pit deposits and scatters contained only one token piece of unburnt bone within 'cremated' deposits. The character of most of the deposits at Appleby Slack and Birkrigg stone circle, whether they incorporated human remains or not, suggests they were cremated nearby. The majority of pits were scorched, and spreads and deposits of burnt earth and charcoal infilled the cremation pits. The spreads of charcoal and burnt earth in particular at Appleby Slack may be suggestive of imported pyre debris, with only one area at Appleby Slack, and none at Birkrigg stone circle, suggesting that cremation took place on site. The urned burials from both sites were not associated with burnt material, and none were recovered from scorched pits. Three of the four urns at Birkrigg were inverted, and the mouth of urn 3 at Appleby Slack (like that at Allithwaite) rested on the limestone bedrock. This may suggest that if the urns were brought in from elsewhere, their contents were emptied back into the earth.

Perhaps the most enigmatic of the depositional practices associated with the Birkrigg monuments are the token deposits of organic matter and /or charcoal, analogous to traditions identified in upland and cairnfield contexts. On Birkrigg, these were sometimes associated with a single token of unburnt bone and often with 'alien' pebbles brought in from elsewhere. The evidence suggests the emphasis remained on the burial of token, partial and disarticulated remains at least into the Early Bronze Age. As discussed in chapter eight, it is likely that cremated remains were subject to a protracted series of rituals, in different locations, not necessarily restricted to their final deposition. As with earlier periods, the evidence suggests limestone fissures and caves continued to be used for mortuary ritual and the deposition of human remains.

Close to the Birkrigg cairns on Appleby Slack, the infill of a limestone gryke was exposed by men digging out a trapped ferret (Erskine & Wood 1936). Further excavation revealed an artificially widened fissure *c.* 2 metres in depth. A large number of fragmentary unburnt human and animal bones were identified, including an inhumation, beneath which was a partial human mandible and six teeth. A layer of black earth covered a deposit of stones sealing a deposit of charcoal rich material above the natural clay. As there was no material culture identified, the deposits cannot be securely dated. A similar deposit, however, was recovered from a gryke in Heaning Wood, Urswick (Barnes 1970b). Here, unburnt fragments of three individuals were found together with a large quantity of animal bones, a fragment of collared urn and a large tuff knife.

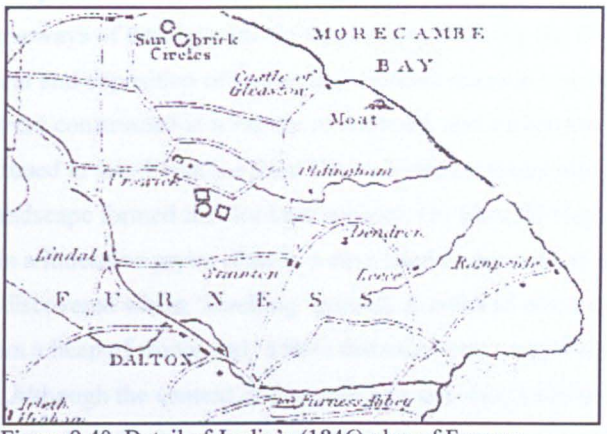


Figure 9.40. Detail of Joplin's (1846) plan of Furness, suggesting a possible second circle on Birkrigg.

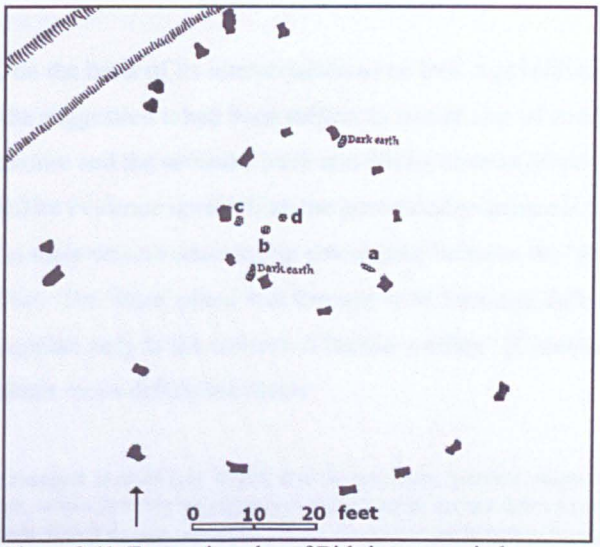


Figure 9.41. Excavation plan of Birkrigg stone circle illustrating position of central deposits. From Geldred & Dobson (1912).


Figure 9.42. Lowick Beacon (foreground), with view of Coniston Water and the fells.

Continuity of place into the Bronze Age

Although some ways of dealing with the dead changed during the Bronze Age, many elements of the treatment and deposition of human and cultural material were maintained. New monuments were constructed in a variety of contexts, and earlier monuments and natural features continued in use. Evidence from Urswick demonstrates places important in the 'Neolithic' landscape formed foci for later activity. On Baycliff Haggs, where a stone axe had been placed in a limestone gryke close to a cave used to deposit human remains, a number of burials were discovered whilst 'levelling' ground. A collared urn containing a cremation was recovered from a heap of stones and 'a little distance' away, a cist contained two inhumations (West 1805). Although the context or presence of a covering cairn was not recorded, nor the space between the burials, these clearly illustrate the continuing significance and appropriation of particular landscape features into the Bronze Age.

As discussed, on the basis of its interpretation as an Iron Age hillfort, excavations on Skelmore Heads led to the suggestion it had been subject to two phases of construction; the first being a palisaded enclosure and the second a bank and ditch constructed along the northern perimeter (Powell 1963).The evidence upon which the postulated sequence is based is however questionable as there was no relationship determined between the 'palisade' and the bank (RCHME 1996c). The 'later' phase was thought to be Iron Age date since the earthworks were deemed "appropriate only in the context of human warfare" (Corcoran 1963: 18). Recent surveys cast doubt on its defensible nature:

> "The northern rampart is relatively slight, and the southern, gentler, slope could not be easily defended: the rocks there, while forming an effective visual barrier do not form a physical one. The eastern and western slopes which define two sides of the enclosure are steeper, though again the barrier is less physical and more symbolic" (RCHME 1996c: 11).

Although dating remains equivocal, the continuing importance of the site into the Bronze Age is demonstrated by the deposition of a hoard of socketed Bronze axes in a limestone fissure and by the later find of a saddle quern (Fell 1963). At the southern end of the limestone ridge, Stone Close also continued to be used for deposition. Alongside the dozen or so Neolithic axes, a socketed bronze axe, a palstave, and a bronze ring were recovered, alongside a ground cobble granite axe and numerous quernstones and quern fragments (Dobson 1912; Fell 1963). Close to a swallow hole downslope of Stone Close, quarrying for road material at Stainton Head revealed a sandy hillock had been used for the deposition of cremations. Although a collared urn containing a tanged bronze knife, and a collared urn containing an accessory cup were recorded (Fell 1957) further burials included several urns smashed up by workmen (Dobson 1912).

Across Cumbria, urn cemeteries have been found in association with features such as sandy hummocks and limestone grykes, often situated close to natural springs and watercourses (see chapter eight). As discussed above, lithic scatters and stone axes in the Stainton area (ST) suggest it was utilised for hunting and grazing during the Later Mesolithic and Early Neolithic. The burials suggest that activity continued into later periods, with the sheltered valley below the locally dominant Stone Close likely forming the focus for occupation.

During the Early Bronze Age, evidence for deposition and burial in the Urswick environs reflects both continuity and change. As in other areas, deposits both of material culture and human remains were placed in caves, fissures, grykes and other natural features, many of which, situated on prominent hills and escarpments, had seen earlier use. Drawing on and appropriating their earlier significance and likely signifying the identities and concerns of particular local communities, many such features saw the construction of burial cairns. Earlier monuments associated with these features saw structural elaboration and the addition of burials, and 'new' monuments were constructed in their environs. As in the Neolithic, funerary and associated rituals were based around the token burial of human remains. Some of these may have been cremated close to the monuments in which they saw deposition and others brought in from elsewhere. As discussed in chapter eight, the sorts of activities evidenced on Birkrigg are similar to those represented in upland cairnfield contexts. The dead and the monuments and natural features into which they were placed, were being increasingly drawn on in the assertion of tenurial concerns.

Evidence for the use of the Furness fells during the Neolithic and Bronze Age is sparse. However, two large embanked ringcairns have been identified north of Ulverston. The Kirk and Lowick Beacon are situated on routeways across the fells towards the Coniston valleys and uplands. As with those on Birkrigg, their settings reference important localised features and draw on distinctions between local and wider landscapes.

The Beacon is located in a lowlying position at the foot of Lowick Beacon, itself appropriated by a summit cairn of uncertain date. Close to the modern route between Morecambe Bay, the Duddon and the west coast, the large ringcairn was situated to overlook Coniston Water and the central Lakes (figure 9.42). With the exception of a cairn close to its southeastern perimeter, no other monuments have been identified however the monument is situated below enclosure boundaries and its surrounding have seen some improvement. To the southwest, the Kirk is situated on a shoulder of land below three high points, one of which is today occupied by a wind farm. The shoulder is the focus for springs conjoining to form Gill House Beck, which runs into the Duddon estuary. Although the estuary is not visible from the ringcairn, there is a clear view upslope of the monument from a large oval funerary cairn. Excavated in the

nineteenth century, the cairn revealed calcined bones in a cist with two megaliths at its western end (Joplin 1846). Although small numbers of cairns have been identified, the area has not seen detailed survey and much of it been disturbed by slate quarrying. A few kilometres to the north west, areas of cairnfield, funerary cairns and ringcairns cluster on the lower lying fells at Gawthwaite and Heathwaite (figure 6.8). It is tempting to suggest these were exploited by communities from Furness, with The Kirk and Lowick Beacon, on routeways between the peninsula and the fells, representing increasingly structured movement between transitional areas of the landscape.

Later Neolithic and Bronze Age scatters

Monuments and depositional practices evidenced on Furness during the Later Neolithic and Early Bronze Age illustrate changes in the ways in which communities referenced and appropriated prominent landscape features. Although continuing to combine and disperse at different times and places, clear lines were drawn between local and wider communities, with occupation increasingly tied to specific places. Lithic evidence from the coast and valleys of Furness suggest similar themes.

Returning down the valley from Urswick to Gleaston Castle, lithic scatters from the valley junction attest to its continued use. With the exception of a thumbnail scraper from GLE 8, no clear diagnostics were present, however both GLE 6/7 and GLE 8 incorporated flake based forms, including a number of the distinctive 'specialist' tools common in Later Neolithic/Early Bronze Age assemblages. To the north of where earlier occupation had been centred on the spring and the valley floor, a flake based scatter including a flake core, a thumbnail scraper and a heavy duty chopper was identified on a flat area of land on the western side of the valley (GLE 10 & 11; figure 9.18). A bronze axe has also been found in the area (Swainson Cowper 1888a).

Similar themes are evidenced at Breastmill Beck, in that although the scatter (BMB) contained predominantly Later Mesolithic/Early Neolithic forms, small amounts of later material were present, including a flake core and a number of 'specialist' tool types made on flakes and chunks. Upslope and to the south of Breastmill Beck, a Later Neolithic/Early Bronze Age scatter was identified on a gently sloping field at Manor Park (MP; figures 9.17, 9.43). Thumbnail scrapers, a range of nosed and spurred implements, a heavy duty chopper and part of a jet bangle were identified alongside waste including four flake cores. Upslope of Manor Park, small dispersed scatters have been identified at Rakesmoor (RR) and Sinkfall (SLL), and on the other side of the valley (MUTT, DS, PD) all situated around the 70 metre contour (figure 9.43).

Scatters at Breastmill Beck and Gleaston illustrate that during the Later Neolithic and Early Bronze Age, scarps and terraces above valley floors continued to be occupied, although at a smaller scale than earlier periods. Scatters at Manor Park and Gleaston 10 and 11 illustrate a gradual proliferation away from the valley bottoms, with activity spreading upslope on flatter areas along the valley sides. As in earlier periods, small scale activities also took place in the higher reaches of the valleys. Close to the clusters of Later Mesolithic/Early Neolithic material at Leece (LE 1) a hollow based arrowhead was found together with an edgeworn flake on high ground west of the village (LE 7). That occupation was focussed in the same areas, on high ground, and at the meetings of major valley systems suggests a degree of continuity inland from the coast. Where the picture is noticeably different however is in the coastal lowlands where the majority of Later Mesolithic/Early Neolithic activity was focussed.

As discussed above, over the Later Mesolithic and Neolithic, tidal incursions inundated and exposed lowlying land on the coastal lowlands. During the Later Neolithic and Early Bronze Age, whilst small scale incursions did occur, sea levels dropped with more stable conditions allowing the formation of dune systems on west facing coasts. Along sheltered shores of Morecambe Bay and the Duddon however, salt marshes and former intertidal environments converted to bog (Smith 1958, 1959; Oldfield & Smith 1963). Compared to earlier periods, there is little evidence these environments saw extensive occupation. That later scatters are small and widely dispersed may indicate activity was restricted in scale and episodic in nature. At Four Lane Ends (FLE) four scatters comprised a total of only seventeen flake based pieces. A range of tool forms were represented, including split pebble scrapers, two thumbnail scrapers, a heavy duty chopper, and notched and nosed implements. Similar small scatters of material were identified at Roosecote Moss (RM) and at Rampside Road (RP), where a burnt scraper and a number of flakes were identified in association with a large scatter of unworked burnt flint (figures 9.13, 9.43).

Numerous metalwork finds have been identified on the mosses (figure 9.25), including a bronze dagger from Rampside (Cowper 1907). A bronze rapier was found at Paige Bank Moss (*ibid.*), close to where a spearhead was brought up by the ploughing of a meadow (SMR 2600). Together with the discovery of a bronze axe "12 inches below the surface" (Fell 1940: 121) at Mossfield, Roose, these finds may suggest the coastal wetlands were utilised in different ways to earlier periods. Along the Morecambe Bay coast likely Bronze Age trackways have been identified on the Foulshaw and Gilpin mosses (Barnes 1904; Hodgson 2004). Again associated with metalwork finds, it is possible similar features on the Furness mosses, built in order to connect islands of dry land, became a focus for deposition during the Bronze Age.

Location	Height AOD	No.	tools	waste	blades	flakes	Chunks/ spalls	Blade cores	Flake cores
Gleaston 6/7	40m	46	32	6	11	23	10	0	0
Gleaston 10/11	40m	18	8	7	0	11	6	0	1
Manor Park	40m	138	54	55	5	61	57	2	4
Dalton South	50m	5	3	2	0	3	2	0	0
Parkers Dalton	70m	2	1	1	1	0	1	0	0
Rakesmoor	60m	4	3	1	0	3	1	0	0
Sinkfall	50m	4	2	1	0	3	1	0	0
Four Lane Ends	20m	17	15	1	0	9	7	0	0
Roosecote Moss	20m	4	1	2	0	3	1	0	0
Rampside Road	20m	49	3	1	0	0	6	0	0
Sandscale Farm	10m	14	7	7	0	6	5	3	1
Roanhead	5m	191	19	171	0	21	163	1	1

Figure 9.43. Summary data of mixed and 'later' scatters from the Furness transect.

Location	Height AOD	No.	tools	waste	blades	flakes	Chunks/ spalls	Blade cores	Flake cores
Trough Head	10m	140	14	123	2	44	95	1	2
Mulgrews	10m	619	101	518	7	92	466	1	49
Hare Hill		33	7	24	1	6	2	0	0
Hillock Whins 1	10m	19	2	17	1	4	14	0	0
Hillock Whins 2	10m	18	8	9	0	7	11	0	0
Hillock Whins 3	10m	72	8	58	0	9	57	0	1
Hillock Whins 4	10m	61	24	35	1	24	5	0	1
Middle Hill	10m	31	4	27	0	26	2	1	0
Lamity Sike	5m	7	1	6	1	6	0	0	0
North End	10m	3	2	1	0	0	1	1	0

Figure 9.44. Summary data of scatters from Walney.

On Walney

On Walney, the stabilisation of sea levels led to the formation of sand dune systems on both its far north and the south ends and probably exposed lowlying land between the boulder clay 'islands'. During and after the Later Neolithic, the same areas used in earlier periods for the exploitation of coastal shingles formed foci for repeated occupation episodes (figures 9.14, 9.44).

Close to where fragments of food vessel were picked up from below a cliff face during the 1950s (Barnes & Hobbs 1952), 33 lithic pieces were collected from a burnt peaty lens eroding from a cliff at Hare Hill (HH). The majority were waste chunks and spalls, however pebble scrapers, awls/borers and three tuff flakes were identified. Two sherds of flat bottomed pottery with quartz and granite inclusions, a lump of baked clay and a piece of burnt bone were also collected. At Hillock Whins, four areas of erosion produced lithic collections. Close to the area where a narrow blade microlith was recovered from a peat filled hollow in the cliff face (HW 1) pits, postholes and lenses of charcoal rich material have been recorded. An eroding pit contained 72 lithic implements, the majority of which were waste chunks and spalls derived from pebble reduction. Tools included three pebble scrapers, a thumbnail scraper, an edgeworn flake, a heavy duty chopper and two retouched spalls (HW 3). Above the cliff face, sand eroded by cattle poaching revealed 61 pieces (HW 4) including pebble and thumbnail scrapers, utilised flakes and a chunk of tuff. Further inland, a scatter of 18 similar pieces including a thumbnail scraper was identified close to a pond (HW 2). Similar small scatters have been identified at Middle Hill (MH) and Lamity Sike (LS). Middle Hill, a west facing high point overlooking the Irish Sea, lies directly upslope of an area of dense occupation at Mulgrew's.

The collection from Mulgrew's (MUL) comprised over 600 pieces, of which the majority was waste (figure 9.44). With the exception of the four tuff forms (including a butt and the cutting edge of a polished stone axe), all were of pebble flint. Waste was mainly primary and secondary chunks and spalls derived from pebble reduction and the production of blank flakes, with many unretouched split pebbles illustrative of raw material testing. The assemblage was dominated by flake and pebble forms, and included 20 flake cores, and 29 forms on primary split pebbles. Many of these exhibited damage at their distal ends indicative of a bi-polar technology, and three anvil stones were recovered.

A variety of tool types were represented at Mulgrew's, including convex and plane scrapers, awls/borers, notched, nosed and spurred implements, abraded and retouched pebbles, and heavy duty chopping and cutting tools (figure 9.45). A total of 16 bifacially worked blank flakes were identified, all of a similar size range averaging 25 by 20 mm, many seemingly discarded due to raw material flaws. Given the existence of similar forms within Later

Neolithic/Early Bronze Age assemblages close to raw material sources in other areas (Edmonds 1995), it is possible these flakes were blanks made for the production of arrowheads. None, however, were present within the assemblage. The assemblage from Trough Head (TH) was also largely waste derived from primary and secondary reduction. Of the 140 pieces collected, 123 primary and secondary chunks and flakes were identified including two rough flake cores, and only 14 identifiable tool forms (figure 9.44). As at Mulgrew's, with the exception of two tuff waste flakes, the assemblage was made up entirely of pebble flint.

Long term collection, undertaken by a number of individuals, with finds recovered from blowouts, former shorelines and exposed sections of the dunes meant that the assemblages recovered from Walney North End were mixed (Cross 1938, 1939, 1942, 1946, 1947, 1949, 1952; Barnes 1956). Whilst Later Mesolithic/Early Neolithic forms were present, the majority of material recovered was Later Neolithic/Early Bronze Age. Finely worked arrowheads, including barbed and tanged, hollow based and petit tranchet derivatives were collected. Although many of these were made on translucent or other high quality material, the majority of tools collected were of pebble flint. Illustrations and descriptions suggest the assemblage was dominated by split pebble scrapers, awls, borers, notched, nosed and spurred implements as well as heavy duty choppers and cutting tools. Non-flint implements included flakes and chunks of tuff, and polished and broken stone axes, some re-used as choppers. Ground implements of local basalt and gritstone were also identified, together with a number of porecllanite flakes from Tievebulliagh in Antrim (Cross 1946). Anvils similar to those identified at Mulgrew's were also represented, alongside hammerstones and worked cobbles (Cross 1949).

Sandscale Haws is less than a kilometre north east of Walney North End, separated from the island by Walney Channel. Several flint scatters and polished stone axes have been identified on Sandscale (Dobson 1914; Barnes & Hobbs 1952; Barnes 1954) together with a number of unpublished examples (NNR warden, pers. comm.). On the south end of the Sandscale peninsula, flint flakes, cores, an arrowhead, a fabricator and a bronze axe have been identified (Cross 1946; White 1994). At Sandscale Farm (SF) 14 pieces of flint were collected as part of the Furness transect. This small and dispersed scatter of flakes and chunks included two awls/borers, a heavy duty cutting tool and four rough pebble cores.

On the north end of Sandscale Haws, excavation of the site of a lithic scatter exposed by a sand dune blowout at Roanhead revealed a small stakehole structure and a number of pits (Evans & Coward 2003, 2004; figure 9.48). Occupying a sheltered position on the coast facing north up the Duddon estuary, the structure was situated on a shingle ridge thinly covered by windblown sand at *c.* 5 metres AOD (figure 9.49). Although few finds were

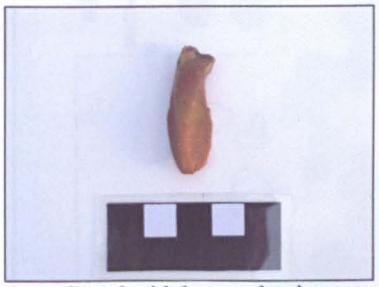
located through excavation, the surface assemblage comprised a tiny polished stone axe (figure 9.47), two pieces of a polished tuff whetstone, an anvil and 191 pieces of worked flint (RD). Tools included a barbed and tanged arrowhead, pebble and thumbnail scrapers, retouched and edgeworn flakes, a heavy duty chopper and two awls/ borers (figure 9.46). A rough blade core and a bi-polar flake core, both re-used as choppers, were also identified alongside split pebbles, primary and secondary waste. A polissoir, an axe hammer, two barbed and tanged and a petit tranchet derivative arrowhead found in the 1940s (Barnes 1954) were from the same area.

The excavation revealed eleven stakeholes surrounded by rough boulder settings, which formed a D-shaped structure approximately two by three metres across, with a linear cobble arrangement defining its shoreward extent. Although there was no direct dating derived from the posthole fills, the polished stone axe was found wedged between the exposed stones of a linear cobble structure. Associated with the postholes were four shallow pits. A broken thumbnail scraper was found associated with the fill of the westernmost pit, and a large flake of black translucent flint was discovered unstratified above the truncated fill the easternmost pit. The fourth pit contained a broken retouched flint flake.

Given the lack of structural evidence from the Cumbrian coast, the site may be best understood by analogy to others on the western seaboard where similar structures in sand dune contexts have seen excavation. Although little is known about their character, these have been interpreted as tents or windbreaks and are often associated with domestic beaker assemblages and burnt mounds (Simpson 1971; Darvill 1996). At Roanhead, although not directly related to the excavated site, a deposit of fire cracked granite and burnt material lies 75 metres to the west (Evans & Coward 2003) and a cluster of burnt granite spreads have been identified in a blowout on Walney North End (figure 9.43).

Along the west coast of Cumbria, many analogous flint assemblages have been identified in sand dune contexts, and may have been associated with similar occupation features. At Drigg flint scatters with 'Bronze Age affinities' have been identified in association with 'hearths' (Cherry 1982). One of these has seen evaluatory excavation and reinterpretation as a burnt mound dating to 2900-2507 cal BC and 2456-2039 cal BC (OAN 2001). Recent survey and excavation in Cumbria suggest these features are relatively common and occur in both upland and lowland contexts (LAU 1995, 1996; Heawood & Huckerby 2002).

Blank flakes (MUL 101, 102, 106, 114).



'Nosed' tool with heavy glossing on distal end (MUL 97).

Convex pebble scraper (MUL 24).

Side scraper on split pebble (MUL 26).

Broken retouched flake (MUL 22).

Figure 9.45. selection of lithic finds from Mulgrew's (MUL).

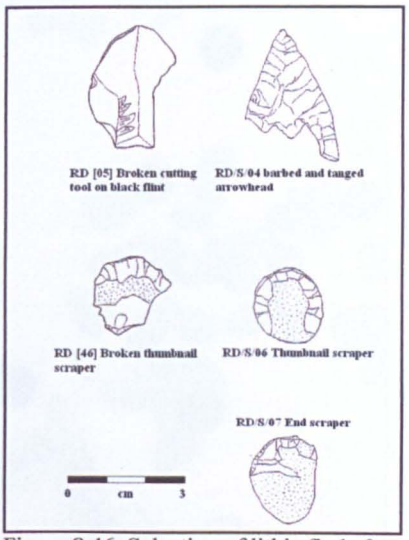


Figure 9.46. Selection of lithic finds from Roanhead (RD).

Figure 9.47. Tiny polished stone axe from Roanhead (RD).

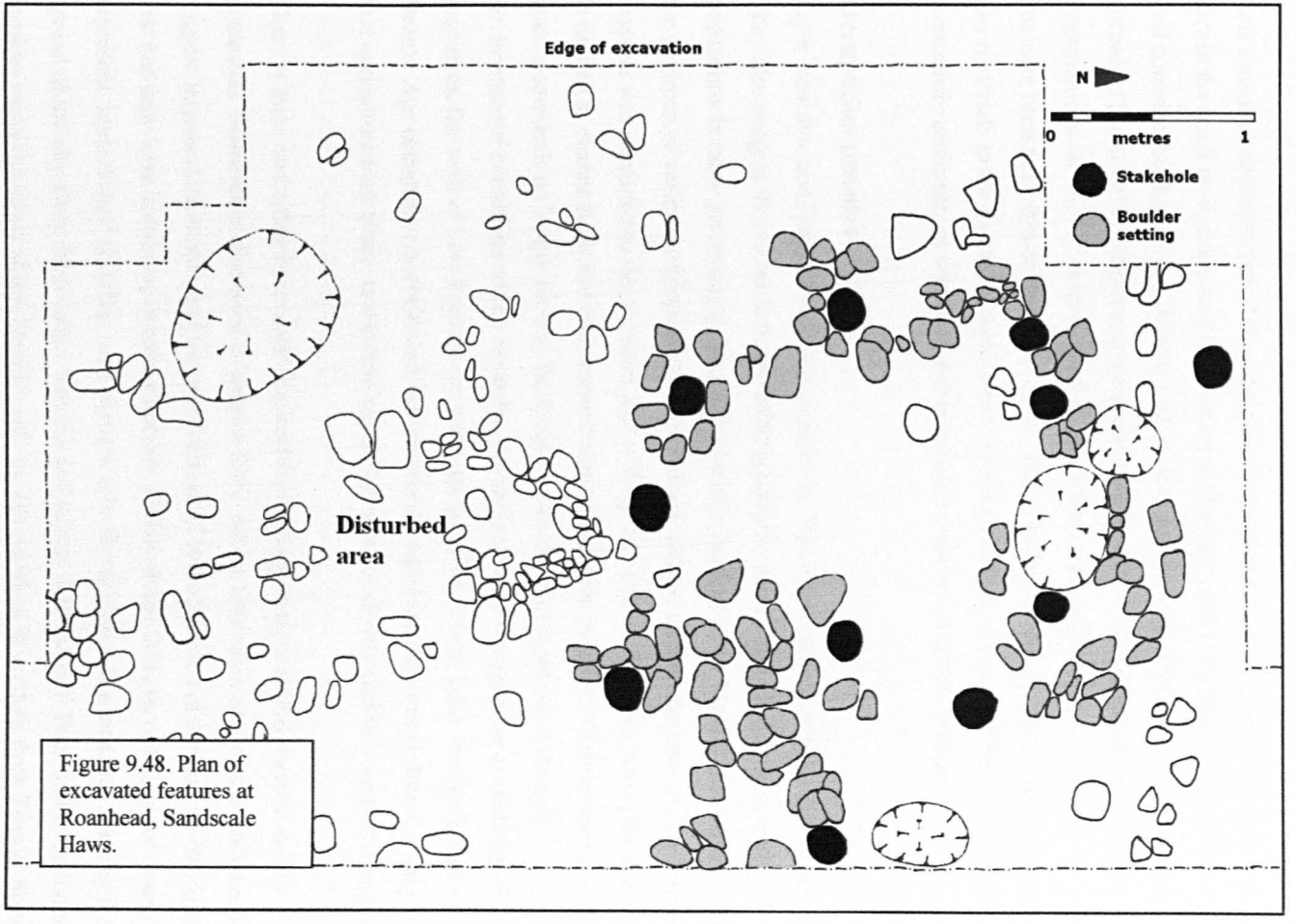


Figure 9.48. Plan of excavated features at Roanhead, Sandscale Haws.

In a number of areas on North End, dune movement revealed midden deposits, some of which, separated by lines of clean sand (Cross 1939; Barnes 1956) likely indicate repeated occupation episodes. One of these contained beaker sherds, potboilers, shellfish, brushwood charcoal and animal bone (Cross 1939). Beaker was also identified at sites identified by Barnes (1956).

Few faunal assemblages have been identified in prehistoric contexts in Cumbria or indeed, across the north west as a whole (Stallibrass & Huntley 1996). The midden deposit on North End contained numerous 'ox' bones, with smaller amounts of sheep/goat, deer, pig and porpoise (Cross 1939), illustrating the presence of both wild and domesticated animals. Communities on Walney evidently drew on a wide variety of resources, some of which may not have been available on the island itself. The west facing area of North End provided lithic raw materials in the coastal shingle. Food resources including fish, shellfish and sea mammals were easily available, as was fresh water from a number of localised springs.

Occupation practice

Later Neolithic and Early Bronze Age scatters on Furness attest to a great deal of continuity. They also suggest that rather than the shifting patterns of earlier periods, the overall scale of occupation became increasingly focussed on particular places; on Walney and Sandscale and the environs of valley meetings leading to Urswick and the uplands beyond. As the Furness transect was restricted to the southern part of the peninsula, evidence for use of the limestones is limited to chance finds and monumental and depositional practice. What is clear is that the coastal lowlands no longer formed the focus for extensive occupation. Although environmental conditions on the estuarine mosses may have changed the availability of resources, the soils of Low Furness are particularly fertile. Given Later Neolithic/Early Bronze Age occupation is evidenced further inland, and along the coastal shores, it may be that agriculture took place on the drier ridges but was not closely tied to domestic occupation.

There is little data either for coastal foreland chronology or agricultural practice on the peninsula. However as discussed in chapter three, across the region as a whole, pollen records suggest increased clearance, and the proliferation of intensification of agriculture into areas that had seen little arable use in earlier periods. Although the lithic record does not clearly represent 'agricultural' practice, such changes may be suggested at a localised scale by the spread of activity away from valley bottoms and scarps at Breastmill Beck and Gleaston to terraces along the valley sides. Similar patterns were evident in scatters from Temple Sowerby in eastern Cumbria (Skinner 2000).

Inland from the valley meetings at Breastmill Beck and Gleaston, monuments and evidence for deposition suggest both continuity and change in the character of occupation, and the scale

and structure of community. During the Final Neolithic and into the Bronze Age, likely in parallel with occupation on Walney and the inland valleys, human remains and other elements of material culture saw deposition in limestone grykes, caves and monuments in the Urswick environs. Whilst larger scale communities still came together on Birkrigg, the protracted nature of burial and token deposition illustrates that the dead were utilised in the affirmation of local as well as broader social ties. These activities took place in areas which had seen use in the past, however, the marked appropriation of particular places and monuments illustrates explicit concerns with the identification of local communities with specific places.

By the Later Bronze Age and Iron Age these concerns are clearly evidenced in the occupation record, with the construction of enclosed settlements on the Urswick limestones. Many such features were recorded in the 19th century and have since been destroyed. Settlement enclosures have been identified at Stone Walls, Stone Close, Little Urswick Crags, Foula and at Appleby Slack on Birkrigg common. A possible example has also been identified by aerial photographic evidence close to Skelmore Heads. Perhaps the best preserved site is Stone Walls. Situated a few hundred metres south west of the Tosthills dolmen, Stone Walls comprises two enclosures, hut platforms and field boundaries (RCHME 1996d). Elements of the complex have seen excavation, with a scrap of ornamented bronze and a flint scraper recovered from the central hut structure (Dobson 1907). In the nineteenth century a hoard of bronze axes and rings was recovered within two hundred yards of the site (Barber 1869). The dating of these 'settlement' enclosures is equivocal, with many likely in use into the Iron Age and the Romano-British period (McKenny Hughes 1912; Hodgson 2004). Given the existence of similar structures in association with many upland cairnfield areas, it seems unlikely that they represent a clear shift in occupation practice after the Bronze Age.

Although in the Neolithic, the structured movement of livestock between upland and lowland areas is difficult to prove conclusively, the environmental record for clearance in the high upland valleys, alongside evidence for the production of axes certainly suggests such practices took place (Bradley & Edmonds 1993; Edmonds 2004). Axe production has been seen as an adjunct to seasonal grazing, with some members of the community left to tend stock in upland valleys, whilst others made the final climb into the high mountains to quarry and work stone in the high peaks (Edmonds 2004). Finds of both roughout and polished axes bring these communities back down the valleys from the central mountains, into the lowland and coastal areas more conducive to winter occupation. Over the Later Neolithic and Early Bronze Age and into later periods, the use of upland areas is well attested by the environmental and cairnfield record. Shafthole axes and other implements produced from localised sources in the central and western uplands, identified in cairnfield areas down major valleys and along the coast, illustrate a degree of continuity from earlier periods.

Historical references and placename evidence from Cumbria suggest transhumant grazing patterns from at least the Early Medieval period (Bradley & Edmonds 1993). Summer sheilings and homesteads are in evidence in many upland valleys, and although records go back no further than the 12th century AD, it is likely these patterns have been relatively consistent since the introduction of domesticates. In modern Cumbria, animals are moved between seasonal pastures with summer grazing in the upland fells, retreating to lower sheltered ground in the winter months. Today, lantern processions in the market towns of Kendal and Ulverston in September mark the traditional times of livestock returning from the fells, celebrating the coming together of dispersed communities, not only of animals, but of people. Overwintering, followed by lambing and calving in Spring, take place close to the domestic sphere. These seasonal traditions have always been tied closely to the social and geographical scales at which agricultural life is played out.

On Furness, the location of settlement enclosures drew on the past in a variety of ways. Not only were they situated in 'transitional' areas of the landscape, between the coastal lowlands and the high uplands, they were also in the environs of Neolithic and Bronze Age monuments and areas of deposition associated with limestone caves and fissures. These were places already replete with significance, and this was consistently drawn on in the affirmation of tenurial ties. In earlier periods, the area had formed a focus for communities coming together, likely as an adjunct to seasonal grazing patterns. The location of settlement enclosures may illustrate, as with earlier monuments, that they were positioned in order that a variety of landscape zones, and the resources these provided could be exploited at different times of the year. Given the nature of the cairnfield record, the use of these dwellings likely remained tied into patterns of seasonal landscape use. On the coast, some continuity of occupation practice is evidenced on Walney North End. Here, pottery and thick midden layers of Later Bronze Age or Iron Age date have been identified in the sand dunes, together with wild and domestic animal bones and hearths where "masses of shellfish had been boiled in crude bucket shaped pots" (Barnes 1956: 4).

Scales of community: lithic raw materials and exchange

Walney North End has played a central role in interpretations of prehistoric occupation in Cumbria and its links with other areas of the Irish Seaboard. During the 1930s, lithics from the site were described as characteristic of the 'poverty industries' of Northern Ireland and western Scotland (Cross 1939). Brought into focus by a number of axes from Walney, their marked clustering across Furness, alongside that of later bronzes, was taken to illustrate coastal exchange networks, along the western seaboard and across the Irish Sea (Fell 1940, 1972).

As has been discussed, prehistoric communities operated at different social and geographical scales. Clear lines were drawn between the routine worlds of local everyday landscapes, and those which involved coming together with those from further afield. Whilst culture historical frames of reference have focussed on the latter, it remains that for much of the year, occupation was essentially local; repetitive episodes of living and working in familiar territory, seeing familiar faces and undertaking the tasks of everyday and seasonal life. Monuments such as enclosures, henges and stone circles, their locations drawing on and formalising earlier traditions of social interaction, were visited at particular times of the year and provided arenas in which face to face encounters between both the dispersed members of wider communities and those belonging to the world beyond. Whilst the activities that took place within such contexts cannot be established with certainty, the likelihood is that these involved exchange; not only of animals and elements of material culture, but the negotiation of debts, obligations and tenurial issues, the exchange of marriage partners, ideas and the reaffirmation of shared cultural values.

Over and beyond similarities in monument architecture, burial traditions and ceramic styles evidenced across Cumbria, of the ways we can begin to understand how 'local' occupation tied into the wider world is through the presence of lithic raw materials. Much has been made of the presence of 'non-local' flint within lithic assemblages in Cumbria, in particular in relation to its inferred association with the exchange of Group VI axes. In Furness, whilst scatters on the coastal shingle sources largely comprise 100% local pebble flint, those further inland incorporate significant quantities of translucent material. Whilst pebble flint occurs consistently within these scatters, it was in general used for the production of pebble scrapers, awls/borers and rough flakes and blades. The higher quality translucent flints, occurring in colours ranging from black to grey, brown and cream, were chosen for the production of finely worked implements including blades, microliths, thumbnail scrapers and arrowheads. These materials also form the majority of heavily and invasively retouched broken forms. The evidence for 'non-local' lithic materials in the Furness assemblages illustrates little clear patterning. Cores of all the translucent and high quality flints identified are present, sometimes identifiable as pebbles. The majority of assemblages were dominated by secondary and tertiary pieces with only small amounts of waste. This suggests that in general, the primary reduction of superior quality flint took place elsewhere and that these materials were curated, recycled and worked to exhaustion. Although some of this flint may have been available in pockets of glacial drift and in coastal deposits, the majority, in the form of pebbles, cores, blanks or finished implements, is likely to have been the product of hand to hand exchange.

As discussed in chapter three, evidence for axe working in lowland contexts is difficult to establish with any certainty. The majority of axes recovered from Furness have been chance

finds and few have been recorded in direct association with lithic occupation evidence. However, polished axes, roughouts and axe fragments are clustered along the main valleys and localised high points where Neolithic occupation is evidenced by lithic scatters (figure 9.25). Many are broken fragments or the small 'variant' forms likely subject to reworking through use, and others, particularly on the limestones, are the products of structured deposition, as are a number of polissoirs. Largely as a result of the polissoirs found in association with roughouts, polished and part polished axes at Ehenside Tarn (Darbishire 1873), together with chance finds in other lowland areas, it seems likely that the final grinding and polishing of axes took place in lowland occupation areas. Numerous axes have been found with the Furness coastal scatters, as have polissoirs, for example at Sandscale (Barnes 1954) and Walney North End (NE). Shafthole implements made on local grits and granites available in the central uplands have been identified in these same areas and share a distributional pattern to Group VI forms across the peninsula, the region and northern England (Roe 1979; figure 3.18).

Initially quarried from sources in the central Lakes, during the Neolithic and Bronze Age, roughout axes, both of Langdale and other stones, were brought down the valleys where they saw the final stages of production. Those that remained on the peninsula were broken, reworked, deposited and discarded in a variety of different contexts, as were the flints that had been brought in from further afield. The significance of each of the stages of the use life and deposition of these implements was drawn on in a number of ways, relating to their own life cycles and biographies and to the concerns of the people that carried them. Like other aspects of the local world which were repeatedly drawn on, axes and flint tools were 'pieces of places' and such processes contributed to the ways people came to recognise themselves, and others, as members of distinct but interconnected communities.

That such communities were part of wide scale networks of affiliation stretching over both land and sea may implicitly be suggested by the concentration of axes and non local flint forms at Gleaston, Urswick and on Walney North End and Sandscale. Both areas are in estuarine locations; Birkrigg overlooking Morecambe Bay (figure 9.38) and Walney North End and Sandscale, the Duddon (figures 9.49, 9.50). South Walney is situated where the Morecambe Bay estuaries meet the Irish Sea, and on a clear day, Anglesey is visible to the south. Walney North End is at the point where the Duddon estuary opens out to meet the Irish Sea, across which the Isle of Man is often visible. Across the Duddon sands the skyline is dominated by Black Coombe, and the site of the Lacra stone circles on Great Knott. A short distance across the Duddon sands to the west coast, the henge at Gutterby is 12 km north of Walney North End, with the monument complex at Urswick a similar distance to the south east.

Figure 9.49. Sandscale (excavated site on ridge in foreground) with view up the Duddon estuary towards the central fells.

Figure 9.50. View of Black Coombe from Walney North End. On a clear day, the Isle of Man is visible to the west.

Although the evidence is problematic, Walney and Sandscale may have been central to the relationship not only between communities on Furness, but also across Morecambe Bay, the central fells and the west Cumbrian coast. On the basis of the presence of porcellanite fragments from Antrim at Walney North End, Furness may also have been central to ties stretching across and along the Irish Sea. Across the Duddon and along the west coast, large scatters in estuarine locations such as St Bees Head, Eskmeals and Seascale may be analogous to the occupation evidenced on Walney. That these also were tied into broader networks of interaction is suggested by the presence of significant amounts of non local flint and a Ronaldsway axe from Bailey Ground (Cherry 1967), close to the estuarine circle at Grey Croft.

As discussed in chapter seven, the landscape settings of stone circles in Cumbria make clear reference to water sources, and the meetings of major valley systems. The locations of these features clearly drew on earlier traditions of gathering in such contexts, and are clear testament to the existence of different scales of community. Stone circles on the west coast of Cumbria, such as Birkrigg, Grey Croft and Lacra are clearly located to reference estuaries and the coming together of dispersed communities, in particular places, to confront the wider world. So not only was the occupation on Walney was located in order to exploit a variety of different localised resources, and the natural harbour afforded by Walney Channel, its physical location may have been central to the coming together of wider networks of community on the west coast of Cumbria and beyond.

Conclusion

Across Cumbria, the architecture and settings of monuments and the ways they were constructed and used share many common themes. Monuments and traditions of dealing with the dead were part of shared cultural repertoires evident across many areas of Britain. In terms of occupation practice, although there are similarities across and between regions, patterns of movement and residence are essentially local and vary across different landscapes. Occupation and monument practice result from different sets of localised traditions, tied closely to the uplands, lowlands and routeways which characterise individual valley systems. Communities moved around and inhabited different areas drawing on the availability of particular resources and also the ways these places had seen used in earlier periods. Lithic scatters alone are a blunt instrument for understanding the statics and dynamics of occupation practice over the Neolithic and Bronze Age. However, when considered in conjunction with the distributions and settings of monuments, evidence for the appropriation of 'natural' features and the characteristics of the landscapes in which they were situated, it is possible to forward a broad model of occupation and understand something of the nature of settlement practice.

The Morecambe Bay peninsulas evidence a number of shared traditions. The limestones

formed prominent landmarks with which people identified themselves. They also provided contexts through which pieces of places and pieces of people could be returned into the earth, in ways that in other areas may have been achieved through different means. That elements of depositional and monumental practice were shared across the southern and eastern limestones is testament to extensive networks of communication and cultural affiliations across relatively wide areas. The articulation of the 'local' and the 'regional' worked in different ways in different places. From Furness, networks of contact stretched in every direction and everyday occupation on the peninsula meant that constant reference was made not only to aspects of the local landscape, but also to the world beyond. Alongside the production of a regional sequence of landuse, occupation, monuments and deposition practice across the Neolithic and Bronze Age, these themes form the basis for discussion in the concluding chapter.

Chapter 10: Local and regional traditions

"From the topographic settings and architecture of monuments to excavated sites, lithic scatters, environmental records, landscape surveys and monument distributions, the evidence can be approached at local, regional and inter-regional scales. By tacking back and forth between these scales it is possible to look at the social construction of community at different levels; the ways people moved and organised themselves across local and regional landscapes, and the ways and places in which they came together. Through detailed investigation of different classes of evidence, we can begin to understand some of the ways localised traditions drew on those of the wider world and how this changed over time. Only then will it be possible to assess how these practices articulated with the larger scale social processes evidenced in other areas" (chapter two, page 23).

Introduction: scales of analysis

At the outset of this thesis, the need for an integrated synthetic study of the prehistoric landscapes of Cumbria was established. The narrative produced would have to result from a multiscale analysis set within a coherent intellectual framework. This meant not only working with an extraordinarily varied dataset which needed far more basic sorting than was envisaged, but also situating and analysing this material in a landscape context. Approaching the evidence from different geographical scales has allowed exploration of the ways the varying landscapes of Cumbria were occupied, drawn on and appropriated by prehistoric communities. Through an integrated and holistic approach, it has also been possible to demonstrate some of the ways monument construction and depositional practice articulated with seasonal patterns of occupation and landuse.

As discussed in chapter two, we often approach analysis of the prehistoric record from static perspectives. Only through looking at all of the evidence at different scales has it been possible to produce an integrated regional study. Although working through the data has itself been problematic, what was unclear at the outset of this research was that *writing* a regional narrative is an incredibly difficult process.

The difficulties of writing any sort of regional account can be illustrated by the ways people have tried to capture the character of Cumbrian landscapes. The Lake District has attracted the attentions of writers, poets and painters since at least the eighteenth century. Notwithstanding books based on the lives and works of the lakeland poets, galleries and shops are filled with paintings, tour guides and descriptive and romantic accounts heavy on prose and metaphor (see Nicholson 1955; 1972; Edmonds 2004). What is common to many attempts to get across the character of the region, or aspects of its history, is that few are particularly successful. Whilst many accounts romanticise Cumbria as a 'rustic' backwater on the edge of Britain, its history

and character are defined by local and regional traditions mixed with 'outside influences'. The boom and bust of the cloth trade, mining, slate quarrying and ironworking, the rise of the Picturesque, the Romantics, and in particular the tourist industry has affected not only the nature and perception of Cumbrian landscapes, but also its inhabitants:

> "Travelling is a reciprocal activity. Or, to put it in terms of grammar, 'to visit' is a transitive verb: it needs the visitor and the visited. In the case of the Lakes, the visited was not just a place but a people, and the rise of the tourist trade was due as much to the wish of the inhabitants as that of the tourists themselves, as much to conditions inside the Lakes as to fashions outside" (Nicholson 1955: 11).

A successful regional narrative therefore needs not to be solely an account of a region. Rather, it should be an account of the ways localised histories and traditions stemming from the very character of the landscape became enmeshed within wider social and political trends. Nicholson went some way achieve this aim. Though topographic description, historical accounts, plays, poetry and prose (e.g. 1955, 1972; Curry 1994), he spent a career experimenting with different literary media. However, based on the personal and physical experience of living across Cumbrian landscapes and intimate knowledge of its people and their histories, he himself admitted his work was not always successful (1972).

If generations of literary authors have found it difficult to get across the character of Cumbria, we have to ask if the ways we interpret and write about the prehistoric record can successfully capture the nature and scale of life as it was lived across specific landscapes and in relation to broader trends. Not only do we have to create narratives from cumbersome datasets divorced from their original contexts, reliance on the timescales and geographies of typology and classification is obstructive to understanding the articulation of local and regional. The construction of linear narratives is problematic because it is difficult to capture the character and diversity of landscapes, but also, the ways we approach archaeological data tend to separate people from the landscapes in which they lived. As such, before outlining a regional sequence, it is necessary to explore some of the ways that the articulation of local, regional and wider traditions are evidenced in the archaeological record, and how these can be understood in the context of routine landscapes.

One of the main concerns of *The Lakers: The Adventures of the First Tourists* (Nicholson 1955) was to discuss the ways perceptions of the Lake District landscapes have changed over time. The book was concerned more with the *distortions* of landscape perception rather than the objective truth;

> "...but because we can only measure change in relation to that which does not change [the physical landscape], it will help us to understand how people looked at the Lakes if, first of all, we look for ourselves, though we must remember that our vision may be just as subjective in our own way as was theirs" (1955: 1).

Nicholson's approach brings us back to one of the themes explored in chapter two; although we can never grasp the specifics of the ways people understood themselves in relation to the land, taking the physical landscape as the basic unit of analysis allows exploration of how the temporalities of occupation were caught up in social life. Drawing on the local, the intra-regional, the regional and the wider world, the social and geographical scales at which communities operated overlapped in many ways. Although life is always lived in the present, across different times and places and in a variety of social settings, it is also played out with reference to the past and in anticipation of the future. Many of these concerns are fossilised within the archaeological record. It is the scales at we chose to interpret them which separate grand narrative accounts from studies based on the specifics of local landscapes.

Chronology, history and temporality

One of the central concerns of thesis has been to present a narrative set in the middle ground between conventional scales of interpretation. Looking at how local temporalities articulated with the wider traditions that characterise the Neolithic and Bronze Age at a national scale has meant it has been possible to understand something of the nature of regional traditions and change over time. However one of the issues the discussion has brought out is that the linear timescales with which we work in the present fail to articulate with those across which prehistoric lives took place (e.g. Bradley 1987; 1991a, 2001a, 2002a; Ingold 1993; Gosden 1994; Barrett 1994).

At a basic level, the perception of time can be split into three overlapping stages. For the purposes of this discussion, these can be termed temporality, history and chronology; temporality being routine cycles of occupation, history being understandings of the ways temporality created meaningful places, and chronology being the ways that histories are evidenced, and ordered and arranged by us, in relation to the archaeological record. Put another way, these can also be understood as relating to the scales and longevity of memory; the *physical* time of routine experience, the *generational* or genealogical time of particular social groups, and the *mythical* time of social memory and tradition. Only through understandings of the ways these different timescales collapsed into each other is it possible to look at the ways routine landscapes were understood, drawn on and reworked.

One of the central concerns of this research has been the identification and analysis of time depth in the archaeological record. Crucial to landscape scales of analysis is the recognition that in all but rare circumstances, the evidence that we work with is the product of long term histories. Monument complexes for example at Long Meg, Birkrigg and Shap attest to the continued use and reworking of particular places over long periods. The persistence of these places can be seen to transcend generational time (e.g. Bradley 1987, 1991b, 2000a, 2002a).

Although individuals might have been unaware of how long certain rituals or forms of deposition had been taking place, when the first funerary cairn in a cemetery was constructed, or how understandings of certain practices had changed over time, they were likely to have been understood to be linked to the mythical past. Taking proscribed forms often outside the realms of everyday life, ritual practice can naturalise changes in social formation (Bradley 1991b, 1998; Barrett 1994; Gosden 1994). This means what we identify as long term traditions evidenced by the archaeological record were mutable, and understandings of the pasts to which particular places or monuments referred were likely reworked over time (e.g. Evans 1988; Edmonds 1993, 1999; Bradley 2002a).

Another of the ways in which it is possible to work through aspects of social change is through looking at the relationship between communities and what we classify as the natural world. In the broadest sense, this relates to the conditions in which people lived and the places that resources were exploited. However, looking at how aspects of the landscape were referenced and appropriated has allowed some understanding of the senses of meaning attached to particular places. The evidence discussed demonstrates that it can be unwise to draw sharp distinctions between 'nature' and 'culture' as they were inextricably linked.

Figure 10.1. Encounters with mountains. Photo: Mark Edmonds.

Encounters with mountains

In order to illustrate the overlapping scales of social life, the fells that dominate most accounts of Cumbria, as well as the physicalities of the region, are an appropriate point of departure. Not only did the fells work in relation to people in different physical contexts, they also tied into different scales of generational and mythical time. The physical significance of the Cumbrian mountains works at different levels. The most prominent landmarks in the region, they form the backbones of and backdrops to many different landscapes. Mountains such as Coniston Old Man, the Langdale Pikes, Scafell, Skiddaw and Helvellyn can be experienced in many ways; they take different forms when encountered close up, or seen at a distance, appearing and disappearing with the changing weather, and from points on routes between different places (figure 10.1). At a regional scale, mountains form barriers to movement and communication. Serving to define the geological and topographical character of different areas of Cumbria, they acted as reference points and also provided resources exploited by prehistoric communities. For much of the Neolithic and Bronze Age, the fells were visited over the course of seasonal routines. Such visits required journeys, and these journeys created certain temporalities for experience.

As has been discussed, the physical layout of Cumbria has traditionally impacted significantly on the ways life has been lived; not only in relation to what Wordsworth described as the 'cartwheel' of valley systems radiating from the central fells, but also the variety of topographies within. The landscapes of the coastal fringe are characterised by lowland mosses with estuaries and creeks leading to the rockier terrain of the inland valleys. From the coast of the old county of Cumberland, these lead into the dales of the Derwent, the Esk, the Irt, the Ehen and the Duddon, towards the lakes and the high ground beyond. In the south, the coastal mosses of Lancashire-north-of-the-Sands are dominated by lowlying limestone fells. These lead along shallow wetland valleys towards the lowland hinterlands along the Crake and the Leven, to Coniston Water and Windermere then into the central fells. Westmorland is largely landlocked, dominated to the west by the central fells and to the east by the Pennine ridge. Here, life is lived along the floodplains, upland limestones and valleys of the Eamont, the Lowther, the Eden, the Kent and the Lune.

The valley systems and topographic zones within each of these regions presented a diversity of potentials to prehistoric communities; different configurations of lowlands, uplands, vegetation and waterways with different histories of use. Informed not only by the topography of individual valleys and the routeways between them, movement and occupation was also based on tradition, and knowledge of what particular places had to offer. Journeys between camps and clearings along coasts or floodplains, up the valleys and into the uplands meant following long established paths and trackways, learning the best places to cross becks and ghylls, and

where particular resources would be available. Along these paths, people would recount myths and stories attached not only to mountains, rivers, lakes, outcrops and clearings, but also to the people that had gone before.

The existence of long term and repetitive traditions of movement and landuse in the fells and the continued importance of particular places is demonstrated not only by the pollen and monument record, but also by evidence for stone axe production. On the basis of currently available dates, the axe quarries were in use for around a millennium, a timespan also attested by pollen evidence. Alongside monuments constructed in important points of transition on routes into the uplands, many set to reference the mountains that towered above, such places remained in use well beyond the realms of generational time.

Once in the fells, journeys to the higher peaks may have been undertaken by specific members of the community (Edmonds 2004). Climbing precipitous paths, crossing becks and scrambling across screes to the quarries would have taken on special significance. Reaching the summits, for example of Stickle Pike, Scafell or Glaramara, the views afforded took in wide expanses (figure 10.2). Offering different outlooks on the layout of the world below, beyond the landscapes of everyday life, journeys to these places would have affirmed the identities of different social groups and the individuals which made them up. It is for these and many other reasons that mountains often assume totemic significance.

The physical experience of visiting the axe quarries, even in the present day, brings to mind the experience of the distant and mythical past (Figure 10.3). Over the Neolithic, walking over quarry waste, picking up discarded hammer stones and broken roughouts, people worked alongside each other in places where the past was clearly and physically evident in the present.

In Cumbria, stone axes provide a context through which to bring together understandings of the relationship between people and the landscape. That monuments and aspects of the natural world were enduring places suggests some of the ways that routine experience articulated with longer term pasts. The landscape itself was caught up in patterns of landuse, resource procurement, monument construction and ritual practice that acquired physical, generational and mythical histories.

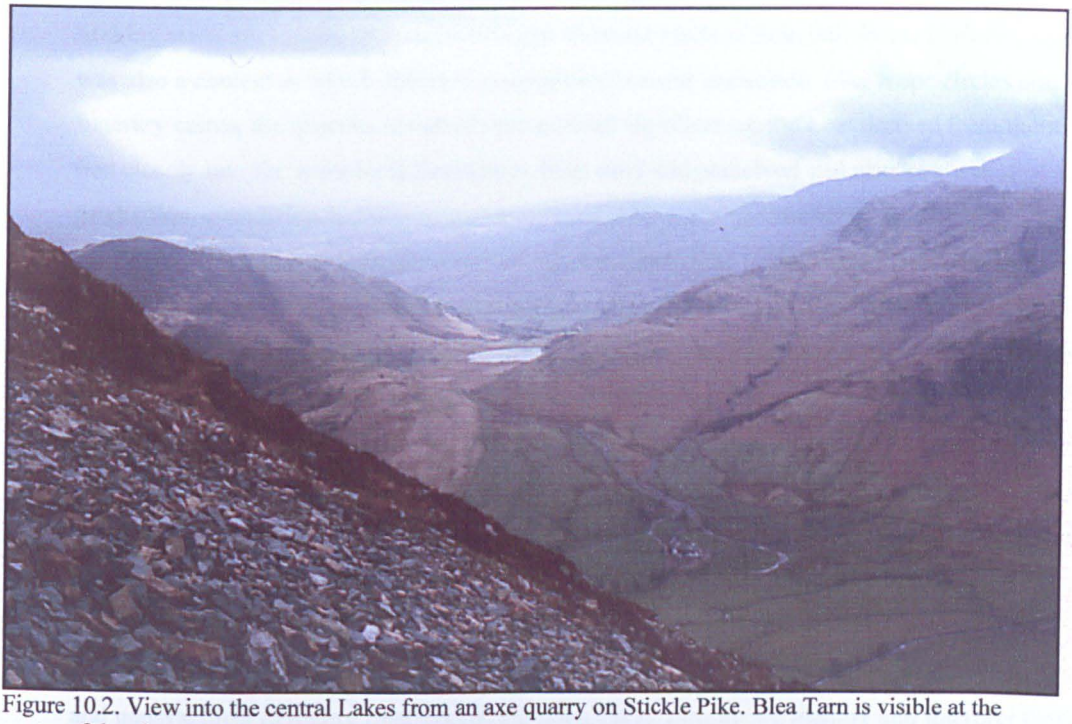


Figure 10.2. View into the central Lakes from an axe quarry on Stickle Pike. Blea Tarn is visible at the centre of the picture.

Figure 10.3. Walking over quarry waste. Photo: Mark Edmonds.

The nature and identification of local and regional traditions

Making stone axes in the mountains brought different kinds of time into focus. However this was also a context in which different geographies became enmeshed. Like stone circles and funerary cairns, the quarries assumed monumental significance; the axes derived from them tied closely into the ways local landscapes were used and perceived and also how axe production, circulation and deposition articulated with the larger worlds of the British Neolithic. At a regional scale the distribution of working sites to the west, south, east and north of the central source suggest that communities approached from different directions. This likelihood is also demonstrated also by the presence of non-local hammer stones at source and the distribution of roughouts and polished axes along valleys radiating from the central fells (Bradley & Southren 1990; Bradley & Edmonds 1993; Edmonds 2004). Returning to the significance (and visibility) of mountains, this means they can be understood in similar ways to major ceremonial monuments; places of local, regional and inter-regional significance serving as markers for places where people travelling in different directions might come together.

If axe sources and mountains were times and places where different scales of social, temporal and geographical existence overlapped, the question is, how do we identify and interpret these geographies? How can we untangle the ways in which local, regional and inter-regional traditions articulated? The easy option would be to fall back onto established academic practice and present an abstract narrative pitched largely at a national scale. Given there are similarities in the character of monuments, material culture and even depositional practice at that scale, this has its attractions. However as has been established, there are also important differences manifested at both local and regional levels. These have to be central to any account.

Gaining knowledge of the wider world though the exchange of ideas and material culture worked in such a way that people came to recognise themselves as members of distinct but interconnected communities. However, shared material culture repertoires should not be understood as shared understandings (Thomas 1998) and 'exotic' implements or materials may have been drawn on and understood in different ways. An individual in Furness or the Eden Valley signalling their place in the local community through the use of a stone axe from Ireland or a barbed and tanged arrowhead made from Yorkshire flint was also, and perhaps unknowingly, referencing wider traditions of which they may have known very little. Understandings of ideas and the significance of material culture may have varied from place to place, from person to person and from community to community. If social change could only occur with reference to the past, the introduction of new ideas and material culture would have been incorporated into existing value systems and localised traditions. This means that the articulation of the 'local' the 'regional' and the 'national' worked in different ways in different places.

The identification of regional traditions has its complexities. To take the variety of monumental, depositional and occupation practice demonstrated by the evidence, for example from Furness, and expand these across Cumbria would brush over the diversity which characterises the prehistoric record and has informed the very nature of this thesis. It is only through consideration of the physical landscape and how the layouts of valley systems tied into the wider geographies of social life, that we can begin to understand the character of regional traditions.

Cumbria incorporates many different landscapes, each with distinctive topographies and varied configurations of monuments and occupation evidence. Situated in geographically diverse areas, these would likely have been involved in different networks of contact and communication. Any given area would have had people coming in and going in every direction, bringing in and taking out ideas and material culture. Regional traditions were therefore configurations of a mess of different concerns and practices. Based not only on the mythical and occupation histories of local landscapes, they were drawn from contact with neighbouring communities and tied into broader inter-regional trends.

Given these complexities, to what extent is it possible to recognise any coherent patterning in the archaeological record? As has been discussed, not only are there groups of henges and stone circles which broadly conform to the physical layout of the county's regions, there are localised clusters of specific monument forms. The distinctive small paired circles on White Moss, Low Longrigg and Lacra, for example, are similar in setting and layout and all were situated with reference to earlier circles. On Town Bank and Stockdale Moor the pear shaped 'long cairns' might be understood as localised variants drawing on the form and location of Samson's Bratful. Although these monuments can be understood to draw on wider concerns, they are also all products of localised traditions. These drew on the past importance of particular places and architectural forms in locally and historically specific ways.

There is some suggestion of variation in monument form either side of the central fells. As discussed in chapter nine, shared traditions can be identified across the southern and eastern limestones. Neolithic long cairns such as Raiset Pike and Skelmore Heads appear architecturally similar, and the limestone 'pavement' cairns at Sizergh 2, Birkrigg Disc Barrow and Crosby Crosby Garrett CLXXIII share depositional and architectural traits. Similar themes may be demonstrated in the ways large open circles were reworked in the Early Bronze Age. Although their final forms can be understood to have resulted from similar processes, that the 'Burnmoor' circles of western Cumbria and the so-called 'concentric' circles of the east have been classified separately in the past may demonstrate localised interpretations of broader traditions.

Across Cumbria, although there appear to have been localised and regional variants on similar themes, drawing distinctions between different areas is impossible not least as there are some real problems of coverage. That there are more similarities than differences in monument form illustrates that monuments were set within broader traditions. Although the evidence is problematic it does suggest that some monuments to the east and west of the mountains drew on themes shared with those along the Irish Seaboard and across the Pennine ridge. In some ways this observation brings us full circle, returning to culture historical interpretations and the wide scale exchange networks suggested by the distribution of stone axes. However, if we understand that these distributions are the products of localised histories and traditions, and interactions between people at different social and geographical scales then we may be in a position to understand how the routine practices of everyday and seasonal life in Cumbria tied into to what we understand as the wider trajectories of the Neolithic and Bronze Age.

A regional sequence

> "We must now gather up the results of our survey and offer a general sketch- very tentative, and presented merely as a working hypothesis to be tested by fieldwork and excavation..."
> (Collingwood 1933: 189-90).

The following section lays out the key themes established over the course of this thesis and illustrates the unfolding of the later prehistoric sequence in Cumbria. The construction of this narrative is thwarted by some major chronological problems, not least in that it is difficult to identify a point from which to begin. In coastal contexts, evidence for occupation in both the Early and Later Mesolithic has been obscured by the Postglacial marine transgressions. With the exception of Early Mesolithic implements found in caves, Later Mesolithic radiocarbon dates from pits at Monk Moors and heathland burning on the Eden floodplain little is known of the character and scale of occupation.

Although Later Mesolithic lithic assemblages are inseparable from those of the Early Neolithic, the very existence of 'mixed' scatters illustrates a continuity not only of technology, but of place, over the Mesolithic-Neolithic transition. Echoed by the environmental record, the evidence illustrates the continued use of particular places. What this might indicate is that the seasonal use of particular wild resources continued into the Neolithic. Although the introduction of domesticated plants and animals would have meant significant changes in the ways people became tied to particular places, it seems likely that the predictable routines that came with domesticates were incorporated and naturalised within existing traditions of occupation.

Lithic evidence from lowland and coastal contexts illustrates that into the Neolithic, occupation shifted across areas from which a variety of different resources could be exploited; along ridges and above mosses close to the sea, in sheltered valley bottoms, on floodplains and around lowland tarns and estuaries. Environmental records suggest woodland management from the Later Mesolithic, with cultivation occurring close to the coast and in the Eden Valley around 4000 BC. Although evidence for inland occupation is limited, the use of valley meetings such as those at Gleaston and Breastmill Beck in Furness suggest repetitive movement up and down valleys, with occupation focussed on sources of fresh water. In upland areas, the environmental evidence suggests grazing related clearance. Given the seasonal conditions inherent to occupation of the high fells, this can be taken to suggest their use for summer pasture, with both wild animals and domesticates retreating to more sheltered areas in the autumn months. The timing of these movements was probably influenced by the ripening of crops and fruits. This may be suggested by the presence of blackberry and elderberry seeds in the Early Neolithic tree throw pit at Holbeck, together with carbonised wheat and burnt hazelnuts.

As well as the new concerns over land and time which arose from the relationship that developed between people and domesticates, routine life brought about encounters with others. Not only were there chance meetings and collaboration in the practical activities that made up day to day life, these encounters also took place at more specialised times and places. The journeys taking communities between landscape zones were marked, in some areas at least, by long cairns. Although almost nothing is known about their chronology, they were constructed in established places along known routes between the uplands and lowlands, and like at Heathwaite, Raiset Pike and Samson's Bratful, with reference to prominent outcrops and watercourses. Acting also as orientational markers, it is likely that such features, the natural 'monuments' of the Mesolithic, were drawn on to illustrate continuity with the past. Not only this, the construction of built monuments can be understood to reflect concerns with marking out the connections between people and areas of land or grazing brought about by the introduction of domesticates.

At wider social and geographical scales, seasonal movement also brought dispersed communities together at enclosures. Like long cairns, the specific chronologies of these monuments are unknown. Skelmore Heads and Howe Robin are situated close to long cairns and alongside Carrock Fell have close associations with stone axes, tying them into localised concerns as well as the wide scale social exchange networks of the Early Neolithic. Alongside their locations at the heads of valley systems, their physical size is testament to the collaboration of large scale communities.

Not all of the places where people came together were marked by constructed monuments. At the axe quarries in the central Lakes, in coastal contexts or where rivers met, communities came into contact with people coming from different directions. Meetings at monuments and other places may have meant the exchange of axes and animals brought down off the fells, as well as the exchange of ideas and material culture brought in from the wider world. Into the Later Neolithic, the existence of such gatherings is more clearly demonstrated by the construction of henges and large stone circles, formalising the earlier use of estuaries, the meetings of valley systems, or built close to earlier monuments. Across the county, these monuments occur in different configurations, indicating the unfolding of localised sequences. Although their chronology is problematic, they may represent points in processes begun in the Middle Neolithic with the construction of lowlying enclosures such as those at Long Meg and Summer Hill.

The distributions, settings and dimensions of henges and stone circles suggest they operated at overlapping scales; whilst the larger monuments may have taken over the roles of earlier enclosures, others may have been similar in scale to long cairns. The smaller and more 'localised' stone circles illustrate continuity in landscape use, marking places of physical, social and seasonal transition between the fells and lower lying areas. Compared to the numbers of known long cairns, their proliferation suggests the communities which came together at ceremonial complexes were splitting off into more discrete areas of the routine landscape. Into the Later Neolithic, distinctions were drawn not only between landscape zones, but also between the individual valley systems which make up the region.

The distribution of stone circles illustrates an important point in the process leading to the increased structure of movement and residence into the Final Neolithic and Early Bronze Age. Alongside their smaller physical scale, the proliferation of monuments across the landscape illustrates an increasingly localised focus. The variety of settings in which these occur; along established pathways, on ridges and scarps, overlooking watersheds and close to earlier monuments, suggests that important places on journeys became increasingly marked and appropriated. Together with the erection and decoration of standing stones and prominent earthfasts, these monuments suggest structured and formalised movement. Often drawing on natural features already important in social memory and identity, like the deposition of human remains in caves and outcrops, these monuments drew on and referenced the pasts of individual communities. That their construction and embellishment signalled connections between localised communities and particular places meant they provided important foci in the processes leading to a shift in tenurial focus into the Bronze Age.

Environmental sequences illustrate that in both upland and lowland contexts, places that had seen Neolithic agriculture continued and intensified in use and in the Early Bronze Age this spread into other areas of the landscape. The long term cyclical nature of management, cultivation and clearance meant that in the uplands, clusters of cairnfields grew up between becks and rivers, many associated with their own ringcairns and funerary monuments. Evidence from lowland areas suggests similar themes were played out. Reflecting concerns with appropriating places of past significance, burials were placed in earlier funerary cairns and in natural features close to occupation areas. That these monuments (constructed or otherwise) seem to have operated as familial plots suggests an increasingly localised domestic focus. If the funerary monuments on routeways were constructed as points on journeys and not established under conditions hinged on persistent occupation, those more closely associated with cairnfields and lowland occupation areas illustrate that patterns of residence became focussed on particular places.

At a localised scale, individual parcels of land and monuments with which they were associated were often situated immediately adjacent to others. Working in these places would have involved daily encounters and shared practical activity. Not only this, communities, or parts of communities continued to move on a structured seasonal basis, and the journeys involved would have required planning and collaboration. People and animals followed established routeways between the uplands and lowlands, camping in places that had formed foci for occupation in the past. In some contexts these journeys were carried out for specific purposes. These involved the exploitation of localised upland stone sources and in coastal and riverine contexts, occupation occurred where flint and other resources were available. As in earlier periods, these were the places where people came into contact with others and in some cases were marked by major ceremonial monuments.

If the monument record suggests that individual communities saw themselves as small groups tied to particular places, they also remained within wider social worlds. The dispersal of communities across the landscape was mirrored by the fragmentation and transformation of people and other substances evidenced by the depositional record; not only in the domestic sphere but also in association with monument complexes. The articulation of the 'local' and the 'regional' is evidenced by the settings and scales of monuments used into the Early Bronze Age. Focussed on watercourses and the routeways they provided, henges, stone circles, ringcairns and funerary cairns formed networks of places and marked routes. Their settings can be understood as a metaphor for the different scales at which these communities operated. The configuration of springs, becks, rivers, estuaries and the sea are clearly marked by monuments and formed foci for the ways small scale groups understood themselves in relation to wider social worlds. If the small monuments close to springs and beckheads focussed on the

expression of localised identities, ceremonial complexes where rivers met represented the concerns of larger communities coming together. Additions to ceremonial complexes, the reworking of old monuments and the construction of new ones across the occupied landscape, together with the deposition of token remains in both domestic and overtly ceremonial contexts suggest the dead and the past were drawn on in the negotiation of social tensions. These were concerned not only with the affirmation of ties between people and place, but also with marking out and coming to terms with the changing social, temporal and geographical scales at which communities operated into the Bronze Age.

Discussion

The reconciliation of different scales of existence; geographical, social and temporal, is extremely difficult to achieve within a linear academic narrative. Given that these were a fact of life in prehistory as they are today, this illustrates significant problems in the ways and scales at which we often approach the prehistoric record. As has been demonstrated, if we are to understand how ritual and routine lives were played out across local and regional landscapes and how this changed over time, then we must resist the desire to forward simplistic synthetic accounts of the Neolithic and Bronze Age at a national scale.

Across Britain, although there are broad similarities in prehistoric monument style and material culture at local, regional and national scales, there are also some strong differences. The process of classifying and grouping monument styles has been detrimental to understandings of the places these features occupied in the landscapes of the communities that built and used them. The construction and use of monuments reflect concerns with the articulation of different scales of community. This means that looking at their settings and associations and the ways these changed over time can illustrate more of the character of occupation than adherence to the rigidities of traditional academic classification.

According to conventional wisdom, the Early Bronze Age witnessed changes in the scale and distribution of monuments, together with the introduction of new material forms, signalling a clear shift from earlier periods. However as has been illustrated, reliance on typology has masked a great deal of continuity in landuse, occupation and depositional tradition. Many of the 'new' practices suggested by material culture and monument architecture were used in relation to localised histories and this allowed the naturalisation of change within existing traditions. Attaching our narratives of social change to traditional typologies has masked the subtleties of social process. At a fundamental level, monument styles and packages of material culture form the basis of our period distinctions and concomitant models of social change. By retaining them, we are left in a position where it is impossible to confront understandings of its nature. Instead, we should perhaps look at the changes between the fifth and second millennia

BC as gradual and cumulative processes; social change always occurred under localised conditions, and there were few clear breaks from the past. Only through consideration of the ways long term local traditions drew on and articulated with those of the wider world will it be possible to further understand the different ways, and scales, at which people made sense of the routines and temporalities of the world around them.

Further work

Although it has been possible to forward a regional sequence through the use of an integrated approach to Cumbria's prehistoric record, it remains that there are some major problems of chronological security. Each of the categories of evidence discussed throws up specific methodological and interpretative issues. Through pollen sequences, lithic assemblages, monuments and material culture, the most significant of these is the lack of close dating. Focussing on the identification of continuity and change from the fifth to the second millennia BC has meant it has been possible to forward a 'floating' regional sequence. Those few radiocarbon dates that do exist have been used to illustrate specific points within the long term processes identified. However, it remains that the evidence precludes discussion of many questions relating to chronologically specific aspects of Cumbria's prehistoric record.

One of the central themes of this thesis has been that understandings of regional and local traditions should not be extrapolated *solely* from national typologies or evidence from other areas. In Cumbria, this is illustrated in that long held interpretations of the character and chronology of landuse, occupation, monuments and burial traditions have been thrown into question by recent work. Among others, issues such as the dating of collared urns (Bewley *et al.* 1992; Wild 2003), the chronology of landuse in the Eden Valley (Skinner 2000) and the excavation of a Neolithic timber circle sealed beneath the Oddendale ringcairn (Turnbull & Walsh 1997) illustrate a clear need to reassess the 'received wisdom' of traditional chronologies and typologies at regional and national levels. Although this thesis has gone some way to highlight these issues, this can only be achieved through further research and excavation. The following section outlines how some of the chronological and other problems brought to light by the present research should be addressed in the future.

Environment

- Further detailed environmental work is imperative in order that the results of early pollen analytical studies are revised in line with modern dating and interpretative methodologies. This should involve the reinterpretation of previous work as part of a broader programme of radiocarbon dating existing material. Sampling and close analysis of sedimentary contexts close to known prehistoric sites should also take place.

- Pollen evidence is poorly represented between coastal and high upland contexts. The results of Skinner's (2000) work in eastern Cumbria have clearly demonstrated that there are appropriate sedimentary contexts in the middle ground between these areas and these should form the foci for future studies.

- Future excavation of prehistoric sites should include the sampling of environmental material for pollen analysis and the identification of macrofossil and faunal remains. Bulk samples from stratigraphically secure feature fills and sealed ground surfaces can provide much needed dating evidence, information regarding diet and subsistence regimes as well as that regarding the character of the contemporary landscape.

Cave sites and natural features

- Palaeolithic/ Early Mesolithic activity is suggested by a number of cave excavations which at present remain entirely or incompletely unpublished. These sites are potentially nationally important, but remain poorly understood. Assemblages from such contexts are in need of full characterisation, dating and publication.

- Radiocarbon dating of human bone from cave sites and other natural features is important to further ascertain the nature of depositional and burial traditions.

- Excavators should be made aware of the potential for prehistoric and later material to have been placed within prominent and/or sub-surface geological features. Curatorial bodies should ensure such features see appropriate investigation.

Lithic scatters

- Methodologically secure transect based programmes of surface survey are important to establish the presence and absence of lithic scatters across different topographical zones. Where ploughing has been limited, these could also provide contexts for excavation.

- As the majority of previously collected assemblages have been collected as a result of erosion and often contain material of mixed date, the identification and excavation of stratigraphically secure and scientifically datable material in association with lithic assemblages is imperative.

- A number of unpublished excavations and fieldwalking programmes have taken place. The characterisation and publication of this material is important for furthering understandings of technology, chronology and landscape use.

- The close analysis of the Cherry collections has the potential to clarify technological distinctions between Later Mesolithic/Early Neolithic technologies and those of the Later Neolithic/Early Bronze Age. Re-interpretation of this material in line with contemporary approaches is critical to altering outdated understandings of the region's lithic record.

- Existing lithic assemblages occur in a variety of local and non-local raw materials. Raw material characterisation of the available lithic resource may illustrate aspects of the intra and inter-regional exchange of raw materials, possibly related to the circulation of Group VI axes.

Polished, roughout, socketed and shafthole stone axes

- As with lithic assemblages, the recovery of stone axes from within stratigraphically secure contexts together with scientifically datable material is imperative. Not only will this help to elucidate questions regarding material associations, the changing morphology of stone axes and the use of non-flint stone artefacts (in particular those of tuff) remain poorly understood.

- Continued monitoring of erosion at and close to stone sources in the central, western and eastern fells could lead to the identification of new working and quarry sites. There is at present no clear understanding of the onset or demise of the production of polished or shafthole axes and excavation has the potential to produce new radiocarbon dates.

- Detailed morphological and petrographic analysis should take place on roughout, polished and shafthole axes held in museum and private collections. At present there is no definitive list or number of axes collected either from stone sources or chance finds in other contexts. Such analyses could help with the identification of stone sources away from the central and western fells and have the potential to elucidate questions regarding the character and chronology of axe production.

Enclosures, stone circles and hengiform monuments

- Although a significant number of large upland enclosures have been identified through field and aerial survey, they are extremely poorly understood. Further survey and excavation are imperative if we are to understand their character, chronology and longevity. These monuments are of both regional and national importance. Even at a small scale, excavation could provide much needed environmental and dating evidence and elucidate questions regarding the region's monument sequence.

- Targeted investigation of conjoined monuments such as those identified through aerial photographs at Long Meg and Summer Hill have the potential to provide important information regarding their chronology and longevity, as well as the relationship between lowlying enclosures, henges and stones circles. As with the upland enclosures, geophysical survey together with small scale excavation could provide significant results at local, regional and national scales.

- At a broader level, the closer characterisation and clarification of sequences of individual sites and wider monumental complexes is imperative in order to bring understandings of such features in line with other areas of the British Isles. Such programmes, based on extant monuments, those identifiable by soil marks and those recorded but no longer visible on the ground, should be undertaken through detailed archival research, targeted geophysical survey and small scale excavation.

Long cairns

- Although over 20 possible long cairns have been identified in Cumbria, none have seen modern investigation. The close characterisation of such features is important to securely establish the presence, chronology and architecture of Neolithic long cairns in the region. This may clarify problems regarding the relationship between long and round cairns and allow further understandings of the relationship between Neolithic monuments and geologically natural features.

Ringcairns and round funerary cairns

- The characterisation of round funerary cairns and ringcairns in the many contexts in which these occur (ceremonial complexes, cemeteries, on summits and ridges and in association with upland cairnfield areas) is imperative. This information would be invaluable to understanding changes in the uses, physical forms, scales and locations of monuments over time. Although much of the excavated evidence is restricted to antiquarian sources, when such features have seen modern excavation they have illustrated long histories of deposition and architectural embellishment. Analysis

should include archival research where recorded excavations have taken place, alongside survey and excavation to further understandings of the chronology and character of burial and depositional traditions.

Cairnfields

- Outside those upland cairnfield areas which have seen detailed survey by the LAU, the information available remains confined largely to antiquarian descriptions. In order that this fieldwork bias is not taken to represent the actual distribution of monuments at a topographic or regional scale, further landscape surveys should be undertaken. These should focus on areas outside the Lake District National Park, in the high fells and in areas of such as woodland plantations and the upland fringe where modern agriculture has not impacted significantly on the archaeological landscape.

- Current interpretations of the cairnfield record are presumptive with classification based on monument morphology. No modern excavation has taken place in such contexts and further characterisation of these features is necessary if we are to understand the chronology and nature of cairnfield occupation and landuse. Close scale survey and excavation of all 'types' of cairnfield features should be undertaken in order to provide dating and environmental evidence, information regarding architectural and depositional traditions, structural complexity and time depth. Although small scale investigations would be extremely useful, large landscape scale projects have taken place in other regions and have yielded successful and significant results.

Future potential

These suggestions for further research are significant and in the present academic, curatorial and financial climate, it seems unlikely many will be confronted in the foreseeable future. There is some hope however. Tackling some of the specific issues outlined above has the potential to be nationally as well as regionally significant. Although few university departments undertake fieldwork in the county at present, there has been a renewed interest in northern and western Britain as a whole. It is hoped that in the future, both small and large scale projects could be organised in the region, set up as collaborative partnerships between universities, local archaeological organisations, the Lake District National Park and other curatorial bodies.

Some of the problems of chronology and fieldwork coverage discussed throughout this thesis stem from the ways that Cumbria's prehistoric record has been treated in the past. However, as with other areas, those more recent excavations which have provided secure dating and material culture assemblages have been derived from development control interventions.

Cumbria's topography and the status of much of the region as a National Park has often precluded large scale development and little archaeological work has taken place in areas with known prehistoric sites or findspots. Outside the bounds of the Lake District National Park at least, this situation has begun to change. As yet unpublished excavations ahead of quarrying and development along the coastal plain have been carried out up to and including 2005. Revealing detailed evidence for burial, deposition and occupation practice across the Neolithic and Bronze Age and into the Iron Age (Mark Brennand pers. comm.) these will provide much needed material culture assemblages and radiocarbon dates.

Whilst development led excavation is limited and the provision of scientifically dated material can in many cases only be achieved through new work, there is a high potential within private collections and unpublished research. There is a strong need to promote positive communication between local archaeologists and regional curatorial bodies. Together with the assessment of museum collections and other archives, it is necessary to critically evaluate these resources in order that they can be drawn on in the future. These issues have seen recent and detailed discussion in English Heritage's *Regional Research Framework for the North West* (Hodgson 2004; Hodgson & Brennand 2004). Providing specific details of the problems and initiatives necessary to furthering knowledge of the region's archaeology, the Research Framework promotes the need for a research orientated approach to be firmly embedded in curatorial practice and to be explicitly promoted through it. The documents also include recommendations for development control procedures and future research investigations. Critical to these recommendations is that where excavation takes place in the future there must be provision for scientific sampling and radiocarbon dating. Information drawn from the present research has contributed to the Research Framework Resource Assessment and Agenda documents. It is hoped that together with this thesis, these will be used as solid bases from which to undertake further targeted research of Cumbria's prehistoric archaeology.

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List of appendices

Appendix 3. Cairnfields, funerary cairns and ringcairns

Concerning sites identified across the southern half of Cumbria, this appendix is split into four sections and details information concerning elements of the upland and cairnfield records.

Appendix 3.1 details the LAU cairnfield typology of upland agricultural settlement discussed in chapter four (Robinson 1988; Quartemaine 1989, 2002; Quartermaine & Leech forthcoming). The cairnfield 'types' described are illustrated in figure 4.3.

Appendix 3.2 details 'simple' and 'complex' cairnfield areas identified across the southern half of Cumbria. As discussed in chapter six, 'cairns' relates to cairnfield areas composed of ten or less individual monuments, 'simple' relates to cairnfields of 10 or more cairns exhibiting little coherent structure and organisation, and 'complex' refers to cairnfield areas with alignments, banks and obviously organised field areas.

Appendix 3.3 details round funerary cairns identified in different contexts across the southern half of Cumbria. These contexts are self evident however in the light of discussions in chapters six and seven 'cairnfield' funerary cairns in appendix 3.3 do not differentiate between those isolated from or within cairnfield areas. This is not always noted on SMR records and only through close analysis (either on foot or with reference to detailed survey plans) is it possible to tell these monuments apart. 'Fellside' funerary cairns related to those where no clear information was available.

Appendix 3.4 details ringcairns identified across the southern half of Cumbria.

Appendices 3.2, 3.3 and 3.4 are based on information derived from the county SMR as of Spring 2002 and provide only summary information. The majority of the monuments listed have been recorded as part of the LAU upland surveys and are to be published in full (Quartermaine & Leech forthcoming). Detailed survey data for cairnfields and associated monuments are available on the SMR. SMR/survey numbers and National Grid References for individual monuments and cairnfield areas are included within the appendices. Due to the size of the datasets involved, the appendices do not include monuments for which there was insufficient locational/structural information. Given problems with the secure identification of particular forms from SMR and survey data based on monument morphology (as discussed in chapter four) the monument 'types' proposed are provisional.

Appendix 4. Excavated monuments and natural features

Appendix 4.1 provides summary information pertaining to excavated monuments and natural features discussed in the text. The majority of the information available for these sites has been synthesised in chapters eight and nine and some of this material has been subject to statistical analysis by Annable (1987). There is little to be gained by attempting to tabulate/quantify the data derived from these investigations. It has been established that many monuments had long and complex histories and similar depositional practices occurred in a variety of different contexts across the Neolithic and Early Bronze Age. Many of the investigations described were undertaken in the 19th and early 20th centuries and lack secure statigraphic/contextual information. The detailed results of more recent excavations are published in full elsewhere and not included here. Radiocarbon dates derived from these excavations and quoted in the text are detailed in appendix 6. The data included in appendix 4.1 includes National Grid References for individual sites (where known), summary description of monument architecture/deposits and published references. Figure numbers are also included where individual sites have been illustrated.

Appendix 5. Stone axes, bronzes and lithic scatters

This appendix concerns the character and distribution of stone axe and bronze finds across the southern half of Cumbria and lithic assemblages derived from the Furness peninsula. As discussed in chapter three, details of the Cherrys' lithic archive (e.g. Cherry & Cherry 1983, 1984, 1985, 1987a, 1987b, 1996, 2002) from the west coast and eastern uplands are not included here. As has been established, there are significant problems with the characterisation and interpretative methodologies utilised and without further work, the published assemblages provide little beyond basic qualitative and locational information. The results of Skinners (2000) field survey are not included (see note below).

Appendix 5.1 details finds of stone axes (polished/unpolished and shafthole) and bronzework across the southern half of Cumbria as recorded on the County SMR as of Spring 2002. This should not be treated as a definitive catalogue of finds form the area. The production of a comprehensive list would require significant archival and museum research and is beyond the remit of the present study. As discussed in chapter three there are significant problems with the character of the evidence. As the majority of recorded finds result from 19th and early 20th century activity the data available is often restricted. Implements recorded as 'axes' in appendix 5.1 relate to those records where the information available does not clearly distinguish between roughout and polished 'celts' or axes. Different perforated forms are described as 'shafthole' axes as the information available does not often differentiate between particular classificatory 'types'. The appendix provides a list of finds with summary descriptions, references and SMR numbers. Most of the National Grid References give only general locations due to the lack of secure information characterising descriptions of many early finds.

Appendix 5.2 details the locations of lithic scatters derived from the Furness transect survey. The appendix includes National Grid References for the centres of lithic scatters and assemblage names/codes.

Appendix 5.3 provides a key to understanding the numeric codes utilised in the lithic characterisation process and explains the layout of the assemblage sheets used in appendix 5.4.

Appendix 5.4 provides information regarding each of the individual lithic assemblages from the Furness transect. The assemblages have been fully characterised and subject to metric analysis however sheets in this format illustrate the constituents of the assemblage more clearly than the original characterisation sheets. The assemblage sheets include the constituents of individual scatters, analysis of reduction technology and waste. They also outline the presence of diagnostic implements and specific technological attributes.

Appendix 5.5 illustrates the frequencies of particular lithic raw materials in each of the lithic assemblages from the Furness transect. As the raw material patterning within and between different assemblages was discussed in chapter nine, appendix 5.5 provides only summary information.

Appendix 6. Environmental data and radiocarbon dates

This appendix is concerned with detailing the pollen sample sites and radiocarbon dated deposits mentioned in the text. Due to the complexities of dealing with both pollen and radiocarbon data and inconsistencies between the ways specialists from different fields disseminate and interpret this material, this appendix provides only summary descriptions and references to the original published/unpublished sources. A full list of radiocarbon dated material and environmental samples from the Cumbrian lowlands is included in *The Lowland Wetlands of Cumbria* (Hodgkinson *et al.* 2000).

Appendix 6.1 details the locations and references pertaining to the pollen sample sites mentioned in the text, together with brief descriptions of interpretations derived from radiocarbon dated samples. Data from Skinner's (2000) pollen sample sites are as yet unpublished and radiocarbon dates cited within this thesis are approximated from a final draft of her PhD thesis which did not include appendices. It is important that this material sees dissemination and it is hoped that full publication of this thesis will include more detailed material derived from Skinner's work.

Appendix 6.2 details the radiocarbon dates from monuments, occupation features and axe working sites mentioned in the text. This information includes site location, radiocarbon dates (as quoted in original texts) and references. Where this information is available, the context of the radiocarbon dated material and lab references are also included.

East	North	Site	Status	Description	Figure Nos.
309900	485300	Annaside	Stone circle	Destroyed circle with 12 stones and a diameter of *c*. 18m. Hutchinson (1794); Eccleston (1972); Waterhouse (1985).	
319200	487300	Ash House	Stone circle	Likely original 22 stones. 2 standing stones recorded by OS (1998), Burl (1976), Waterhouse (1985) probably not part of the circle.	
329230	473960	Birkrigg	Stone circle	Circle of 24m diameter with internal stone setting. Gelderd & Dobson (1914); Waterhouse (1984).	5.4, 5.7, 9.37-39. 9.41.
306010	514030	Blakely raise	Stone circle	Re-erected. Present diameter 16.6m. Original had *c*. 21 stones rather than the present 11. Clare (1975); Waterhouse (1985).	
317370	502340	Brat's Hill	Stone circle	*c*. 40 stones, diameter *c*. 30.4m. 5 internal cairns. Clare (1975); Waterhouse (1985), Burl (1976, 1988).	5.4. 5.7, 7.12-14.
354800	546700	Broomrigg A	Stone circle	Dilapidated circle *c*. 50m diameter, possible stone avenue. Hodgson (1935); Waterhouse (1985).	
329100	523600	Castlerigg 2	Stone circle	2nd circle at Castlerigg recorded by Stukeley (1776). Larger than the extant circle, downslope to west.	
329100	523600	Castlerigg	Stone circle	38 of 42 stones, 32.6 by 29.9m. Northern entrance, rectangular stone setting to south east. Waterhouse (1985); Fraser (1985).	5.7, 7.20-22.
317600	531700	Elva Plain	Stone circle	Diameter 33.5m, 15 stones, originally about 30. Waterhouse (1985).	5.7.
364000	508200	Gamelands	Stone circle	40 stones remain of a circle 44.4m by 38.8m. Stones set in low bank. Ferguson (1882); Waterhouse (1985).	5.7, 7.11.
303340	502380	Grey Croft	Stone circle	Reconstructed circle of 10 stones (originally 12) diameter 27m. Small central cairn. Fletcher (1956); Waterhouse (1985).	5.7, 8.12.
354500	548700	Grey Yauds	Stone circle	'Lost' circle of 88 stones, 47.5m diameter. Remaining outlier. Nicholson & Burn (1777); Hodgson (1935); Waterhouse (1985).	
356820	517750	Gunnerkeld	Stone circle	*c*. 21 stones, diameter 31.8m. Northern entrance. Internal stone setting with emptied cist. Dymond (1880); Waterhouse (1985).	5.4, 5.7, 7.10.
311200	487100	Hall Foss	Stone circle	Destroyed circle, *c*. 23m diameter. 8 large stones in 1794. Eccleston (1872); Waterhouse (1985).	
356800	513300	Kemp Howe	Stone circle	Arc of 6 boulders, estimated diameter 24.4m. Stone avenue. Nicholson & Burn (1777); Clare (1978); Waterhouse (1985).	5.11.
310610	484320	Kirkstones	Stone circle	Destroyed (?)concentric stone circles close to Gutterby. Eccleston (1872).	
314980	481320	Lacra A	Stone circle	8 stones, diameter 15.7m. Dixon & Fell (1948); Waterhouse (1985).	5.4.
315010	480960	Lacra B	Stone circle	6 of 11 stones, diameter 14.7m. Internal cairn. Dixon & Fell (1948); Waterhouse (1985).	5.4.
314920	480970	Lacra C	Stone circle	Arc of 3 stones, estimated diameter 24m. Dixon & Fell (1948); Waterhouse (1985).	7.24.
306500	517700	Lamplugh	Stone circle	Possible large circle of which 6 stones remained in 1842. Estimated diameter of *c*.90m. Waterhouse (1985).	
357100	537200	Long Meg	Stone circle	69 stones, 109m by 93m. Outlier. SW portalled entrance. Dymond (1881); Burl (1976); Soffe & Clear (1988); Waterhouse (1985).	5.7, 5.10, 7.4, 7.27, 7.28
357100	537200	Long Meg 2	Stone circle	2nd circle at Long Meg recorded by Stukeley (1776). Smaller than the extant circle, to the south west.	5.10, 5.27.
317280	502810	Low Longrigg NE	Stone circle	Dilapidated circle of 15 stones, diameter 21.7m. 2 central cairns. Burl (1976, 1988); Waterhouse (1985).	5.4, 7.19.
317250	502785	Low Longrigg SW	Stone circle	9 stones, diameter of 15.2m. Central cairn. Burl (1976, 1988); Waterhouse (1985).	5.4. 7.18.
359200	512900	Oddendale circle	Stone circle	34 stones, diameter 27.1m. Internal stone setting. Waterhouse (1985).	5.7.
304000	522300	Studfold Gate	Stone circle	15 stones, 26m by 33m. Central mound with stone slab. Mason & Valentine (1925); Waterhouse (1985).	

East	North	Site	Status	Description	Figure Nos.
317170	488130	Swinside	Stone circle	51 stones, diameter 28.7m. Portalled entrance to SE. Dymond (1902); Burl (1976); Waterhouse (1985).	5.7, 7.7. 7.26.
345700	519200	Swinside 2	Stone circle	2nd circle recorded at Swinside, archival documents from Swinside farm. Sharon Croft pers. comm.	
317295	502410	White Moss NE	Stone circle	11 stones, diameter 16.2m. Central cairn. Burl (1976, 1988); Waterhouse (1985).	5.4, 7.15, 7.17.
317255	502390	White Moss SW	Stone circle	14 stones, 16.6m diameter. Central cairn. Burl (1976, 1988); Waterhouse (1985).	5.4. 7.15, 7.16.
313425	493860	Whitrow Beck	Stone circle	9 large boulders, diameter *c*. 20m. Unpublished; SMR 31011.	7.6.
310900	484150	Gutterby	Hengiform	Circular ditch, *c*. 35m diameter, with evidence for internal post/stone settings. Unpublished; identified from aerial photographs.	5.8, 5.12, 5.13.
352300	528300	King Arthur's Round Table	Hengiform	Bank surrounding circular ditch. SE entrance. Internal diameter 54m, external 92.5m. Dymond (1890); Bersu (1940); Topping (1992).	5.8.
325800	527900	Little Round Table	Hengiform	A ditch 92 metres in diameter with a north-easterly entrance (Topping 1992)	
351900	528400	Mayburgh	Hengiform	Circular bank with eastern entrance. Internal diameter 90m, external 170m. Internal standing stones. Dymond (1890); Topping (1992).	5.8.
310250	487950	Summer Hill	Hengiform	'Conjoined' ditched enclosures (50m and 30m diameter) with internal post/stone settings. Unpublished; identified from aerial photograph	5.8, 5.12, 5.14, 7.4.
310250	487950	Summer Hill	Hengiform	Circle of stone or timber settings *c*. 30m in diameter. Unpublished; identified from aerial photographs.	

Appendix 1.1. Large freestanding circles and hengiform monuments.

East	North	Site	Status	Description	Figure No.
354800	546500	Broomrigg C	Kerbed cairn	14 stones, diameter 15.6m. Kerbed cist cairn, partly destroyed by addition of a large kerbed cairn. Hodgson & Harper (1950).	8.7, 8.8.
357300	539300	Glassonby	Kerbed cairn	Kerbed funerary cairn, max. diameter 15.7m. Collingwood (1901); Waterhouse (1985); Beckensall (2002).	
359600	514800	Iron Hill North	Kerbed cairn	19 small boulders around a central mound, 14.5 by 11.5m. Collingwood (1933b); Waterhouse (1985).	5.6.
315130	481240	Lacra D	Kerbed cairn	Small dilapidated circle *c.* 18m in diameter. Large stone in centre, urn at the foot of an outer stone. Dixon & Fell (1948).	
356300	526300	Leacet Hill	Kerbed cairn	Excavated by Ferguson (1881), cremations, urns, token deposits. Diameter 11.5m, originally 10 stones. Waterhouse (1985).	
349400	522000	Moor Divock 4	Kerbed cairn	10 stones in a bank around the top of a cairn, 11m in diameter. Simpson (1882); Taylor (1886); Waterhouse (1985).	
349300	522200	Moor Divock 5	Kerbed cairn	Disturbed mound with standing stones, diameter 14m. Simpson (1882); Taylor (1886); Waterhouse (1985).	
350340	49880	Potter Fell	Kerbed cairn	Identification of a small stone circle (Plint 1960) probably relates to the remains of a burial cairn recorded by Machell (1691).	
355260	588650	Shapbeck	Kerbed cairn	Also known as Knipe Scar A. Dilapidated structure described as a 'concentric' circle (Turner 1986). Diameter *c.* 22m.	
354970	518270	Wilson Scar	Kerbed cairn	35 low kerbstones, external bank, partially ?paved interior. Inhumations and token deposits on ground surface. Sieveking (1984).	
348300	522200	Cockpit	Large ringcairn	Embanked circle with an internal diameter of 26m. Kerbing on inner face. Taylor (1886); Waterhouse (1985).	6.9.
325130	482990	Kirk	Large ringcairn	Embanked ringcairn, some low internal standing stones/slabs remain. Diameter *c.* 30m. Joplin (1846); Waterhouse (1985).	6.9.
328000	484230	Lowick Beacon	Large ringcairn	Large embanked ringcairn, low internal and external standing stones/slabs remain. Diameter *c.* 30m. Waterhouse (1985).	6.9. 9.42.
328460	496700	Banniside	Ringcairn	Ringbank of *c.* 15m, with internal standing and fallen slabs. Excavated by Collingwood (1912). Waterhouse (1985).	8.13.
369000	480000	Casterton	Ringcairn	19 stones set in an irregular ringbank *c.* 19m diameter. See Waterhouse (1985).	
349600	521700	Kopstone	Ringcairn	Large standing stone set in a ringbank/stone circle possibly *c.* 17m in diameter. Taylor (1886); Waterhouse (1985).	
345700	519200	Swarth Fell	Ringcairn	65 low stones/slabs set close together around a central area *c.* 16m in diameter. Waterhouse (1985).	
326400	494600	Bleaberry Haws	Small kerbed cairn	7 stones arranged in an 'ellipse' 4.7 by 3.7m. Swainson-Cowper (1888a); Waterhouse (1985).	5.5.
354800	546600	Broomrigg B	Small kerbed cairn	Kerbed structure with robbed central pit. 4 of 7 stones remain. Diameter 3.4m. Hodgson (1952), Waterhouse (1985).	
355000	546600	Broomrigg D	Small kerbed cairn	Irregular circle measuring 5.5 by 4.5m. Fell & Richardson (1975); Waterhouse (1985).	
358740	515460	Castlehowe sca	Small kerbed cairn	11 pink granite boulders, diameter *c.* 5m. Waterhouse (1985)	5.5.
359600	514700	Iron Hill South	Small kerbed cairn	9 stones, 7.1m by 6.2m. Remains of possible cist within. Waterhouse (1985); Beckensall (2002).	5.5, 7.35.
357700	537500	Little Meg	Small kerbed cairn	Internal cist surrounded by 11 stones, 5.9m by 4.7m. Dymond (1890); Waterhouse (1985); Beckensall (2002).	5.5.
360700	511600	White Hag	Small kerbed cairn	11 granite boulders, diameter *c.* 6m. Waterhouse (1985).	

Figure 1.2. Kerbed funerary monuments and ringcairns.

East	North	Site	Status	Description
343000	545000	Broadfield	Omitted from analysis	'Lost' monument. 6 stones in 3 pairs around a mound. C18th excavation, 3 cists with inhumations. Waterhouse (1985).
		Brougham	Omitted from analysis	A circle of gritstones 18m in diameter surrounding a pile of stones. Close to Mayburgh, now destroyed. Waterhouse (1985)
		Chapel Flat	Omitted from analysis	Lowlying monument with large stones, *c*. 27m in diameter. Destroyed. Waterhouse (1985).
		Dacre	Omitted from analysis	A circle recorded in Dacre parish. Waterhouse (1985).
316900	489300	Fenwick	Omitted from analysis	Recorded as a small stone circle (SMR 1464), possible funerary cairn or ringcairn.
		Grasmere	Omitted from analysis	Several large stones between the Grasmere and Keswick roads recorded in the 19th century. Waterhouse (1985).
305700	503600	Gretigate A	Omitted from analysis	Recorded by Stout (1961). Survey and excavation located only recent field clearance. SMR 1292, Daniels (1995).
305700	503600	Gretigate B	Omitted from analysis	I of 3 recorded by Stout (1961). Survey and excavation located only recent field clearance. SMR 1292, Daniels (1995).
305700	503600	Gretigate C	Omitted from analysis	I of 3 recorded by Stout (1961). Survey and excavation located only recent field clearance. SMR 1292, Daniels (1995).
355200	588800	Knipe Scar B	Omitted from analysis	Recorded by Simpson (1882) as a concentric circle. Recorded as 'lost' by Waterhouse (1985).
298900	518000	Le Wheles	Omitted from analysis	Possible stone circle east of Whitehaven, thought to have been destroyed in 1628. Collingwood (1933); Waterhouse (1985).
341630	505910	Low Kingate	Omitted from analysis	Also called Hird Wood. Dilapidated possible stone circle. *c*. 19.8m. Possible central cairn. Waterhouse (1985)
349400	522000	Moor Divock 3	Omitted from analysis	?Burial cairn recorded by Taylor (1886), since destroyed. Part of a cemetery including Cockpit and Kopstone. Waterhouse (1985).
349400	522000	Moor Divock 6	Omitted from analysis	?Burial cairn recorded by Taylor (1886), since destroyed. Part of a cemetery including Cockpit and Kopstone. Waterhouse (1985).
349400	522000	Moor Divock 7	Omitted from analysis	?Burial cairn recorded by Taylor (1886), since destroyed. Part of a cemetery including Cockpit and Kopstone. Waterhouse (1985).
349400	522000	Moor Divock 8	Omitted from analysis	?Burial cairn recorded by Taylor (1886), since destroyed. Part of a cemetery including Cockpit and Kopstone. Waterhouse (1985).
341900	529200	Motherby	Omitted from analysis	*c*. 15.5m diameter. ?Destroyed in the 19th century. Probably a kerbed cairn/ringcairn. Collingwood (1923); Waterhouse (1985).
		Rawthey Bridge	Omitted from analysis	Recorded by Nicholson & Burn (1777) as a circle of stones used for druidical worship. Located on the edge of the Howgills.
299530	510760	Ringlen Stones	Omitted from analysis	Lost' circle west of Egremont consisted of 10 large stones, '60 paces in circumference'. Collingwood (1933); Waterhouse (1985).
303800	502400	Seascale	Omitted from analysis	A 4 ft stone near Seascale recorded as a stone circle. SMR 1302.
		Yealand Conyers	Omitted from analysis	Also known as Summerhouse Hill (North 1936b). Not thought to be a stone circle (Burl 1976). Now in Lancashire.

Appendix 1.3. Sites omitted from the present analysis.

East	North	Sitename	Status	Parish	SMR	References	Description
327440	475390	Skelmore Heads	Excavated	Urswick	2225	Powell (1963, 1972).	Oval mound with internal standing stones. Oriented E/W.
365000	507000	Crosby Garrett CLXXIV	Excavated	Crosby Garrett		Greenwell (1877); Masters (1984); Kinnes (1979).	Oval cairn oriented N/S. situated on limestone outcrop.
368400	507200	Raiset Pike	Excavated	Crosby Garrett		Greenwell (1877); Masters (1984); Kinnes (1979).	Bipartite, oriented NW/SE, wider end to SE.
357100	580800	Lamb Crag	Excavated	Carlisle		Masters (1984); Clare (1973).	Unrecorded excavated cremation trench.
348200	480200	Haverbrack	Likely	Beetham	2488	Fell (1971); Masters (1984).	Trapezoid/oval mound, orientation N/S, wider end to S.
309840	508050	Samson's Bratful	Likely	Ennerdale	9315	Masters (1984).	Pear shaped, oriented SE/NW. higher end to SE.
325029	488230	Heathwaite	Likely	Kirkby Ireleth	31065	Masters (1984).	Pear shaped, oriented NE/SW.
314790	494620	Muncaster/Stainton Fell	Likely	Muncaster	31060	Masters (1984).	Oval mound with possible façade. Oriented E/W.
361600	511900	Cow Green	Likely	Crosby Ravensworth		Masters (1984).	Oriented E/W, wider end to east.
353800	582700	The Currick	Likely	Carlisle		Masters (1984).	Trapezoid mound oriented E/W, wider end to E.
358800	513500	Oddendale	Likely	Crosby Ravensworth		Collingwood (1926); Masters (1984).	Long barrow W. of Oddendale.
353700	524300	Trainford Brow	Questionable	Lowther		Masters (1984).	Bipartite, possible ditch E. end. Oriented E/W.
313700	502000	Irton Fell	Questionable	Copeland		Masters (1984).	Probably a natural outcrop. oriented WSW/ENE.
310150	507750	Stockdale Moor 1	Questionable	Ennerdale	30954	Quartermaine (1989).	Long cairn' within cairnfield 9324.
307638	509870	Town Bank X (564)	Questionable	Ennerdale	30987	Quartermaine (1989).	Pear shaped cairn with boulder on top. 1 of 6 in cairnfield 9353.
307299	509841	Town Bank XI	Questionable	Ennerdale	30990	Quartermaine (1989).	Long mound, 10.5 by 6.2m.
309630	508270	Stockdale Moor IV	Questionable	Ennerdale	30961	Quartermaine (1989).	Pear shaped cairn in cairnfield 9314.
327079	506461	Mickledon	Questionable	Lakes	3017	Clare (1973).	Possible pear shaped disturbed barrow in cairnfield at Mickledon.
309787	509775	Monk's Graves	Questionable	Ennerdale	30966	Quartermaine (1989).	Well defined, semi circular appendage at north end.
307602	509892	Town Bank (551)	Questionable	Ennerdale	30986	Quartermaine (1989).	Prominent oval cairn, boulder on top. 1 of 6 in cairnfield 9353.
307680	509986	Town Bank X (518)	Questionable	Ennerdale	30985	Quartermaine (1989).	One of six 'long cairns' in cairnfield 9353.
307600	509880	Town Bank X (541)	Questionable	Ennerdale	9353	Quartermaine (1989).	One of six 'long cairns' in cairnfield 9353.
307570	509870	Town Bank X (558)	Questionable	Ennerdale	9353	Quartermaine (1989).	One of six 'long cairns' in cairnfield 9353.
307630	509900	Town Bank X (536)	Questionable	Ennerdale	9353	Quartermaine (1989).	One of six 'long cairns' in cairnfield 9353.

Appendix 2.2. Enclosures.

CARROCK FELL
NGR: NY 3425 3364
NMR: NY 33 SW 1 and 3
COUNTY SMR: 2973
SITE STATUS: SAM 22545

Carrock Fell, first described in the regional literature by Collingwood (1937) is recorded on the NMR as an Iron Age hillfort. Surveyed by the RCHME (1996a), this isolated hilltop monument lies between 640 and 665 metres AOD and encloses an area of 1.94ha. The enclosure is defined by a discontinuous stone rubble bank surviving to a maximum height of 1.6 metres. Below the north west and south west there are scree slopes and in places the perimeter of the monument is formed of naturally outcropping rock. Roughly pear shaped in plan and oriented with east-west, the enclosure is 220 metres in length and has a maximum width of 100 metres. Ten separate lengths of bank have been identified, however there is no extant evidence for the presence of either an internal or external ditch. Two mutilated cairns occupy high points within the enclosure. The southern flank of Carrock Fell has been identified as the source of group XXXIV stone axes (Clough & Cummins 1988). Given that the relationship between Neolithic enclosures and axe sources seems well established (Edmonds 1993, 1999), this may well be suggestive of a Neolithic date for the monument.

GREEN HOW, AUGHERTREE FELL
NGR: NY2574 3746
NMR: NY23 NE12
COUNTY SMR: 31727
SITE STATUS: LDNPA, not scheduled.

Initially identified by aerial survey in 2000, Green Howe, on the western end of Aughertree Fell, appears on the basis of its morphology to typify causewayed enclosures identified in other areas (English Heritage 2000). At a height of 320 metres AOD, the hilltop enclosure occupies an area of 0.62ha and is comprised of a single circuit of discontinuous bank and ditch. With a length of 132 metres and a width of 56 metres the elongated oval perimeter of the monument consists of a number of irregular segments of bank with corresponding causeways in the course of the ditch. A possible entrance causeway has been identified midway along the southern circuit. A collection of Later Mesolithic/Early Neolithic lithics (including a number of microliths) have been recovered from the environs of the monument and a number of funerary cairns are situated close by. Earthwork features overlying the enclosure appear to correspond with likely Iron Age and Romano-British field systems recorded by Higham (1978). Attention has also been drawn to a natural feature reminiscent of a long mound within the enclosure which appears to be respected by the perimeter of the circuit (Horne 2000).

HOWE ROBIN, CROSBY RAVENSWORTH FELL
NGR: NY624 104
NMR: NY61 SW 75
COUNTY SMR: 16761
SITE STATUS: Not scheduled

The Howe Robin enclosure, surveyed by the RCHME (1996b), is situated at a height of 360 metres AOD on Crosby Ravensworth Fell. Occupying an area of 4.55 ha, the monument is roughly heart shaped and is 250 metres in length with a maximum width of 220 metres. Situated on a prominent limestone plateau, the monument survives as discontinuous sections of earthen bank and/or rubble scarp linking the outcropping limestone of which hilltop is primarily formed. At the foot of the bank/scarp are a series of irregular impressions cut into the limestone. These range from clearly constructed ditch segments to shallow scoops cut out of the natural rock. The enclosure is situated in an area dense with evidence for Neolithic and Bronze Age activity. Numerous funerary cairns have been recorded in the environs of the Howe Robin enclosure, including a long cairn at Cow Green (Masters 1984). The enclosure is also situated roughly half way between the stone circles of Gamelands and Oddendale, both of which form part of major monument complexes. Neolithic occupation both close to and within Howe Robin has been illustrated by both lithic and ceramic evidence (Cherry *et al.* 1985). Finds included a small polished stone axe, a number of flakes struck from polished stone axes, part of a polished flint axe, a leaf shaped arrowhead and a number of sherds of Grimston ware.

SKELMORE HEADS, URSWICK
NGR: SD 274 751
NMR SD27 NE2
COUNTY SMR: 2248
SITE STATUS: SAM 27688

The Skelmore Heads enclosure, situated on the southern Furness Peninsula, has in general been considered to be a univallate hillfort of Iron Age date. Situated on a prominent flat topped hill at a height of 95 metres AOD, the enclosure covers an area of 1.7ha and is 143 metres in length and 98 metres in width. Surveyed by the RCHME (1996c), the enclosure is broadly rectilinear in form, a shape defined largely by the presence of outcropping limestone and steep slopes which form much of the western southern and eastern perimeter of the monument. To the north the enclosure is defined by a bank and ditch. Skelmore Heads saw limited excavation by Powell (1963). Interpretations as to the results of these investigations (where a palisaded enclosure of Iron Age date was later replaced by an earthen bank and ditch) remain equivocal on a number of levels (see RCHME 1996c). Although the monument may well have seen a number of different phases of use, there is strong circumstantial evidence to suggest a Neolithic foundation from the site (Evans 2004). A long cairn is situated 50 metres to the north of the enclosure (Powell 1963, 1972; Masters 1984), and a cache of roughout stone axes were located in limestone outcrops which partially form its perimeter (Barnes 1963).

HALLIN FELL, ULLSWATER
NGR: NY 435 197
NMR: 17670_63
COUNTY SMR: n/a
SITE STATUS: LDNPA, not scheduled.

Very little is known of the enclosure at Hallin Fell, Ullswater, only recently identified through aerial survey by English Heritage. Hallin Fell is an isolated hill on the eastern shore of Ullswater, situated north and downslope of Martindale common. The enclosure bank itself cuts off the summit of the fell (at 388 metres AOD) and is formed of a massive rubble rampart following a steep scarp at a height of *c.* 350 metres AOD. The bank runs between outcrops across the south of the fell, on the basis of aerial photographic evidence, for a distance of *c.* 200 metres. The remainder of the fell summit is formed by outcropping rock and steep gradients running down towards the lake. Given the location and architecture of the enclosure, it seems likely it is prehistoric in date, however the site has not yet seen detailed survey and there are few known prehistoric sites in its close environs. A cairn is situated adjacent to the enclosure on the south eastern flank of the of the fell, with a second example overlying the enclosure bank close to what may be a southerly entrance. Further afield, the site is to the west of High Street Roman road, alongside which are numerous Neolithic and Bronze Age monuments such as the Moor Divock cemetery complex and the Swarth Fell ringcairn.

LONG MEG
NGR: NY 571 372
NMR: 908034
COUNTY SMR: 6154
SITE STATUS: SAM 23663

With a maximum diameter of 109 metres, the Long Meg stone circle is the sixth largest in size in Britain and has seen interpretation as one of the earliest stone circles in the British Isles (Burl 1976). A large sub circular enclosure has been identified immediately adjacent to its northern perimeter (Soffe & Clare 1988). With a length of 220 metres and a width of 190 metres, the enclosure is significantly larger in size than the stone circle. Likely entrances have been identified both to the north and south (see Burl 1994), the southernmost meeting the stone circle on its flattened northern perimeter at the point at which an outlying stone may have formed an entrance between the two monuments. Long Meg formed the focus for a series of monuments including the Glassonby and Little Meg funerary monuments, a second stone circle recorded by Stukeley (1776) and a possible cursus monument (Soffe & Clare 1988; Beckensall 2002).

SUMMER HILL, BOOTLE
NGR: SD 102 879
NMR:
COUNTY SMR: 13937
SITE STATUS: LDNPA, not scheduled.

A number of previously unknown monuments have recently been identified, through aerial reconnaissance, on the west Cumbrian coastal plain. These include a complex of hengiform and possibly funerary monuments at Summer Hill, less than a kilometre to south of Bootle. Perhaps of the most significance are a pair of conjoined circular ditched features illustrating evidence of internal settings. The organisation of these monuments exhibits a strong similarity to the enclosure and stone circle at Long Meg.. Summer Hill East has an approximate diameter of 50 metres, whilst Summer Hill West is *c.* 35 metres across. To the north of these monuments are a further three circular features. The largest of these, with no surrounding ditch, appears to be a timber circle with a diameter of *c.* 30 metres. Two or more cremation burials were recovered from the environs of these monuments during the construction of a gas pipeline in the early 1990s (County SMR 16767). Summer Hill lies a kilometre to the north of Barfield Tarn where pollen analysis has illustrated woodland clearance and cereal cultivation from the Early Neolithic onwards (Pennington 1975; Hodgkinson et al. 2000).

Appendix 3.1. LAU cairnfield typology.

The following descriptions, based on the typological definition of five types of upland agricultural settlement (Quartermaine 1989, 2002; Quartermaine & Leech forthcoming) are taken from an unpublished English Heritage Monuments Protection Programme document produced for the National Trust (Robinson 1988). Problems with this typology are discussed in chapter four and the cairnfield 'types' are illustrated in figure 4.3.

- **Primary cairnfield:** Random cairnfield development is the most common agricultural feature of the uplands and is considered to reflect recently cleared forest lands of the Bronze Age. They appear as simple small cairnfields with no evidence of stone banks, cairn alignments or other elements of a protofield system and there is never any contemporary association with lynchets.

- **Protofield system**: Adaptation of the primary random cairnfield by using stone banks or alignments of cairns in order to demarcate and rationalise the land for agriculture. In some cases they incorporate stone huts and small cultivation plots denoting a degree of established settlement and the introduction of mixed agricultural practice. These are essentially hay meadows with boundaries possibly for the purpose of stock control and to segregate hay growing areas from general pasture. The introduction of small garden plots at some sites is a significant innovation demonstrating the introduction of basic arable techniques within an overall pastoral economy.

- **Cairn-field-system:** The classic example of this system incorporated a series of fields defined by long continuous stone banks oriented downslope. Some fields have randomly distributed cairnfields contained by field boundaries, while others have no cairnfields but include garden plots and hut circles. Although this cairnfield system is more rationalised and ordered than the typologically earlier protofield system, the agricultural methodologies are similar, however this latter system appears to offer a more balanced mixed economy.

- **Cultivated field system:** This is a major departure from the earlier cairnfield system. The classic example has a series of regular rectilinear fields defined by lynchets. There are no cairns within the fields although a small number are aligned along the top of the field system and in relation to field boundaries. Fields are up to 100 metres in length and average 32 metres wide and this size implies that they were cultivated. There is no large random cairnfield in association and the emphasis is on cultivation rather than pastoralism. Fields are directly associated with complex farmsteads comprising hut circles and sunken enclosures suggesting a Late Bronze Age/Early Iron Age date. The cultivated field system appears both to have been constructed from the outset in this developed form or to have developed out of an earlier type of field system. This later fossilisation of field systems within later developed field systems is considered to be an indicator of continuity of settlement.

- **Arable cairnfields.** The survey produced evidence of medieval cairnfields which served arable agriculture. Here cairnfields comprise a series of elongated cairns along the edges of cultivation terraces and are associated with the medieval type of simple farmstead or shieling.

East	West	Location	Parish	SMR/LAU	Description	Simple/complex
313820	488430	Bootle Fell	Bootle	9386	8 cairns, 4 well defined and large, 4 small.	cairns
374740	496471	Banishead	Coniston	THC/1610	THC VIa, 2 cairns and a bank on well drained land between 2 crags.	cairns
327185	489909	Beacon Tarn	Coniston	TLC	TLC XIV (93). Cairn 5m by 2.5m, no other cairns in vicinity.	cairns
327595	496301	Banishead	Coniston	THC/1610	THC VId (38-42). Small scattered cairnfield next to Torver Beck.	cairns
326575	495286	Bleaberry Haws	Coniston	THC/3892	High Pike Haw THCXV (93-104). Small cairnfield on slope between 2 areas of crag/scree.	cairns
327524	496397	Banishead	Coniston	THC/1610	THC VIb 2 cairns on terrace edged by stream gullies.	cairns
326926	493762	Banks/Plattocks	Coniston	THC	THC XXVc (199-206) Cairnfield on flat bottomed gully base.	cairns
326319	494147	Bleaberry Haws	Coniston	THC	THCXXIIc (172-7). Small group of cairns on a natural terrace.	cairns
326991	493803	Banks/Plattocks	Coniston	THC/1631	THCXXVb (193-8, 222). Small group 7 cairns on a terrace.	cairns
326927	493642	Banks/Plattocks	Coniston	THC	THC XXVd (206, 207, 219, 220). Small group of ill defined cairns on a narrow terrace.	cairns
332520	496380	Torver	Coniston	2064	Mound on west facing slope.	cairns
327117	493880	Banks/Plattocks	Coniston	THC	THC XXV a (186-90) 3 cairns and 2 of ill defined structures.	cairns
326483	495015	Bleaberry Haws	Coniston	THC	Bleaberry Haws THC XVII (110-112) Group of 3 cairns in a natural bowl.	cairns
326531	495461	Banishead	Coniston	THC/1614	THC XIII (82-5) Small group of ill defined cairns between two streams.	cairns
326934	495809	Banishead	Coniston	THC	THC XI Flask Brow, group of 5 cairns (68-72).	cairns
326182	495840	Bleaberry Haws	Coniston	THC	Bleaberry Haws THC XVI (106, 108). 2 clearance cairns assoc with a small stone ring (107)	cairns
327520	496266	Banishead	Coniston	THC/1610	THC VIc (32-7) Well defined large cairns next to Torver Beck.	cairns
327772	494560	Banishead	Coniston	THC	THC V/24-25. 2 clearance cairns.	cairns
327784	496059	Banishead	Coniston	THC	THC VII (47-49, 218). Group of 4 cairns close to quarry, well defined and prominent.	cairns
326422	494299	Bleaberry Haws	Coniston	THC/1621	THCXXIIb (168-71) 4 cairns, 2 possibly natural. on broad natural terrace.	cairns
327062	492339	Green Howe	Coniston	TLC	TLCVIa (34-8). Small cleared area of land surrounded on 3 sides by natural drop.	cairns
328620	496840	Banishead	Coniston	1607	2 small mounds located on east facing slope.	cairns
327232	492474	Green Howe	Coniston	TLC	TLC V (31-3) Small area of clearance in a gully.	cairns
326673	494097	Banks/Plattocks	Coniston	THC	THC XXIV (178-184) Group of ill defined cairns.	cairns
326875	489648	Wool Knott	Coniston	TLC	TLC XV (105-111). Large cairnfield of 7 cairns on terrace.	cairns
327567	492330	Inking Knott	Coniston	TLC	TLC II (13-14) 2 cairns, small cairnfield on a natural terrace.	cairns
326828	494467	Banks/Plattocks	Coniston	THC	THC XXIII (159-66). Scattered group of clearance cairns above valley floor. linear distribution.	cairns
327906	490503	Nutty sheep fold	Coniston	TLC	TLC XXII (79-83). Disparate group of cairns.	cairns
326778	489190	White Borran	Coniston	TLC	TLC IXX (142-49) medium size cairnfield, relatively large cairns, parallel to break of slope.	cairns
327054	492334	Green Howe	Coniston	TLC	TLCVIb (36-8) 3 cairns in natural bowl.	cairns
326836	492528	Greaves Ground	Coniston	TLC/1633	TLC III (19-21). Small cairnfield on a flat topped terrace.	cairns
327701	492621	Inking Knott	Coniston	TLC	TLC IV (25-8) 4 cairns, 2 possibly natural.	cairns
326572	494413	Bleaberry Haws	Coniston	THC/1620	THC XXIIa (156,158) 2 cairns.	cairns

East	West	Location	Parish	SMR/LAU	Description	Simple/complex
329040	498100	Prehistoric	Coniston	2692	5 cairns 3-6m diameter, 1 is 6m diameter and kerbed.	cairns
327429	492971	Hazel Hall	Coniston	TLC	TLC I (5-9). Small cairnfield on a terrace.	cairns
327034	488769	Round Haw	Coniston	TLC	TLC XXI (159-61). Medium sized cairnfield on a tongue of flat land.	cairns
309250	507570	Stockdale Moor	Ennerdale	9321	Small group of 4 cairns.	cairns
309130	507930	Stockdale Moor	Ennerdale	9320	Isolated group of 5 cairns beside a beck.	cairns
308200	509690	Town Bank	Ennerdale	9344	Town Bank VII cairnfield. Small group, ill defined.	cairns
308600	509780	Town Bank	Ennerdale	9342	Small isolated group of cairns on an island of well drained land.	cairns
307800	509640	Town Bank	Ennerdale	9354	Small group of cairns on a steep slope.	cairns
314500	514000	Ennerdale Forest	Ennerdale	17728	Cairnfields settlements etc. Multiperiod sites, no SMR definition.	cairns
307650	510250	Town Bank	Ennerdale	9352	Group of small irregular cairns in a gully. Possibly natural.	cairns
309970	509190	Cawgill	Ennerdale	9310	Small group of clearance cairns.	cairns
308700	510400	Boat Howe	Ennerdale	1202	Partially grassed heaps of stone clearance.	cairns
316330	497970	Eskdale	Eskdale	7015	3 isolated small cairns.	cairns
315130	497210	Devoke Water	Eskdale	7530	5 cairns.	cairns
318600	498190	Birkenthwaite	Eskdale	4719	6 cairns and a possible enclosure.	cairns
321800	488600	Field Broughton	F. Broughton	6853	Earthen bank and heaps of boulders.	cairns
321800	488600	Field Broughton	F. Broughton	6853	Earthen bank and heaps of boulders.	cairns
311900	507700	Whin Garth	Gosforth	8778	Small cairnfield, including possible funerary cairns.	cairns
325340	488750	Heathwaite Fell	Kirkby Ireleth	9394	Small group of 4 prominent cairns.	cairns
325450	487810	Heathwaite Fell	Kirkby Ireleth	3207	Cairnfield scattered over undulating slopes.	cairns
325650	488700	Thwaites Fell.	Kirkby Ireleth	9393	Low scatter of mounds on a spur, possibly natural.	cairns
325400	486800	Heathwaite Fell	Kirkby Ireleth	4932	Cairns.	cairns
325300	486950	Heathwaite Fell	Kirkby Ireleth	9427	Cairns, some probably natural.	cairns
324900	487050	Heathwaite Fell	Kirkby Ireleth	9430	Cairns, some possibly natural.	cairns
324865	487375	Heathwaite Fell	Kirkby Ireleth	3207	4 irregular mounds.	cairns
325290	487625	Heathwaite Fell	Kirkby Ireleth	3207	Group of 3 cairns.	cairns
324965	487420	Heathwaite Fell	Kirkby Ireleth	3207	Small group of cairns, possibly augmented outcrops.	cairns
325650	488700	Thwaites Fell.	Kirkby Ireleth	9393	Thwaite cairnfield. Low scatter of mounds.	cairns
339600	478900	Hampsfell	L. Allithwaite	2445	Cairns.	cairns
326200	507300	Mickledon	Lakes	3015	Linear clearance bank and 3 cairns.	cairns
342710	506590	Troutbeck	Lakes	1931	Round cairn E of Hagg Gill. Clearance below enclosure wall.	cairns
326300	506900	Mickledon	Lakes	8667	7 cairns and a stone bank.	cairns
326600	485300	Gawthwaite	Lowick	2173	Mounds.	cairns

East	West	Location	Parish	SMR/LAU	Description	Simple/complex
320400	484700	Gawthwaite	Lowick	2178	10 mounds and cairns.	cairns
326560	485040	Gawthwaite	Lowick	2175	Mounds.	cairns
317300	490000	Smallthwaite	Millom	9127	5 clearance cairns west of Smallthwaite Forest.	cairns
317000	490500	Thwaites Fell	Millom Without	16597	Cairns near Cloven Stone.	cairns
313613	494785	Stainton Fell	Muncaster	8691	Cairn, stone bank.	cairns
313625	494940	Stainton Fell	Muncaster	8693	6 cairns surrounded by bog.	cairns
313910	494980	Stainton Fell	Muncaster	8693	5 cairns.	cairns
313390	494950	Stainton Fell	Muncaster	8692	Small cairnfield. 9 oval cairns and banks.	cairns
314638	497581	Linbeck Gill	Muncaster	7531	Group of 3 round cairns.	cairns
345300	497400	Staveley	Nether Staveley	4626	Possible cairn and hut platform.	cairns
313930	505460	Countess Eck	Nether Wasdale	7664	8 cairns.	cairns
311400	507500	Yokerill	Nether Wasdale	3040	7 cairns.	cairns
312300	506300	Grey Borran	Nether Wasdale	1345	4-5 small cairns.	cairns
352360	489550	Natland	Natland	14897	Clearance cairns identified from aerial photographs.	cairns
341000	513000	Low Harstop	Patterdale	5338	Cairns.	cairns
323180	493600	Seathwaite	Seathwaite	13958	Cairnfield.	cairns
321350	493670	Kiln Bank	Seathwaite	1623	Heaps of stones.	cairns
321800	493500	kiln Bank	Seathwaite	1626	3 grassed cairns in steep sided pass.	cairns
321000	492500	Tarnhill.	Seathwaite	1458	mounds and cairns.	cairns
322300	494400	Goat Crag	Seathwaite	1622	Mounds in a slight hollow.	cairns
323160	493850	Seathwaite	Seathwaite	13860	Clearance cairns.	cairns
320500	491600	Seathwaite	Seathwaite	1635	Cairnfield and enclosure.	cairns
322600	494100	Caw	Seathwaite	2691	Cairnfield.	cairns
322000	493500	Kiln Bank,	Seathwaite	1627	Mounds on W facing hillside.	cairns
323000	494300	Seathwaite	Seathwaite	1457	Caw summit cairns.	cairns
321400	493400	Seathwaite	Seathwaite	1628	Mounds on a NW facing hillside.	cairns
321100	492200	Seathwaite	Seathwaite	2693	4 cairns.	cairns
325500	501900	Cockley Beck	Seathwaite	1361	Cairnfield.	cairns
352328	513138	Hawswater	Shap Rural	31563	Cairn.	cairns
344073	512590	Hawswater	Shap Rural	31372	Isolated cairn.	cairns
355404	512790	Hawswater	Shap Rural	31587	3 prominent cairns, 2 large, 1 small.	cairns
353219	512924	Stone How	Shap Rural	8149	Small cairnfield of 7 cairns, bank, possible field boundary.	cairns
347180	511490	Hawswater	Shap Rural	31455	3 cairns.	cairns

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352869	512369	Hawswater	Shap Rural	31576	3 small cairns.	cairns
353939	514760	Tailbert Head	Shap Rural	31554	7 cairns, 6 in a line.	cairns
349348	514232	Hawswater	Shap Rural	31357	Clearance cairns.	cairns
349850	514380	Naddle Forest	Shap Rural	31354	7 small cairns.	cairns
349610	514200	Naddle Forest	Shap Rural	31358	Cairns.	cairns
353250	513750	Thiefstead	Shap Rural	8142	Cairns and a wall, poor condition.	cairns
352831	513037	Rowentree Crag	Shap Rural	31573	8 small clearance cairns.	cairns
352149	512114	Hawswater	Shap Rural	31567	6 cairns, well defined, and a possible bank.	cairns
350340	498880	Potter Fell	Strickland Roger	2086	2 former cairns.	cairns
350400	498700	Potter Fell	Strickland Roger	2086	3 cairns.	cairns
327400	491800	Torver	Torver	3235	Cairn.	cairns
318500	496700	Rough Crag	Ulpha	1441	5 round and 1 oval cairn.	cairns
319370	495940	Freeze Beck	Ulpha	7809	5 cairns around the edge of stone free area.	cairns
318500	494470	Hesk Fell	Ulpha	7779	6 cairns identified from aerial photographs.	cairns
318590	490760	Park Moss	Ulpha	7800	8 possible cairns identified from aerial photographs.	cairns
318000	495600	Wood Knotts	Ulpha	7778	6 cairns identified from aerial photographs.	cairns
318550	494840	Ulpha	Ulpha	3199	2 cairns close to Ulpha settlement site.	cairns
325540	474180	Urswick	Urswick	13725	Oval cairn, Little Urswick Crags.	cairns
313980	493780	Whitrow Beck	Waberthwaite	8798	Small group of cairns.	cairns
313510	493070	Waberthwaite Fell	Waberthwaite	8747	8 clearance cairns.	cairns
313950	493700	Whitrow Beck	Waberthwaite	8799	4 cairns.	cairns
313310	490785	Whit Crags	Waberthwaite	31008	6 cairns, short section of bank.	cairns
313200	493300	Waberthwaite Fell	Waberthwaite	8746	Small scattered group of cairns either side of a beck.	cairns
313650	493950	Whitrow Beck	Waberthwaite	8796	Cairns.	cairns
312900	491600	High Corney	Waberthwaite	8755	Small compact group of cairns.	cairns
315970	521010	Lanthwaite Green,	Buttermere	1091	Enclosed settlement and cairns.	complex
307400	509800	Town Bank	Ennerdale	9358	Town Bank XI. Complex of cairnfield, banks, fields, hut circles and enclosed settlement.	complex
308700	509300	Town Bank	Ennerdale	9338	Town Bank IV, 6 sub-groups of features including cairnfields, banks, enclosures, hut circles.	complex
318531	497699	Birkerthwaite	Eskdale	31709	13 cairns. field plot inside curvilinear bank/ enclosure.	complex
316700	498010	Pike How	Eskdale	7527	23 cairns, 2 enclosures, 5 lengths of bank.	complex
318000	503650	Burnmoor	Eskdale	6327	Enclosure containing 3 hut circles and 8 cairns.	complex
317620	503300	Burnmoor	Eskdale	6326	Enclosure containing 10 cairns.	complex
316660	496750	Devoke Water	Eskdale	5350	*c*. 30 cairns, parallel downslope banks.	complex

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316020	498500	Hare Gill	Eskdale	7705	*c*. 30 cairns, banks/walls/hut circles/settlements.	complex
318850	503310	Whillan Beck	Eskdale	16835	Cairnfield to west and east of hut circle enclosure.	complex
319300	499400	Low Birker Tarn	Eskdale	7048	Cairnfield, hut circles, field system. 7 cairns, 1 oval, 6 round. Occasional banks.	complex
316950	497750	Pike How	Eskdale	1425	*c*. 160 oval/circular cairns. Banks and stone free plots also visible.	complex
317410	502560	Burnmoor	Eskdale	1351	*c*.400 cairns, banks, plots, lynchets. Developed cairnfield close to stone circles.	complex
310370	505420	Whin Garth	Gosforth	1314	Cairns, hut circles and enclosure.	complex
311650	506000	Whin Garth	Gosforth	8769	Cairnfield, linear banks, hut platforms.	complex
344000	500500	Hugill	Hugill	15026	Enclosure, cairns, boundaries identified from aerial photographs.	complex
325370	486170	Heathwaite Fell	Kirkby Ireleth	2141	Settlement and cairns.	complex
325000	488600	Heathwaite Fell	Kirkby Ireleth	2160	Settlement and cairns.	complex
325100	488300	Heathwaite Fell	Kirkby Ireleth	2161	Settlement and cairns.	complex
325240	487700	Heathwaite Fell	Kirkby Ireleth	2165	Settlement and cairns.	complex
325840	487900	Heathwaite Fell	Kirkby Ireleth	2163	Settlement and 9 cairns.	complex
315200	496900	Birkby Fell,	Muncaster	2699	285 cairns west of Devoke water. Settlement, banks, field systems.	complex
313600	496000	Barnscar	Muncaster	1437	Many phases cairnfield (3-400 cairns), enclosures, settlements.	complex
313200	495350	Barnscar	Muncaster	8733	2 groups cairns (*c*. 60) divided by bank.	complex
313600	494500	Whitrow Beck	Muncaster	1434	cairnfield N of Whitrow Beck. Includes banks, alignments, lynchets.	complex
314110	495880	Birkby Fell	Muncaster	8743	60 oval cairns, banks alignments plots etc.	complex
313493	495747	Barnscar	Muncaster	31020	Complex cairnfield, field system, small fields and plots, cairn alignments, banks etc.	complex
313900	494400	Stainton Ling	Muncaster	8683	Cairnfield, alignments/plots etc.	complex
313690	496800	Birkby Fell	Muncaster	7638	10 long cairns, 70 round cairns, stone banks, field system.	complex
313930	495160	The Knott	Muncaster	8695	39 oval cairns in 4 clusters. Alignments representing plot edges.	complex
313900	505700	Buckbarrow	Nether Wasdale	1326	Cairns, hut circles banks etc.	complex
353100	489000	Natland	Natland	14846	Cairnfield/ field system identified from aerial photographs.	complex
357100	509400	Hawswater	Shap Rural	1943	Cairnfield and hut circle.	complex
353750	513850	Hawswater	Shap Rural	8219	Large cairnfield, cairns, linear clearance, enclosures.	complex
357450	511300	Theifstead	Shap Rural	8327	cairnfield, banks.	complex
318450	494080	Hesk fell	Ulpha	1451	50-80 cairns, oval enclosure, field system. Some probably medieval.	complex
318580	495000	Crosby Gill	Ulpha	1450	Cairns, enclosures, field boundaries etc.	complex
317800	495070	Ulgra Beck	Ulpha	7774	Cairns and enclosures identified on aerial photographs.	complex
318900	495500	Crosbythwaite	Ulpha	1408	200-250 cairns, field system, shielings, medieval settlement.	complex
313000	490600	Buckbarrow	Waberthwaite	1453	Mounds and cairns on a SW slope.	complex
313390	493950	Whitrow Beck	Waberthwaite	8795	cairnfield, bank, hut circle, lynchets, stone circle.	complex

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313530	490730	Buckbarrow West	Waberthwaite	1404	Cairnfield and field system.	complex
313000	491800	High Corney	Waberthwaite	8754	3 large cairnfields and field system.	complex
313000	493550	Whitrow Beck	Waberthwaite	8794	Cairnfield, field system.	complex
313300	491200	High Corney	Waberthwaite	8757	3 cairnfields incorporating alignments and banks.	complex
313110	490440	Buckbarrow	Waberthwaite	1431	*c.* 100 cairns, lynchets, banks, alignments, a hut circle.	complex
312700	490430	Buckbarrow	Waberthwaite	1431	*c.* 100 cairns. field system, lynchet, alignments.	complex
312800	492700	Charlesground Gil	Waberthwaite	15165	Field system identified from aerial photographs.	complex
350000	478900	Beetham	Beetham	2519	Cairnfield and possible settlement site.	complex
349400	486900	Sizergh	Sizergh	2508	Slight irregular mounds	natural
312700	501900	Mecklin Park	Irton with Santon	3719	Scattered cairnfield with linear alignments of cairns.	simple
313160	488300	Bootle Fell	Bootle	1483	16 clearance cairns and banks associated with funerary cairns and medieval field system.	simple
313000	489000	Bootle Fell	Bootle	1490	Cairnfield built around base of natural hillock.	simple
313800	488600	Little Grassoms	Bootle	1491	Little Grassoms cairns. On west facing slope.	simple
312600	489500	Low Kinimont	Bootle	1488	Cairnfield on west slope of hill.	simple
312900	489200	Oldclose Gill	Bootle	7719	Cairnfield of *c*. 30 cairns identified form aerial photographs.	simple
312750	488800	Coppycow	Bootle	7691	10 cairns.	simple
313200	489400	Bootle Fell	Bootle	1489	Cairnfield and banks, west slope of hill, *c*. 20 cairns.	simple
327858	496286	Banishead	Coniston	THC	THC I, 2-3, 8-17, 216. Small dispersed linear cairnfield on narrow terrace.	simple
327687	492203	Grey Stone	Coniston	TLC/1634	TLC IX (Grey Stones) (42-58). 16 scattered cairns.	simple
326950	494650	Bleaberry Haws	Coniston	THC	Bleaberry Haws THCXIX (119-30) cairnfield on narrow natural terrace just above floor of Plattocks.	simple
327064	489717	Wool Knott	Coniston	TLC	TLC XIII (94-104). Large group of cairns spread out across wide area.	simple
329000	484000	Stainton Gap	Egton with Newla	4821	Stainton Gap cairns.	simple
306700	509790	Town Bank	Ennerdale	9359	Town Bank XIV. Loose collection of random cairns around enclosure/hut circle.	simple
308150	510150	Town Bank	Ennerdale	9340	Town Bank VI. III defined group of cairns.	simple
309690	509850	Stockdale moor	Ennerdale	9300	Stockdale moor VII. Group 1: 12 poorly defined cairns. Group 2: 10 cairns, 1 stretch banking.	simple
309450	510050	Town Bank	Ennerdale	9332	A few remote cairns associated with ring cairn 30979.	simple
312800	514000	Char Dub	Ennerdale	4760	Char Dub cairnfield, east of Ennerdale Water. Some linear cairn alignments.	simple
309130	510200	Town Bank	Ennerdale	9334	Town Bank III. Group of random ill defined cairns in area of outcropping stone. 3 sections of bank.	simple
309150	508650	Town Bank	Ennerdale	9335	Town Bank III cairnfield. Cairns and banks.	simple
309500	509500	Stockdale Moor	Ennerdale	9304	Stockdale Moor VI. Small group of cairns and short sections of bank.	simple
306600	509500	Town Bank	Ennerdale	9360	Town Bank XV. Loosely distributed cairns.	simple
307650	509900	Town Bank	Ennerdale	9353	Cairnfield with group of 'long cairns'. Small irregular clearance cairns, 2 cairn alignments.	simple
307900	509900	Town Bank	Ennerdale	9349	Town bank cairnfield. Loosely distributed cairns and banks, irregular clearance debris.	simple

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308300	509800	Town Bank	Ennerdale	9343	Town Bank VII. Small group of cairns.	simple
308450	510100	Town Bank	Ennerdale	9339	Town Bank V. III defined group of cairns, some possibly natural.	simple
310340	508200	Stockdale Moor	Ennerdale	9317	Stockdale Moor 1 (NW). 14 cairns.	simple
310400	508300	Stockdale Moor	Ennerdale	9318	Stockdale Moor II. 25 largely peat covered cairns.	simple
308600	509950	Town Bank	Ennerdale	9341	Town bank III. Lots of outcropping stone, some mounds probably natural.	simple
309900	508600	Stockdale Moor	Ennerdale	9313	Stockdale Moor II. Cairnfield split into 3 main parts.	simple
309500	509200	Cawgill	Ennerdale	9309	Cawgill cairnfield, isolated from main groups by becks. Poorly defined clearance cairns.	simple
309600	508900	Stockdale Moor	Ennerdale	9312	Stockdale Moor V. Cairnfield, randomly distributed.	simple
309820	509330	Cawgill	Ennerdale	9311	Small groups of cairns between Cawfell Beck and Caw Gill.	simple
309300	507800	Stockdale Moor	Ennerdale	9322	Stockdale Moor I. Small group of cairns, short sections of bank.	simple
310000	507800	Stockdale Moor	Ennerdale	9324	Stockdale Moor cairnfield. A number of clearance cairn clusters.	simple
309700	510150	Stockdale Moor	Ennerdale	9326	Stockdale Moor IX. Compact cairnfield, isolated from others.	simple
309500	508600	Stockdale Moor	Ennerdale	9314	Stockdale Moor IV. 7 small groups of cairns and a few stone banks.	simple
315620	497380	Devoke Water	Eskdale	5349	121 oval /circular cairns.	simple
318570	498350	Birkerthwaite	Eskdale	1427	13 cairns, alignments and short stretches of bank.	simple
315100	498050	Brantrake moss	Eskdale	1430	*c*. 60 cairns, stone banks and plots.	simple
318780	498540	Birkerthwaite	Eskdale	1427	10 cairns.	simple
318000	497900	Birkerthwaite	Eskdale	1426	*c*. 30 round and oval cairns.	simple
317500	496900	The Seat	Eskdale	1423	*c*. 80 cairns and an enclosure.	simple
317860	497020	Prehistoric	Eskdale	4720	*c*. 50 cairns and banks	simple
317100	497300	Birker fell	Eskdale	4780	*c*. 100 cairns.	simple
316430	497484	Rough Crag	Eskdale	1424	*c*. 40 oval/circular cairns over an extensive area.	simple
318340	502998	Burnmoor	Eskdale	1352	Small cairnfield (11 cairns) including a funerary cairn, a standing stone, 2 banks.	simple
318060	505590	Burnmoor	Eskdale	7897	Area of primary cairnfield. 3 main groups. 40 cairns various shapes and sizes.	simple
315500	499700	Milkingstead	Eskdale	4268	10 cairns on steep sided ridge.	simple
318800	498190	Smallstone Beck	Eskdale	4719	Group of 21 cairns.	simple
316680	496770	Woodend Bridge	Eskdale	31716	c. 70 oval and circular cairns.	simple
317230	496850	Woodend Bridge	Eskdale	31716	Cairnfield 850m new wooden bridge.	simple
315620	497380	Water Crag	Eskdale	2696	*c*. 120 cairns, short banks, enclosures and stone free plots.	simple
309500	506000	Blengdale Forest	Gosforth	8765	Simple cairnfield.	simple
311750	507250	Whin Garth	Gosforth	8776	Compact cairn group with lengths of short bank.	simple
312300	506300	Whin Garth	Gosforth	8772	Cairnfield.	simple
310400	506500	Whin Garth	Gosforth	8766	Simple cairnfield.	simple

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309300	505300	Whin Garth	Gosforth	8762	Whin Garth field system. 422 components, banks cairns ring cairns etc.	simple
310700	505000	Whin Garth	Gosforth	1340	Oval walled enclosure with cairns.	simple
311750	507600	Whin Garth	Gosforth	8777	Small group of elongated cairns on an island of well drained land.	simple
311530	506950	Whin Garth	Gosforth	8775	Whin Garth cairnfield, boggy unimproved moorland.	simple
339370	478290	Hampsfield Fell	Grange	19243	Cairns and field boundaries.	simple
343900	505001	Hugill	Hugill	15047	Cairnfield and dyke identified from aerial photographs.	simple
312500	501500	Mecklin Park	Irton with Santon	3709	Cairns banks and alignments. Spence (1936); Fletcher (1985).	simple
325310	487560	Heathwaite Fell	Kirkby Ireleth	3207	Small group of cairns. Low turf covered mounds associated with natural outcrops.	simple
325250	487850	Heathwaite Fell	Kirkby Ireleth	9409	Cairns.	simple
325150	486950	Heathwaite fell	Kirkby Ireleth	9429	Cairns.	simple
325000	487600	Heathwaite Fell	Kirkby Ireleth	9413	Cairns next to a former tarn.	simple
325780	486470	Mawthwaite Moss	Kirkby Ireleth	2169	Cairnfield.	simple
325450	488460	Heathwaite Fell	Kirkby Ireleth	3212	Settlement / cairnfield.	simple
325000	488500	Heathwaite Fell	Kirkby Ireleth	9398	Cairnfield.	simple
325620	487960	Heathwaite Fell	Kirkby Ireleth	3544	Giant's Grave's cairns.	simple
325320	488340	Heathwaite Fell	Kirkby Ireleth	9402	Cairns.	simple
325640	486360	Heathwaite Fell	Kirkby Ireleth	3211	Cairns.	simple
325225	487605	Heathwaite Fell	Kirkby Ireleth	3207	Small compact cairnfield. 10 large well defined cairns.	simple
325300	488400	Heathwaite Fell	Kirkby Ireleth	9403	Cairns.	simple
325400	488240	Heathwaite Fell	Kirkby Ireleth	4409	Cairnfield.	simple
325470	487340	Heathwaite Fell	Kirkby Ireleth	3210	Settlement/ cairnfield.	simple
325400	486200	Heathwaite Fell	Kirkby Ireleth	9439	Group of cairns NE of enclosure.	simple
325110	487475	Heathwaite Fell	Kirkby Ireleth	3207	Compact substantial cairnfield, c. 40 cairns.	simple
325130	488040	Heathwaite Fell	Kirkby Ireleth	4409	Cairnfield.	simple
324700	487200	Heathwaite Fell	Kirkby Ireleth	3207	Group of large cairns, some possibly natural.	simple
325800	487600	Heathwaite Fell	Kirkby Ireleth	2166	Cairns and mounds.	simple
325060	487330	Heathwaite Fell	Kirkby Ireleth	3207	Small scatter of cairns.	simple
325150	487100	Heathwaite Fell	Kirkby Ireleth	9428	Cairns.	simple
329200	504500	Blea Tarn	Lakes	3018	Blea Tarn cairnfield.	simple
326700	506800	Mickledon	Lakes	3016	Cairns and banks at Mickledon.	simple
327140	506430	Mickledon	Lakes	3017	Cairns and banks at Mickledon.	simple
327070	506220	Mickledon	Lakes	8672	21 cairns and a stone bank.	simple
326480	506815	Mickledon	Lakes	8668	Stone bank linking 2 streams and a cairn 4 by 3 m.	simple

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320400	484700	Gawthwaite	Lowick	2178	10 mounds and cairns.	simple
317800	489100	Lath Rigg	Millom	1466	Cairnfield.	simple
316800	490000	Fenwick	Millom Without	1481	Cairnfield.	simple
317900	489900	Hodgewife Fell	Millom Without	1465	Mounds and heaps of stone.	simple
316900	490000	Hodgewife Fell	Millom Without	9125	Cairns & stone bank.	simple
318300	489420	Smallthwaite	Millom Without	7790	18 cairns, long and round.	simple
312500	495800	Barnscar	Muncaster	4718	49 cairns, an enclosure and 5 short banks.	simple
313760	496340	Barnscar	Muncaster	8742	40 oval cairns, stone banks, NE of Barnscar.	simple
313400	495450	Barnscar	Muncaster	8735	Small cairnfield with banks.	simple
314370	494720	Stainton Fell	Muncaster	8687	14 Clearance cairns.	simple
314420	494400	Stainton Fell	Muncaster	8684	16 oval cairns, 2 short banks.	simple
313950	494700	Stainton Fell	Muncaster	8688	Small group of cairns between 2 stream gullies.	simple
313820	494890	Stainton Fell	Muncaster	8693	Random distribution of cairns on an island of well drained land.	simple
312850	495500	Barnscar	Muncaster	8732	10 oval cairns.	simple
314380	496900	Birkby Fell	Muncaster	9448	13 cairns on col between 2 outcrops.	simple
314314	497493	Muncaster	Muncaster	7532	Group of 11 cairns either side of a beck.	simple
324100	496500	Dunnerdale	Seathwaite	1500	Cairnfield and standing stone.	simple
322700	494000	Seathwaite	Seathwaite	4423	At least 24 cairns.	simple
325110	501750	Graitscale	Seathwaite	3012	Cairnfield.	simple
321900	493400	Kiln Bank,	Seathwaite	1629	11 grassed heaps of stone.	simple
321600	493200	Seathwaite	Seathwaite	1630	Cairnfield.	simple
356400	510990	Shap	Shap	4280	Large dispersed cairnfield, 50 cairns, banks/walls.	simple
353129	512433	Hawswater	Shap Rural	31577	Cairns.	simple
353400	513400	White Raise	Shap Rural	8220	Small dispersed cairnfield and enclosure.	simple
353400	514000	Bracken How	Shap Rural	8128	13 cairns, ill defined.	simple
352950	513950	Thiefstead	Shap Rural	8143	Banks, cairns, ring cairn.	simple
307100	507300	Low Prior Scales	St Briget Beckerm	1287	Mounds and field boundaries.	simple
318150	496000	Woodend Bridge	Ulpha	1410	13 cairns, some in a line.	simple
318820	496060	Ulpha Fell	Ulpha	1409	20 cairns along W facing slope.	simple
318810	496610	Ulpha Fell	Ulpha	1411	Cairnfield, linear boundaries.	simple
317980	496480	Sike Moss	Ulpha	1412	15 circular and oval shaped clearance cairns.	simple
318330	492730	Hole House	Ulpha	1452	15 grassed heaps above a stream.	simple
318240	496270	Brown Rigg	Ulpha	1449	33 cairns, 2 with kerbing.	simple

East	West	Location	Parish	SMR/LAU	Description	Simple/complex
317750	496070	Woodend Bridge	Ulpha	7717	*c.* 15 cairns situated among loose rock on open fell.	simple
316400	496400	Hall Beck	Ulpha	1413	More than 20 cairns.	simple
350000	492000	Underbarrow	Underbarrow	4161	cairnfield.	simple
349200	492000	Underbarrow	Underbarrow	4159	cairnfield.	simple
313300	492900	Buckbarrow	Waberthwaite	2701	Cairns.	simple
313790	493430	Waberthwaite Fell	Waberthwaite	8745	17 basic cairns.	simple
313030	490680	Buckbarrow	Waberthwaite	1453	Over 60 clearance cairns.	simple
313210	492640	Corney Fell	Waberthwaite	7777	*c* .30 cairns. Simple but incorporating alignments.	simple
313500	492500	Waberthwaite	Waberthwaite	4781	20 cairns.	simple
311260	491300	Lambground	Waberthwaite	7666	2 small cairnfields separated by a mire. 13 cairns and stone clearance banks.	simple
312600	492500	Corney Fell	Waberthwaite	7652	Small primary cairnfield (20 cairns). 2 groups separated by a bank.	simple
312500	493800	Whitrow Beck	Waberthwaite	1438	Large cairnfield with short stretches of walling.	simple

East	West	Type	Location	Parish	SMR/LAU	Description	Context
326270	474470	Chamber tomb	Urswick	Urswick	2311	Tosthills chamber tomb. EBA knife find. Dobson (1912).	valley floor
322040	469330	Funerary cairn	Barrow	Barrow	2622	Tumulus removed in 1810 in SW. corner of Dovecotes field. Fell (1957).	lowland
313082	488615	Funerary cairn	Bootle Fell	Bootle	31052	Large and prominent, overlooks beck.	cairnfield
313331	489017	Funerary cairn	Bootle Fell	Bootle	31046	Pear shaped cairn on a small hillock.	cairnfield
312984	489128	Funerary cairn	Bootle Fell	Bootle	31051	Well defined, possible kerb.	cairnfield
312598	489801	Funerary cairn	Bootle Fell	Bootle	31036	Large prominent circular mound, almost flat topped. Possible kerbing.	cairnfield
313900	489200	Funerary cairn	Bootle Fell	Bootle	7719	Large cairn.	cairnfield
313707	488622	Funerary cairn	Bootle Fell	Bootle	31054	Very large, very prominent.	cairnfield
312750	488800	Funerary cairn	Bootle Fell	Bootle	7691	Barrow in cairnfield, situated on a knoll.	cairnfield
313541	489039	Funerary cairn	Bootle Fell	Bootle	31048	Barrow associated with 2 enclosures and ringcairn.	cairnfield
313160	488300	Funerary cairn	Great Grassoms	Bootle	1483	Prominent, well defined.	cairnfield
312978	488976	Funerary cairn	Bootle fell	Bootle	31050	Large prominent disturbed kerbed cairn.	summit
326110	516250	Funerary cairn	Brund fell	Borrowdale	13817	Bowl barrow western side of Brund Fell.	fellside
331430	490710	Funerary cairn	Colton	Colton	2065	Heap of stones, slab 0.75m by 0.3m, disturbed at centre.	fellside
327725	496443	Funerary cairn	Banishead	Coniston	THC	THC V 26. Round cairn Banishead Quarry, possible kerbing.	cairnfield
326790	494428	Funerary cairn	Bleaberry Haws	Coniston	THC1618/9	THC XXIII (164). Lowlying prominent cairn, large central depression.	cairnfield
326742	494488	Funerary cairn	Bleaberry Haws	Coniston	THC/1616/7	THCXXIII (160). Prominent, large central depression.	fellside
326602	494957	Funerary cairn	Bleaberry Haws	Coniston	THC/1614	THC XIV site 113. Large cairn with central depression.	fellside
327730	496298	Funerary cairn	Banishead	Coniston	THC	THC III 18. Kerbed, highest point of hill, overlooking Torver Beck.	summit
327685	496244	Funerary cairn	Banishead	Coniston	THC/1610	THC III 19. Kerbed, overlooking Torver Beck.	summit
327896	496474	Funerary cairn	Banishead	Coniston	THC	THCIII site 1. Banishead Quarry. Natural rise overlooking Torver Beck.	summit
327252	490434	Funerary cairn	Beacon Tarn	Coniston	TLC/1638	Round cairn on summit, overlain by walkers cairn.	summit
326563	494714	Funerary cairn	Bleaberry Haws	Coniston	THC/1613	Funerary cairn, modern marker cairn on top. Swainson Cowper (1888a)	summit
326698	489026	Funerary cairn	White Borran	Coniston	TLC	TLC XX (151) 2 cairns either side of a beck (150/151), valley floor.	valley floor
326738	489045	Funerary cairn	White Borran	Coniston	TLC	TLC XX (150) 2 cairns either side of a beck (150/151).	valley floor
345700	494440	Funerary cairn	Crook	Crook	3375	Cist burial recorded from within disturbed cairn.	fellside
309820	509330	Funerary cairn	Cawfell Beck	Enn and Kinn	9311	2 mounds, both disturbed.	cairnfield
309948	509750	Funerary cairn	Stockdale Moor	Enn and Kinn	30964	Stockdale Moor (Monk's Graves) kerbed cairn.	cairnfield
309485	508465	Funerary cairn	Stockdale Moor	Enn and Kinn	30959	Stockdale Moor IV. Prominent round cairn Stockdale Moor North.	cairnfield
309615	508940	Funerary cairn	Stockdale Moor	Enn and Kinn	30956	Stockdale Moor V ring cairn/round cairn.	cairnfield
310031	509810	Funerary cairn	Stockdale Moor	Enn and Kinn	30968	Stockdale Moor kerbed round cairn. Cairnfield 9302	cairnfield
310170	508310	Funerary cairn	Stockdale Moor	Enn and Kinn	30975	Stockdale Moor round cairn. Large circular prominent mound. Group of 3 in a line.	cairnfield
310236	508132	Funerary cairn	Stockdale Moor	Enn and Kinn	30974	Stockdale Moor round cairn. large circular prominent mound. Group of 3 in a line.	cairnfield

East	West	Type	Location	Parish	SMR/LAU	Description	Context
309967	509712	Funerary cairn	Stockdale Moor	Enn and Kinn	30970	Stockdale Moor Monk's Graves round cairn. Kerbed.	cairnfield
309975	509705	Funerary cairn	Stockdale Moor	Enn and Kinn	30969	Stockdale Moor Monk's Graves round cairn.	cairnfield
309612	508310	Funerary cairn	Stockdale Moor	Enn and Kinn	30960	Stockdale Moor IV round cairn. Central depression.	cairnfield
310239	508045	Funerary cairn	Stockdale Moor	Enn and Kinn	30976	Stockdale Moor round cairn. Large circular prominent mound. Group of 3 in a line.	cairnfield
306600	509500	Funerary cairn	Town Bank	Enn and Kinn	9360	Town Bank XV. I Possible funerary cairn	cairnfield
307020	509845	Funerary cairn	Town Bank	Enn and Kinn	30995	Town Bank XIII. Large and disturbed. Spence (1938).	cairnfield
308950	511680	Funerary cairn	Lank Rigg	Enn and Kinn	3597	Lank rigg round cairn. Skylined, modern marker cairn on top.	summit
309350	509300	Funerary cairn	Stockdale Moor	Enn and Kinn	9307	Pair of sizable and well defined cairns on top of a ridge.	summit
315100	498050	Funerary cairn	Brantrake Moss	Eskdale	1430	Southern round cairn associated with cairnfield.	cairnfield
315100	498050	Funerary cairn	Brantrake Moss	Eskdale	1430	Northern round cairn associated with cairnfield.	cairnfield
318480	505420	Funerary cairn	Burnmoor	Eskdale	1329	Maiden castle round cairn, local high point northern end Burnmoor.	summit
318340	502998	Funerary cairn	Burnmoor	Eskdale	1352	Burnmoor, S. of Eller How, cairnfield funerary cairn	summit
333730	498120	Funerary cairn	Hawkshead	Hawkshead	2061	Thompson Ground. Cairn excavated by Swainson Cowper (1888b).	fellside
312500	501500	Funerary cairn	Mecklin Park	Irton with Santon	3709	Cairns excavated by Spence (1936); Fletcher (1985).	cairnfield
326400	485540	Funerary cairn	Gawthwaite	Kirkby Ireleth	2171	Disturbed round/ring cairn, Gawthwaite Moor.	cairnfield
325727	487588	Funerary cairn	Heathwaite Fell	Kirkby Ireleth	31073	Prominent, central depression.	cairnfield
325626	487758	Funerary cairn	Heathwaite Fell	Kirkby Ireleth	31072	Large excavated kerbed cairn.	cairnfield
325095	487428	Funerary cairn	Heathwaite Fell	Kirkby Ireleth	3207	Funerary cairn, bank to N. edge.	cairnfield
325876	487641	Funerary cairn	Kirkby Ireleth	Kirkby Ireleth	31071	Prominent oval mound.	cairnfield
325900	486700	Funerary cairn	Mawthwaite Moss	Kirkby Ireleth	4408	2 cairns, Mawthwaite Moss.	cairnfield
326510	490950	Funerary cairn	Rattan Howe	Kirkby Ireleth	1637	Rattan Howe cairn.	summit
325000	482700	Funerary cairn	The Kirk	Kirkby Ireleth	2182	Oval mound, possible ditch, boulder at one end. Joplin (1846).	summit
326680	506804	Funerary cairn	Mickledon	Lakes	3016	Possible barrow.	cairnfield
327374	506327	Funerary cairn	Lakes	Lakes	31023	Damaged large solitary cairn.	fellside
336760	508050	Funerary cairn	Rydal Beck	Lakes	13682	Round cairn 180m E. Rydal Beck. kerbed projection.	fellside
340400	502000	Funerary cairn	The Raise	Lakes	1902	Contained a cist with bones, destroyed C19 for wall building.	fellside
342500	507630	Funerary cairn	Troutbeck	Lakes	1926	Round cairn, Hagg Gill.	summit
336630	501700	Funerary cairn	Rydal Beck	Lakes	13681	3 round cairns on valley floor 70m E. of Rydal Beck.	valley floor
336630	501700	Funerary cairn	Rydal beck	Lakes	13681	Round cairns on valley floor 70m E. of Rydal Beck.	valley floor
342740	507779	Funerary cairn	Troutbeck	Lakes	1924	Disturbed round cairn, valley bottom Hagg Gill.	valley floor
340560	506750	Funerary cairn	Troutbeck	Lakes	1928	Tumulus and natural mound.	valley floor
342730	506640	Funerary cairn	Troutbeck	Lakes	1930	Round cairn, Hagg Gill.	valley floor
342470	507610	Funerary cairn	Troutbeck	Lakes	1925	Disturbed round cairn, The Tongue, Hagg Gill.	valley floor

East	West	Type	Location	Parish	SMR/LAU	Description	Context
342730	507730	Funerary cairn	Troutbeck	Lakes	1923	Disturbed round cairn, valley bottom Hagg Gill.	valley floor
349750	485870	Funerary cairn	Levens	Levens	2504	Damaged round barrow 700 yards N. of Levens Bridge.	valley floor
350520	485890	Funerary cairn	Levens	Levens	2668	Round barrow.	valley floor
326440	485760	Funerary cairn	Gawthwaite	Lowick	2170	2 damaged round cairns, Gawthwaite Moor. Swainson-Cowper (1893).	cairnfield
326450	484900	Funerary cairn	Gawthwaite	Lowick	2176	barrow/ring cairn disturbed. Swainson-Cowper (1893).	fellside
317648	489717	Funerary cairn	Thwaites Fell	Millom Without	31033	Heavily robbed round cairn.	fellside
313340	495490	Funerary cairn	Barnscar	Muncaster	8733	520m S. of Barnscar.	cairnfield
313570	494280	Funerary cairn	Muncaster	Muncaster	1434	Round cairn	cairnfield
313573	494270	Funerary cairn	Muncaster	Muncaster	31055	Large prominent mound regular profile, possible kerbing.	cairnfield
133496	495499	Funerary cairn	Muncaster	Muncaster	8735	Possible funerary cairn within cairnfield.	cairnfield
315120	496890	Funerary cairn	Birkby Fell	Muncaster	2699	Prominent, isolated from cairnfield on high local point, disturbed.	summit
314020	494450	Funerary cairn	Stainton	Muncaster	12279	Ringcairn/barrow on Stainton Ling, quartz fragments in mound material.	summit
313900	508400	Funerary cairn	Stockdale Moor	N. Wasdale	1331	Seatallan cairn, overlooking Stockdale Moor.	summit
349969	514458	Funerary cairn	Hawswater	Naddle forest	31355	Prominent, on small rocky knoll.	cairnfield
352830	513225	Funerary cairn	Hawswater	Rowentree crag,	31552	Funerary cairn away from main cairnfield group. Prominent, well defined.	cairnfield
352978	512962	Funerary cairn	Hawswater	Rowentree crag,	31573	Large, well defined, associated with cairnfield.	cairnfield
32100	492400	Funerary cairn	Seathwaite	Seathwaite	1458	Round mound, kerbed, disturbed.	cairnfield
321600	493200	Funerary cairn	Seathwaite	Seathwaite	1630	Barrow in cairnfield, excavated 1950, not backfilled, supposedly kerbed.	cairnfield
322700	493700	Funerary cairn	Seathwaite	Seathwaite	5949	Burial cairn with internal cist.	cairnfield
325550	496670	Funerary cairn	Seathwaite	Seathwaite	3220	Burial cairn.	cairnfield
323160	493850	Funerary cairn	Seathwaite	Seathwaite	13860	4 funerary cairns and other clearance cairns either side of a stream.	cairnfield
322400	493300	Funerary cairn	Stephenson Ground	Seathwaite	13856	Previously opened cist group.	cairnfield
322950	493750	Funerary cairn	Stephenson Ground	Seathwaite	13839	Previously opened cist group.	cairnfield
322900	493600	Funerary cairn	Stephenson Ground	Seathwaite	13857	Previously opened cist group.	cairnfield
349070	511180	Funerary cairn	Hawswater	Selside Pike	1515	Summit round cairn.	summit
355640	515470	Funerary cairn	Shap	Shap	1567	Skellaw Hill round (bowl) barrow close to standing stone alignment.	summit
353762	513662	Funerary cairn	White Raise	Shap Rural	31545	Isolated cairn, White Raise.	cairnfield
353420	513440	Funerary cairn	White Raise	Shap Rural	16783	Round cairn W. of White Raise.	fellside
352647	511408	Funerary cairn	Seat Robert	Shap Rural	31569	Summit of Seat Robert, overlooking cairnfields at Rowentree Crag and White Raise.	summit
350340	498880	Funerary cairn	Potter Fell	Strick. roger	2086	2 former cairns.	fellside
318540	494030	Funerary cairn	Hesk Fell	Ulpha	1451	Funerary cairn, in cairnfield.	cairnfield
318120	496060	Funerary cairn	Ulpha Fell	Ulpha	1410	Brown Rigg	cairnfield
318810	496500	Funerary cairn	Ulpha Fell	Ulpha	1411	Large disturbed kerbed oval cairn, S. facing slope N. of Rough Crag cairnfield.	cairnfield

East	West	Type	Location	Parish	SMR/LAU	Description	Context
315800	492800	Funerary cairn	Ulpha Fell	Ulpha	16598	Summit Whitfell, kerbing w. edge, augmented by hill walkers.	summit
349300	492290	Funerary cairn	Cunswick Scar	Underbarrow	Not recorded	Damaged cairn with exposed central cist.	fellside
328530	474490	Funerary cairn	Birkrigg	Urswick	2370	Birkrigg round cairn. Gelderd & Dobson (1914).	circ. complex
328000	472600	Funerary cairn	Birkrigg	Urswick	2368	Birkrigg round cairn. Gelderd & Dobson (1914).	circ. complex
328840	474520	Funerary cairn	Birkrigg	Urswick	2324	Appleby Slack. Gelderd & Dobson (1914).	circ. complex
328350	474310	Funerary cairn	Birkrigg	Urswick	2372	Birkrigg round cairn. Gelderd & Dobson (1914).	circ. complex
328910	474340	Funerary cairn	Birkrigg	Urswick	2371	Birkrigg 1. Gelderd & Dobson (1914).	circ. complex
328680	474300	Funerary cairn	Birkrigg	Urswick	2375	Birkrigg Disc Barrow. Dobson (1926).	circ. complex
313637	492740	Funerary cairn	Charlesground Gill	Waberthwaite	31027	Large prominent cairn isolated from other cairns.	cairnfield
312740	490620	Funerary cairn	Kinmot Beck	Waberthwaite	1431	Kinmot Beck, associated with cairnfield.	cairnfield
310630	484130	Funerary cairn	Gutterby	Whicham	1493	Gutterby cairn, kerbed. 185m south Kirkstones. Eccleston (1872).	valley floor
309630	508270	Oval cairn	Stockdale Moor	Enn and Kinn	30961	Stockdale Moor IV 'long cairn'. Pear shaped, 4.5m by 6.6m.	cairnfield
310150	507750	Oval cairn	Stockdale Moor	Enn and Kinn	30954	Stockdale Moor 1 'long cairn' Cairnfield 9324.	cairnfield
307630	509900	Oval cairn	Town Bank	Enn and Kinn	9353	TBX 536 'long cairn'. 1 of 6 in cairnfield SMR 9353.	cairnfield
307600	509880	Oval cairn	Town Bank	Enn and Kinn	9353	TBX 541 'long cairn'.1 of 6.	cairnfield
307570	509870	Oval cairn	Town Bank	Enn and Kinn	9353	TBX 558 'long cairn'. 1 of 6.	cairnfield
307638	509870	Oval cairn	Town Bank	Enn and Kinn	30987	Town Bank X. 564. 'long cairn' Pear shaped, boulder on top. 1 of 6.	cairnfield
307299	509841	Oval cairn	Town Bank	Enn and Kinn	30990	Town Bank XI 'long cairn'.	cairnfield
307602	509892	Oval cairn	Town Bank	Enn and Kinn	30986	Town Bank X 551 'long cairn'. Boulder on top. 1 of 6.	cairnfield
307680	509986	Oval cairn	Town Bank	Enn and Kinn	30985	Town Bank X. feature 518 'long cairn'. 2 boulders middle of cairn. 1 of 6.	cairnfield
309787	509775	Oval cairn	Stockdale Moor	Enn and Kinn	30966	Monk's Graves 'long cairn'.	cairnfield
327079	506461	Oval cairn	Mickledon	Lakes	3017	Pear shaped disturbed barrow.	cairnfield
339200	501100	ring ditch	Lakes	Lakes	1898	Possible ring ditch identified from aerial photographs.	fellside
310300	496700	ring ditch	Muncaster	Muncaster	16766	Gas pipeline cut through probable ring ditch, 1992.	fellside
317370	502340	St. circle cairn	Burnmoor	Eskdale	31715	5 cairns within Brat's Hill stone circle.	circ. complex
317250	502785	St. circle cairn	Burnmoor	Eskdale	31712	Central cairn within Low Longrigg SW stone circle.	circ. complex
317255	502390	St. circle cairn	Burnmoor	Eskdale	31713	Cairn within White Moss SW stone circle.	circ. complex
317280	502810	St. circle cairn	Burnmoor	Eskdale	31711	2 cairns within Low Longrigg NE stone circle.	circ. complex
317295	502410	St. circle cairn	Burnmoor	Eskdale	31714	Cairn within White Moss SE stone circle.	circ. complex
314920	480970	St. circle cairn	Lacra B	Millom Without	1480	Cairn within Lacra B stone circle. Dixon & Fell (1948).	circ. complex
303340	502380	St. circle cairn	Grey Croft	Seascale	1288	Cairn inside Grey Croft stone circle. Fletcher (1956).	circ. complex

East	North	Status	Diameter	Parish	SMR/LAU	Location
326724	495003	Large ringcairn	19.6m	Coniston	THC/1612	Bleaberry Haws THC XIV (site 92). Swainson Cowper (1888a).
328460	496700	Large ringcairn	20.0m	Coniston	1608	Banniside (Collingwood 1912).
325130	482990	Large ringcairn	30.0m	Kirkby Ireleth	2182	The Kirk.
328000	484230	Large ringcairn	35.0m	Lowick	2179	Lowick Beacon.
325630	487964	Ringcairn	10.0m	Kirkby Ireleth	31066	Giants Graves ringcairn (north).
309340	507960	Ringcairn	10.0m	Enn and Kinn	30953	Stockdale Moor.
308450	509369	Ringcairn	11.0m	Enn and Kinn	30982	Town Bank IX large complex two phase feature.
312725	489335	Ringcairn	11.5m	Bootle	31037	Bootle Fell.
326450	484900	Ringcairn	12.0m	Lowick	2176	Gawthwaite.
309942	507805	Ringcairn	12.0m	Enn and Kinn	30952	Stockdale Moor 1.
312750	489828	Ringcairn	12.0m	Bootle	31035	Bootle Fell.
309615	508940	Ringcairn	12.3m	Enn and Kinn	30956	Stockdale Moor V.
310350	509630	Ringcairn	12.4m	Enn and Kinn	30971/9303	Stockdale Moor, W. Pearsons Fold, N. Cawfell Beck.
315310	498150	Ringcairn	15.0m	Eskdale	7010	Brantrake Moss.
326467	495767	Ringcairn	8.9m	Coniston	THC	THC XII (78).
309450	510025	Ringcairn	8.9m	Enn and Kinn	30979	Town Bank I.
312286	489093	Ringcairn	9.0m	Bootle	31039	Bootle Fell.
309525	509082	Ringcairn	unknown	Enn and Kinn	30957	Stockdale Moor V.
352111	512687	Ringcairn	unknown	Shap	31564	Waite Howes.
352402	512667	Ringcairn	unknown	Shap	31564	Waite Howes.
357100	511600	Ringcairn	unknown	Shap	13991	2 ringbanks.
353040	512469	Ringcairn	unknown	Shap Rural	31577	
310004	509790	Ringcairn	unknown	Enn and Kinn	30967	Stockdale Moor
307299	509841	Ringcairn	unknown	Enn and Kinn	30990	Town Bank XI.
354468	513665	Small stone ring	3.8m	Shap Rural	8331	White Crag.
326176	495267	Small stone ring	3.8m	Coniston	THC	Bleab Haws THC XVI (site 107).
309770	510208	Small stone ring	5.0m	Enn and Kinn	30958	Stockdale Moor IX.
312985	489261	Small stone ring	6.0m	Bootle	31041	Bootle Fell.
313019	489263	Small stone ring	6.0m	Bootle	31043	Bootle Fell.

East	North	Status	Diameter	Parish	SMR/LAU	Location
313491	488794	Small stone ring	6.5m	Bootle	31047	Bootle Fell.
324985	488332	Small stone ring	6.5m	Kirkby Ireleth	31062	Heathwaite Fell.
312979	489269	Small stone ring	6.8m	Bootle	31040	Bootle Fell.
317920	496480	Small stone ring	7.0m	Ulpha	1412	Sike Moss.
325510	486900	Small stone ring	7.0m	Kirkby Ireleth	2110	Heathwaite Fell.
313067	489024	Small stone ring	8.5m	Bootle	31049	Bootle Fell.
317940	496510	Small stone ring	8.5m	Ulpha	1412	Sike Moss.
313067	489024	Small stone ring	8.6m	Bootle	31049	Bootle Fell.
326176	495267	Small stone ring		Coniston	THC	Bleaberry Haws THC XII.

East	North	Site	Description	References	Figure Nos.
368400	507200	Raiset Pike	Conjoined round cairns with disarticulated burials.	Greenwell (1877), Kinnes (1979).	6.5.
327440	475390	Skelmore Heads	Disturbed oval cairn adjacent to Skelmore Heads enclosure.	Powell (1972).	6.5.
365000	507000	Crosby Garrett CLXXIV	Oval cairn on limestone outcrop. Articulated and disarticulated burials.	Greenwell (1877), Kinnes (1979).	
365000	507000	Crosby Garrett CLXXIII	Pavement' cairn with disarticulated burials.	Greenwell (1877), Kinnes (1979).	
328680	474300	Birkrigg Disc Barrow	Pavement' cairn with disarticulated burials.	Dobson (1927)	
349480	486840	Sizergh Tumulus 2	Pavement' cairn with disarticulated burials.	McKenny Hughes (1904b); Evans & Edmonds (2003).	8.1, 8.2, 8.3.
353750	527050	Clifton	Double cists with beaker material.	Taylor (1881).	8.10.
350530	486190	Levens	Beaker grave and inhumations within stone settings beneath a large cairn.	Sturdy (1972); Turnbull & Walsh (1996)	8.4.
359080	513720	Oddendale	Timber circle/ringcairn with central grave, beaker. Urn material associated with ringcairn phase	Turnbull & Walsh (1997).	8.5, 8.6.
354970	518270	Wilson Scar	Open kerbed structure with inhumations and token deposits.	Sieveking (1984).	
358140	510410	Hardendale Nab	Multi phased cist/ringcairn structure with urn material and token deposits.	Williams & Howard Davies (forthcoming).	
354800	546600	Broomrigg B	Kerbed structure with robbed central pit.	Hodgson (1952)	
357300	539300	Glassonby	Open kerbed structure.	Collingwood (1901).	
357700	537500	Little Meg	Open kerbed structure with central cist.	See Beckensall (2002).	5.5.
349400	522000	Moor Divock IV	Open kerbed structure with central ?cist/deposits and food vessel.	Simpson (1882)	
354800	546500	Broomrigg C	Small kerbed cist superseded by large open kerbed structure. Urn material and other deposits	Hodgson & Harper (1950)	8.7, 8.8.
354000	522000	Hackthorpe Hall	Double cists and large open kerbed structure. Urn material.	Mawson (1876).	8.9.
315010	480960	Lacra B	Cairn within stone circle.	Dixon & Fell (1948).	
303340	502380	Grey Croft	Cairn within stone circle.	Fletcher (1956).	8.12.
329230	473960	Birkrigg stone circle	?Open kerbed structure within stone circle. Urned and token deposits.	Gelderd & Dobson (1912).	9.41.
328460	496700	Bannisde ringcairn	Ringcairn with two phases of urned/token deposits.	Collingwood (1912).	8.13, 8.14.
328350	474310	Birkrigg 1	Kerbed open structure covered by mound. Later insertions and token deposits.	Gelderd et al. (1914).	
328840	474520	Appleby Slack	Urned, unurned and token deposits beneath a cairn.	Gelderd et al. (1914).	
326790	494428	Bleaberry Haws	Cist, pits and token deposits beneath a cairn.	Swainson Cowper (1888a).	
307020	507350	Birrell Sike	Token deposits within cairnfield structures.	Richardson (1982).	
333730	498120	Hawkshead Moor	Pit and charcoal deposits beneath a cairn.	Swainson Cowper (1888b).	
312500	501500	Mecklin Park	Beaker material and other finds in the body of a cairn	Fletcher (1985).	

East	North	Site	Description	References	Figure Nos.
349400	486900	Sizergh Tumulus 1	Beaker material in a limestone gryke beneath a cairn.	McKenny Hughes (1904a); Edmonds et al. (2002).	
326800	474800	Heaning Wood	Urn fragments and human remains in a limestone gryke.	Barnes (1970).	
303500	535300	Ewanrigg	Cist and unenclosed cremation cemetery on a natural hummock.	Bewley et al (1992)	8.11.
338700	476650	Allithwaite	Urned and unurned cremation cemetery in limestone gryke.	Wild (2003)	8.15.
324120	472500	Stainton Head	Urned cremations in a natural hummock.	Hodgson (1957)	
unknown	unknown	Aglionby	Urned and unurned cremations in a natural hummock.	Hodgson (1957)	
339000	476000	Kent's Bank Cavern	Multi-period finds including human remains and Bronze Age pottery.	Salisbury (1992, 1997).	
341730	480140	Lindale Low	Multi-period finds including human remains.	Salisbury (1992).	
348290	480250	Dog Holes	Multi-period finds including human remains.	Jackson (1913).	
348300	473100	Badger Holes	Multi-period finds including human remains, a stone axe, lithic material and beaker sherds.	Jackson (1914).	
327800	472100	Bart's Shelter	Multi-period finds including lithics, human remains, pottery and a Bronze Age brooch.	Hodgson (2004)	
327760	472190	Bonfire Scar	Finds including human remains, lithics and the butt of a polished stone axe.	Atkinson (1927).	

Appendix 4.1. Excavated monuments and natural features.

East	North	Type	Parish	SMR	Description
335200	498200	axe	Hawkshead	2039	Syke side celt.
354900	498300	axe	Whitwell	4116	Polished stone axe hammer.
324000	472000	axe	Urswick	2299	Celt, had been used for extracting haematite. Barber (1869).
328000	474000	axe	Urswick	2360	Stone lance/spearhead, Birkrigg.
329250	477900	axe	Ulverston	2212	Axe, flints.
328000	478000	axe	Ulverston	2232	Axe, Ulverston 1859.
316700	496400	axe	Ulpha	18985	Stone hammer.
301780	506800	axe	St John Beckermet	18987	Stone hammer, Barwicksted.
300790	505280	axe	St Bridget Beckermet	1258	Axe.
307940	500390	axe	Seascale	1276	Stone axe.
307900	500500	axe	Seascale	1277	Stone axe found about 2ft 6 beneath peat.
304400	5000900	axe	Seascale	1304	'Ronaldsway' axe with flint scatter from the edge of a boggy hollow, Bailey Ground. Cherry (1967).
226000	477000	axe	Pennington	2239	Several querns, stone balls and axes, railway works. Barber (1869).
341100	509000	axe	Lakes	3781	Low Bull Crag stone axe.
337000	475000	axe	L. Holker	2417	Winder Moor axes. Stockdale (1864).
337000	478000	axe	L. Holker	2422	Nunshill axes/celts. Stockdale (1864).
336300	475000	axe	L. Holker	4375	Nab Green celts and hammers. Stockdale (1864).
322800	481400	axe	Kirkby Ireleth	2132	Stone axe, Soutergate. Spence (1937).
322000	482000	axe	Kirkby Ireleth	2133	Stone celt, 1896.
321300	501300	axe	Eskdale	6336	Brotherkeld axe find.
315300	499900	axe	Eskdale	6357	Stone hammer, Field Head Farm.
300650	521950	axe	Distington	1042	Stone hammer.
308950	521710	axe	Dean	1048	Stone hammer.
307480	521350	axe	Dean	1049	Stone hammer, 1856.
336000	497000	axe	Claife	2044	A beehive quern, stone celts and hammers from High Wray.
339700	487200	axe	Cartmel fell	6860	Broken stone axe on Cartmel Fell forestry Road.
324000	490000	axe	Broughton West	1509	A stone axe hammer and other implements.
326000	510000	axe	Borrowdale	4446	Langstrath axe find. Fell (1964).
322000	468000	axe	Barrow	2601	Stone axe sold in Wigton 1895, from Moorhead. Gaythorpe (1897).
327000	472000	axe	Aldingham	2347	2 stone celts, 1896 & 1898.
341325	509545	adze	Lakes	17116	Adze, 1896.
348000	489000	adze	Helsington	4070	Brigsteer stone adze.

Appendix 5.1. Stone axes and bronze finds across southern Cumbria.

East	North	Type	Parish	SMR	Description
324750	510640	axe working	Borrowdale	1230	Glaramara, Plint (1962).
327500	508100	axe working	Borrowdale	1362	Borrowdale.
324140	510270	axe working	Borrowdale	6338	Looking Steads, Glaramara.
321300	507200	axe working	Eskdale	1355	Eskdale/Borrowdale/Scafell Pike quarries. .
319860	507370	axe working	Eskdale	6317	Brown Tongue working sites.
323220	506500	axe working	Eskdale	6334	Stone axe factory at Pike de Bield Moss.
327200	507200	axe working	Lakes	3004	Stickle pike quarries and working sites.
323920	509870	axe working	Borrowdale	6314	Glaramara south peak.
323050	509730	axe working	Borrowdale	6315	Sprinkling crags, Eskdale.
322450	509600	axe working	Borrowdale	6316	Great Slack axe chipping sites, roughouts, flakes, hammerstones etc.
322100	507700	axe working	Eskdale	1354	Flakes of a Neolithic character. Plint (1962).
321300	507500	axe working	Eskdale	1371	Broken roughouts, flakes and hammerstones, 1959.
321690	507600	axe working	Eskdale	15240	Tuff flakes a few hundred feet below Scafell Pike.
320000	507400	axe working	Eskdale	19629	Tuff flakes, Brown Tongue, Scafell. Richardson (1998).
321460	507100	axe working	Eskdale	19630	Large struck tuff flake, Scafell Pike, 1965. Richardson (1998).
322200	506900	axe working	Eskdale	6333	Tuff flakes at Rough Crag.
324900	506500	axe working	Lakes	15143	15 tuff flakes on path called 'Climber's Traverse', beneath Flat Crags.
327000	507000	axe working	Lakes	16923	Axes/flakes/hammerstones, south scree. Richardson (1990).
327000	507000	axe working	Lakes	16931	21 implements of tuff. Richardson (1990).
327000	507000	axe working	Lakes	19119	Mace and hammerstone, south scree. Richardson (1990).
322100	509300	axe working	N. Wasdale	1365	Roughout and flakes. Plint (1962).
322100	509300	axe working	N. Wasdale	5613	Axes flakes and discards at Hollow Stones.
334400	506700	axe fragment	Lakes	1862	Grasmere axe, polished. Butt end missing. Thompson (1963).
325800	477700	axe fragment	Pennington	2241	Stone celt, pre 1886. Butt end, reworked to a new edge.
306030	501140	axe fragment	Seascale	1273	Incomplete polished axe found 1855. Fair (1935).
303340	502380	axe fragment	Seascale	1288	Broken stone axe at Grey Croft. Fletcher (1956).
305000	500200	axe fragment	Seascale	1311	Fragment of butt of stone axe, found with a flint scatter.
339500	482600	axe fragment	U. Allithwaite	4138	Butt of a broken polished stone axe. Fell (1971).
324500	472500	axe fragment	Urswick	2288	polished stone axe, cutting edge broken off. Barrow Museum acquisition 5135.
326400	473810	axe fragment	Urswick	2320	Fragment of stone celt and upper quern stone found before 1923.
326000	474000	axe fragment	Urswick	2341	2 broken polished stone axes. Barrow NFC.
342700	485300	axe fragment	Witherslack	16720	Reworked axe fragment, 1ft below ground level. Broken end worked into a tang.

East	North	Type	Parish	SMR	Description
327000	507000	axe hoard	Lakes	19113	Group of roughouts found under a stone. Boyd (1990).
325000	472800	axe hoard	Urswick	2265	Various celts of stone, Stone Close. Dobson (1912).
327400	475200	axe hoard	Urswick	5443	4 roughouts in a limestone crevice, Skelmore Heads. Barnes (1963)..
326109	471600	bronze axe	Aldingham	2329	Bronze celt, Gleaston castle. Swainson Cowper (1888a).
344210	477170	bronze axe	Arnside	19540	Bronze hammer flanged axe found New Barnes, Arnside.
320000	470000	bronze axe	Barrow	19063	Narrow butt of a Bronze Age flat axe from near Barrow.
324000	469200	bronze axe	Barrow	2603	Bronze age, hammered flanges. 12in below surface, Mossfield, Roose. Fell (1940).
337000	478000	bronze axe	Cartmel fell	4145	Bronze axe found in peat near Cartmel Fell.
330000	502000	bronze axe	Coniston	5606	LBA socketed bronze axe found Low Fell, 1961. Fell (1963).
330000	484000	bronze axe	Egton with Newland	5545	Middle BA convex flanged axe, Spark Bridge. Fell (1964).
309100	503900	bronze axe	Gosforth	1285	Copper alloy axe, 1820, Rainors. Fair (1943).
310500	505300	bronze axe	Gosforth	6324	Copper battleaxe, 1820. Fair (1943).
349500	485300	bronze axe	Levens	19332	EBA cast flanged axehead. Portable Antiquities: LVPL288.
328000	478000	bronze axe	Ulverston	2230	Bronze axe Kirkdale.
325000	472800	bronze axe	Urswick	2265	Socket celt, palstave and ring, bloomery cinder and iron ore. Dobson (1912).
351000	511000	bronze axes	Shap Rural	31671	2 LBA axes. Fell (1964).
349900	487775	bronze blade	Levens	19621	Copper alloy blade fragment, Sizergh castle. Richardson (1998).
324000	468000	bronze dagger	Barrow	2604	Dagger, Rampside. Lancs museum Swainson-Cowper (1907).
323800	468000	bronze dagger	Barrow	2604	Bronze dagger, Paige Bank, Rampside. Cowper (1907)
346800	489100	bronze dagger	Helsington	4071	Tanged dagger of EBA type in peat moss. Fell (1940).
326100	471600	bronze dirk	Aldingham	15296	Bronze dirk, near Gleaston Castle.
350300	480200	bronze dirk	Beetham	15200	Pool darking bronze dagger/dirk MBA. Fell (1995).
337000	504000	bronze hoard	Lakes	1876	Ambleside hoard, 6 bronzes. Fell & Coles (1965).
327420	475090	bronze hoard	Urswick	2226	Bronze axe hoard, Skelmore Heads gryke. 6 socketed axes. Cowper (1905).
326350	474000	bronze hoard	Urswick	2314	Hoard, 250 yards from Stone Walls. 4-5 bronze celts, 4-5 bronze rings. Barber (1869).
326300	474500	bronze knife	Urswick	2312	Bronze knife, 1912. Tosthills chamber tomb. Dobson (1912).
338430	475330	bronze palstave	L. Allithwaite	2413	Palstave Wraysholme Tower. Stockdales (1864).
336000	475000	bronze palstave	L. Holker	2427	Palstaves (2 or 3) ploughed up near Flookburgh before 1886. Cowper (1907).
337260	504630	bronze palstave	Lakes	1875	Bronze palstave at Millans park, Ambleside. Cowper (1905).
337000	486000	bronze palstave	Staveley Cart	19396	MBA looped shield pattern palstave.
324200	468000	bronze rapier	Barrow	5595	MBA rapier. Cowper (1907).

Appendix 5.1. Stone axes and bronze finds across southern Cumbria.

East	North	Type	Parish	SMR	Description
324000	468000	bronze spear	Barrow	2600	Bronze spearhead c. 1830, Barrow NFC. Meadow ploughing.
323270	463600	bronze spear	Barrow	2619	Piel Castle spearhead. Gaythorpe (1906).
344300	487000	bronze spear	Crosthwaite	4073	Whitbarrow bronze spearhead, leaf shaped blade, loops. Clough (1969).
344000	487000	bronze spear	Crosthwaite	4131	Whitbarrow spearhead class IV. Clough (1969).
300340	522510	bronze spear	Distington	1038	Copper alloy spearhead.
315820	488423	bronze spear	Millom without	19302	Bronze spearhed on Swinside Fell, 1880s. Keswick Museum.
328000	478000	bronze spear	Ulverston	2233	Spearhead, bronze. Cowper (1907).
355900	498100	bronze spear	Whinfell	2460	MBA looped bronze spearhead, edge of Whinfell Tarn. Cowper (1905).
345500	485600	flint axe	Crosthwaite	4074	Broken flint axe. Plint (1964).
297200	517300	flint axe	Whitehaven	1189	Flint axe and tuff roughout.
304000	518000	perforated axe	Arl/Friz	1204	Axe hammer.
346500	477600	perforated axe	Arnside	2521	Axe hammers said to have been found in Hagg wood.
323920	467370	perforated axe	Barrow	2597	Perforated stone axe hammer, porpytic lava, Rampside churchyard. Gaythorpe (1897).
322000	469000	perforated axe	Barrow	2599	Perforated and polished stone adze, Roose, 1901.
324000	466000	perforated axe	Barrow	2606	Perforated sandstone axe hammer, Rampside. Gaythorpe (1904).
320500	469800	perforated axe	Barrow	2609	Perforated macehead. On top of boulder clay, 2ft 6 down. CW11:483
318550	468440	perforated axe	Barrow	2621	Perforated BA axe/macehead. Barrow Museum acquisition 5193.
318220	470090	perforated axe	Barrow	2716	Perforated macehead near North Scale, 2ft down in clay. Barnes & Hobbs (1947).
319980	469990	perforated axe	Barrow	2724	Perforated stone axe hammer. 5 ft below surface, gravel bed on boulder clay. Dobson (1914).
318330	469400	perforated axe	Barrow	2725	Stone axe hammer, unfinished hourglass perforation. Dobson (1914).
318500	468340	perforated axe	Barrow	2729	Macehead, 1875, 4ft from surface in solid clay. Gaythorpe (1904).
318600	468130	perforated axe	Barrow	2730	Stone axe hammer. Barrow museum 5002. Gaythorpe (1904).
319200	466200	perforated axe	Barrow	2740	Perforated stone axe hammer, igneous rock. Barrow museum 5005.
318600	468130	perforated axe	Barrow	3114	Battleaxe, Vickerstown. Gaythorpe (1904).
319000	466200	perforated axe	Barrow	3592	Perforated macehead. Biggar Park.
347400	479700	perforated axe	Beetham	2516	Storth macehead.
348900	479700	perforated axe	Beetham	4350	Stone hammer, hourglass perforation. North (1936).
310000	488000	perforated axe	Bootle	18981	Stone axe hammer 7 by 4.5 inches. 1813.
227242	520591	perforated axe	Borrowdale	19299	Broken stone axe hammer, 1887. Keswick museum.
321200	488400	perforated axe	Broughton west	3586	Stone axe with hourglass perforation. Possibly diorite. Fell (1971).
333000	489000	perforated axe	Colton	2545	Perforated stone axe found in drain cutting.

Appendix 5.1. Stone axes and bronze finds across southern Cumbria.

East	North	Type	Parish	SMR	Description
335000	485900	perforated axe	Colton	3575	Ealingheath stone axe hammer broken through perforation. Fell (1971).
334000	488800	perforated axe	Colton	3585	Perforated stone axe. Swainson Cowper (1888a).
331300	497000	perforated axe	Coniston	5537	Perforated macehead.
345700	489300	perforated axe	Crosthwaite	4151	Perforated stone macehead, in a field pre 1974.
324000	475000	perforated axe	Dalton	2200	2 perforated axe hammers, possibly from Lindal. Joplin (1846).
306180	521510	perforated axe	Dean	1047	Perforated stone axe hammer.
307200	521900	perforated axe	Dean	1050	Perforated stone hammer, provenance uncertain.
306820	498950	perforated axe	Drigg	1389	Dark red perforated stone hammer, Drigg. Cherry (1966).
330900	479200	perforated axe	Egton with Newland	5561	Perforated stone axe hammer, Plumpton Hall, 1951. Fell (1971).
331300	478700	perforated axe	Egton with Newland	5564	Perforated stone axe hammer found *c*. 1870, Plumpton Hall. Fell (1971).
339000	480000	perforated axe	F. brought on	2401	Perforated stone axe hammer.
338500	479700	perforated axe	F. brought on	3115	Aynsome perforated stone axe hammer, polished.
334000	483000	perforated axe	Haverthwaite	2560	Perforated stone axe hammer, Low Wood Bridge. Spence (1935).
335600	484800	perforated axe	Haverthwaite	2564	Part of a perforated stone axe, bed of River Leven. Dobson (1914).
335500	499800	perforated axe	Hawkshead	2038	Axe hanging in a cow byre. Birkway farm, Outgate. Swainson-Cowper (1888a).
335200	498200	perforated axe	Hawkshead	2040	Many stone implements including 3 large axe hammers.
335000	498000	perforated axe	Hawkshead	3569	Perforated stone implement, Hawkshead 1885. Swainson-Cowper (1888a).
351000	488000	perforated axe	Helsington	4089	Perforated stone axe hammer.
351300	488400	perforated axe	Helsington	4090	Larkrigg perforated stone axe hammer. Spence (1935).
351000	484700	perforated axe	Hincaster	4355	Stone hammer, perforated pebble. Spence (1935).
351000	492000	perforated axe	Kendal	2481	Axe hammer. Spence (1935).
352100	492860	perforated axe	Kendal	2485	Ovoid stone macehead with core drilled perforation. Thorny Hills. Fell (1971).
321000	494500	perforated axe	Kendal	4099	Stone axe hammer. Barrow museum 5002. Gaythorpe (1904).
324500	490500	perforated axe	Kirkby Ireleth	3572	Bridge End, perforated stone implement. CW 26:45
338000	476000	perforated axe	L. Allithwaite	2431	Perforated stone axe hammer. Allithwaite.
333900	479580	perforated axe	L. Allithwaite	4144	Cartmel stone axe hammer. Cowper (1907).
336000	476000	perforated axe	L. Holker	2421	Cartmel perforated stone axe.
336300	476600	perforated axe	L. Holker	3573	Perforated stone implement. Swainson Cowper (1888a).
337000	475000	perforated axe	L. Holker	4147	Several stone hammers, intertidal meadow drainage. Stockdale (1874).
334100	504700	perforated axe	Lakes	6359	Perforated pebble macehead.
349100	484500	perforated axe	Levens	6080	Ninzergh axe. hourglass perforation, broken and resharpend. North (1937).
317200	488300	perforated axe	Millom Without	19212	Hourglass perforated macehead. Richardson (1990).
319000	488000	perforated axe	Millom Without	3574	1889, stone axe hammer Duddon Bridge. Collingwood (1926).

East	North	Type	Parish	SMR	Description
313100	496700	perforated axe	Muncaster	18984	Axe hammer, hourglass perforation. In a wall, Crag Farm, Birkby.
325000	481000	perforated axe	Pennington	2140	Perforated pebble macehead with band of silica. 1880.
324760	479000	perforated axe	Pennington	2190	Perforated axe hammer found during building of reservoir. Fell (1948).
326000	477000	perforated axe	Pennington	2240	Perforated axe hammer, pre 1904. Barrow NFC.
326000	477000	perforated axe	Pennington	3580	Perforated pebble on Rathvale Moor, 1880. Collingwood (1926).
327300	477300	perforated axe	Pennington	3589	Perforated axe hammer, pre-1920. North (1945).
355000	518000	perforated axe	Shap Rural	1548	Perforated stone hammer, roughly triangular. Spence (1935).
352200	496900	perforated axe	Skelsmergh	4112	Holme House perforated axe hammer Plint (1960).
353000	497000	perforated axe	Skelsmergh	4113	Stone axe hammer. Collingwood (1926).
352400	499300	perforated axe	Strik. roger	4115	Garnett Bridge perforated axe hammer. Collingwood (1926).
328500	494300	perforated axe	Torver	3595	Perforated stone implement at Torver. Collingwood (1926).
341000	480000	perforated axe	U. Allith	2456	Stone axe hammer, Bognells Farm, 8ft depth.
329000	477600	perforated axe	Ulverston	2229	Perforated stone axe hammer. Gaythorpe (1897).
327400	477400	perforated axe	Ulverston	2242	Perforated axe, hourglass, Swarthmoor. North (1945).
329000	479010	perforated axe	Ulverston	3590	Perforated axe, Ulverston before 1939. Fell (1971).
327300	478800	perforated axe	Ulverston	5588	Rosside perforated stone axe hammer group XV Coniston Grit. Fell (1974).
329700	478900	perforated axe	Ulverston	6127	Ulverston axe hammer, 1868.
324600	473100	perforated axe	Urswick	2287	Perforated stone axe hammer dark green porphitic lava. Dobson (1914).
326000	474000	perforated axe	Urswick	2343	Stone axe hammer partly bored, interesting ornamental fluting. CW10:509
325000	471500	perforated axe	Urswick	3576	Perforated stone axe hammer. Spence (1935).
310700	493900	perforated axe	Waberthwaite	18890	Axe hammer 'beaker type' Muncaster Castle. Fell (1940).
311400	493900	perforated axe	Waberthwaite	18989	Bronze Age perforated axe hammer, bed of watercourse.
313500	481800	perforated axe	Whicham	18973	Stone hammer, Arrow hill, 1860.
313100	481600	perforated axe	Whicham	18974	Stone hammer. 1862. hourglass perforation.
356000	498000	perforated axe	Whinfell	4092	Perforated stone axe re-used as adze. Cowper (1934).
341000	503000	perforated axe	Windermere	1901	Perforated stone axe hammer, Troutbeck, 1884.
339900	499400	perforated axe	Windermere	2049	Perforated stone axe hammer, 1962. Calgarth. Fell (1971).
302000	526000	perforated axe	Winscales	1054	Perforated stone axe hammer.
337000	504000	perorated axe	Lakes	1882	Perforated stone adze, road alterations.
327000	472000	polished axe	Aldingham	1023	High stone quarry. 1899. North (1937).
324600	470800	polished axe	Aldingham	2261	Tuff axe, drainage, 1963. Fell (1971).
328130	472540	polished axe	Aldingham	2333	Baycliffe Haggs axe, field wall pre 1914. Dobson (1914).

Appendix 5.1. Stone axes and bronze finds across southern Cumbria.

East	North	Type	Parish	SMR	Description
324700	469300	polished axe	Aldingham	3089	Leece axe, Carrick. Sewage work 1956, Ruskin museum. Fell (1971).
321600	471500	polished axe	Barrow	2292	stone celt. 1859, Manor farm. Gaythorpe (1897).
321430	470430	polished axe	Barrow	2304	Stone axe, new church foundations, 1956.
319500	472600	polished axe	Barrow	2710	Two stone axes, polished. Barrow museum 5102,3; North (1937).
319350	470140	polished axe	Barrow	2714	Polished axe. Gaythorpe (1906).
317640	467720	polished axe	Barrow	2731	Polished axe above high water mark. Gaythorpe (1904).
324700	467600	polished axe	Barrow	3090	Polished axe, Peasholmes farm. Robinson (1985).
317000	472500	polished axe	Barrow	5598	Polished stone axe between airfield and North End. Fell (1971).
321600	470100	polished axe	Barrow	5600	Polished axe, Barrow. Fell (1971).
318000	467000	polished axe	Barrow	5601	Polished axe, Walney. Fell (1971).
352100	481100	polished axe	Beetham	4353	Stone celt, thin butted, polished blue stone, 1888. Collingwood (1926).
329400	489800	polished axe	Colton	5574	Polished tuff axe, High Nibthwaite. Fell (1971).
327450	501750	polished axe	Coniston	17747	'Engraved' axe which may have been found E of south scree, Stickle Pike. Fell (1980).
330290	495400	polished axe	Coniston	2030	Small polished axe from bloomery hearth excavation, Coniston. Robinson (1985),
345400	488300	polished axe	Crosthwaite	4072	Polished axe, 1952, woodland track. Fell (1971).
306700	499100	polished axe	Drigg	1338	Stone polished axe of Cumbrian type
306820	499100	polished axe	Drigg	1388	Polished stone axe, pasture near 'White Garth'. Cherry (1966).
306900	499200	polished axe	Drigg	4431	Sturge Coll, British museum. Fell (1964).
322800	481300	polished axe	Kirkby Ireleth	5571	Polished axe from Soutergate. Fell (1964).
323700	483900	polished axe	Kirkby Ireleth	5572	Polished axe, Chapels. Fell (1971).
333900	479580	polished axe	L. Allithwaite	18966	Low Frith axe of tuff on beach. Curteis (1989).
335880	477280	polished axe	L. Holker	2408	Large polished greenstone axe, Lower Holker.
333000	507000	polished axe	Lakes	1865	Small axe in garden, 1925, polished cutting edge, rough butt end. Fell (1971).
336800	502000	polished axe	Lakes	1880	Polished axe, 5-6 ft deep. Hogg (1958).
341000	503000	polished axe	Lakes	1903	Polished axe, 5 and a half inches long. North (1934).
347200	485400	polished axe	Levens	4067	Polished tuff axe and barbed and tanged arrowhead. Cowper (1905).
349750	485870	polished axe	Levens	4315	Stone axe and flints 50m from cairn (SMR3107). Cherry (1987).
299780	506900	polished axe	Lowside Quarter	3677	Improvement to W. of Silver Tarn.
317500	478500	polished axe	Millom	16739	Hodbarrow ore mine, 1 mile SE of Millom. In topsoil.
315820	481670	polished axe	Millom Without	18975	Found/recorded 1874.
326000	476000	polished axe	Pennington	5587	1959. Fell (1971)
357600	511280	polished axe	Shap Rural	19713	Axe find, Hardendale Fell, 2000.
353000	513000	polished axe	Shap Rural	31573	Polished stone axe, close to Rowentree Crag cairnfield. Fell (1964).

Appendix 5.1. Stone axes and bronze finds across southern Cumbria.

East	North	Type	Parish	SMR	Description
294000	513000	polished axe	St Bees	1192	1887. Spence (1935).
296100	513100	polished axe	St Bees	1194	Spence (1935)
301000	506000	polished axe	St John Beckermet	6438	Fell (1964).
300900	507900	polished axe	St John Beckermet	6843	1878, Ehenside Tarn. Cherry & Cherry (1984)
330280	495280	polished axe	Torver	6129	Polished stone axe, Barrow museum.
341000	480000	polished axe	U. Allith	2457	Lindale axe. Dickinson (1935).
329320	478570	polished axe	Ulverston	2207	Partially polished tuff axe.
328000	478000	polished axe	Ulverston	2237	Polished stone axe. Gaythorpe (1897).
328710	479010	polished axe	Ulverston	2244	Smooth Cumbrian axe. Fell (1954).
330000	476000	polished axe	Ulverston	2395	Polished stone axe, 6ft below surface before 1893.
330600	478300	polished axe	Ulverston	2397	Rame, 1925.
330200	477600	polished axe	Ulverston	5562	Polished axe ploughed up Saltcoats Farm 1969. Fell (1971).
329410	475070	polished axe	Urswick	2228	Polished axe, Sautergate, Barrow museum 5039
326470	473860	polished axe	Urswick	2318	Polished axe, limestone gryke. Barrow NFC 1923.
324700	471600	polished axe	Urswick	2348	Polished axe. Fell (1971).
327200	475000	polished axe	Urswick	5586	Axe, Skelmore Heads ploughed field. Barnes (1963).
311400	491100	polished axe	Waberthwaite	1456	Low Borrowdale Ground, polished axe, ploughing. Cherry (1976).
312300	481600	polished axe	Whicham	18968	1868
313100	481900	polished axe	Whicham	18970	Small, 1933.
296000	516000	polished axe	Whitehaven	1190	Polished axe, broken along one side.
339900	499700	polished axe	Windermere	2048	Polished stone axe, Culgarth 1913. Fell (1971).
307530	503150	quern and axe	Gosforth	1308	Stone axe with 3 rubbing stones, 6 inches underground. Fair (1943).
324240	469420	unpolished axe	Aldingham	17930	Leece, 2 portions of roughout, broken in antiquity. Robinson (1985).
324280	468380	unpolished axe	Barrow	16786	Roughout in a barn wall. Moss Side, 1993.
320980	471580	unpolished axe	Barrow	2268	Roughout, 15 inches below surface, Hawcoat. North (1936).
319000	466000	unpolished axe	Barrow	2741	Roughout, Barrow NFC 1903.
323700	468800	unpolished axe	Barrow	5762	Stake Moss, Leece, roughout. Robinson (1985).
321000	487000	unpolished axe	Broughton west	2151	Stone celt of rude workmanship, 1887, 8 inches long.
321920	473980	unpolished axe	Dalton	4383	Roughout, 1902.
309000	528000	unpolished axe	Dean	1060	Two unpolished stone axes found west of Eaglesfield.
305400	500500	unpolished axe	Drigg	6462	Roughout. Cherry & Cherry (1984).
306000	514000	unpolished axe	Enn and Kinn	1206	Fell End axe find. Near Blakeley Raise. Fair (1935).

Appendix 5.1. Stone axes and bronze finds across southern Cumbria.

East	North	Type	Parish	SMR	Description
321300	507200	unpolished axe	Eskdale	1363	Tuff axe found Scafell 1874. Fair (1935).
321000	507000	unpolished axe	Eskdale	1364	Stone axe. Plint (1962).
321700	507400	unpolished axe	Eskdale	1366	Stone axe, 1931. Close to main track, hollow between Broad Crag and summit Scafell.
320000	507000	unpolished axe	Eskdale	1370	6 roughouts and some stone flakes Brown Tongue, 1959. Plint (1962).
321300	507000	unpolished axe	Eskdale	4437	Broken roughout Scafell. Plint (1962).
305400	502700	unpolished axe	Gosforth	6460	Small roughout. Cherry & Cherry (1984).
334100	505300	unpolished axe	Lakes	1861	Roughout, above tarn. Plint (1962).
317600	482500	unpolished axe	Millom Without	18976	Roughout, field surface.
304550	501840	unpolished axe	Seascale	1269	Stone axe of banded tuff, unfinished. Fell (1967).
301000	504800	unpolished axe	St Bridget Beckermet	1270	'Slate' stone axe, brown veins, found (Bog Holes) near mouth of Ehen. Fell (1964).
301100	504700	unpolished axe	St. Bridget Beckermet	1268	Roughout, found 1898.
348750	492150	unpolished axe	Underbarrow	4106	Roughout among limestone outcrops. Plint (1960).
326900	475300	unpolished axe	Urswick	2224	Roughout. Barnes (1963).
324000	472000	unpolished axe	Urswick	2305	Roughout axe (flaked celt) Stainton. Barrow museum 5282.
326120	472960	unpolished axe	Urswick	2354	Bolton chapel.
325000	473000	unpolished axe	Urswick	3567	Roughout Stainton Quarry (Stone Close). Fell (1971), Dobson (1912).
297299	517300	unpolished axe	Whitehaven	1189	Roughout and flint axe (see separate record).
341560	499490	unpolished axe	Windermere	4221	Roughout recorded by members of CWAAS.

Appendix 5.2. Location of lithic scatters from the Furness transect.

East	North	Site name	Site code	Height OD	Chronology
323100	469300	Dungeon Lane	DL	30m	Meso/Neo
326000	471500	Gleaston 8	GLE8	40m	Meso/Neo
324500	469600	Leece	LEE	30m	Meso/Neo
323200	468000	Moorhead	MD	20m	Meso/Neo
323450	468500	Moorhead Cottages	MC	30m	Meso/Neo
323800	471500	New Close	NC	70m	Meso/Neo
322300	471150	Parkhouse	PH	25m	Meso/Neo
325300	472600	Stainton	ST	70m	Meso/Neo
323600	469900	Stank	STA	20m	Meso/Neo
323250	466630	Westfield	WF	10m	Meso/Neo
325300	468600	Four Lane Ends	FLE	20m	Neo/EBA
326400	471700	Gleaston 10 & 11	GLE 10/11	40m	Neo/EBA
320367	463012	Hare Hill	HH	10m	Neo/EBA
319300	464700	Hillock Whins	HW	10m	Neo/EBA
319507	475693	Roanhead	RD	5m	Neo/EBA
319700	474150	Sandscale Farm	SF	10m	Neo/EBA
321700	472800	Breastmill Beck	BMB	50m	Mixed
325800	471300	Gleaston 6 & 7	GLE 6/7	40m	Mixed
321390	472100	Manor Park	MP	40m	Mixed
320770	463200	Mulgrews	MUL	10m	Mixed
323500	472300	Mutton's	MUTT	70m	Mixed
320250	463270	Trough Head	TH	10m	Mixed
322250	473500	Dalton South	DS	50m	Unknown
324600	471300	Dendron	DEND	70m	Unknown
318700	465600	Lamity Sike	LS	5m	Unknown
318000	473400	North End	NE	10m	Unknown
323704	473227	Parker's	PD	70m	Unknown
321100	472800	Rakesmoor	RR	60m	Unknown
324300	466700	Rampside	RP	20m	Unknown
321100	473390	Sinkfall	SLL	50m	Unknown
321700	471500	Sixth Form College	SFC	45m	Unknown
318490	465890	Walney Middle Hill	MH	10m	Unknown

Appendix 5.3. Key to the assemblage recording sheets

1. Constituents of the assemblage

This section details the location of the lithic scatter and the technological makeup of the assemblage.

Tools: Number of pieces classifiable as particular tool groups/types.
Waste: Number of waste pieces (including cores).
Cores: Number of cores
Blades: Parallel sided forms with a 2:1 length/width ratio or more.
Flakes: Flakes with less than a 2:1 length/width ratio.
Chunks/spalls: Flakes smaller than *c.* 10mm, or thicker/chunkier than classic flakes.
Classifiable: Forms classifiable as either tools or waste
Unclassifiable: Forms too badly broken to be securely identified.
Formal: Tools exhibiting more than 5% of retouch.
Informal: Tools exhibiting less than 5% of retouch, often edge damage/glossing.

2. Tool types

Identifiable tool types are split into eight main groups, based on the types of tool relating to particular ranges of activities/uses. In the absence of clear diagnostic indicators, these can also be indicative of chronology. For example, high proportions of retouched/edgeworn blades and flakes and multiuse forms are common in Later Mesolithic/Early Neolithic scatters. High proportions of tools seemingly made for specific tasks (e.g. notched, spurred and nosed forms) are common in Later Neolithic/Early Bronze Age assemblages (e.g. Gardiner 1987; Edmonds 1987, 1995). These groups are classified after Gardiner (1987) and are sub-divided into particular forms.

Group 1: Axes

1. Roughout
2. Part polished
3. Polished
4. Fragment

Group 2: Scrapers

1. Concave
2. Convex
3. Plane

Group 3: Arrowheads

1. Leaf
2. Barbed and tanged
3. Triangular
4. Other

Group 4: Awls borers and piercers

No subgroups

Group 5: Cutting tools

1. Egdeworn blade
2. Edgeworn flake
3. Retouched blade
4. Retouched flake

Group 6: Heavy duty implements

1. Heavy edgeworn blades and flakes
2. Choppers
3. Heavy duty borers

Group 7: Composite/microlithic forms

1. Geometric
2. Non-geometric
3. Retouched bladelets/microlithic manufacture

Group 8: Miscellaneous

1. Spurred points
2. Notched flakes
3. Abraded edge
4. Misc. retouched
5. Broken retouched
6. Nosed
7. Multiuse
8. Denticulate

Group 9: Anvils and hammer stones

No subgroups

3. Reduction and technology

Aspects of reduction technology can be used to understand the chronology of lithic scatters through the identification of flake/blade ratios. The presence of particular types/proportions of waste can suggest some of the technological activities the assemblage represents (e.g. Ford 1987).

Core type: How many blade or flake cores are represented and whether these were reused as core tools.

Waste type: Illustrates the constituents of waste in the assemblage and the average size of particular forms:

1. Flakes
2. Blades
3. Cores
4. Chunks
5. Spalls

Reduction: Number of primary, secondary, tertiary and pieces of unknown reduction (largely broken forms) within the assemblage. This can illustrate the nature of the scatter (e.g. a scatter situated close to a raw material source is likely to contain large proportions of primary and secondary forms, or if the scatter includes mainly tertiary forms this can be suggestive of contexts where tools were being utilised and reworked).

Tool group: Illustrates whether particular types of tools were made on particular types of blanks and a general picture of the flake/blade ratio across the assemblage.

4. Raw materials (see appendix 5.5)

This analysis illustrates the presence/absence and proportions of different raw materials within each lithic scatter. Irrespective of tool forms, analysis of reduction technology of particular raw materials can suggest differential patterns of working within and between assemblages. Various statistical analyses were undertaken in order to assess differences in the reduction of raw materials; whether specific tool forms were made on particular types of flint and if there were any differences between the use and occurrence of different raw materials between earlier and later scatters. As discussed in chapter nine, there was little clear patterning in this material other than that higher quality flints were predominantly used for the production of finely worked implements and also formed the majority of heavily retouched broken forms in the assemblages. Analysis of change over time was also problematic as Later Neolithic/Early Bronze Age scatters were either

located on the coastal shingle sources and comprised of 100% local pebble flint or were situated at valley meetings within chronologically mixed assemblages. Appendix 5.5 is therefore restricted to detailing the frequencies of the raw materials identified in relation the locations of individual scatters. This illustrates that pebble flint is markedly more common close to raw material sources on Walney and that non-pebble flint raw materials are well represented within the chronologically mixed valley based assemblages. The presence of tuff forms is also detailed.

The lithic raw materials identified are split into eight groups. Raw material types 1, 2, 3 and 11 are definitely available locally with the remainder either from unidentified sources within the region or of non-local derivation. Raw material 5 is what is often referred to as 'black chalk flint' and raw material 13 as 'grey Wolds flint'. The remainder could be specific raw material types or may relate to colour/quality variations within other raw materials (see discussion in chapter three).

1. Beach pebble flint (orange-brown)
2. Tuff.
3. Chert (black grey and white).
4. White flint speckled brown/red.
5. Translucent black/brown.
6. Mottled dark/light grey.
8. Yellow with dark inclusions.
9. Translucent buff grey/honey with white flecks.
10. Grey/black with orange-brown cortex.
11. Lignite/cannel coal
12. Pink.
13. Milky fawn with blue/grey veins.
14. Unknown/patinated.

Area		Code	BMB	NGR (centre)		Height OD	50m
Breastmill Beck				321770/472670			
No. of pieces	89	tools	44	waste	36	unclass	5
flakes	38	blades	13	cores	2	chunks/ spalls	35

2. Tool types

1.1		2.1	1	3.1		4.0	4	5.1		6.1		7.1	1	8.1		9.0	
1.2		2.2	2	3.2				5.2	7	6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3	3			7.3		8.3	3		
1.4				3.4				5.4	5					8.4	3		
=	0	=	3	=	0	=	4	=	15	=	0	=	1	8.5	12		
														8.6	2		
														8.7			
														8.8	1		
														=	21		

Notes:

1 concave scraper
2 convex scrapers
4 awls/borers
7 edgeworn flakes
3 edgeworn blades
3 retouched blades
4 retouched flakes
1 geometric microlith
3 abraded edge
3 misc. retouched
12 broken retouched
2 nosed
1 denticulate

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.	1	1	2
5.			
6.			
=	1	1	

Waste type		Size (av.)
1.	4	31
2.	1	
3.	2	27
4.	28	22
5.	1	11
=	36	

Reduction	
primary	6
secondary	7
tertiary	53
unknown	23
=	89

Tool group	Flake	Blade	Chunk
1.			
2.	2		1
3.			
4.	2		2
5.	11	4	
6.			
7.		1	
8.	15	2	4
=	30	7	7

Diagnostics present?	Notes
Microlith, denticulate 19 dorsal scarring 1 axe thinning flake 1 blade and 1 flake of tuff	

Area		Code	DS	NGR (centre)		Height OD	50m
Dalton South				322250/473500			
No. of pieces	5	tools	3	waste	2	unclass	0
flakes	3	blades	0	cores	0	chunks/ spalls	2

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1		7.1		8.1		9.0	
1.2		2.2	2	3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3	1		
1.4				3.4				5.4						8.4			
=	0	=	0	=	0	=	0	=	0	=	0	=		8.5			
														8.6			
														8.7			
														8.8			
														=	1		

Notes:
2 convex scrapers
1 abraded edge

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (av.)
1.	2	
2.		
3.		
4.		
5.		
=		

Reduction	
primary	2
secondary	
tertiary	2
unknown	1
=	

Tool group	Flake	Blade	Chunk
1.			
2.	2		
3.			
4.			
5.			
6.			
7.			
8.			1
=			

Diagnostics present?	Notes

Area		Code	DEND	NGR (centre)		Height OD	
Dendron				324600/471300			
No. of pieces	4	tools	2	waste	1	unclass	1
flakes	3	blades		cores	1	chunks/ spalls	

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1		7.1		8.1		9.0	
1.2		2.2		3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4	1			3.4				5.4						8.4			
=	0	=	0	=	0	=	0	=	0	=	0	=		8.5	1		
														8.6			
														8.7			
														8.8			
														=	1		

Notes:
1 axe fragment
1 broken retouched

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.		1	
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.		
2.		
3.	1	33
4.		
5.		
=	1	

Reduction	
primary	
secondary	1
tertiary	1
unknown	2
=	4

Tool group	Flake	Blade	Chunk
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.	1		
=			

Diagnostics present?	Notes
1 roughout fragment with percussive damage dispersed group of finds	

Area		Code	DL	NGR (centre)		Height	30m
Dungeon Lane				323000/469331		OD	
No. of pieces	52	tools	22	waste	25	unclass	5
flakes	17	blades	7	cores	5	chunks/ spalls	24

2. Tool types

1.1		2.1		3.1		4.0	3	5.1		6.1		7.1		8.1	1	9.0	
1.2		2.2	1	3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3	1	3.3				5.3	5			7.3		8.3			
1.4				3.4				5.4	1					8.4			
=	0	=	2	=	0	=	3	=	6	=	0	=	0	8.5	8		
														8.6			
														8.7	1		
														8.8			
														=	10		

Notes:
1 plane scraper
1 convex scraper
3 awl/borer
5 retouched blades
1 retouched flake
1 spurred
8 broken retouched
1 multiuse

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.	1	2	
2.			
3.			
4.			
5.			
6.			1
=	1	2	1

Waste type		Size (average)
1.	5	
2.		
3.	4	
4.	12	
5.	5	
=	6	

Reduction	
primary	4
secondary	11
tertiary	34
unknown	3
=	52

Tool group	Flake	Blade	Chunk
1.			
2.	1	1	
3.			
4.	1		3
5.	1	5	
6.			
7.			
8.	7	1	2
=	10	7	5

Diagnostics present?	Notes
13 dorsal scarring exhausted cores. core rejeuvenation. blade side/end scrapers with heavy retouch. backed blade. bifacially worked broken frags. 2 tips ?leaf aheads, finely worked.	Ironpan cement on a number of objects may suggest derivation from subsoil features.

Area		Code	FLE	NGR (centre)		Height OD	20m
4 Lane Ends				325030/468500			
No. of pieces	17	tools	15	waste	1	unclass	1
flakes	9	blades		cores		chunks/ spalls	7

2. Tool types

1.1		2.1		3.1		4.0	2	5.1		6.1		7.1		8.1		9.0	
1.2		2.2	5	3.2				5.2		6.2	1	7.2		8.2	1	=	0
1.3		2.3		3.3				5.3				7.3		8.3	1		
1.4				3.4				5.4	2					8.4			
=	0	=	5	=	0	=	2	=	2	=	1	=	0	8.5	2		
														8.6	1		
														8.7			
														8.8			
														=	5		

Notes:
5 convex scrapers
2 awls/borers
1 heavy duty chopper
1 notched
1 abraded edge
3 broken retouched
1 nosed

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.		
2.		
3.		
4.		
5.	1	
=	1	

Reduction	
primary	1
secondary	6
tertiary	10
unknown	
=	17

Tool group	Flake	Blade	Chunk
1.			
2.	3		2
3.			
4.	1		1
5.	2		
6.			1
7.			
8.	2		1
=	8		5

Diagnostics present?	Notes
Thumbnail scraper. 1 dorsal scarring.	

Area		Code	GLE 8	NGR (centre)		Height OD	40m
Gleaston 8				326100/471600			
No. of pieces	80	tools	52	waste	21	unclass	0
flakes	29	blades	17	cores	8	chunks/ spalls	21

2. Tool types

1.1		2.1		3.1		4.0	7	5.1	4	6.1	2	7.1	2	8.1		9.0	
1.2		2.2	2	3.2				5.2	3	6.2	2	7.2		8.2		=	0
1.3		2.3	1	3.3				5.3	5			7.3	3	8.3			
1.4				3.4				5.4	4					8.4	10		
=	0	=	3	=	0	=	7	=	16	=	4	=	5	8.5	7		
														8.6			
														8.7			
														8.8			
														=	17		

Notes:
2 convex scrapers
7 awls/borers
4 edgeworn blades
3 edgeworn flakes
5 retouched blades
4 retouched flakes
4 heavy duty
2 geometric microliths
3 retouched bladelets
10 misc. retouched
7 broken retouched

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.	7		1
2.	1		
3.			
4.			
5.			
6.			
=	8		

Waste type		Size (average)
1.	8	18
2.		
3.	8	21
4.	5	22
5.		
=	21	

Reduction	
primary	6
secondary	19
tertiary	38
unknown	6
=	80

Tool group	Flake	Blade	Chunk
1.			
2.	1		1
3.			
4.	1	1	5
5.	6	9	1
6.	1		3
7.	2	3	
8.	8	3	6
=	19	16	16

Diagnostics present?	Notes
1 thumbnail scraper. microliths. 16 dorsal scarring.	

Area		Code	GLE	NGR (centre)		Height	40m
Gleaston 6 & 7			6/7	325800/471250		OD	
No. of pieces	46	tools	32	waste	6	unclass	8
flakes	23	blades	11	cores		chunks/ spalls	10

2. Tool types

1.1		2.1	1	3.1		4.0		5.1		6.1		7.1	2	8.1	1	9.0	
1.2		2.2	3	3.2				5.2	1	6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3	4			7.3	2	8.3			
1.4	1			3.4	1			5.4	5					8.4			
=	1	=	4	=	1	=	0	=	10	=	0	=	4	8.5	7		
														8.6	1		
														8.7	3		
														8.8			
														=	12		

Notes:

1 concave scraper
3 convex scrapers
1 arrowhead (type?)
1 edgeworn flake
4 retouched blades
5 retouched flakes
2 geometric microliths
2 retouched bladelets
1 spurred
7 broken retouched
1 nosed
3 abraded edge

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			1
5.			
6.			
=			

Waste type		Size (average)
1.	3	35
2.		
3.		
4.	3	21
5.		
=	6	

Reduction	
primary	1
secondary	8
tertiary	26
unknown	11
=	46

Tool group	Flake	Blade	Chunk
1.	1		
2.	2	1	1
3.	1		
4.			
5.	6	4	
6.			
7.		4	
8.	9	1	2
=	19	10	3

Diagnostics present?	Notes
1 axe thinning flake. 1 reworked polished axe fragment. microliths arrowhead. 13 blade scars. 1 multiuse is denticulated.	

Area		Code	GLE	NGR (centre)		Height OD	40m
Gleaston 10 & 11			11	326300/471820			
No. of pieces	18	tools	8	waste	7	unclass	3
flakes	11	blades		cores	1	chunks/ spalls	6

2. Tool types

1.1		2.1		3.1		4.0	1	5.1		6.1	1	7.1		8.1	1	9.0	
1.2		2.2	2	3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3	1	8.3			
1.4				3.4				5.4						8.4			
=	0	=	2	=	0	=	1	=	0	=	1	=	1	8.5	1		
														8.6			
														8.7	1		
														8.8			
														=	3		

Notes:
2 convex scrapers
1 awl/borer
1 heavy duty
1 retouched bladelet
1 spurred
1 broken retouched
1 multiuse

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.		1	
2.			
3.			
4.			
5.			
6.			
=		1	

Waste type		Size (average)
1.	4	23
2.		
3.	1	22
4.	2	49
5.		
=	8	

Reduction	
primary	1
secondary	6
tertiary	9
unknown	2
=	18

Tool group	Flake	Blade	Chunk
1.			
2.	2		
3.			
4.			1
5.			
6.			1
7.	1		
8.	1		2
=	4		4

Diagnostics present?	Notes
Thumbnail scraper. 1 dorsal scarring.	

Area		Code	HH	NGR (centre)		Height OD	10m
Hare Hill				320370/463010			
No. of pieces	33	tools	7	waste	24	unclass	2
flakes	6	blades	1	cores		chunks/ spalls	2

2. Tool types

1.1		2.1		3.1		4.0	2	5.1	1	6.1		7.1		8.1		9.0	
1.2		2.2	2	3.2				5.2	1	6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3		6.3	1	7.3		8.3			
1.4				3.4				5.4						8.4			
=	0	=	2	=	0	=	2	=	2	=	1	=	0	8.5			
														8.6			
														8.7			
														8.8			
														=	0		

Notes:
2 convex scrapers
2 awls/borers
1 edgeworn flake
1 edgeworn blade
1 heavy duty borer

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.	1	
2.		
3.		
4.		
5.		
=	1	

Reduction	
primary	9
secondary	9
tertiary	10
unknown	5
=	33

Tool group	Flake	Blade	Chunk
1.			
2.	1		1
3.			
4.	1		1
5.	1	1	
6.	1		
7.			
8.			
=	4	1	2

Diagnostics present?	Notes
1 dorsal scarring.	3 tuff (2 flakes and 1 chunk)

Area		Code	HW	NGR (centre)		Height OD	10m
Hillock Whins				319300/464700			
No. of pieces	61	tools	24	waste	35	unclass	2
flakes	24	blades	1	cores	1	chunks/ spalls	5

2. Tool types

1.1		2.1		3.1		4.0	3	5.1	1	6.1		7.1		8.1		9.0	
1.2		2.2	5	3.2				5.2	4	6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4	5					8.4	1		
=	0	=	5	=	0	=	3	=	10	=	0	=	0	8.5	3		
														8.6	2		
														8.7			
														8.8			
														=	6		

Notes:
5 convex scrapers
3 awls
1 edgeworn blade
4 edgeworn flakes
5 retouched flakes
1 misc. retouched
3 broken retouched
2 nosed

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.		1	
4.			
5.			
6.			
=		1	

Waste type		Size (average)
1.	1	34
2.		
3.	1	30
4.	13	20
5.	18	10
=	33	

Reduction	
primary	14
secondary	18
tertiary	23
unknown	6
=	61

Tool group	Flake	Blade	Chunk
1.			
2.	5		
3.			
4.	3		
5.	9	1	
6.			
7.			
8.	5		1
=	22	1	1

Diagnostics present?	Notes
Thumbnail scrapers. 1 dorsal scaring.	1 chunk of tuff

Area		Code	HW1	NGR (centre)		Height OD	10m
Hillock Whins 1				319300/464700			
No. of pieces	19	tools	2	waste	17	unclass	
flakes	4	blades	1	cores		chunks/ spalls	14

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1		7.1	1	8.1		9.0	
1.2		2.2		3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4						8.4	1		
=	0	=	0	=	0	=	0	=	0	=	0	=	1	8.5			
														8.6			
														8.7			
														8.8			
														=	1		

Notes:
1 geometric microlith
1 misc. retouched

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.	3	28
2.		
3.		
4.		
5.	14	15
=	17	

Reduction	
primary	5
secondary	1
tertiary	12
unknown	1
=	19

Tool group	Flake	Blade	Chunk
1.			
2.			
3.			
4.			
5.			
6.			
7.		1	
8.	1		
=	1	1	

Diagnostics present?	Notes
Narrow blade microlith.	All pebble flint

Area		Code	HW2	NGR (centre)		Height OD	10m
Hillock Whins 2				319300/464700			
No. of pieces	18	tools	8	waste	9	unclass	1
flakes	7	blades		cores		chunks/ spalls	11

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1	1	7.1		8.1		9.0	
1.2		2.2	1	3.2				5.2	1	6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4						8.4			
=	0	=	1	=	0	=	0	=	1	=	1	=	0	8.5	3		

Notes:
1 thumbnail scraper
1 edgeworn flake
3 broken retouched
1 nosed
1 multiuse

	8.6	1
	8.7	1
	8.8	
	=	5

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.		
2.		
3.		
4.	5	15
5.	4	10
=	9	

Reduction	
primary	2
secondary	6
tertiary	9
unknown	1
=	18

Tool group	Flake	Blade	Chunk
1.			
2.	1		
3.			
4.			
5.	1		
6.	1		
7.			
8.	3		1
=	6		1

Diagnostics present?	Notes
Thumbnail scraper. One side of multiuse is denticulated.	

Area		Code	HW3	NGR (centre)		Height OD	10m
Hillock Whins 3				319300/464700			
No. of pieces	72	tools	8	waste	58	unclass	6
flakes	9	blades		cores	1	chunks/ spalls	57

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1	1	7.1		8.1		9.0	
1.2		2.2	3	3.2				5.2	1	6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3	2	8.3			
1.4				3.4				5.4						8.4	1		
=	0	=	3	=	0	=	0	=	1	=	1	=	2	8.5			
														8.6			
														8.7			
														8.8			
														=	1		

Notes:
3 convex scrapers
1 edgeworn flake
1 heavy duty
2 retouched bladelet
1 misc. retouched

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			1
5.			
6.			
=			1

Waste type		Size (average)
1.	1	35
2.		
3.	1	30
4.	21	20
5.	27	10
=		

Reduction	
primary	21
secondary	7
tertiary	33
unknown	11
=	72

Tool group	Flake	Blade	Chunk
1.			
2.	3		
3.			
4.			
5.	1		
6.	1		
7.	2		
8.	1		
=	8		

Diagnostics present?	Notes
1 thumbnail scraper. 2 retouched bladelets.	All from pit fill so stratigraphically associated.

Area		Code	LS	NGR (centre)		Height OD	5m
Lamity Sike				318700/465600			
No. of pieces	7	tools	1	waste	6	unclass	0
flakes	6	blades	1	cores	0	chunks/ spalls	0

2. Tool types

1.1		2.1		3.1		4.0		5.1	1	6.1		7.1		8.1		9.0	
1.2		2.2		3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4						8.4			
=	0	=	0	=	0	=	0	=	1	=	0	=		8.5			
														8.6			
														8.7			
														8.8			
														=	0		

Notes:

1 edgeworn blade

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.	6	15
2.		
3.		
4.		
5.		
=	6	

Reduction	
primary	3
secondary	1
tertiary	3
unknown	
=	6

Tool group	Flake	Blade	Chunk
1.			
2.			
3.			
4.			
5.		1	
6.			
7.			
8.			
=		1	

Diagnostics present?	Notes
All pebble flint	

Area		Code	LE 1-5	NGR (centre)		Height OD	30m
Leece				324780/469600			
No. of pieces	32	tools	15	waste	14	unclass	3
flakes	12	blades	5	cores	2	chunks/ spalls	13

2. Tool types

1.1		2.1		3.1		4.0	1	5.1	2	6.1		7.1		8.1		9.0	
1.2		2.2	1	3.2				5.2	3	6.2		7.2		8.2	1	=	0
1.3		2.3		3.3	1			5.3	3			7.3		8.3			
1.4	1			3.4				5.4						8.4			
=	1	=	1	=	1	=	1	=	8	=	0	=	0	8.5	1		

Notes:
1 roughout fragment
1 convex scraper
1 hollow based arrowhead
1 awl/borer
2 edgeworn blades
3 edgeworn flakes
3 retouched blades

8.6		
8.7	1	
8.8		
=	3	

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.		1	1
4.			
5.			
6.			
=		1	1

Waste type		Size (average)
1.	2	19
2.		
3.	2	28
4.	8	22
5.	2	10
=	14	

Reduction	
primary	1
secondary	15
tertiary	12
unknown	4
=	32

Tool group	Flake	Blade	Chunk
1.			1
2.	1		
3.	1		
4.			1
5.	3	5	
6.			
7.			
8.	3		
=	8	5	2

Diagnostics present?	Notes
Hollow based arrowhead. Roughout fragment. Backed blade. 4 dorsal scarring.	Dispersed scatters around village.

Area		Code	MP	NGR (centre)		Height OD	40m
Manor Park				321440/472020			
No. of pieces	138	tools	54	waste	55	unclass	
flakes	61	blades	5	cores	6	chunks/ spalls	57

2. Tool types

1.1		2.1	1	3.1		4.0	5	5.1		6.1	2	7.1		8.1	1	9.0	
1.2		2.2	4	3.2				5.2	3	6.2	1	7.2		8.2		=	0
1.3		2.3	1	3.3				5.3	1			7.3		8.3	6		
1.4				3.4				5.4	8					8.4	5		
=	0	=	6	=	0	=	5	=	12	=	3	=	0	8.5	13		
														8.6	2		
														8.7			
														8.8			
														=	27		

Notes:

1 concave scraper
4 convex scrapers
2 plane scrapers
5 awls/borers
3 edgeworn flakes
9 retouched flakes
3 heavy duty
1 spurred
6 abraded edge
5 misc. retouched
13 broken retouched
2 nosed

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.	1	2	
2.		1	
3.		1	
4.			
5.			
6.	1		
=	2	4	

Waste type		Size (average)
1.	15	24
2.	2	14
3.	6	35
4.	30	23
5.	2	18
=	55	

Reduction	
primary	10
secondary	27
tertiary	37
unknown	55
=	138

Tool group	Flake	Blade	Chunk
1.			
2.	6		1
3.			
4.	2		3
5.	11	1	
6.	1		2
7.			
8.	19	2	6
=	39	3	12

Diagnostics present?	Notes
Thumbnail scrapers. Fragment of jet bangle. 3 dorsal scarring.	

Area		Code	MH	NGR (centre)		Height OD	10m
Middle Hill				318490/465890			
No. of pieces	31	tools	4	waste	27	unclass	
flakes	26	blades	0	cores	1	chunks/ spalls	2

2. Tool types

1.1		2.1	1	3.1		4.0		5.1		6.1		7.1		8.1		9.0	
1.2		2.2	2	3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4	1					8.4			
=	0	=	3	=	0	=	0	=	1	=	0	=	0	8.5			

Notes:
1 concave scraper
2 convex scraper
1 retouched flake

	8.6	
	8.7	
	8.8	
	=	0

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.	1		
2.			
3.			
4.			
5.			
6.			
=	1		

Waste type		Size (average)
1.	26	20
2.		
3.		
4.		
5.		
=	26	

Reduction	
primary	4
secondary	13
tertiary	13
unknown	
=	30

Tool group	Flake	Blade	Chunk
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
=			

Diagnostics present?	Notes
Retouched flake is a heavily invasively worked backed knife. Blake core is tiny, exhausted and pyramidical. Convex scraper thumbnailesque.	

Area		Code	MD	NGR (centre)		Height OD	20m
Moorhead				323200/468000			
No. of pieces	28	tools	19	waste	6	unclass	3
flakes	18	blades	2	cores		chunks/ spalls	7

2. Tool types

1.1		2.1		3.1		4.0	1	5.1		6.1		7.1		8.1	1	9.0	
1.2		2.2		3.2				5.2	3	6.2	2	7.2		8.2		=	0
1.3		2.3		3.3				5.3	2			7.3		8.3			
1.4				3.4				5.4	3					8.4	1		
=	0	=	0	=	0	=	1	=	8	=	2	=	0	8.5	6		
														8.6			
														8.7			
														8.8			
														=	8		

Notes:
1 awl/borer
3 edgeworn flakes
2 retouched blades
3 retouched flakes
1 heavy duty chopper
1 spurred
1 misc. retouched
6 broken retouched

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.	2	20
2.		
3.		
4.	4	35
5.		
=	6	

Reduction	
primary	1
secondary	11
tertiary	10
unknown	6
=	28

Tool group	Flake	Blade	Chunk
1.			
2.			
3.			
4.	1		
5.	6	2	
6.	2		
7.	6		
8.			1
=	15	2	1

Diagnostics present?	Notes
2 flakes of tuff broken pieces all heavily worked	Early Neolithic occupation features excavated in this field (Holbeck) Pit with rod microlith, pottery and unpolished tuff flakes. Other flint forms in the report.

Area		Code	MC	NGR (centre)		Height OD	30m
Moorhead Cottages				323330/468460			
No. of pieces	51	tools	23	waste	22	unclass	6
flakes	16	blades	10	cores	4	chunks/ spalls	21

2. Tool types

1.1		2.1		3.1		4.0	2	5.1	2	6.1		7.1		8.1	1	9.0	
1.2		2.2	1	3.2				5.2	3	6.2		7.2		8.2	2	=	0
1.3		2.3		3.3				5.3	4			7.3	1	8.3	1		
1.4				3.4				5.4	3					8.4			
=	0	=	1	=	0	=	2	=	9	=	0	=	1	8.5	2		
														8.6			
														8.7	1		
														8.8			
														=	7		

Notes:
1 convex scraper
2 awls/borers
2 edgeworn blades
3 edgeworn flakes
4 retouched blades
3 retouched flakes
1 retouched bladelet
1 notched
2 broken retouched
1 multiuse
1 spurred

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.	2	1	
2.			
3.			
4.			
5.			
6.	1		
=	3	1	

Waste type		Size (average)
1.	1	
2.		
3.	4	
4.	6	
5.	11	
=	21	

Reduction	
primary	2
secondary	9
tertiary	33
unknown	7
=	51

Tool group	Flake	Blade	Chunk
1.			
2.	1		
3.			
4.	1		1
5.	6	6	
6.			
7.		1	
8.	5	1	1
=	13	8	2

Diagnostics present?	Notes
18 dorsal scars. 1 snapped bladelet, broken blades. 1 blade multiuse. 1 retouched bladelet. 1 exhausted core fragment. 3 single platform blade cores.	Lots finely worked broken things Lots bulbs, platforms and dorsal scarring

Area		Code	MUL	NGR (centre)		Height OD	10m
Mulgrews				320770/463200			
No. of pieces	619	tools	101	waste	518	unclass	
flakes	92	blades	7	cores	51	chunks/ spalls	466

2. Tool types

1.1		2.1	1	3.1		4	10	5.1	4	6.1	7	7.1	1	8.1	6	9.0	3
1.2		2.2	12	3.2				5.2	16	6.2	3	7.2		8.2	4	=	3
1.3		2.3	3	3.3				5.3	2			7.3	3	8.3	3		
1.4	3			3.4				5.4	6					8.4	5		
=	3	=	16	=	0	=	10	=	28	=	10	=	3	8.5	5		
														8.6	4		
														8.7			
														8.8			
														=	27		

Notes:

1 concave scraper
2 convex scrapers
3 plane scrapers
10 awls/borers
4 edgeworn blades
16 edgeworn flakes
2 retouched blades
6 retouched flakes
10 heavy duty
1 geometric microlith
3 retouched bladelets
6 spurred, 4 notched
3 abraded
5 misc. retouched
5 broken retouched
4 nosed

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.	1	1	
2.		15	
3.		4	
4.			29
5.			
6.			
=	1	20	29

Waste type		Size (average)
1.	29	26
2.	1	25
3.	23	28
4.	466	24
5.		
=	519	

Reduction	
primary	393
secondary	183
tertiary	152
unknown	32
=	619

Tool group	Flake	Blade	Chunk /core
1.			
2.	7		9
3.			
4.	5		5
5.	20	7	1
6.	5		5
7.	14		
8.	19		8
=	70	7	28

Diagnostics present?	Notes
Cutting edge and butt end of polished stone axe. Geometric microlith. 1 hollow scraper. 11 dorsal scarring.	Waste flakes as blanks. Raw material testing. Core tools were scrapers, awls and heavy duty implements. All pebble flint with exception of 3 tuff forms.

Area		Code	MUT	NGR (centre)		Height OD	70m
Muttons Dalton				322348/472469			
No. of pieces	26	tools	18	waste	6	unclass	2
flakes	11	blades	2	cores	3	chunks/ spalls	10

2. Tool types

1.1		2.1		3.1		4.0	6	5.1		6.1		7.1		8.1	1	9.0	
1.2		2.2	2	3.2				5.2	2	6.2		7.2		8.2	1	=	0
1.3		2.3		3.3				5.3	2			7.3	1	8.3			
1.4				3.4				5.4						8.4			
=	0	=	2	=	0	=	6	=	4	=	0	=	1	8.5	1		
														8.6	1		
														8.7	1		
														8.8			
														=	5		

Notes:
2 convex scrapers
6 awls/borers
2 edgeworn flakes
2 retouched blades
1 retouched bladelet
1 notched
1 broken retouched
1 nosed
1 multiuse

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.		2	
2.			
3.			
4.			
5.			
6.	1		
=	1	2	

Waste type		Size (average)
1.	1	23
2.		
3.	3	24
4.		
5.	2	
=	6	

Reduction	
primary	1
secondary	9
tertiary	11
unknown	5
=	26

Tool group	Flake	Blade	Chunk
1.			
2.	2		
3.			
4.	2		4
5.	2	2	
6.			
7.	1		
8.	2		4
=	9	2	8

Diagnostics present?	Notes
Thumbnail scarper. 3 dorsal scarring Lots of bulbs/platforms.	

Area		Code	NC	NGR (centre)		Height OD	70m
New Close				323800/471500			
No. of pieces	13	tools	8	waste	4	unclass	1
flakes	3	blades	2	cores	2	chunks/ spalls	6

2. Tool types

1.1		2.1		3.1		4.0		5.1	1	6.1		7.1		8.1		9.0	
1.2		2.2	3	3.2				5.2	1	6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3	1			7.3		8.3			
1.4				3.4				5.4	2					8.4			
=	0	=	3	=	0	=	0	=	5	=	0	=		8.5			
														8.6			
														8.7			
														8.8			
														=	0		

Notes:

3 convex scrapers
1 edgeworn blade
1 edgeworn flake
1 retouched blade
2 retouched flake

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.	2		
2.			
3.			
4.			
5.			
6.			
=	2		

Waste type		Size (average)
1.		
2.		
3.	2	23
4.	1	28
5.	1	
=	4	

Reduction	
primary	1
secondary	5
tertiary	5
unknown	2
=	13

Tool group	Flake	Blade	Chunk
1.			
2.			3
3.			
4.			
5.	2	2	1
6.			
7.			
8.			
=	2	2	4

Diagnostics present?	Notes
Blade cores. 2 dorsal scarring.	

Area		Code	NE	NGR (centre)		Height OD	10m
Walney North				318000/473400			
No. of pieces	3	tools	2	waste	1	unclass	
flakes		blades		cores	1	chunks/ spalls	1

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1		7.1		8.1	1	9.0	1
1.2		2.2		3.2				5.2		6.2		7.2		8.2		=	1
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4						8.4			
=	0	=	0	=	0	=	0	=	0	=	0	=		8.5			
														8.6			
														8.7			
														8.8			
														=	1		

Notes:
1 spurred
1 anvil stone

waste: 1 blade core

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.	1		
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.		
2.		
3.	1	25
4.		
5.		
=		

Reduction	
primary	
secondary	
tertiary	1
unknown	1
=	

Tool group	Flake	Blade	Chunk
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
=			

Diagnostics present?	Notes
	With basalt spreads in dune blowout on Walney North End.

Area		Code	PD	NGR (centre)		Height OD	70m
Parkers Dalton				323787/472962			
No. of pieces	2	tools	1	waste	1	unclass	
flakes		blades	1	cores		chunks/ spalls	1

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1		7.1		8.1		9.0	
1.2		2.2		3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3	1			7.3		8.3			
1.4				3.4				5.4						8.4			
=	0	=	0	=	0	=	0	=	1	=	0	=		8.5			
														8.6			
														8.7			
														8.8			
														=	0		

Notes:
1 retouched blade

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.		
2.		
3.		
4.	4	
5.		
=		

Reduction	
primary	
secondary	1
tertiary	1
unknown	
=	2

Tool group	Flake	Blade	Chunk
1.			
2.			
3.			
4.			
5.		1	
6.			
7.			
8.			
=		1	

Diagnostics present?	Notes

Area		Code	PAR	NGR (centre)		Height OD	30m
Parkhouse				322300/471150			
No. of pieces	12	tools	6	waste	4	unclass	2
flakes	6	blades	1	cores		chunks/ spalls	3

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1		7.1		8.1		9.0	
1.2		2.2	2	3.2				5.2	2	6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3	1			7.3		8.3			
1.4				3.4				5.4	1					8.4			
=	0	=	0	=	0	=	0	=	0	=	0	=	0	8.5			
														8.6			
														8.7			
														8.8			
														=	0		

Notes:
2 convex scrapers
2 edgeworn flakes
1 retouched blade
1 retouched flake

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.	2	
2.		
3.		
4.	2	
5.		
=	4	

Reduction	
primary	1
secondary	2
tertiary	7
unknown	2
=	12

Tool group	Flake	Blade	Chunk
1.			
2.	1		1
3.			
4.			
5.	3	1	
6.			
7.			
8.			
=	4	1	1

Diagnostics present?	Notes
1 nice retouched blade. 1 dorsal scarring.	

Area		Code	RR	NGR (centre)		Height OD	20m
Rakesmoor				321349/473973			
No. of pieces	4	tools	3	waste	1	unclass	
flakes	3	blades		cores		chunks/ spalls	1

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1		7.1		8.1		9.0	
1.2		2.2	1	3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4	2					8.4			
=	0	=	1	=	0	=	0	=	2	=	0	=	0	8.5			
														8.6			
														8.7			
														8.8			
														=	0		

Notes:
1 convex scraper
2 retouched flake

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.		
2.		
3.		
4.	1	85
5.		
=		

Reduction	
primary	2
secondary	
tertiary	2
unknown	
=	4

Tool group	Flake	Blade	Chunk
1.			
2.	1		
3.			
4.			
5.	2		
6.			
7.			
8.			
=			

Diagnostics present?	Notes

Area		Code	RP 1-3	NGR (centre)		Height OD	20m
Rampside				324280/466600			
No. of pieces	49	tools	3	waste	1	unclass	45
flakes	2	blades		cores		chunks/ spalls	6

2. Tool types

1.1		2.1		3.1		4.0	1	5.1		6.1		7.1	1	8.1		9.0	
1.2		2.2		3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3	1	3.3				5.3				7.3		8.3			
1.4				3.4				5.4						8.4			
=	0	=	1	=	0	=	1	=	0	=	0	=	1	8.5			
														8.6			
														8.7			
														8.8			
														=	0		

Notes:
1 plane scraper (tertiary, burnt)
1 awl/borer on pebble flint
1 geometric microlith on chert

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.		
2.		
3.		
4.		
5.		
=		

Reduction	
primary	
secondary	
tertiary	
unknown	
=	

Tool group	Flake	Blade	Chunk
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
=			

Diagnostics present?	Notes
Geometric microlith	Three separate concentrations, the third of which was associated with a spread of 43 chunks and lumps and a single burnt scraper.

Area		Code	RD	NGR (centre)		Height OD	5m
Roanhead				321950/475690			
No. of pieces	191	tools	19	waste	171	unclass	
flakes	21	blades		cores	2	chunks/ spalls	

2. Tool types

1.1		2.1		3.1		4.0	2	5.1		6.1	1	7.1		8.1		9.0	1
1.2		2.2	7	3.2	1			5.2	3	6.2	1	7.2		8.2		=	1
1.3	1	2.3		3.3				5.3				7.3		8.3	1		
1.4				3.4				5.4						8.4			
=	1	=	7	=	1	=	2	=	3	=	2	=	0	8.5			
														8.6			
														8.7	1		
														8.8			
														=	2		

Notes:
1 small polished stone axe
7 convex scrapers
1 barbed and tanged arrowhead
2 awls/borers
3 edgeworn flakes
2 heavy duty
1 abraded edge
2 multiuse
1 anvil stone

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.	1		
2.			
3.			
4.			
5.		1	1
6.			
=	1	1	1

Waste type		Size (average)
1.	49	
2.	22	
3.	2	
4.		
5.	114	
=		

Reduction	
primary	55
secondary	30
tertiary	5
unknown	
=	

Tool group	Flake	Blade	Chunk
1.			
2.	7		
3.	1		
4.	1		
5.	3		
6.	1		1
7.			
8.	3		
=	16		

Diagnostics present?	Notes
2 pieces tuff whetstone. thunmbnail scrapers. barbed and tanged arrowhead. polished stone axe.	Associated with excavated posthole structure in sand dune blowout.

Area		Code	RM	NGR (centre)		Height OD	20m
Roosecote Moss				323750/468550			
No. of pieces	4	tools	1	waste	2	unclass	1
flakes	3	blades	0	cores	0	chunks/ spalls	1

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1		7.1		8.1		9.0	
1.2		2.2		3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4						8.4			
=	0	=	0	=	0	=	0	=	0	=	0	=		8.5			

Notes:
1 broken retouched

	8.6	1
	8.7	
	8.8	
	=	1

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.	2	20
2.		
3.		
4.		
5.		
=	2	

Reduction	
primary	
secondary	2
tertiary	2
unknown	
=	4

Tool group	Flake	Blade	Chunk
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.	1		
=	1		

Diagnostics present?	Notes

Area		Code	SF	NGR (centre)		Height OD	10m
Sandscale Farm				319700/474150			
No. of pieces	14	tools	7	waste	7	unclass	
flakes	6	blades		cores	4	chunks/ spalls	5

2. Tool types

1.1		2.1		3.1		4.0	2	5.1		6.1	1	7.1		8.1	1	9.0	
1.2		2.2		3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4	1					8.4	1		
=	0	=	0	=	0	=	2	=	1	=	1	=		8.5			
														8.6	1		
														8.7			
														8.8			
														=	3		

Notes:
2 awls/borers
1 retouched flake
1 heavy duty
1 spurred
1 misc. retouched
1 broken retouched

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.	2		
2.		1	
3.	1		
4.			
5.			
6.			
=	3	1	

Waste type		Size (average)
1.	1	32
2.		
3.	4	38
4.	2	14
5.		
=	7	

Reduction	
primary	2
secondary	1
tertiary	7
unknown	4
=	14

Tool group	Flake	Blade	Chunk
1.			
2.			
3.			
4.	1		1
5.	1		
6.			1
7.			
8.	3		
=	5		2

Diagnostics present?	Notes
Blade cores very rough, and not exhausted, hinge fractures etc. 2 dorsal scarring.	All pebble flint

Area		Code	SLL	NGR (centre)		Height OD	50m
Sinkfall				321160/473450			
No. of pieces	4	tools	2	waste	1	unclass	1
flakes	3	blades		cores		chunks/ spalls	1

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1		7.1		8.1		9.0	
1.2		2.2		3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3	1		
1.4				3.4				5.4						8.4			
=	0	=	0	=	0	=	0	=	0	=	0	=	0	8.5	1		
Notes: 1 abraded edge 1 broken retouched 1 broken tuff flake														8.6			
														8.7			
														8.8			
														=	2		

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.	1	27
2.		
3.		
4.		
5.		
=		

Reduction	
primary	
secondary	
tertiary	3
unknown	1
=	4

Tool group	Flake	Blade	Chunk	Diagnostics present?	Notes
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.	1		1		
=	1		1		

Area		Code	SFC	NGR (centre)		Height OD	45m
Sixth form				321760/471390			
No. of pieces	4	tools	3	waste	1	unclass	
flakes		blades		cores	1	chunks/ spalls	3

2. Tool types

1.1		2.1		3.1		4.0		5.1		6.1		7.1		8.1		9.0	
1.2		2.2	1	3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4						8.4			
=	0	=	1	=	0	=	0	=	0	=	0	=		8.5	2		
														8.6			
														8.7			
														8.8			
														=	2		

Notes:

1 convex scraper
2 broken retouched

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.		1	
2.			
3.			
4.			
5.			
6.			
=		2	

Waste type		Size (average)
1.		
2.		
3.	1	30
4.		
5.		
=	1	

Reduction	
primary	2
secondary	
tertiary	1
unknown	1
=	4

Tool group	Flake	Blade	Chunk
1.			
2.			1
3.			
4.			
5.			
6.			
7.			
8.			2
=			3

Diagnostics present?	Notes

Area		Code	ST	NGR (centre)		Height OD	70m
Stainton				325640/472475			
No. of pieces	5	tools	3	waste	1	unclass	1
flakes	1	blades	3	cores	0	chunks/ spalls	1

2. Tool types

1.1		2.1		3.1		4.0		5.1	2	6.1		7.1		8.1		9.0	
1.2		2.2		3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4	1					8.4			
=	0	=	0	=	0	=	0	=	3	=	0	=	0	8.5			
														8.6			
														8.7			
														8.8			
														=	0		

Notes:
2 edgeworn blades
1 edgeworn flake

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.		
2.		
3.		
4.		
5.		
=		

Reduction	
primary	
secondary	1
tertiary	3
unknown	1
=	5

Tool group	Flake	Blade	Chunk
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
=			

Diagnostics present?	Notes
1 tuff endscraper. 2 dorsal scarring.	

Area		Code	STA	NGR (centre)		Height OD	20m
Stank				323600/469900			
No. of pieces	37	tools	11	waste	24	unclass	2
flakes	11	blades	1	cores	9	chunks/ spalls	16

2. Tool types

1.1		2.1		3.1		4.0	2	5.1		6.1		7.1		8.1		9.0	
1.2		2.2	2	3.2				5.2	1	6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3	1			7.3	2	8.3			
1.4				3.4				5.4	2					8.4			
=	0	=	2	=	0	=	2	=	4	=	0	=	2	8.5			
														8.6			
														8.7			
														8.8	1		
														=	1		

Notes:
2 convex scrapers
4 awls/borers
1 edgeworn flake
1 retouched blade
1 retouched flake
1 retouched bladelet
1 denticulate

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.	7		
2.	2		
3.			
4.			
5.			
6.	4		1
=	13		1

Waste type		Size (average)
1.	1	12
2.		
3.	9	23
4.	11	20
5.	3	12
=	24	

Reduction	
primary	2
secondary	12
tertiary	9
unknown	14
=	37

Tool group	Flake	Blade	Chunk
1.			
2.	2		
3.			
4.			2
5.	3	1	
6.			
7.	2		
8.	1		
=	8	1	2

Diagnostics present?	Notes
Exhausted single and opposed platform blade cores, and core rejuvenations. Denticulate. 6 dorsal scarring.	

Area		Code	TH	NGR (centre)		Height OD	10m
Trough Head				320250/463270			
No. of pieces	140	tools	14	waste	123	unclass	3
flakes	44	blades	2	cores	3	chunks/ spalls	95

2. Tool types

1.1		2.1		3.1		4.0		5.1	1	6.1		7.1		8.1		9.0	
1.2		2.2	2	3.2				5.2	5	6.2	1	7.2		8.2	1	=	0
1.3		2.3		3.3				5.3	1			7.3		8.3			
1.4				3.4				5.4						8.4			
=	0	=	0	=	0	=	0	=	0	=	0	=	0	8.5	1		
														8.6			
														8.7	2		
														8.8			
														=			

Notes:
2 convex scraper
1 edgeworn blade
5 edgeworn flake
1 retouched blade
1 heavy duty
1 notched
1 broken retouched
2 multiuse

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.		1	
2.	1	1	
3.			
4.			
5.			
6.			
=	1	2	

Waste type		Size (average)
1.	32	26
2.		
3.	3	35
4.	83	24
5.		
=	118	

Reduction	
primary	74
secondary	40
tertiary	17
unknown	9
=	140

Tool group	Flake	Blade	Chunk
1.			
2.			2
3.			
4.			
5.	5	2	
6.	1		
7.			
8.	4		
=	10	2	2

Diagnostics present?	Notes
Opposed platform core. 6 with dorsal scarring.	All pebble flint with exception of 2 tuff waste flakes. These broken but with blade characteristics. .

Area		Code	WF	NGR (centre)		Height OD	10m
Westfield				323250/466630			
No. of pieces	10	tools	6	waste	2	unclass	2
flakes	5	blades	0	cores	0	chunks/ spalls	5

2. Tool types

1.1		2.1		3.1	1	4.0	3	5.1		6.1		7.1		8.1		9.0	
1.2		2.2	1	3.2				5.2		6.2		7.2		8.2		=	0
1.3		2.3		3.3				5.3				7.3		8.3			
1.4				3.4				5.4						8.4			
=	0	=	0	=	1	=	3	=	0	=	0	=	0	8.5	1		
														8.6			
														8.7	1		
														8.8			
														=	5		

Notes:
1 leaf arrowhead
1 side scraper
3 awls/borers
1 end/side scraper
1 broken retouched

3. Technology and reduction

Core type	Blade	Flake	Core tool
1.			
2.			
3.			
4.			
5.			
6.			
=			

Waste type		Size (average)
1.	1	
2.		
3.		
4.	1	
5.		
=	1	

Reduction	
primary	
secondary	3
tertiary	7
unknown	
=	10

Tool group	Flake	Blade	Chunk
1.			
2.	1		
3.			
4.			3
5.			
6.			
7.			
8.	1		1
=	2		4

Diagnostics present?	Notes
Invasively worked leaf arrowhead. Side/end scraping/cutting tools.	

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NGR	Location	RC dates	References
345415/482514	Foulshaw Moss	Small scale clearances between 3000 and 2000 cal BC. Larger scale between 2000 and 1300 cal BC. Cereal pollen between 1300 and 900 cal BC.	Smith 1959; Wimble *et al.* 2000.
341888/485030	Helton Tarn		Smith 1958.
346700/489000	Helsington Moss	As at Foulshaw Moss. See Wimble *et al.* for details.	Smith 1959; Wimble *et al.* 2000.
343500/482500	Nichols Moss		Smith 1959; Oldfield 1963.
343500/486400	Witherslack Hall		Oldfield 1963.
327069/474442	Urswick Tarn		Oldfield 1963; Oldfield and Statham 1963.
334900/480100	Ellerside Moss		Oldfield 1963; Oldfield and Statham 1963.
349700/476600	Thrang Moss		Oldfield 1963; Oldfield and Statham 1963.
347850/476700	Hawswater		Oldfield 1963.
333000/482500	Roudsea	Small scale clearances between *c.* 3850 and *c.* 3150 BC. Grass/plantain from *c.* 3400 BC and cereal pollen from *c.* 3150 BC.	Birks 1982.
308500/491800	Williamson Moss	Anthropogenic influences discernible at c. 4780-4470 cal BC. First Elm decline 4458-4047 cal BC. Second and cereal pollen at 3893-3381 cal BC.	Pennington 1971, 1971; Tipping 1994.
310800/486900	Barfield Tarn	Clearance at 4457-3825 cal BC then at VIIa/b boundary with grasses, weeds and cereal pollen.	Pennington 1971, 1975; Hodgkinson *et al.* 2000.
300300/507100	Ehenside Tarn	Main activity between *c.* 3900 and 1500 cal BC, increased charcoal between *c.* 3000 and 2600 cal BC.	Walker 1966, 2001.
326200/508400	Langdale Coombe		Walker 1965.
329300/508400	Blea Tarn	First clearance episode at *c.* 3700 cal BC.	Pennington 1964, 1971, 1975.
316000/497000	Devoke Water		Pennington 1964.
325200/498700	Seathwaite Tarn		Pennington 1964.
326300/496700	Blind Tarn		Pennington 1964.
326600/497700	Goatswater		Pennington 1964
328300/507200	Thorn Crag	Axe working debris sealed by peat associated with charcoal dated to 4209-3709 cal BC. Elm decline at 4100-4030 cal BC.	Jamie Quartermaine pers. comm. (OAN).
326900/503800	Red Tarn		Pennington 1964.
324500/507700	Angle Tarn		Pennington 1964.
327100/503600	Red Tarn Moss		Pennington 1964.
361600/527050	Temple Sowerby	Fluctuations of heather associated with charcoal soon after *c.* 5600 cal BC. Woodland clearance at *c.* 3900 cal BC.	Skinner 2000.
367710/529900	Howgill Castle	Cereal pollen at c. 4000 cal BC. Further clearance from c. 3570 cal BC.	Skinner 2000.
363980/512650	Bank Moor	Clearance and burning at *c.* 2900 cal BC. Charcoal and cereal pollen at *c.* 1900 cal BC.	Skinner 2000.
372100/528150	Great Rundale	Peat formation *c.* 3300 cal BC. Clearance and burning c. 1800 cal BC until *c.* 1650 cal BC then *c.* 1500 cal BC.	Skinner 2000.

Appendix 6.1.
Pollen sites mentioned in the text.

Site	Date	Context/notes	Lab Ref.	References
Bart's shelter	6100-5883 cal BC	Bone point.	OxA-8069	Hodgkinson *et al.* (2000).
Monk Moors	5970-5360 cal BC	Site 2 hearth.	BM-1216	Tipping (1994); Hodgkinson *et al.* (2000).
Oddendale timber circle	2853-2466 cal BC	Inner ring of timber circle; charcoal on floor of infilled post pit.	UB-3421	Turnbull & Walsh (1997).
Oddendale timber circle	2583-2483 cal BC	Inner ring of timber circle; charcoal on floor of post pit.	UB-3399	Turnbull & Walsh (1997).
Oddendale timber circle	2859-2579 cal BC	Outer ring of timber circle; charcoal on floor of post pit.	UB-3400	Turnbull & Walsh (1997).
Hardendale Nab	3030-2500 cal BC	Charcoal in limestone chippings covering phase 1 cist; carbon dates were also derived from cremations.	OXA 1836	Williams & Howard Davies (forthcoming).
Ewanrigg	3350-2920 cal BC	Material from disturbed beaker pit, context 84.	HAR-8788	Bewley *et al.* (1992).
Ewanrigg	2450-1830 cal BC	Material from cremation pit; burial 18, context 18. Carbon dates were also derived from other cremations.	HAR-5961	Bewley *et al.* (1992).
Ewanrigg	2290-1750 cal BC	Material from cremation pit; burial 5, context 55. Carbon dates were also derived from other cremations.	HAR-7077	Bewley *et al.* (1992).
Allithwaite	2107-1747 cal BC	Material from burial 115, urn 1023.	AA-43419	Wild (2003).
Allithwaite	1922-1637 cal BC	Material from burial 115, urn 1023.	AA-43420	Wild (2003).
Allithwaite	2027-1741 cal BC	Material from burial 119, urn 1049.	AA-43418	Wild (2003).
Drigg	2900-2507 cal BC	Material from burnt mound.	UB-906	Cherry (1982); Hodgkinson *et al*. (2000).
Drigg	2456-2039 cal BC	Material from burnt mound.	UB-905	Cherry (1982); Hodgkinson *et al*. (2000).
Birrel Sike	1720±100 b.c	Hut circle' No. 1; charcoal from 'Hole A' in central area.	Birm-1018	Richardson (1982).
Birrel Sike	1690±100 b.c.	Cairn No.13; charcoal beneath stone slab in central area.	Birm-1063	Richardson (1982).
Thorn Crag	4209-3709 cal BC	Charcoal associated with an axe working deposit. Carbon from pollen sample appendix 6.1.		Jamie Quartermaine pers. comm.
Stake Beck	3730-3410 cal BC	Charcoal from an axe working floor.	OxA-2181	Bradley & Edmonds (1993)
Harrison Stickle	3780-3530 cal BC	Charcoal from an axe working floor.	BM 2625	Bradley & Edmonds (1993)
Top Butress Stickle Pike	3690-3370 cal BC	Charcoal associated with axe working debitage from a depth of 130-140cm, site 95.	BM 2628	Bradley & Edmonds (1993)
Top Butress Stickle Pike	3500-3100 cal BC	Charcoal associated with axe working debitage from a depth of 40-50cm, site 95.	BM 2627	Bradley & Edmonds (1993)
Thunacarr Knott	3250-2850 cal BC	Charcoal from an axe working floor.	BM 676	Clough (1973); Bradley & Edmonds (1993)

Appendix 6.2. Radiocarbon dates mentioned in the text.