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Prehistoric Landscapes of Cumbria

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Volume I

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Volume I

Summary

Characterised by the often uncompromising landscapes of the northern English Lake District, the perceived marginality of Cumbria has meant that its prehistoric record has seen little systematic academic attention. However, the region's topographic layout and agricultural history have contributed to the survival of many aspects of the prehistoric record. Although recent archaeological work has been limited this means there is a variety of data including pollen records, lithic evidence and a diverse range of extant and excavated monuments. The main concerns of this thesis are to present a synthesis of this evidence and to construct an integrated regional sequence from the Later Mesolithic to the Early Bronze Age. The application of contemporary theoretical approaches and engagement with the physical landscape means it is possible to explore the ways prehistoric communities organised themselves across local and regional landscapes and how this changed over time. Analysis and interpretation of the monument record, occupation evidence and the character of depositional traditions allows the formulation of a regional model of landscape occupation. Through this it is possible to explore the ways the distributions, settings and uses of monuments and important aspects of the natural world tied into the ways people lived across Cumbria at different social, geographical and temporal scales.

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Acknowledgements

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Sandra Robinson and Mark Jackson introduced me to Birkrigg and Stone Walls in the early 1990s and the Furness limestones began to work their way into my blood. More recently, my obsession with Furness has been indulged through meeting with Dave Coward. Alongside his encyclopaedic local knowledge, his commitment to prehistoric archaeology in Furness has been a much needed source of enthusiasm and encouragement. Without access to the lithic data from Dave's fieldwalking project over the past few years and the many long discussions resulting from its analysis, this PhD may well have been very different in character.

I am very grateful to Mark Brennand for his support and advice and for taking the time to comment on the final draft of this thesis. He also provided information from the county SMR and introduced me to the Witherslack limestones. Mark's knowledge of prehistory has formed the basis for many discussions and as Co-ordinator of English Heritage's *Regional Research Framework for the North West* he has provided the opportunity for useful meetings with other archaeologists working in the area.

Thanks are also due to Caroline Skinner who provided me with a copy of her unpublished PhD thesis. This has contributed greatly to the region's environmental record and provided much needed dating evidence. Any misquotation of her work stems from my limited understanding of the analysis and interpretation of pollen data. Jamie Lund, Robert Maxwell, Pete Burton and Brian Fereday of the National Trust licensed our excavations at Sizergh and Roanhead, lent us tools and provided other information. Thanks are due to Jamie Lund in particular for providing data from the National Trust SMR and for his boundless enthusiasm. Helena Smith provided information from the County SMR and Eleanor Kingston and John Hodgson from the Lake District National Park SMR.

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Introduction

"A revival of prehistoric studies in our district entails three kinds of work. First, to become acquainted with the discoveries already on record, and to think out their implications. Secondly, by new field-work to make fresh discoveries. Thirdly, to master the apparatus of the modern prehistorian, and, in particular, to know one's way about the best recent literature" (Collingwood 1933: 165).

Writing in 1933, Collingwood's call for a 'revival' of prehistoric study in Cumbria neatly sums up the scope of the following thesis. Although archaeological method and theory have seen significant alteration in the intervening 80 years, Cumbria's prehistoric record has seen little consistent academic attention. Together with data derived from new fieldwork, this thesis outlines and discusses the evidence available and brings it in line with current interpretative methodologies.

One of the problems this research was designed to address is that Cumbrian stone axes have dominated interpretations of the region's prehistory and that analyses have been based largely on their distribution at a national scale. This study is not, however, concerned specifically with stone axes, nor with attempting to 'fit' evidence for Neolithic occupation and monument use into narratives concerning their production and exchange. Instead, through the use of an integrated approach, its aim is to explore patterns of occupation and landuse in Cumbria from the Later Mesolithic to the Early Bronze Age. Rather than focussing on a period specific study or one based on the analysis of a particular category of archaeological evidence, the main concern of this research is to produce an integrated regional sequence. Only then will it be possible to address research questions relating to specific aspects of Cumbria's prehistoric record.

One of the main problems with the production of a regional narrative has been the reconciliation of evidence for localised occupation and monument use with contemporary academic interpretations. Conventional 'grand narrative' approaches to prehistoric archaeology have tended to collapse evidence for regional diversity into simplistic national syntheses. Although recent approaches have stressed the existence and importance of distinctive regional traditions, most have focussed on their theoretical implications rather than their material manifestations. Fundamentally, if we want to explore the nature of regional traditions, we need holistic studies of specific areas based on the analysis, integration and interpretation of raw data. This is not a new idea, but one that often falls outside the scope of regional studies.

In 1933, R. G. Collingwood forwarded a four-headed approach for the advancement of knowledge of Cumbrian prehistory; office work, fieldwork, excavation and publication. The office work included three main tasks. The first task, the cataloguing and classification of sites and finds would be followed by the second, the production of distribution maps at different scales to assess the distribution and landscape setting of particular types of sites and finds. Only then would it be possible to complete the third stage, that of interpretation.

The following thesis draws on Collingwood's ideas in a number of ways, not least in that in order to interpret Cumbria's prehistoric record at a regional scale, it has been necessary to analyse and interpret many disparate strands of evidence. Only through setting out and discussing previously available evidence and adding to it through new fieldwork and excavation is it possible to construct, then forward an holistic and integrated regional sequence in line with contemporary academic schema.

The analyses undertaken for the production of this thesis have included the examination of environmental data, the collection and characterisation of lithic scatters, interpretation of the distributions, settings and architecture of monuments and the analysis of burial and depositional practices. Beyond integrating the evidence within a coherent intellectual framework, basic data analysis has been problematic. There is no regional chronology and there are biases relating to the survival and identification of particular types of evidence, across the region and across different topographic zones. The ways this information has been collected and interpreted in the past has also caused problems at a number of levels. Despite this, it has been possible to produce internally coherent datasets with which to work and to interpret them at a number of geographical and analytical scales.

One of the main concerns of this study is the exploration of occupation and monument use in relation to local and regional landscapes. As such, it was decided that for the illustration of many of the following observations and arguments, it was necessary to include figures and photographs within the body of the text. Due to binding restrictions, this has meant that the thesis is split into two volumes. This volume (volume I) incorporates chapters one to seven and volume II incorporates chapters eight to ten, the bibliography and appendices.

Chapter one provides an introduction to Cumbrian landscapes and demonstrates the need for a regional approach to the region's prehistoric record. Drawing on the use of theoretically informed landscape perspectives in the interpretation of prehistoric

occupation, chapter two sets out the methodological and interpretative frameworks forming the basis of this study. Chapter three outlines the character and distribution of environmental and lithic data and develops a model of the likely nature of landuse and occupation these represent. Chapter four introduces the monument record and outlines methodological approaches to particular monument types. Chapter five discusses the classification and interpretation of stone circles and chapter six interprets the character and distribution of all Neolithic and Early Bronze Age monuments. Analysis of the landscape settings of monuments (chapter seven) and evidence for burial and deposition (chapter eight) illustrate the social and geographical scales at which communities operated over the Neolithic and Bronze Age and how they drew on and appropriated aspects of the natural world. Demonstrating the articulation of themes discussed in earlier chapters, chapter nine takes the form of an integrated case study of occupation, monument use and depositional practice across the Furness Peninsula. The final chapter discusses the nature and identification of regional traditions, forwards an integrated regional narrative and concludes with suggestions for further work.

Chapter 1: Welcome to Cumbria: geography and legacy

Introduction

The geographical location and distinctive topographic character of Cumbria have had a significant impact not only on the character and survival of its prehistoric record, but also the ways it has been interpreted in the past. Looking at the region from a number of different historical and geographic perspectives, this chapter is concerned with two main themes; an introduction to the internal layout of Cumbria and discussion of how its prehistoric archaeology has been understood from within, and in relation to its neighbouring regions. These factors have left a formidable legacy. Grand narrative approaches have often overlooked the importance of Cumbria as a prehistoric region, and local and academic research has built on culture historical concerns with charting its links with other areas rather than defining a coherent regional sequence. Although there is a significant amount of material with which to work, this has seen little synthesis or interpretation at a regional scale.

Cumbrian geographies

Cumbria is situated both within northern England and on the western seaboard (figures 1.1 & 1.2). Its geographical positioning has meant it has been secondary to the interpretative traditions which characterise these areas. To its east, the Pennine ridge has been understood as a physical and a conceptual barrier separating the Highland and Lowland Zones of mainland Britain. The delineation of these areas, largely on the basis of geology (e.g. Fox 1932; Childe 1940), has led to the marginalisation of western Britain from the so-called 'core' regions of the south and east.

From culture historical approaches onwards through processual and post-processual perspectives, the monuments of the Lowland Zone have often been understood to reflect the 'prehistoric process' at a national scale. Consistently dependent on re-reading the same datasets, influential theoretical narratives based largely on the monuments of Wessex have been used to chart the emergence of social and political hierarchies, to discuss ritual landscapes and to explore the experiential aspects of monumental architecture (e.g. Renfrew 1973; Clarke 1972; Burgess 1980; Bradley 1984; Thomas 1991, 1993, 1999; Barrett 1994). Although reliance on these areas has provided the datasets through which to forward grand narrative accounts, understandings of regions in the north and west remain based largely on the classification schema forwarded by the proponents of culture history (see Harding 2000; Cummings & Whittle 2004; Cummings & Fowler 2004).

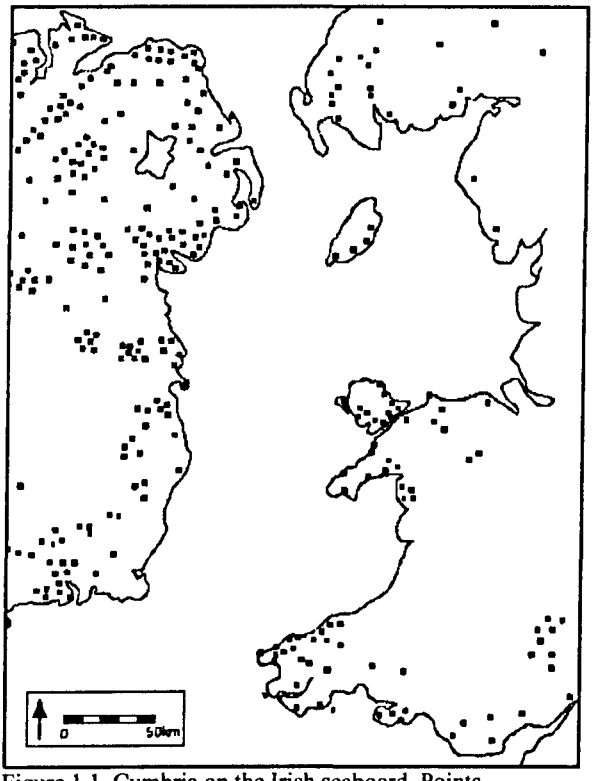

Figure 1.1. Cumbria on the Irish seaboard. Points mark 'Neolithic' monuments. From Cummings (2004b).

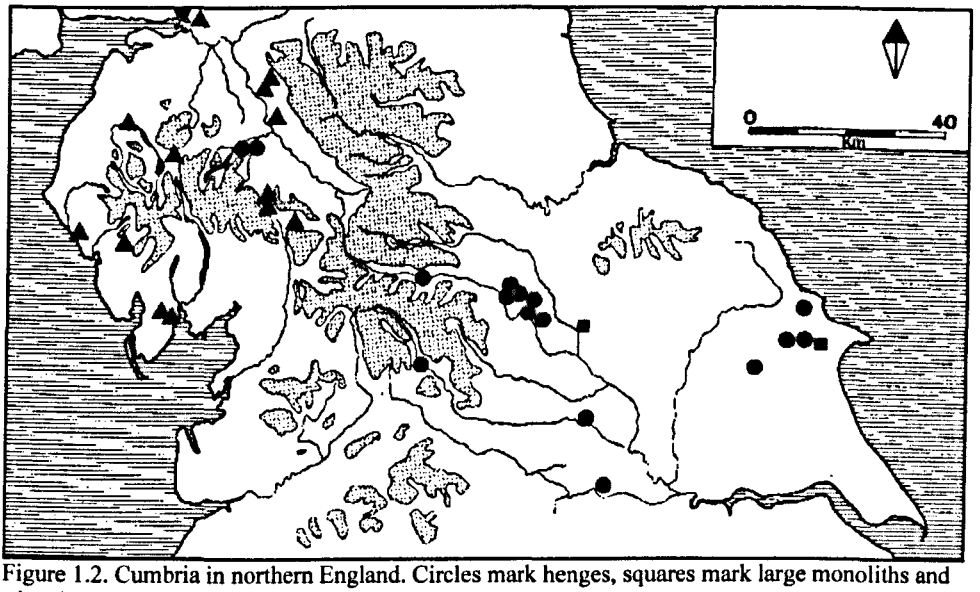

Figure 1.2. Cumbria in northern England. Circles mark henges, squares mark large monoliths and triangles mark large stone circles. From Edmonds (1995).

Cumbria was claimed as a Secondary Neolithic region on the basis of finds of stone axes and Peterborough ware from Ehenside Tarn (Darbishire 1873; Piggott 1954). However, the lack of an identifiable chambered long cairn tradition has impacted significantly on the way the area has been perceived. Since the delineation of the 'Western Neolithic' style zones, Cumbria has remained marginal to the classificatory and interpretative schema of the Irish Sea traditions (Piggott 1954; Powell *et al.* 1969; Cummings & Fowler 2004). Rather than shared monument traditions, it has been the distribution of stone axes from the central Lakes that has been used to identify links across the Irish Seaboard (e.g. Cooney 2000; Cummings 2004).

A similar situation exists with the relationship between Cumbria and its neighbours to the east. Largely in reaction to the interpretive bias towards the south, calls have been made for integrated accounts of the prehistory of northern England (e.g. Harding *et al.* 1996; Frodsham 2000). However, where Cumbria is mentioned in research agendas for the north, attention is commonly focussed on furthering knowledge of the exchange networks illustrated by the distribution of stone axes (Bradley & Edmonds 1993; Durden 1996; Harding *et al.* 1996; Bradley 2002b; Harding 2003). With perhaps the exception of the perceived role of the Penrith henges in 'facilitating' the movement of axes across the Pennines, monuments in Cumbria have played only minor roles in accounts of northern England. Traditionally understood as one of the core areas of the Lowland Zone, the largely earthen monuments of the north east have been easy to relate, at a superficial level at least, to those of the southern chalklands. As such, on the basis of present knowledge, a 'prehistory of the north' would remain biased towards those regions east of the Pennines.

First impressions

> "In Prehistoric times the wildness of the unaccustomed heights and the hostility of the natives may well have persuaded strangers that the boundaries of the region were safer than its unknown heart" (Burl 1988:183).

As a native of Cumbria, the ways the region has been treated are frustrating at a number of levels. It was this frustration which led in part to the initiation of this research. Reading around the available local literature it became clear that although the area had seen a significant history of archaeological investigation, there was no clear regional account. That academic accounts were dominated by the production of stone axes and their subsequent movement beyond the county boundaries led to some questions about what was happening *inside*. What were people doing when they weren't making axes or trading them at stone circles? How did the diversity of landscapes in Cumbria affect patterns of movement and occupation across different parts of the region? How did this relate to narratives based on the southern chalklands? Looking at the evidence, it was striking that the distribution of monuments and axe finds along major routeways between the uplands and lowlands, and occupation sites along the coast suggested

the layout of the landscape impacted on occupation and communication in the past much as it does in the present. As will be discussed below, this was by no means a new idea. However simplistic, it paved the way to thinking about Cumbria's prehistoric record from my own perspective; from the inside, from the valleys and dales rather than from beyond the county boundaries or from the bird's eye perspective of a distribution map.

At the outset of this research, it was envisaged that detailed analysis of the substantial lithic archive available (see below) could provide a context through which to understand the relationship between domestic occupation, landuse and the construction and use of monuments. Following basic data collection however, it became clear that there are significant problems with the ways *all* aspects of the prehistoric record have seen analysis and interpretation in the past. Methodological approaches towards much of the data were disorganised and incoherent and interpretation of different categories of evidence unreliable, based often on historically constituted re-readings of the same datasets. This meant that looking at lithics *in relation* to monuments and environmental data would be untenable. There are many different categories of evidence available, including the landscape itself, and each have their own specific potentials for the understanding of prehistoric occupation. Looking at the ways in which the evidence has seen interpretation in the past, it became clear that these potentials could only be realised through an holistic and multi-scale approach. In order to produce a coherent and integrated regional account then, it has been necessary to confront the lithic, monument and environmental records from 'the bottom up'.

This change in focus, and the increased bulk of the data that came with it, meant it was necessary to limit the physical scale of primary research and also that the evidence available could be confronted from different geographical perspectives. The key categories of data forming the foci for this research are most clearly represented across the southern half of Cumbria and in many cases occur in close spatial proximity. Taking in the central and south western fells, the west coast and the Morecambe Bay peninsulas, analysis of unpublished survey data, Sites and Monuments Records and published accounts has allowed integration and analysis of the evidence at a close landscape scale. For the remainder of the region, research has been based primarily on published sources. Shifting the focus away from the Eden Valley has meant it has been possible to redress some major regional imbalances, and has also allowed comparison between traditions of occupation and monument use across different areas of Cumbria. Not only this, looking at the county's prehistoric record from different geographical scales has meant it has been possible to further understand ways that local and regional traditions related to those evidenced beyond modern political boundaries.

The layout

Romantic attitudes towards the central fells have been problematic to the ways Cumbria has been perceived. Carrying with them a raft of preconceptions, the fells which dominate the '*Lakes*' often loom larger in the imagination than they do in much of the region. Not only does this owe much to the area's literary history (see Nicholson 1955; Edmonds 2004), it also stems from the delineation of political boundaries. From a map-based perspective, the Lake District National Park (established in 1951) remains central to views of Cumbria. This has meant not only that those areas outside the central Lakes are often overlooked, but also that the wide diversity of landscapes which characterise the county as a whole rarely see consideration. As the fells are central to perceptions of the county, they are also central to its geological layout (figure 1.3). However, the drainage system stemming from central Cumbria spreads north to Carlisle, south to Morecambe Bay, west to the Irish Sea and east to the Pennines. Put in the simplest terms, the geological configuration of Cumbria is akin to the effect of slicing the top off an onion; the older rocks lie at the centre of the region, with the later, softer, deposits encircling them in virtual rings (Nicholson 1955, 1972). Whilst they were laid down in layers, the rocks have weathered in different ways and their makeup is central to understanding the character of different areas of the region.

The oldest rocks, the dark, smooth Skiddaw Slates, occupy much of northern Lakes, with a few outlying patches such as Black Coombe on the south west coast (Shackleton 1966). The Borrowdale Volcanic Series formed when a series of volcanoes erupted from the seabed formed by the slates. From their vents spread interleaved beds of lava of blue grey ash, tuff and breccias *(ibid.)*. These rocks vary in hardness and weathering into different configurations of hard high ridges and crumbling screes, include the Scafell group, the Coniston range, the Langdales, Helvellyn and High Street.

The Coniston Flags and Grits, the Banniside Slates and the Kirby Moor Flags characterise the southern slopes of the central Cumbrian dome from Coniston to Windermere and Kendal (Shackleton 1966). In contrast with the hard craggy volcanics against which they lie to the north, these form flattish hills and fells with shallow valleys, and lie in turn against the newer grey-white limestone fells of the eastern uplands and Morecambe Bay peninsulas. The Red Sandstones form a belt of rich lowland arable virtually encircling the rocky landscapes that characterise much of the Lake District (Nicholson 1972). Emerging in Furness then running up the coast to St Bees, these cover most of the Solway Plain to Carlisle before returning south down the Eden valley.

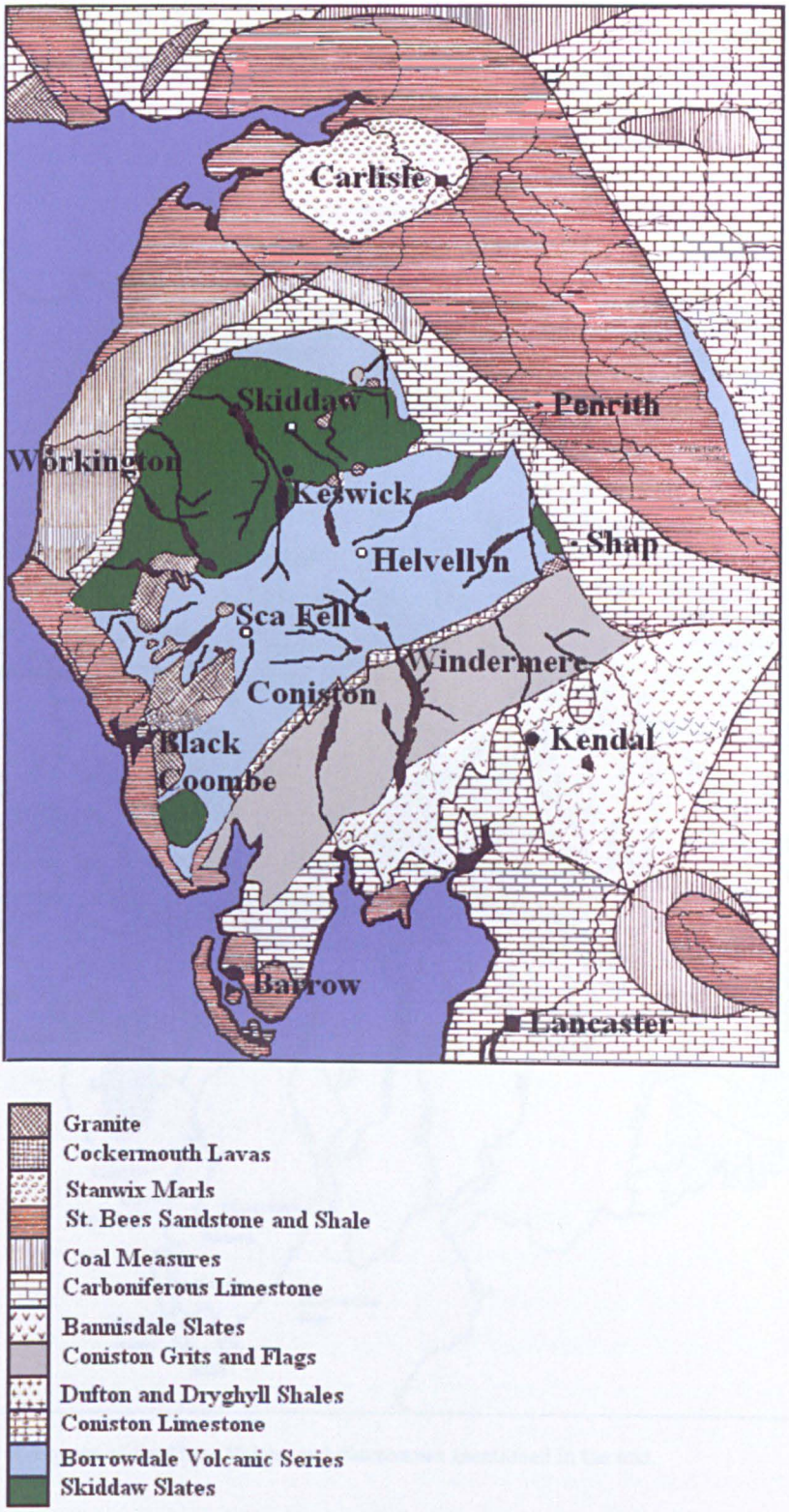

Figure 1.3. Simplified geology of Cumbria. After Shakleton (1966).

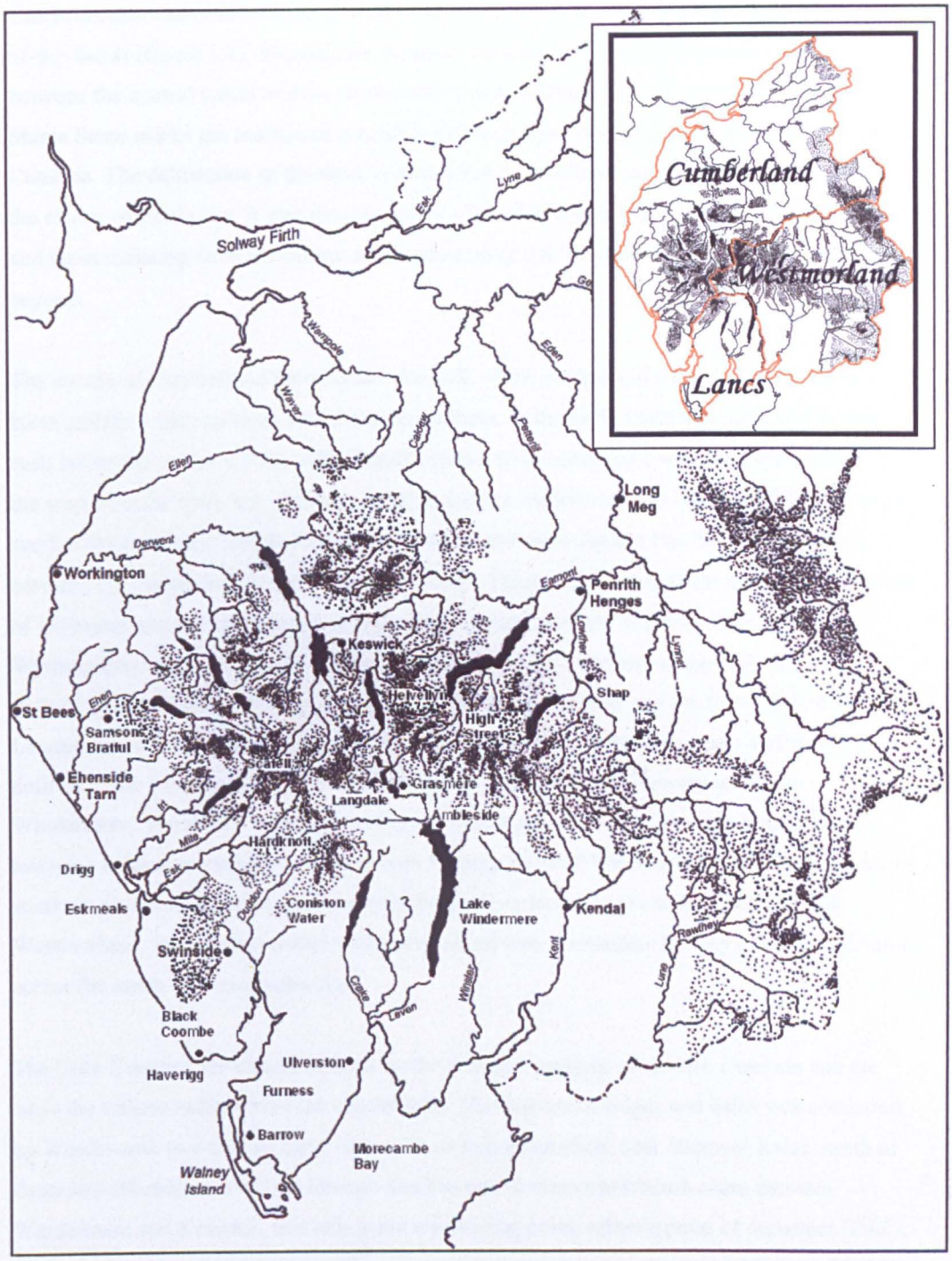

Figure 1.4. Layout of the Three Shires, and placenames mentioned in the text.

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Whilst Cumbria has been understood as a coherent region distinct from others in northern England, it is also split into discrete areas by virtue of its internal topography. Until 1974, Cumbria consisted of three Lake Counties; Cumberland, Westmorland and Lancashire-north-of-the-Sands (figure 1.4). Standing on Wrynose Pass on the line of the Roman road running between the central Lakes and the west coast by way of Hardknott Roman fort, the Three Shires Stone marks the traditional boundary between these distinct and very different areas of Cumbria. The delineation of the three counties has been defined not by solid geology, but by the effects of glaciation. It was the movement of ice that created the systems of U-shaped dales and lakes radiating from the central fells and running into the diversity of lowland landscapes beyond.

The county of Cumberland incorporates the bulk of the central and western mountains and lakes and the valley systems that characterise them. In the north these run north west/south east, bordering on the Solway with Dumfriesshire, to the north east with the Pennines and to the west with the Irish Sea. Between St Bees and the Duddon estuary, the valleys are oriented north east/south west. Cumberland and Westmorland meet along a line broadly stretching between the Langdales, Helvellyn and Ullswater. Taking in the mountains and high fells south of Ullswater and east of Windermere, the Shap uplands and the southern Eden valley, Westmorland is predominately landlocked. Bordering the Pennines to the east, the area is defined by the north/south running valleys of the Lune, Lowther and the Eden, linked to North Lancashire by the the Kent as it flows into Morecambe Bay. Lancashire-north-of-the-Sands is defined to the west by the Duddon estuary and to the east by the Winster and Lake Windermere. The region includes a variety of landscapes from the Coniston range, to the lowlying areas surrounding the north/south running lakes of Windermere and Coniston and the southern peninsulas. Although apparently isolated, squeezed between Cumberland and Westmorland, the area has traditionally been allied with Lancashire by way of communication across the sands of Morecambe Bay.

The Lake Counties are clearly defined by the physical makeup of modern Cumbria and the ways the valleys radiate from the central fells. This pattern of ridges and dales was compared by Wordsworth to a spoked cartwheel, with its hub somewhere near Dunmail Raise, north of Grasmere (Nicholson 1972). Although this lies on the main north/south route between Windermere and Keswick, this hub is not a gathering point, rather a point of departure (*ibid.*). That the three counties have been locked into different networks of communication with their neighbours is due not only to their physical location, but also that life has been lived up and down the dales which run from the fells, rather than across them: "Like the becks it begins at the dale head, gathers tributaries from farms and hamlets, and descends to the comparative lowlands where it usually finds a village or small town" (Nicholson 1972: 16).

"How greatly the mountains divide the people who live among them can be seen from the case of the two Seathwaites. Both are dale villages. From one to another is less than ten miles as the raven flies....But one Seathwaite is in Borrowdale, which runs due north, and the other is in Dunnerdale, which runs due south. The farmer's wife in Borrowdale does her shopping in Keswick; Her next dale neighbour beside the Duddon goes down to Broughton, and beyond to Ulverston or Barrow. Barrow and Keswick are not widely separated to anyone with a car, but, until recently, the dalesman did not often own a car, and if he tried to make the journey by rail, he would have been lucky to manage it in four hours" (Nicholson 1972: 17).

Landuse, enclosure and the antiquarian legacy

Not only has the configuration of Cumbria determined the ways communications between different areas have been played out, it is also closely entwined with the region's social, agricultural, industrial and archaeological history. The second half of the nineteenth century brought the railways, and due in part to the Romantic Poets, the railways brought mass tourism into the central Lakes. The railways also impacted on the growth of the mining and ironworking districts spawning urban construction in both its tourist and industrial towns. Around the same time, drainage, clearance and enclosure brought about considerable changes to the agricultural landscape. Although both urban and rural expansion were destructive to archaeology, the recognition of burial sites and chance finds, alongside the growth of antiquarianism, meant a fostering of interest in the prehistoric record.

Although urban construction produced many axes and other implements, it was activity associated with land improvement and enclosure that had the greatest affect on the archaeological landscape. Today, the most visually impacting of these is the relationship between upland and lowland monuments. On the upland fringe, particularly on the south western and eastern fells, there are many extant cairnfields. Frequently ending abruptly at the enclosure boundaries, which often extend deep into the valleys, stone built cairns and other features were often used as quarries for wall building materials (Edmonds & Evans in prep). That monuments in lowland contexts remain extant both on common land and emparked landscapes, and are visible as soilmarks on aerial photographs, attests to the intensity of improvement before and during the main period of enclosure. In both upland and lowland contexts, it was in only relatively few cases that features destroyed by clearance were recorded. However, antiquarian records attest to the removal of stone circles and burial cairns in lowland areas and also to finds located whilst quarrying sand and stone for building materials.

In lowland coastal contexts, peat cutting and the drainage of wetland areas for agriculture revealed a rich record of features such as buried trackways, metalwork, stone axes and occupation evidence. The drainage of Ehenside Tarn, for example, revealed a wealth of waterlogged wooden material alongside ceramics and stone axes (Darbishire 1873; figures 1.5, 1.6). In areas where land has been reclaimed and subsequently ploughed, the margins of former ponds, mosses or tarns have consistently revealed scatters of lithic material.

Figure 1.5. Axe grinding slab from Ehenside Tarn. From Darbishire (1873).

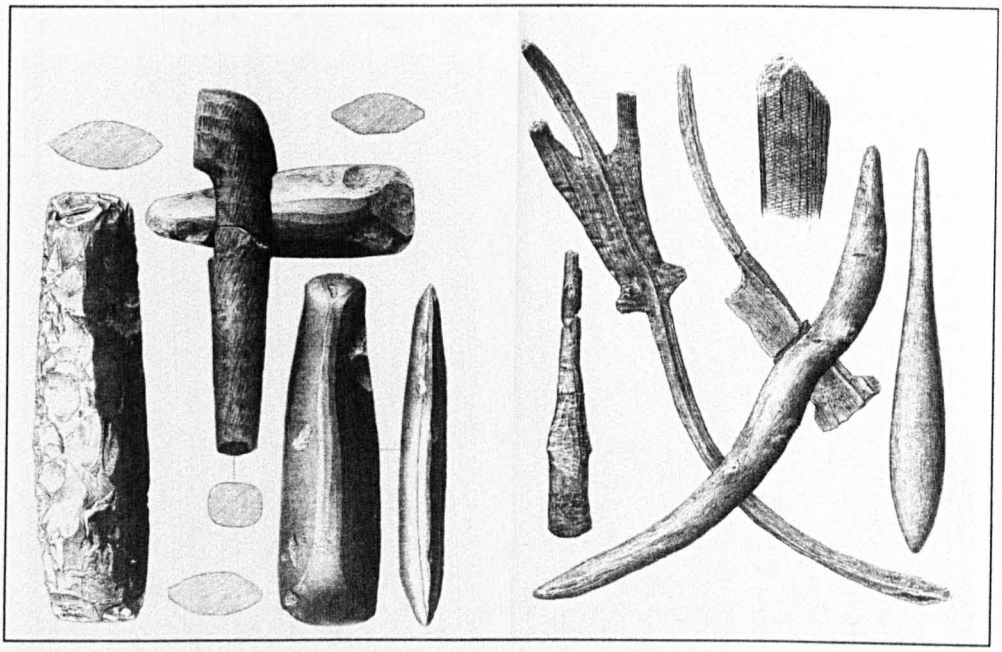


Figure 1.6. Stone axes and wooden implements from Ehenside Tarn. From Darbishire (1873).

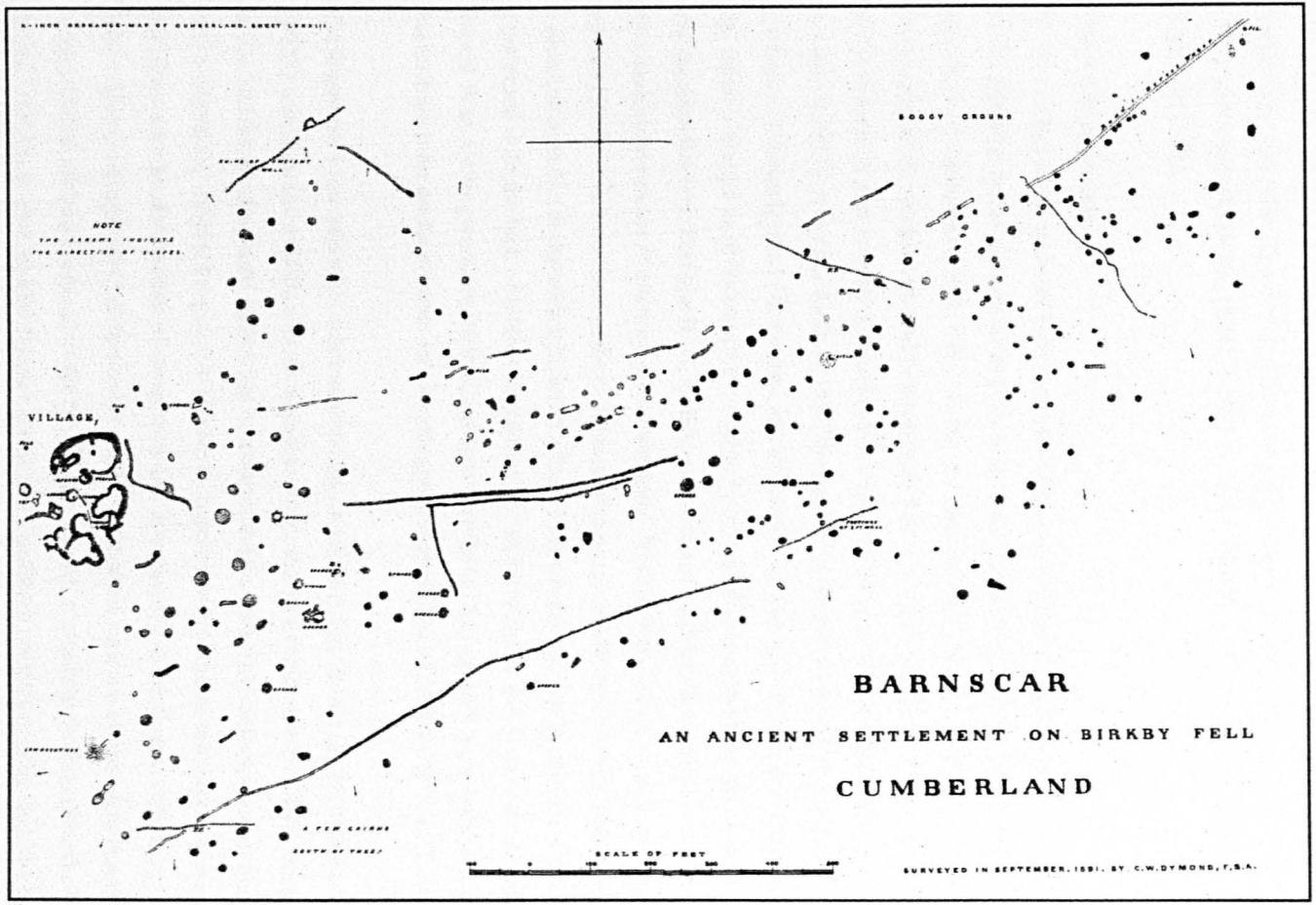


Figure 1.7. Dymond's (1892) survey of Barnscar.

During the mid to late nineteenth century, the increasing intensity of antiquarian activity, an offshoot of 'gentlemanly' interests that also included sketching and survey, led to the excavation of many monuments, only few of which reached publication. Together with anecdotal descriptions and surveys (e.g. Eccleston 1872; Clifton Ward 1878; Dymond 1880, 1881, 1890, 1892; Taylor 1881; figure 1.7) barrow excavations were undertaken by wealthy landowners and other dignitaries such as Canon Greenwell (1866, 1877), Canon Simpson (1882), Swainson Cowper (1888), Lord Lonsdale (Mawson 1876) and Lord Muncaster (Dymond 1892).

The Collingwoods

W. G. Collingwood, eminent historian, novelist, and secretary to John Ruskin was amongst the last antiquarian excavators in the region, undertaking relatively detailed investigations of prehistoric monuments (1901, 1912; Cross & Collingwood 1929). Collingwood published inventories of the prehistoric and historic monuments of Cumberland (1923) followed by those of Westmorland and Lancashire-north-of-the-Sands (1926), culminating in his guide *The Lake Counties* (1932). After his death in 1932 his equally influential son, Robin Collingwood, professor of metaphysical philosophy and the author of *The Idea of History* (1946) took over his father's mantle as president of the *Cumberland and Westmorland Archaeological and Antiquarian Society*. Perhaps R. G. Collingwood's most influential contribution was his paper *An Introduction to the Prehistory of Cumberland, Westmorland and Lancashire-north-of-the-sands* (1933), which outlined understandings of the region's prehistoric record and aimed to set a research agenda for the society's newly established Committee for Prehistoric Studies. Concerned with the lack of interest in prehistoric archaeology in the years following the First World War, Collingwood urged that if properly studied, the region's prehistoric remains could "contribute their quota towards solving the general problems of prehistory" (1933: 165).

Collingwood's interpretative scheme, drawing on the ideas of Childe (1925, 1930) and Fox (1932) was impressive both in scale and discussion and delivered with intuitive foresight. He addressed the geographical patterning of monuments in different landscape zones and within and between the different regions of Cumbria, together with erudite discussion of burial traditions and the distribution of stone axes and bronzework in relation to settlement evidence. Although the strength of Collingwood's work was that his interpretations were based on the integration of different aspects of the prehistoric record, it also clearly illustrates the two key themes that have come to characterise studies of Cumbrian prehistory. The first has been the identification of links to the Irish Seaboard and Eastern Yorkshire and the routes through which these were maintained. The second, a debt to Fox (1932), is that through its very physical location, the region has been understood as culturally backward and of little significance compared to its neighbours.

Collingwood considered the application of conventional dating schema inappropriate: "when the successive waves of civilisations came, they reached our remote western corner quite late if at all" (1933:170). Lacking Early Neolithic dolmens or 'true' long barrows, the area was thought to have been populated through the arrival of Secondary Neolithic cultures and the Beaker Folk, between 1800 and 1500 BC *(ibid.)*. Collingwood was aware that Scandinavian archaeologists had assigned axes of the 'thin-butted type' to the Early Neolithic. However, in line with contemporary British schema (e.g. Childe 1925), "the fact that these axes are common in the district-about a hundred are known-makes it impossible to accept this chronological equation for our region, so we are obliged to put the axes at a much later date" (Collingwood 1933: 177). Beginning his interpretative scheme with the distribution of stone axes and stone circles which are at their densest in south and west Cumbria, Collingwood surmised that Secondary Neolithic communities arrived on the Irish Sea coast, then worked northwards from Black Coombe and inland towards the Derwent and Eden valleys *(ibid.)*. The Beaker Folk entered the region from Yorkshire and worked their way down the Eden valley: "We may regard the Beaker Folk from the east and the circle builders from the west as meeting there and combining to found a hybrid civilisation" (*ibid.*: 181). This argument has proved to be a tenacious one.

Monuments

The 'hybrid' nature of number of Cumbrian monuments, with architectural 'affinities' to both Highland and Lowland Zone traditions has been a key concern of academic interest in the region. The Penrith henges in the Eden Valley have been claimed as 'geological hybrids', sitting on the line drawn between the western stone circle traditions and the hengiform monuments of the east (e.g. Burl 1976). Mayburgh has been claimed as a derivative of the Irish passage graves, the eastern henges and the western stone circle traditions (Atkinson 1951; Burl 1976; Barnatt 1989, 1990; Bradley 1998). Along the west coast, Swinside stone circle and the long cairn of Samson's Bratful have been claimed as western seaboard monuments (Burl 1976; Masters 1984), with the long and round cairns of the Eden valley linked to the Yorkshire traditions (Manby 1970; Masters 1984; Kinnes & Longworth 1985; Bradley & Edmonds 1993).

There has been some suggestion of minor differences between monument traditions either side of the Cumbrian mountains (e.g. Collingwood 1933; Burl 1976; Bradley & Edmonds 1993). However these have been significantly overstated, not least as there are major problems of coverage between the east and west of the county, and the antiquarian excavations upon which many interpretations have been based were biased towards the Eden Valley (e.g. Greenwell 1874, 1877; Taylor 1881, 1886). This situation has been further exacerbated by an over reliance on the external morphology of extant and unexcavated monuments to draw links

between different regions. These factors have meant that a very small number of monuments bearing superficial similarities to those from other areas have seen consistent attention to the detriment of the many other examples that exist in the region.

The academic focus on the Neolithic monuments of Cumbria has meant those of Bronze Age date have often been overlooked. Although upland cairnfields, funerary cairns and ringcairns saw attention at the hands both of antiquarian and later excavators, culture historical interpretations of the Bronze Age in Cumbria, while discussing its geographical insularity, used material culture rather than monuments to stress links with Yorkshire and Ireland (e.g. Fell 1940, 1953; Fell & Hogg 1962; Clough 1968, 1969; Hogg 1972). Clare Fell in particular undertook to chart the routes that styles of metalwork, food vessels, beakers and collared urns had taken into different areas of Cumbria; through the Tyne gap or Swaledale into the Eden Valley, and from the Irish Sea coast into the south west of the region. In common with both earlier and later interpretations, Cumbria was understood as little more than a stopping point between areas perceived as having more interesting archaeology:

> "..if the area had any cultural effect on Ireland at this time, it was merely to transmit from Yorkshire and Northumberland pottery forms created there" (Fell 1940:126).

The lithic record

Approaches to the lithic record stem from the discovery of scatters in sand dune contexts during the 1930s. Flints collected from Eskmeals, and reported by the *CWAAS* Committee for Prehistoric Studies (Spence 1937) formed the catalyst for further surveys, culminating in the first major evidence for Neolithic and Bronze Age 'sandhill' occupation sites (Fair 1936, 1937; Cross 1938, 1939, 1942, 1946, 1947, 1949, 1950; Barnes 1954, 1955). As early as 1939, lithics from Walney North End were described by Graeme Clark (Cross 1939) as being indicative of a 'poverty industry', with affinities to similar dune and raised beach sites in Northern Ireland and Western Scotland (e.g. Lacaille 1939, 1954).

Whilst affinities to Irish assemblages were defined on the basis of tool forms such as hollow scrapers and Bann River points (e.g. Cross 1939), links with Scottish assemblages were based largely on the diminutive size and poor quality of the pebble flint available along the Irish Sea coast. So whilst the term 'poverty industry' was initially ascribed on the basis of raw materials, it has been taken to imply that the lithic technology, and the prehistoric inhabitants to which it belonged, were 'backward' compared to the those of the flint rich Lowland Zone chalklands. This owes much to the ideas of Fox (1932) and Childe (1940) who stressed the stubborn insularity of the inhabitants of the Highland Zone. Discussing sandhill sites in western Scotland, Lacaille referred to their occupants as "squatters", "small unenterprising societies" (1954: 276-77) late to take on the cultural aspects of the dominant Neolithic and Bronze Age

cultures. This perspective clearly influenced interpretation of raised beach scatters from Cumbria. Nickson & Macdonald, in their discussion of a microlithic scatter from Drigg, concluded:

> "...one has to remember that this has always been looked on as a backward region; if, therefore, the Drigg culture resembles a Mesolithic one, it may still be Neolithic in time" (1955: 29).

Spanning thirty years from the 1960s, field survey undertaken by the Cherry family has covered the west coast from St Bees to Haverigg and the eastern uplands between Shap and Kirby Stephen (Cherry 1963, 1965, 1967, 1969, 1982; Cherry & Cherry 1973, 1983, 1984, 1985, 1986, 1987a, 1987b, 1992, 1993, 1995, 1996, 2002). The Cherrys' approach to lithic characterisation has remained entrenched within culture historical diagnostic and interpretative frameworks. Ascribing large and often mixed assemblages to particular period specific 'cultures' has led to claims that no scatters in the region could be ascribed an Early Neolithic date (e.g. Cherry & Cherry 1996, 2002; see chapter three). Although the Cherrys have identified 'Late Mesolithic' and 'Late Neolithic' and 'Bronze Age' *industries*, this argument has been maintained despite the fact that pollen records illustrate clear evidence for Early Neolithic clearance and cultivation (e.g. Pennington 1975). The perceived technological backwardness of Early Neolithic communities in Cumbria has therefore been taken to imply that:

> "..in chronological if not cultural terms, Late Mesolithic communities in Cumbria were contemporaneous with Early Neolithic communities in East Yorkshire" (Cherry & Cherry 2002: 14).

The majority of scatters from the west coast are made up of the locally available pebble flint that characterises the 'poverty industries' of the Irish Seaboard. Scatters from the eastern uplands however comprise significant amounts of chalk flint, thought to derive from Yorkshire (Cherry & Cherry 2000, 2002). At a basic level, this has meant lithic occupation evidence from either side of the Cumbrian mountains has seen interpretation according to different principles; whilst Later Neolithic/Early Bronze Age scatters from the eastern uplands have been linked with the Yorkshire traditions, the coastal dune scatters are seen to "confirm the poverty status of the industries" (Cherry & Cherry 1987b: 8).

Despite the significant quantities of lithic material collected from the region, there remain some fundamental chronological and interpretative problems. Although detailed environmental data exists from many of the same areas from which flintwork has been derived (e.g. Pennington 1975; Tipping 1994), it remains that the actual character of landuse and domestic occupation these represent has seen virtually no discussion. Instead, it has been the *distribution* of the lithic evidence and the differential use of raw materials either side of the central fells that have seen consistent discussion. In common with monuments, interpretation of the lithic occupation

evidence from Cumbria has focussed on its possible relationship to the exchange networks illustrated by the density of Cumbrian stone axes in Yorkshire (e.g. Bradley & Edmonds 1993; Durden 1996; Cherry & Cherry 2000, 2002; Bradley 2002b).

The Langdale 'axe factories'

Research into the production and distribution of Cumbrian stone axes is of both regional and national importance. It has been the *national* importance that has seen consistent attention; we still understand little of the context of axe production and circulation within the region. Although the focus on stone axes has been detrimental to understanding the character of the remainder of Cumbria's prehistoric record, this situation is ironic as axes have the potential to shed light on the character of occupation and landuse. Closer understandings of their social and domestic contexts are of fundamental importance to a regional narrative.

Much of the early research on the production and distribution of Cumbrian axes was undertaken by Clare Fell, whose contribution to current understandings of the region's prehistoric record cannot be underestimated. Concentrating largely on material culture studies, Fell's work included many gazetteers and discussion of the distribution of material culture, stone axes in particular (e.g. Fell 1948, 1950, 1953, 1954, 1957, 1964, 1967, 1971, 1972, 1974, 1980; Bunch & Fell 1949; Fell & Hogg 1962; Fell & Coles 1965; Fell & Davies 1988).

Although stone axes had been found in the vicinity of Stake Pass as early as 1918 it was not until their petrological sourcing to the Borrowdale Volcanic Series (Keiller *et al.* 1941), that their production and distribution came under detailed investigation. As petrological analysis was undertaken across Britain, the distribution of Group VI forms sparked interest not only in the 'industrial' scale of production that had taken place at the 'axe factories' but also the exchange networks linking Cumbria to other regions (Fell 1948, 1954, 1964; Bunch & Fell 1949; Plint 1962, 1978; Manby 1965; Clough 1973; Houlder 1979; Cummins 1979, 1980; Claris & Quartermaine 1989; Bradley & Edmonds 1993).

The research project undertaken by Bradley & Edmonds (1993) saw a shift in focus, being concerned with elucidating the social, rather than economic context of exchange in Neolithic Britain. Although excavations in the central fells have been invaluable to understanding the chronology of production, this work lacked close consideration of the social and domestic context of stone axes within the region. Although Bradley & Edmonds made gestures towards discussing 'Great Langdale in its regional context' (1993, chapter 7), interpretations of Neolithic occupation practice were simplistic, based on uncritical readings of palynological and lithic data. In fact, in common with earlier interpretations (e.g. Collingwood 1933; Manby 1965; Burl 1976), the bulk of the concluding narrative strayed from the monuments of the Eden

Valley across the Pennine ridge to East Yorkshire.

Discussion

Interpreting the Axe Trade clearly illustrates the main problems this research has been designed to address. Wide scale academic investigations tend to pick out particular aspects of the prehistoric record for use as case studies in arguments pertaining to the major interpretative problems of British prehistory. Bradley and Edmonds (1993) had little concern with presenting an account of the Cumbrian Neolithic, focussing rather on the social context of axe production and circulation across Britain. The positioning of Cumbria is extremely conducive to these sorts of approach. As the region is important to the understanding of 'national' exchange networks, and as it sits between the Highland and Lowland zones, academic attention has often been focussed on using aspects of the prehistoric record to chart links across different regions and between different interpretative traditions. At a closer scale, the distinctive physical layout of the region, with valleys radiating from the 'hub' of the central Lakes occupied by the Borrowdale Volcanics, has meant it has been conducive to mapping the movement of the stone axes beyond its boundaries.

In general, grand narratives such as *Interpreting the Axe Trade* use synthetic studies to bulk out accounts of particular regions. However, the lack of modern excavation and consistent academic attention has meant these accounts have been based on interpreting the *distribution* of poorly understood datasets rather than exploration of their character and chronology. Both academic and local archaeologists have focussed either on researching specific monument types or on the collection and analysis of particular elements of material culture. Interpretations of the environmental record, undertaken by pollen analysts, have fallen back on grand narrative accounts, which in turn have been used to interpret other aspects of the prehistoric record. The academic separation of 'specialist' approaches has also meant there has been little successful integration of different categories of evidence and with the lack of secure dating, that there is no clear regional sequence with which to work. This means we understand little of the local or regional character of occupation across Cumbria, or how this changed over the Neolithic and Bronze Age. A regional account needs therefore to deal with the different categories of evidence available not simply as normative economic indicators or as links to other regions, but as evidence of occupation and landuse across the physical landscapes of Cumbria itself. Despite numerous chronological insecurities, the analysis and integration of different datasets from different areas of the region can provide ways into understanding the relationship between people and the land in a way that is neither economically deterministic or overly normative.

Conclusion

Central to this introduction to Cumbria has been the consideration of different geographical scales of analysis. From the delineation of the Highland and Lowland Zones to the understanding of regional and inter-regional traditions, the physical configuration of Cumbria is intimately entwined with the ways its prehistoric record been approached in the past. From a closer perspective, the very diversity of landscapes across Cumbria has also affected the ways, and scales at which life has been lived both in the past and the present. If we are to understand the different social and geographical scales at which prehistoric communities operated, consideration of the character of local, regional and inter-regional landscapes must be central to any account. Not only is it necessary to approach the prehistoric record with reference to the physical landscapes in which life was played out, interpretation of the evidence must be set within an intellectual framework appropriate to working at these scales. The following chapter outlines the ways that theoretically informed landscape perspectives have been drawn on in the interpretation of the available datasets, and how their integration can inform understandings of the character of prehistoric occupation.

Chapter 2: Ways into the prehistoric landscapes of Cumbria

Introduction

This chapter is concerned with setting out the methodological and interpretative frameworks that form the central tenets of this study. The first section illustrates the geographical and theoretical scales of analyses employed and outlines the key themes and issues that will be confronted. Following this, a discussion of the use of theoretically informed landscape perspectives suggests the ways it is possible to interpret aspects of prehistoric occupation and landscape perception. This lays out approaches to understanding environmental data, lithic evidence and the monument record in the context of physical and socialised landscapes. The final section illustrates the methodological practicalities of constructing a regional landscape archaeology, and the means through which this has been achieved. Outlining the nature of the available evidence, and the original fieldwork undertaken, this demonstrates the process by which different classes of data have seen analysis and integration.

Scales of analysis

The development of a regional sequence for prehistoric Cumbria demands an holistic approach, central to which is the integration and interpretation of the available evidence at different geographical and analytical scales. The question of scale is a critical one and is one of the central themes of this thesis. Chapter one demonstrated that the geographical scales at which the prehistoric record in Cumbria has been approached have been detrimental both to establishing a regional sequence and also to understanding the relationships between people and the landscapes they inhabited. At a closer level, the static chronological and geographical scales of analysis we often employ fail to capture the fact that within these landscapes, the lives of prehistoric communities worked at a variety of levels. Much as they do in the present, everyday lives would have operated across different places at different times and under varied sets of social circumstances. It is necessary we understand that everyday and seasonal subsistence tasks brought people into different spheres of contact than those where communities came together, for example, at large scale monuments. Consideration of routine temporalities is therefore of fundamental importance; not only with respect to understanding patterns of landuse and occupation, but also how routine life acted as a frame for reproducing ideas of social identity. Consideration of the ways and scales at which people operated can feed into understandings of different scales of community and also into understandings of monuments. This approach represents a departure from 'traditional' approaches to monuments which have focussed either on the distribution of particular forms across wide areas (e.g. Burl 1976; Barnatt 1989) or on the specific ways individual sites could be 'experienced' (e.g.

Thomas 1993; Barrett 1994; Bradley 1998). The notion that monuments might illustrate something of the scale and character of *occupation*, and how this changed over time, remains one that is rarely considered.

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 (see Thomas 1998), 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.

There are significant interpretative, chronological and methodological problems pertaining to the integration of all aspects of the prehistoric record in Cumbria, as will be discussed in detail over the following chapters. In order to develop a regional perspective however, we need firstly to take into account the physical landscapes in which prehistoric occupation took place. Geographical scale is of central importance if we are to understand the ways that individual valley systems, different topographic zones and the places within them were chosen for occupation and the construction of monuments. In Cumbria this is perhaps easier than other areas in that much of the region is characterised by starkly contrasting upland and lowland landscapes including coastal and lowland areas, major and minor river valleys, fells and high mountainous uplands. However, these occur in different configurations throughout the county, and even across relatively small districts, individual areas are so different in so many ways it seems naïve to assume they were all occupied and thought about in the same ways by prehistoric communities. Consideration of the physical conditions in which people lived across different areas allows the analysis of localised histories of occupation. Across the southern and eastern limestones, for example, the character of landuse and occupation practice is likely to have been different to that in areas such as the Eden valley or the west coast. From the outset, this means evidence for prehistoric occupation is a product of histories, and these have to be understood in relation to local conditions.

Each of the available datasets, including the physical landscape, has its own potentials. It is their integration and exploration which can allow the formulation of questions regarding the ways communities operated, and how this changed over time. How did monument location articulate with occupation evidence illustrated by lithic and environmental data? Does this

suggest why different kinds of monuments were constructed in particular places, or particular *types* of places? Did this change over time? What do the settings of monuments suggest about the relationships between people and specific aspects of the natural world? And what was the relationship of funerary and other ritual and depositional practices to routine life? What do different types of monument, and the sorts of places that they were constructed, tell us about different scales of community? In other words, did large hengiform monuments operate at different social scales to small stone circles? Did large scale monuments remain in use into the Bronze Age? If so, how do they relate to the upland cairnfield record?

Analysis of monuments at the scale both of local and regional landscapes must take account of time depth. Interpretations based on the distribution of particular chronologically specific monument classes tend to overlook the fact that monument clusters are the product of long term histories. Not only do static distribution maps often fail to represent older and younger monuments of different types in the vicinities, for example, of stone circles (e.g. Burl 1976; Barnatt 1989), they brush over the possibility that these monuments may themselves have seen re-use and elaboration after their initial construction. Analysis of time depth can only be confronted through an integrated analysis of all aspects of the monument record, and is of fundamental importance if we are to understand change over time.

Places and times in the physical landscape

These are significant and problematic questions, and before they can be confronted in detail, it is essential they are situated within a coherent intellectual framework. The development of theoretically informed landscape perspectives is relatively new to archaeology, and in order to interpret the evidence, it is necessary to draw on themes derived from a number of disciplines. The development of current understandings of, and approaches to the archaeology and perception of prehistoric landscapes have been driven by the ways geographers and anthropologists have come to understand the importance of the relationship between people and place. In some ways a reaction to ethnographically derived spatial modelling and concerns with economic adaptation (e.g. Binford 1979, 1980; Clarke 1968, 1972), later approaches stressed that landscapes are not merely environments or neutral backdrops against which people live (e.g. Relph 1976, 1981; Cosgrove 1984; Ingold 1993; Tilley 1994). From an archaeological perspective, this has transformed the ways the notion of 'landscape' can be understood (e.g. Fleming 1990; Bender 1993; Gosden & Head 1994; Chadwick 2004) and has also informed the scales at which landscapes can be approached.

The idea that landscapes are replete with humanly understood places not only provides contexts for human activity, it introduces the perspective that places are understood with reference to the past (e.g. Gosden 1994; Gosden & Head 1994). Whether this past be mythical, generational

and/or tied into physical experience, research has demonstrated that aspects of the landscape are drawn on in the creation and maintenance of social identity (e.g. Taçon 1991; Bender 1993; Tilley 1994; Hirsch & O'Hanlan 1995; Ingold 2000). Understanding some of the themes underlying the ways small scale groups move around and perceive the landscapes in which they live means it is possible to look from more localised perspectives at the physical settings in which prehistoric activity took place (e.g. Tilley 1994; Edmonds 1999; Evans *et al.* 1999).

In many small scale societies, the distinctions we draw in the present between 'nature' and 'culture' are not clearcut, with elements of the natural world holding symbolic significance (e.g. Tuan 1977; Ingold 1986, 2000; Morphy 1995; Taçon 1991). Even in our own society, these lines are sometimes little more than arbitrary, as might be illustrated by modern and historical perceptions of the Lake District (see Edmonds 2004). Anthropological sources suggest features such as mountains, hills, rock outcrops and caves, as well as water sources such as rivers, lakes, springs and the sea may have held special importance. Acting not only as orientational foci, these may have held totemic significance, drawing on creation myths and concerns with 'other' worlds, supernatural or real, beyond that of the everyday. Important features are often linked by trackways, along which are networks of places, each with their own meanings and associations. The significance of these places is formed in a variety of ways, with reference to mythical and more recent pasts, and their relationship to resources (e.g. Morphy 1995; Taçon 1991). Journeys *between* different locales also hold great importance (Ingold 1986). Places and the pathways between them become enculturated through social and physical memory, and the stories told about them also act to encode information about the places and times where particular resources are available (e.g. Morphy 1993, 1995; Ingold 1986, 1993; Layton 1995; Ashmore & Knapp 1999). Histories and traditions are therefore created, maintained and recreated through reference to the intimate knowledge people have with routine landscapes (Ingold 1993). Knowledge gained through everyday tasks is passed down through generations and learnt through practical experience. Not only this, the deployment of practical skills in the routines and practice of daily and seasonal life tie into the affirmation of gender and age relations (e.g. Bourdieu 1977; Giddens 1984; Moore 1986; Fullagar & Head 1999).

Incorporating themes thrown up by anthropological studies of landscape occupation and perception into understandings of the prehistoric record is difficult in many ways. Not only are these examples modern and static snapshots of long term social and political histories in other parts of the world, it remains that there is no universality of experience, even at a local scale. From a western perspective, we cannot recreate past understandings which were themselves the products of distinctive and dynamic histories of landscape use, perception, political and social change. However, taking the physical landscape as the basic unit of analysis, and looking at

recurrent themes evidenced by the archaeological record (e.g. Barrett 1994; Gosden 1994; Layton & Ucko 1999) it should be possible to identify some of the ways prehistoric communities occupied and perceived the landscapes in which they lived, and how this changed over time. In other words, we can explore the character and temporality of specific traditions of landscape occupation, and ask how these were caught up in the fabric of social life.

Ways into Cumbrian landscapes

Monuments

The act of architectural construction overtly formalised the significance of particular places (e.g. Bradley 1993) and tied into both social and physical landscapes, monuments would have been bound up in distinctive histories. Alongside the places in which they were constructed, the building materials utilised may have held symbolic associations and these would have been learnt though the construction and embellishment of monuments, the activities carried out within them, and in their environs (Edmonds 1999). Many monuments appear to have drawn on, or have been located and constructed with reference to what may be understood as their antecedents, features termed as the 'natural' monuments of the Mesolithic (e.g. Bradley 1991a, 1993, 2000a; Tilley 1994). Monument construction often mimicked geological forms (Richards 1996a; Tilley 1994, 1996) and like natural caves and fissures, monument architecture often allowed access to 'other' worlds, physically and metaphorically separated from the realms of everyday life (Barnatt & Edmonds 2002). The ways the anatomy of monuments allowed both physical and visual access had the affect of affirming and maintaining aspects of the social construction of community (Giddens 1984; Thomas 1993; Barrett 1994; Parker Pearson & Richards 1994).

Journeys or passages are key metaphors in both occupation and ritual practice (Ingold 1986, 1993; Last 1999). The provision of formal entrances to monuments of different types, like the entrances to caves and fissures, channel bodily movement and can also act as transformative portals, crossing which have the effect of inverting the concerns and inhibitions of everyday life (e.g. Van Gennep 1960; Douglas 1966). The very concept of 'rites of *passage*' suggests a concern with movement and transition. The ritualised bodily movement and procession suggested by the anatomy of monuments could therefore be understood as a metaphor of these themes, not only at a physical but also at a landscape scale.

The architecture and settings of monuments draw heavily both on aspects of localised topography and wider landscapes. Their common location *between* landscape zones suggest concern with transitions (Bradley 1993; Tilley 1994). This is brought into focus by cursus monuments and processional ways which can be seen to draw lines between, and cross, different topographic zones (Barrett *et al.* 1991; Bradley 1993; Tilley 1994; Last 1999).

Monuments were carefully located within the landscapes in which they were set; in relation to valley systems, landscape zones, and significant places within them. Set in order to fix vantage points in relation to the local and wider world, the views from many monuments often hold wide vistas, focussing on important natural features, local and regional landmarks (e.g. Richards 1993, 1996a, 1996b; Tilley 1994, 1996; Bradley 1998; Cummings & Whittle 2004; see chapter seven).

Criticisms have been levelled at phenomenological approaches to 'seeing-in-the-landscape', not only in that such schools of thought stress the universality of physical and visual experience (see Cosgrove 1984; Bender 1993), but also that views from monuments in the present may have been restricted by vegetation (Fleming 1999; Cummings & Whittle 2004). In Cumbria, like many upland areas, the weather may have also precluded visibility. Given that communities would have had an intimate understanding of where (and when) monuments were located, it may be that *seeing* was not always of primary importance. Not only may the very act of monument construction have been great significance, the importance may lie in 'knowing' that the setting and architecture of monuments drew on, and 'stood for' important aspects of the social and physical world.

So how can these ideas be drawn on and developed in the analysis of monuments in Cumbria? Looking at the settings of monuments and the ways they reference local and wider landscapes can demonstrate not only of the significance of particular places and natural features, but the ways these were drawn on over time. Although the prehistoric 'meanings' of aspects of the natural world are unknowable, recognition of the *types* of features referenced by monuments may suggest some of the ways they fed into the creation and maintenance of social identity.

Not only were many different types, and scales, of monument constructed over the Neolithic and Bronze Age, their physical configuration as they exist in the present represents the culmination of long term histories. Both individual sites and monument clusters were constructed and located with reference both to the natural world and to each other. Perhaps the clearest approach to understanding these histories therefore is to work back from the configuration of monuments as they appear in the present. If monuments are understood as embodiments of certain sets of ideas rather than examples of particular classificatory types (see chapter four), then the reworking of individual sites, changing depositional traditions and the construction of 'new' forms might suggest alterations in the ways monuments were used and perceived, and illustrate something of the nature of social process.

The analysis of monuments has to take place at a number of different geographical scales, as

illustrated by the structure of the following chapters. Their changing distributions and locations over the Neolithic and Bronze Age can demonstrate shifts not only in the structure of community, but also the ways people organised themselves over different areas of local and regional landscapes (chapter six). The articulation of large scale ceremonial complexes and smaller scale monuments in other areas of the landscape can begin to illustrate the ways communities combined and separated at different times and places (chapter seven). Together with analysis of the burial and depositional practices associated with monuments and natural features (chapter eight), it is possible to suggest the ways, and places, in which social concerns were negotiated at different social and geographical scales, and how this changed over time.

Environments

If we are to begin to understand why monuments were constructed in particular places, we have to situate them in relation not only to the physical environment and contemporary patterns of movement and residence. Whilst the evidence for prehistoric occupation in Cumbria is problematic, both environmental and lithic data can be utilised to illustrate something of its nature, and how it changed over time (chapter three). Themes drawn from studies of small scale societies in other areas suggest the histories of particular communities would have been closely linked with locally distinctive landscape features and places that particular resources were available. Between the sea, the coastal and inland lowlands, up valleys into the fells and the high mountainous centre of the region, prehistoric communities would have had a intimate knowledge, learnt over time and passed down through generations, of the landscape and the resources different places and times had to offer.

The physical character of Cumbria and its occupation history into the present day demonstrates that it is not an easy region for people to *impose* themselves upon, rather, it imposes on them. Therefore, it is not environmentally deterministic to propose that the physical character of the landscape defined the ways prehistoric communities lived their day to day lives. Put another way, the varied nature of landscapes in Cumbria would have offered a series of potentials that *shaped* traditions of occupation. What we need to consider here are the specific ways these potentials can be established. Environmental data can be used to illustrate the presence and variety of vegetation cover across different topographic and ecological zones. Together with the physical character of different areas, these can suggest the differential availability of vegetation, animals and mineral sources. Although many would have remained relatively constant, changing environmental conditions, influenced by both anthropogenic and natural causes, are likely to have altered the ways particular areas were utilised and the resources they provided.

Many areas of Cumbria have seen environmental analysis. In some cases in areas close to recorded prehistoric activity, records illustrate evidence for clearance and cultivation in particular landscape zones (e.g. Pennington 1970, 1975; Walker 1966a, 2001; Skinner 2000). The potentials of this material will be further discussed in chapter three. Palaeoenvironmental data is not without its problems, not least in the extent to which we can trace the scale and duration of vegetation change at an appropriate human scale. However together with evidence derived from lithic scatters and monuments, the environmental record can begin to illustrate some of the places, and *sorts* of places which were exploited and the ways this changed over time.

Lithics

In comparison with problems relating to the interpretation of environmental data, the lithic record is the clearest indicator of prehistoric occupation practice at a human scale. The very action of lithic exploitation, use and discard means the analysis of stone tools can be approached from different perspectives. Not only can their distribution and associations illustrate the character of landscape occupation, they can also suggest something of the significance of different types of tools and the materials from which they were made.

Although establishing the nature and chronology of occupation strategies on the basis of lithic scatters is problematic, in conjunction with the physical characteristics of the landscapes in which these are located, together with environmental data, it is possible to formulate ideas of the ways people moved between and occupied particular habitat types and landscape zones (e.g. Foley 1981b). The composition of assemblages in different settings can suggest the sorts of activities that were carried out (Mellars 1976; Torrence 1986; Inzian *et al.* 1992; Edmonds 1995), and technological changes in the character of flintworking (Pitts & Jacobi 1979; Ford 1987; Ford *et al.* 1987; Edmonds 1987, 1995) can illustrate some of the ways this changed over time. At a broader scale, the local and regional conditions dictating the availability of workable stone likely informed different attitudes to particular raw materials and the ways, and places, that it was procured, worked and circulated. In cases where the locations of stone sources both within and outside a given region can be identified with certainty, the distribution of particular raw materials can illustrate the existence of local, regional and inter-regional networks of contact and affiliation (e.g. Bradley & Edmonds 1993).

The interpretation of lithics in landscape studies is intimately linked to anthropologically derived understandings of the ways occupation is linked to resource procurement. Like other naturally occurring resources, the use and procurement of stone tools and lithic raw materials in many small scale societies draws heavily on their social and symbolic attributes (e.g. Taçon 1991; Morphy 1995). Stone objects and the raw materials from which they are produced are not

always understood purely as functional implements. Not only can these be symbolic of places and the qualities with which they were associated, they can also tie into the maintenance of age and gender distinctions (e.g. Binford 1979; Taçon 1991; Thomas & Edmonds 1987; Bradley & Edmonds 1993; Edmonds 1995, 2004; Fullagar & Head 1999).

Practicalities of a regional landscape archaeology

Confrontation of the issues outlined above can only occur after the available evidence has seen collation, analysis and integration. Only through the *application* of theoretical perspectives to raw data can an interpretative narrative can be put forward. As discussed in chapter one, although aspects of the region's archaeology have seen a degree of attention, the majority of data pertaining to occupation and monument use remains undigested. It is necessary, therefore, to demonstrate the processes by which archival material has seen collation and analysis and how it has seen integration with the fieldwork elements of this study.

In a perfect world, the different classes of evidence discussed above would be easily integrated to provide a narrative of landscape occupation, perception and social change. However, not only are there are major problems of academic legacy, geographical coverage and dating, the situation is further exacerbated by the lack of modern excavation. Although targeted critical analysis of aspects of the prehistoric record could provide closer understandings of the available data, it was necessary that 'new' material be derived through fieldwork. Financial and time constraints meant that the large scale survey and excavation needed to address major problems of coverage and chronology was impossible. Small scale projects however could begin to redress regional imbalances and provide contexts through which to reassess earlier interpretations of particular types of material. The fieldwork element of the project was concerned with two broad themes; undertaking small scale collaborative programmes of surface survey and excavation and characterising the landscape setting of monuments.

Landscape setting of monuments

Looking at the settings of monuments in Cumbria has a long pedigree. Capturing the imaginations of poets, travelling writers and antiquarians from at least the seventeenth century (e.g. Aubrey 1650; Stukeley 1776; Dymond 1881) even into the present day, the focus has remained fixed on a limited number of the more 'spectacular' circles (e.g. Collingwood 1933; Burl 1976; Bradley 1998). Little attention has been paid to the ways in which monuments of all kinds were located and constructed with reference both to their immediate surroundings, to the wider landscape and to other monuments. The fieldwork undertaken was designed in order to address previous imbalances and to record the settings and locations of different monument types.

It is possible to use Geographical Information Systems (GIS) in a variety of ways to assess the locational significance of different types of site, however it should not be seen as an interpretative tool in its own right. It simply does not provide us with 'the answers'. Prehistoric monuments in other areas have seen a degree of analysis in relation to both aspect and viewsheds (e.g. Johnson & North 1997; Gillings *et al.* 1999; Cummings & Whittle 2004). Although these sorts of analyses highlight common themes, over reliance on GIS can have the effect of brushing over important aspects of the relationship between monuments and landscape. Viewshed analysis 'looks out' from monuments and fails to assess their settings in relation to localised landscape features. This situation is further exacerbated in that Ordnance Survey contour data, recorded for example at 10 or 20 metre intervals, often overlooks micro-topographic changes and the presence of locally prominent landscape features. Not only did these inform the location and character of individual monuments, many such features obscure the digital 'vistas' that viewshed analyses produce. Furthermore, when monuments have been located through recent metric and GPS (Geographical Positioning System) survey, many are not in the exact same positions recorded by the Ordnance Survey. So although GIS is useful in order to assess the distribution and location of monuments, it is only as reliable as the map and archival data on which it is based and the questions which are asked of it. Rather than relying on digital data, assessment of the landscape settings of monuments was carried out on foot.

Assessment of the settings of all recorded monuments across the region would be no small undertaking. As such, although the vast majority of extant small and large stone circles across the county were recorded, the main focus for fieldwork was on the southern half of Cumbria. Visits were made to many of the different 'types' of monument identified; long and round funerary cairns, henges, stone circles, ringcairns and cairnfields. Analysis included recording aspects of their architecture, associations with other monuments and their relationship to localised landscape features. The ways monuments were set in relation to aspects of the wider landscape was also noted, and with open features, views were recorded from within them and from their wider environs. Recording the settings of monuments included textual description, photography and the analysis of unpublished survey plans, Ordnance Survey maps and GIS data. Looking at, and looking from these monuments at different geographical scales allowed the recognition of a number of common trends in monumental architecture and setting, and some of the ways this changed over time.

Survey and excavation

Through consultation and collaboration with local and curatorial bodies, limited programmes of survey, surface lithic collection and excavation have also taken place. Targeted on the south Cumbrian peninsulas, this work has begun to redress a number of regional imbalances and allowed the confrontation of questions relating to localised processes and the ways these

articulated across the county as a whole.

Over three seasons between 2002 and 2004, a programme of landscape survey and small scale excavation was carried out on Sizergh Fell, south of Kendal. A collaboration between the National Trust and the University of Sheffield, the project was designed to explore the character, extent and condition of prehistoric and historic archaeology in order to feed into conservation and management concerns. A major element of the project was the partial re-excavation of a funerary cairn, together with reassessment of material derived from its initial investigation (McKenny Hughes 1904b; Start 2002; Evans & Edmonds 2003). Together with analysis of beaker material, a stone axe and related material deposited in natural limestone outcrops in the environs of the cairn (McKenny Hughes 1904a, Edmonds *et al.* 2002), one of the main results of the project has been to provide a context from which to confront issues regarding the relationship between monuments and depositional practice.

On the Furness Peninsula, a large scale fieldwalking transect was initiated by local archaeologist Dave Coward in 1997. The lithic scatters recovered have been fully recorded, analysed and interpreted as part of the present study. The large scale survey transect covered a number of topographic zones and areas where occupation evidence had been recorded in past. Significantly, this has allowed the reinterpretation of scatters collected between the 1930s and 50s and the integration of lithic data with the many Langdale axe finds collected from Furness over the past century (chapter nine). At Sandscale National Nature Reserve, coastal erosion of a scatter identified in a sand dune context prompted a small scale evaluation at Roanhead in collaboration with the National Trust and English Nature (Evans & Coward 2003, 2004). Revealing a stakehole structure, a number of pits and a substantial lithic assemblage, the excavation provided comparative data through which to assess previously collected material from similar contexts. Information concerning coastal formation and the effects of sand dune erosion on the visibility and destruction of archaeological sites has also fed into management and conservation plans for the reserve.

The lithic collections from Furness are of both local and regional importance. Together with evidence derived from excavation at Sizergh and Sandscale, the fieldwork undertaken has not only provided new data with which to work, it has allowed the reinterpretation of previously recorded material. This has provided evidence through which to forward a model of prehistoric occupation on the Furness peninsula (chapter nine) and also formed a platform from which to interpret aspects of the prehistoric record from across the county as a whole.

Collection and analysis of archival records

Given the ways the prehistoric record in Cumbria has been approached in the past, it was necessary to initiate close scale analysis of the available archives to construct an internally coherent dataset. The main forms of evidence available were published and unpublished investigations and data derived from the county Sites and Monuments Record (SMR). Although published records included academic studies and those relating to the environmental record not available on the SMR, the majority of information was derived from notes and papers in the *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* (*CWAAS*).

Information available on the County SMR is variable in coverage and quality. Although the majority of data related to sources published by the *CWAAS*, the SMR also allowed access to unpublished survey records, excavation reports and chance finds. Every record in the 'prehistoric' and many in the 'unknown' category in the SMR were transcribed by hand, then inputted into a digital database. Unpublished records were collected from across the southern half of Cumbria, with data for this area alone comprising over 1300 records, including chance finds, burials, monuments and cairnfield areas.

As the Lake District National Park Authority (LDNPA) and the National Trust also support SMRs relating to land under their ownership and management, further consultation with curatorial archaeologists meant detailed information not present on the County SMR was made available. Contact was also made with local and academic archaeologists working in the area. Gaining access to unpublished lithic collections, excavation records, environmental data and detailed local knowledge provided an invaluable resource and led to the collaborative fieldwork projects discussed above.

The integration of the different categories of evidence was problematic at a number of levels. Not only have surveys, excavations and previous studies of the prehistoric record been set at different geographic and analytical scales, they are all products of different historically constituted approaches to specific categories of data. As will be discussed in the following chapters, this has caused problems, in particular concerning the construction of a coherent dataset with which to work. After the initial collection and collation of published and unpublished sources, the data was split into different categories; monuments of different types, burials, lithic scatters and other occupation evidence, chance finds and environmental records. Previous interpretations of each then saw critical analysis. In the first instance, this focussed on the reassessment of classificatory, methodological and interpretative schema, and in the second to clarify (where this was possible) locational and structural details pertaining to individual sites. This process involved deconstructing the data, and the ways that different 'types' of

evidence had been approached, recorded and understood in the past. In this light, the records were reorganised in order to simplify what was an extremely large and complex dataset (chapter four).

The construction of individual databases meant they could be imported into a GIS. Although the use of GIS can be problematic at a close topographic scale, one of its main strengths is that it becomes possible to visually reintegrate data of different classes and chronological periods with the physical landscape. With digital mapping available at a number of scales, analysis took place at local and regional levels. This allowed analysis of the locations, settings and distributions of monuments and occupation evidence, and provided a way into understanding aspects of change over time.

Conclusion

The critical analysis of both published and unpublished data allowed the identification of significant problems with the available information. More broadly, the wide geographical scales of earlier analyses clearly demonstrated that local and intra-regional traditions remain poorly understood. This chapter has served to illustrate the methodological and interpretative scales of analysis which can be utilised to redress this imbalance, and to provide an integrated study of prehistoric occupation and monument use. Outlining the issues confronted over the following chapters, some of the means through which this will be achieved have also been established.

Over the course of this discussion, a number of key themes have emerged; not only can an integrated holistic approach towards the interpretation of different classes of evidence illustrate the character of prehistoric occupation at localised scales, the landscapes in which peoples lives were played out were themselves of great significance. At a fundamental level, the character and layout of the physical landscape defined the nature of occupation and the ways communities understood themselves in relation to routine landscapes and to the wider world. If we are to understand the relationship of funerary and other ritual practice with routine life, then the likely nature of movement, residence and landuse needs to be established, alongside the ways this changed over time. If the character of occupation and landuse can illustrate some of the times and places important to prehistoric communities, this can feed into understandings of the concerns that the changing distributions, settings and locations of monuments might represent. Chapter three is concerned not only with setting out the evidence for occupation and landuse in the forms of environmental and lithic data, it also provides a context through which to confront aspects of the monument record discussed in subsequent chapters.

Chapter 3: The occupation record

Introduction

This chapter is concerned with setting out the character and distribution of lithic and environmental data. That previous approaches have either been site specific, or characterised by uncritical observations at a regional scale means there is no regional synthesis of the prehistoric occupation record. The primary aim of this chapter is to outline the available data, and through the use of contemporary academic approaches, to develop a model of the likely nature of landuse and occupation these represent. Although the data can illustrate the character of different landscape zones and suggest some of the ways they were exploited, both suffer from major problems of physical coverage and chronological focus. Difficulties with interpreting the occupation evidence at a landscape scale illustrate a clear need for an holistic and integrated approach to the prehistoric record. The second concern of this chapter is to provide a context through which to understand how the location of monuments tied into occupation practice.

The environmental record

The environmental record from Cumbria appears particularly strong; since the 1950s, cores have been taken from contexts such as peat bogs, kettle holes, lakes, upland and lowland tarns and estuarine areas. Although the pollen record covers different topographic zones, the evidence is biased towards the central uplands and the south west coast, with markedly less evidence from the north and east, or the lower lying fells (figure 3.1).

Interpreting the environmental evidence is problematic not least as the majority of pollen studies have been directed at identifying climate change rather than human activity. Most analyses have been based on the detection of major climatic episodes represented by vegetation changes recognisable as 'pollen zones'. Prior to the availability of radiocarbon dated sequences, these were based on Godwin's (1956) Flandrian zones and subzones, which have traditionally been related to specific prehistoric periods (figure 3.2). Vegetational and environmental changes at the transition between pollen zones VIIa and VIIb represent the elm decline. The Godwin zonation scheme, on the basis of which Neolithic agriculture appeared at *c.* 3000 BC, is rarely used in the interpretation of modern diagrams. However its inclusion here is important as many sequences saw analysis before the availability of radiocarbon dating. The majority of pollen studies undertaken by non-archaeologists are problematic as interpretations are often based on 'fitting' the results into outdated interpretations of the changing nature of prehistoric activity.

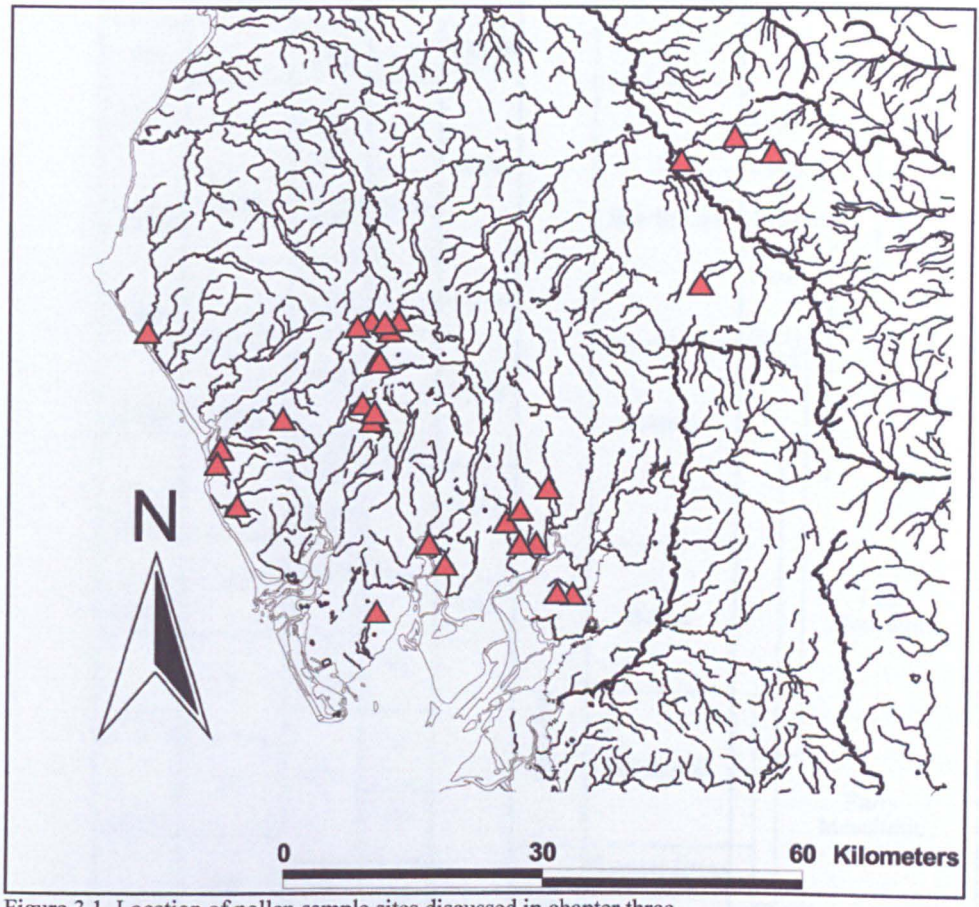


Figure 3.1. Location of pollen sample sites discussed in chapter three.

Figures 3.7, 3.8 and 3.9 illustrate locations of pollen sample sites in the central fells, on Morecambe Bay and along the western coastal strip. Details of individual sites are outlined in appendix 6.

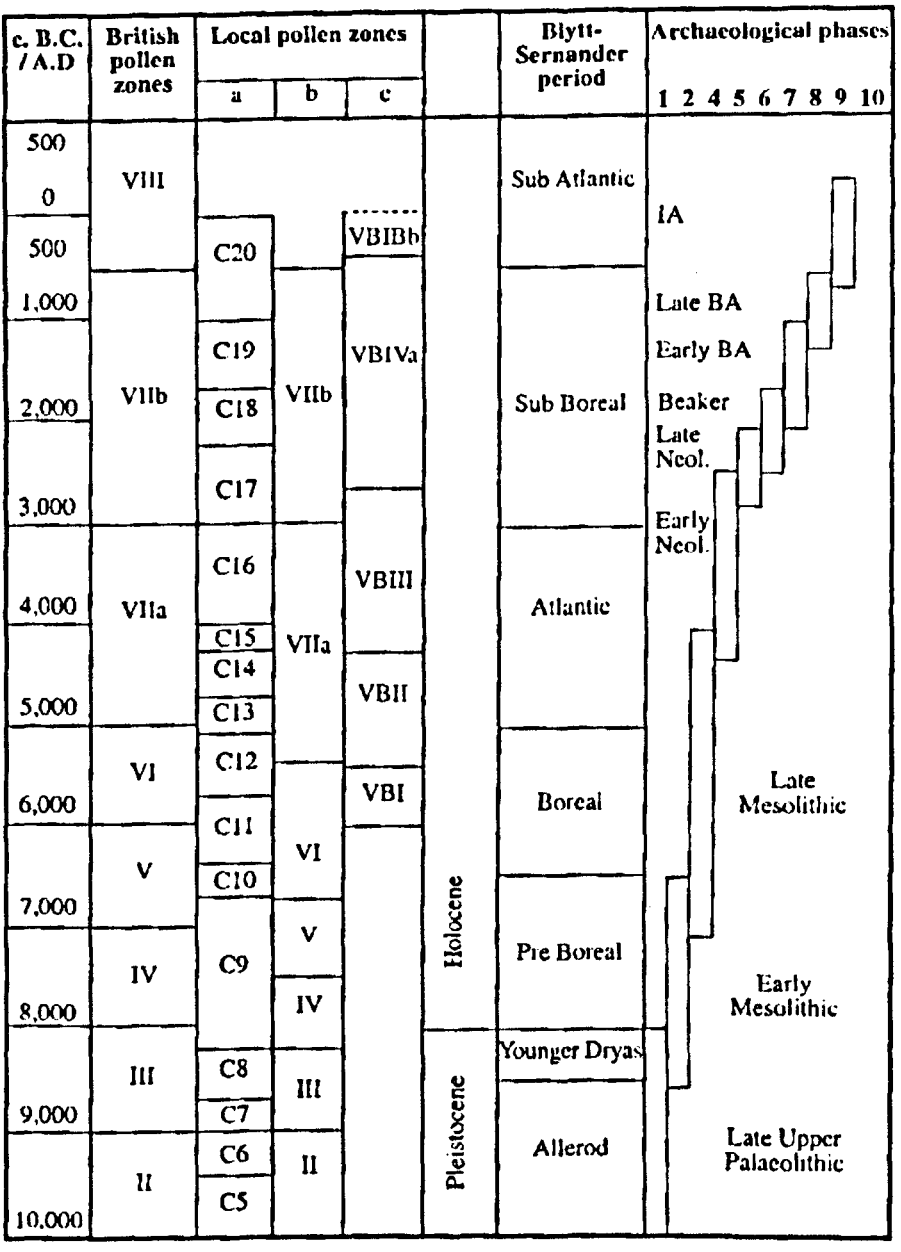


Figure 3.2. Correlation of British (Godwin 1956) and local pollen zones (Walker 1966; Godwin *e al.* 1957; Chambers 1978), relative to the Blytt-Serander sequence of Holocene climatic episodes and archaeological phases. From Skinner (2000).

The elm decline

The elm decline has been attributed to many factors, including climate change, the effects of woodland management and Dutch elm disease (Iversen 1941; Troels Smith 1960; Rackham 1988; Edwards 1993; Veere 2000). These arguments have remained the basis for discussion, some of which has taken place on Cumbrian soil (Walker 1955, 1966a; Oldfield 1963; Oldfield & Statham 1963; Pennington 1970, 1975, 1997; Smith 1981).

Traditional emphasis on the elm decline, alongside changing methods of pollen analysis means there are significant problems with source compatibility and close dating. The elm decline, or the pollen zone VIIa/b transition, has often been used as a standard against which to 'date' other clearance episodes (e.g. Pennington 1975). This has serious implications for the use of relatively dated diagrams and only fully radiocarbon dated absolute sequences can be taken to be chronologically secure (Skinner 2000). Few of these exist in Cumbria and much of the evidence is either based on extrapolation from a single radiocarbon date for the zone VIIa/b boundary, or by analogy to other sequences from the region. Interpretation of postulated sequences is further problematic as published descriptions often do not clearly differentiate between radiocarbon and extrapolated dates (e.g. Pennington 1970, 1975, 1997).

The majority of diagrams analysed during the 1960s and 70s were based on relative values of the taxa represented. As a result, small scale changes in pollen frequencies were often overlooked, in particular before the zone VIIa/b boundary when human interference, according to archaeological narratives, was *supposed* to begin. A number of diagrams exhibit evidence of pre-elm decline disturbance. After identifying such activity at Thrang Moss, Urswick Tarn and Ellerside Moss, Oldfield (1963; Oldfield & Statham 1963; figure 3.8) returned to previous sequences (Smith 1958, 1959; Oldfield 1960) finding similar episodes that had been overlooked. At Blea Tarn, Pennington (1975) illustrated that absolute pollen diagrams, providing independent curves for all taxa, showed changes in environmental conditions where relative diagrams (Pennington 1964) had shown little variation. Interpretations may therefore be skewed by the differential detail of relative and absolute diagrams, and a lack of secure dating further exacerbated by extrapolation and analogy.

The reliance on such methodologies, together with the lack of major climatic changes between pollen zones VIIb and VIII, has implications for understanding later activity. Environmental evidence relating to Later Neolithic and Bronze Age occupation is extremely poorly understood. Where early clearance has been identified, the pollen record illustrates activity was afterward more or less continuous and increasingly intensive, but specific phases were dated only by extrapolation from the zone VIIa/b boundary. At Ehenside Tarn, Walker (2001) identified intensive clearance between 2050 and 940 cal BC, separated from dated Neolithic

episodes by a short interruption. This phase had previously been dated (by extrapolation) to the Roman period (Walker 1966a) and would have remained so had the site not seen reanalysis (Walker 2001).

Woodland composition into pollen zone VIIa

Flandrian II represents a period of development of mixed deciduous closed canopy forest between 5500 and 3200 BC (7500-5000 BP) (Pennington 1997). The concept of closed canopy forest is problematic in that the basis for its albeit notional existence is a product of antiquarian sources which have been built upon rather than questioned (Veere 2000). Interpretations of succession, some dating as early as the seventeenth century (*ibid.*) were influenced by medieval concerns with wildwood and *silva*, where the forest was perceived as untamed wilderness, imbued with biblical connotations (e.g. Moreland 1990; Evans 2004a). Although the resulting perceptions of closed canopy forest remain in use, recent work in forestry and bio-diversity has suggested few such environments would have existed (e.g. Wilkinson *et al.* 1997; Veere 2000). Both hazel and oak, characteristic of 'closed canopy forest', will only grow in conditions where light is present, in fact both species generate only in grazed open landscapes (Veere 2000). Their presence in pollen diagrams essentially contradicts the closed canopy model; it suggests grazing affected forest composition (Buckland & Edwards 1984) and that a wide variety of ground flora would have been present. The herb and shrub flora of mixed wooded environments is poorly recognised not only as these produce little pollen, but also that particular techniques of woodland management stop them from flowering. Many understorey species are insect pollinated, again rendering them unidentifiable (Veere 2000). Pollen analyses of modern grazed park-like landscapes reveal great similarities to prehistoric pollen spectra interpreted as being indicative of closed forest (*ibid.*). Within such landscapes, species such oak, elm, lime and beech emit a great deal of pollen into the atmosphere, whilst grazing and the presence of mantle vegetation precludes the flowering and movement of grassland pollen. These factors indicate the 'closed forests' suggested by pollen analyses were open park-like landscape analogous to modern wood pasture (*ibid.*; Simmons 1993).

Although there are significant problems with the interpretation of pollen data from Cumbria, they do illustrate a variety of different habitats. In the central fells (figure 3.7), birch and elm populated the highland valleys, and on the hills and coastal margins occurred in association with oak. Alder grew in the valley bottoms, around tarns and acidic hollows (Walker 1965). At the higher extents of the tree line, birch woodland predominated with some pine on more marginal soils (Pennington 1975, 1997). At Langdale Combe the opening of zone VIIa was defined by high alder values, together with oak and elm, and low hazel values indicating relatively stable conditions (Walker 1965). Between zones V and VIIa, no herb pollen was recorded at Blea Tarn and Devoke Water (below 250 metres AOD), and there was less than

10% at Seathwaite, Blind Tarn and Goatswater (between 400 and 600 metres AOD). High hazel values were recorded at the majority of these sites (Pennington 1997) which suggests a more open canopy than often proposed. Pennington suggested the upper extent of the tree line was at about 760 metres AOD (1970), however others believe it was lower, around 600 metres (Simmons *et al.* 1981; Bradley & Edmonds 1993). On the lower lying limestones, ash and lime were predominant over elm (Pennington 1975; Birks 1982; figure 3.8) and the evidence suggests some of these areas remained comparatively clear of trees (Skinner 2000; Stallibrass 1991). Many coastal areas illustrate high levels of hazel, holly, ivy and other shrubs and climbers (Birks 1982; Powell *et al.* 1971) also indicating open environments.

Woodland clearance episodes

North and east

Few detailed analyses of pollen sequences from northern and eastern Cumbria have been undertaken. Until recently Walker's version of events stressed that although clearance took place along the coast in the Later Mesolithic and Early Neolithic, it was not common in the Eden valley until about a thousand years later (1966a: 196). This has been reiterated in influential accounts in the archaeological literature, as have interpretations of pollen sequences from other areas of the region analysed before the availability of scientifically dated sequences (e.g. Simmons & Tooley 1981; Bradley & Edmonds 1993).

A recent study of the southern Eden valley (Skinner 2000) has revealed a rich and diverse history of prehistoric landscape exploitation. The study was based on four localised pollen catchment sites in different landscape zones, and included fully radiocarbon dated sequences for each. The lowest lying site was Temple Sowerby Moss, a small basin mire on a terrace above the Eden floodplain (figure 3.3). Fluctuations of heather associated with charcoal were recorded within the forest understorey soon after *c.* 5600 cal BC (*ibid.*). At *c.* 3900 cal BC clearance was evidenced in that herbaceous plants dropped to a minimum, and birch, pine and oak were reduced. Following this episode, hazel and heather spread, and the herb component expanded (*ibid.*). Above this level the sequence had been truncated by later activity.

The Howgill Castle sampling site is a valley mire below Burney Fell (figure 3.4). Here, mixed deciduous forest conditions existed into the Later Mesolithic until at *c.* 4000 cal BC when the sequence illustrated the presence of cereal pollen. From *c.* 3570 cal BC levels of woodland fell markedly, mirrored by a massive rise in plantains, bracken, sedges and other herbaceous plants. Disturbance of the sample site truncated evidence of later activity.

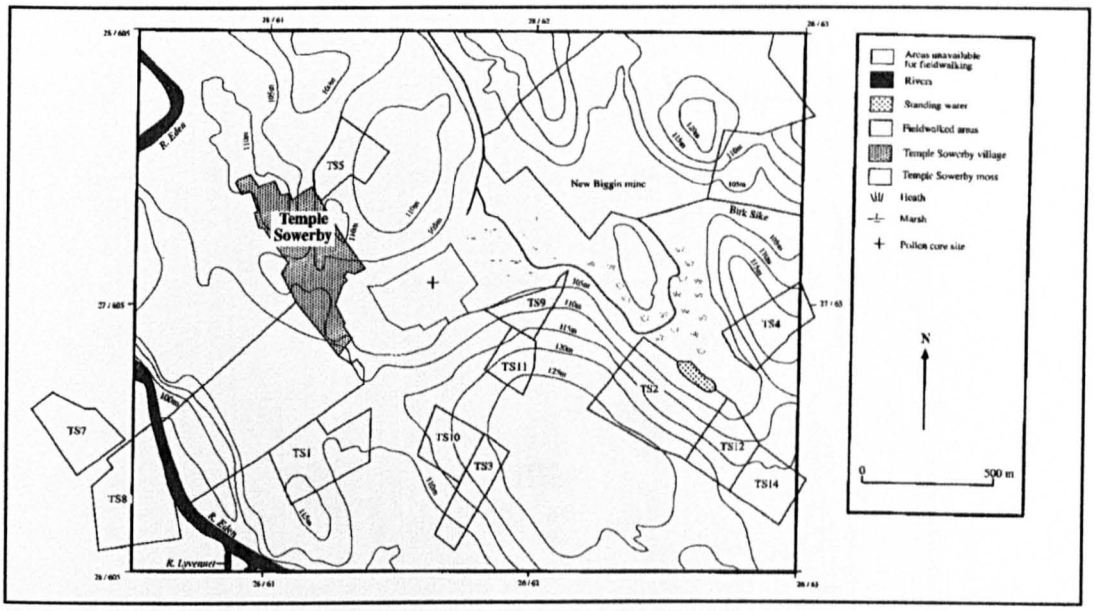


Figure 3.3. The Temple Sowerby Moss sample site and its surrounding micro-region. From Skinner (2000).

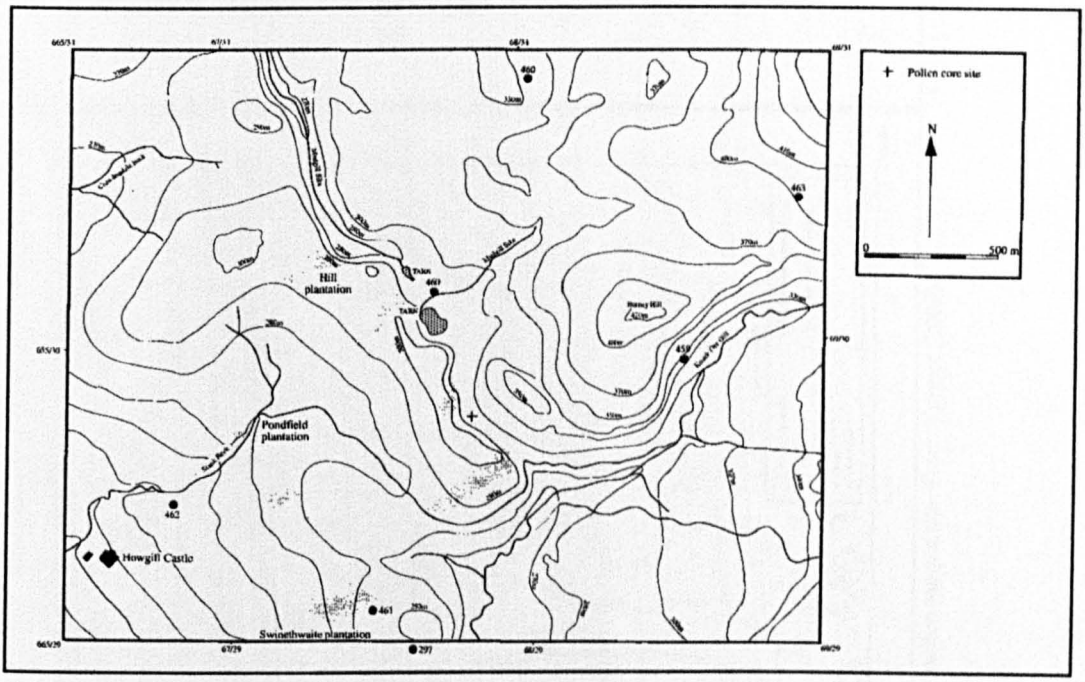


Figure 3.4. The Howgill Castle sample site and surrounding micro-region.
From Skinner (2000).

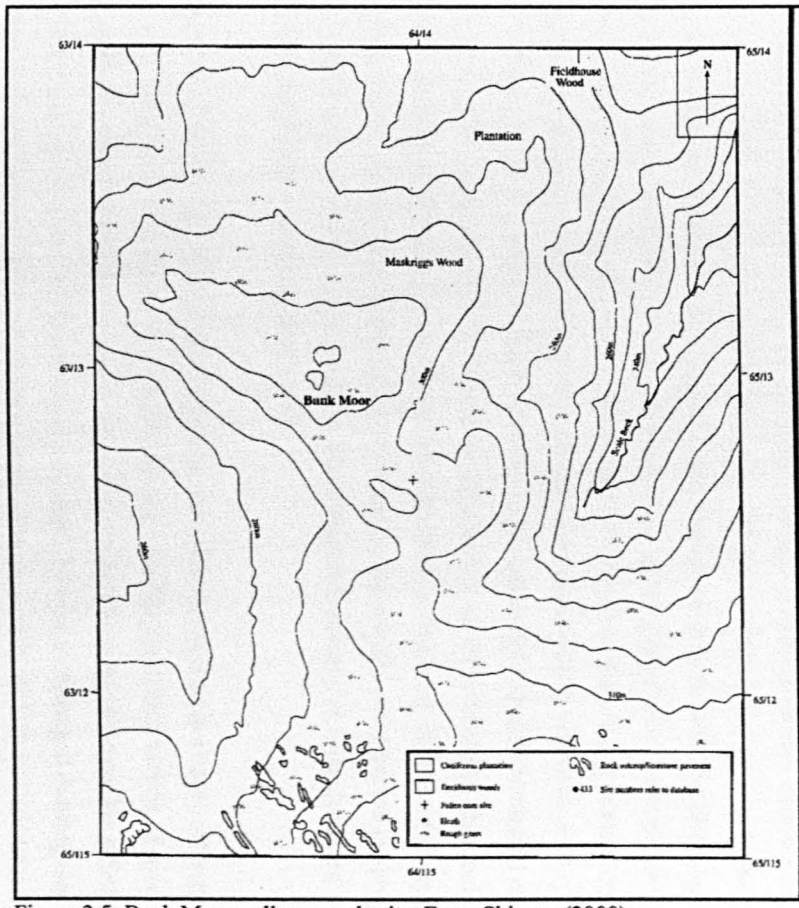


Figure 3.5. Bank Moor pollen sample site. From Skinner (2000).

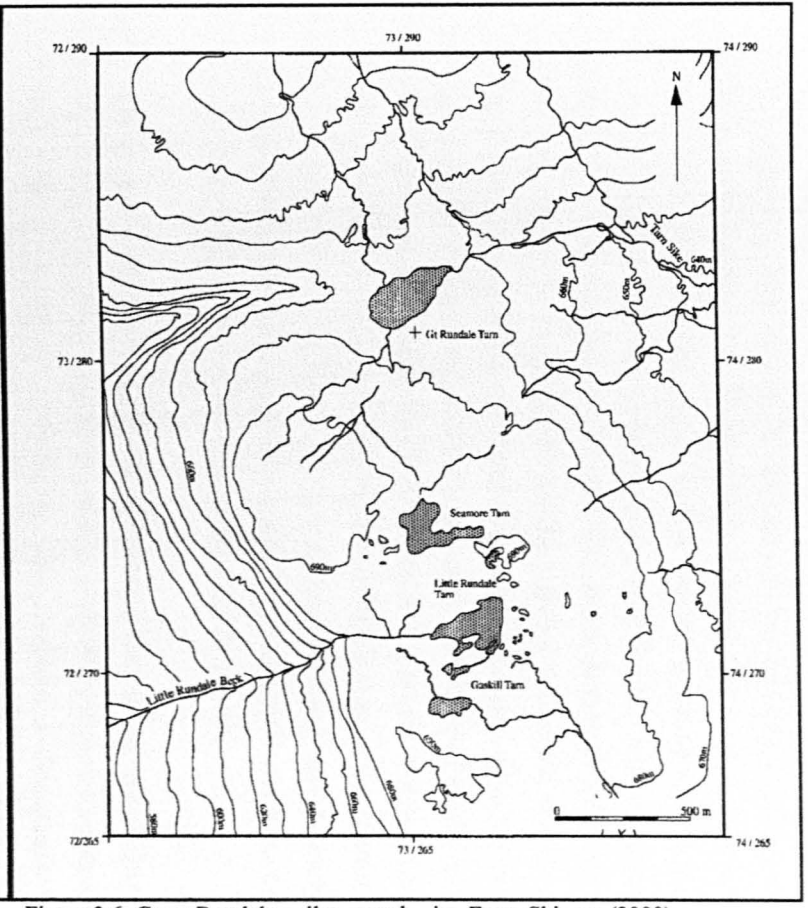


Figure 3.6. Great Rundale pollen sample site. From Skinner (2000).

The Bank Moor sampling site is an upland swallow hole on limestone above the 300 metre contour (figure 3.5). During the Mesolithic and Neolithic the area was characterised by open grassland with stands of birch, hazel and willow. High levels of charcoal from *c.* 5900 cal BC were not evidenced by pollen fluctuations and may have resulted from wind dispersal from fires (Skinner 2000). Between *c.* 4300 and 3200 BC, the vegetation was marked by the spread of open grassland. The period between *c.* 3300 and 2000 BC saw a reduction in the diversity of herbaceous taxa, but the increased presence of grassland indicated a relatively open environment. At *c.* 2900 cal BC, values of birch and grasses decreased markedly in association with high levels of charcoal, suggestive of managed burning. This period also saw a rise in water level evidenced by the erosion of clayey material into the basin edge. It is probable this was clearance related erosion, exacerbated by worsening environmental conditions (*ibid.*). At *c.* 1900 cal BC high levels of charcoal coincided with the first appearance of cereal pollen. At *c.* 1500 cal BC the record illustrates a massive increase in hazel mirrored by a dramatic drop in birch until *c.* 1200 cal BC. Cereal pollen and charcoal were present, discontinuously, for much of this period. Although the evidence is equivocal, this may suggest the area was being used consistently, and perhaps cyclically, for small scale cultivation (*ibid.*).

On the Appleby fells, the highest sample site was at Great Rundale, an area of limestone uplands (figure 3.6). The pollen sequence ran from *c.* 3350 BC, with peat formation starting at *c.* 3300 cal BC (Skinner 2000). At *c.* 2900 cal BC alder decreased, accompanied by the spread of bracken, hazel and grasses. At *c.* 2300 BC a second drop in hazel was matched by a peak in herbaceous plants. At *c.* 2100 cal BC there were drops in birch, pine, lime, and elm, accompanied by peaks in hazel, grasses, heathers and bracken. No clear anthropological indicators were represented until *c.* 1800 cal BC, which suggests either natural openings or small scale woodland management (*ibid.*). At *c.* 1800 cal BC there was a marked drop in hazel, and an increase in grasses, bracken and plantains, accompanied by charcoal, until *c.* 1650 cal BC when values of plantain and bracken fell. At this time oak and alder increased alongside grasses and heather, with reduced values of birch and hazel. High levels of charcoal suggest localised clearances *(ibid.)*. At *c.* 1500 cal BC heather, grasses and alder were cleared, and together with charcoal and cereal pollen, indicate arable activity. An increase in sphagnum suggested that the surface of the peat was becoming increasingly wet and the cereal pollen was likely transported from elsewhere *(ibid.)*.

Skinner's (2000) study clearly illustrates that different vegetation sites have different histories of use. Not only has the presence of naturally open landscapes with a variety of species rich ground flora been established, but also that many of the peaks and troughs identified in the pollen record may be the result of natural processes. However, managed burning was taking place on the terraces of the Eden floodplain as early as *c.* 5600 cal BC and continued into the

Late Neolithic and Early Bronze Age on the limestone plateau. Cereal cultivation was evidenced in the glacial valley at Howgill Castle at *c.* 4000 cal BC, but did not take place on the limestone uplands until the Late Neolithic and Early Bronze Age. What is clear at the upland sites of Bank Moor and Great Rundale is that although the evidence suggests small scale occupation from the Later Mesolithic and Early Neolithic onwards, this became more intensive only during the Later Neolithic and Early Bronze Age.

These closely dated sequences clearly demonstrate problems with previous pollen analyses. Skinner's (2000) work has illustrated a variety of distinct vegetational habitats at a localised scale. Such a series of pollen sites, reflecting extra-local vegetation, are of greater use in the interpretation of prehistoric landscapes than the tarns and lakes traditionally subject to analysis. As such, the evidence derived from pollen analytical studies undertaken earlier in the development of the technique, and detailed below, should be treated with caution.

Upland Tarns

Evidence for woodland disturbance on the central and western fells is relatively well known, used both in the interpretation of axe production, and the identification of processes leading up to peat formation (e.g. Pennington 1975; Bradley & Edmonds 1993; figure 3.7). The earliest episode of clearance is derived from excavations at Thorn Crag. Sealed by peat, axe working debris associated with a mineral soil and charcoal dated to 4209-3709 cal BC, with pollen data illustrating an elm decline at 4100-4030 cal BC (Jamie Quartermaine pers. comm.). Downslope, the sequence from Blea Tarn is extrapolated from a single radiocarbon date of *c.* 3700 cal BC for the first clearance episode (Pennington 1975). Here a rise in herbaceous pollen took place in pine-birch woodland and was maintained for around 200 years *(ibid.)*. This preceded more intense clearance extrapolated from about 3050 BC to at least c. 2400 BC (*ibid.*). At both Blea Tarn and Red Tarn, a fine band of mineral silt occurred at the second phase, illustrating increased soil erosion (Pennington 1964).

After the elm decline at Angle Tarn, the profile illustrated an inwash of acid Mor soil. Pennington interpreted the accumulation and increasing acidity of soils as a response both to deteriorating soil conditions and the clearance of high forest trees (1964, 1975). At Angle Fell and Red Tarn Moss, charcoal layers were present alongside evidence for clearance of birch and pine around the VIIa/b boundary (Pennington 1964). Cores from Devoke Water, Seathwaite Tarn and Blind Tarn contained a band of mineral silt with organic debris containing mountain grassland species immediately above (*ibid.*). Disturbance of this type can change the relationship between soils and vegetation in that the replacement of deep rooted by shallow rooted plants initiates soil acidification, especially in upland areas with high rainfall (Dimbleby 1962).

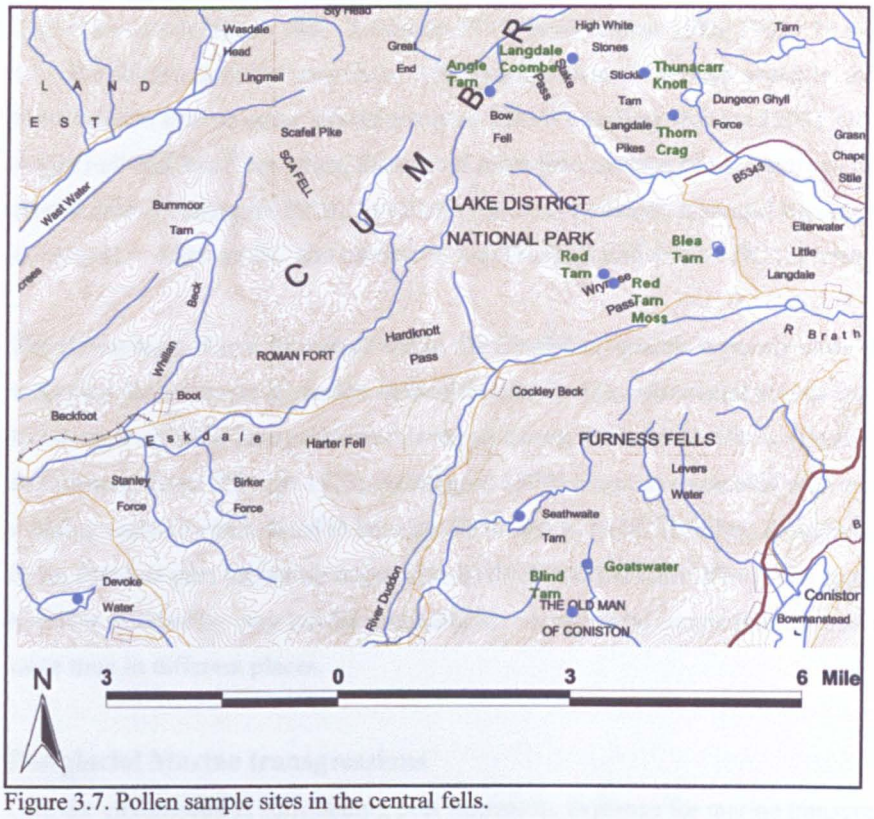


Figure 3.7. Pollen sample sites in the central fells.

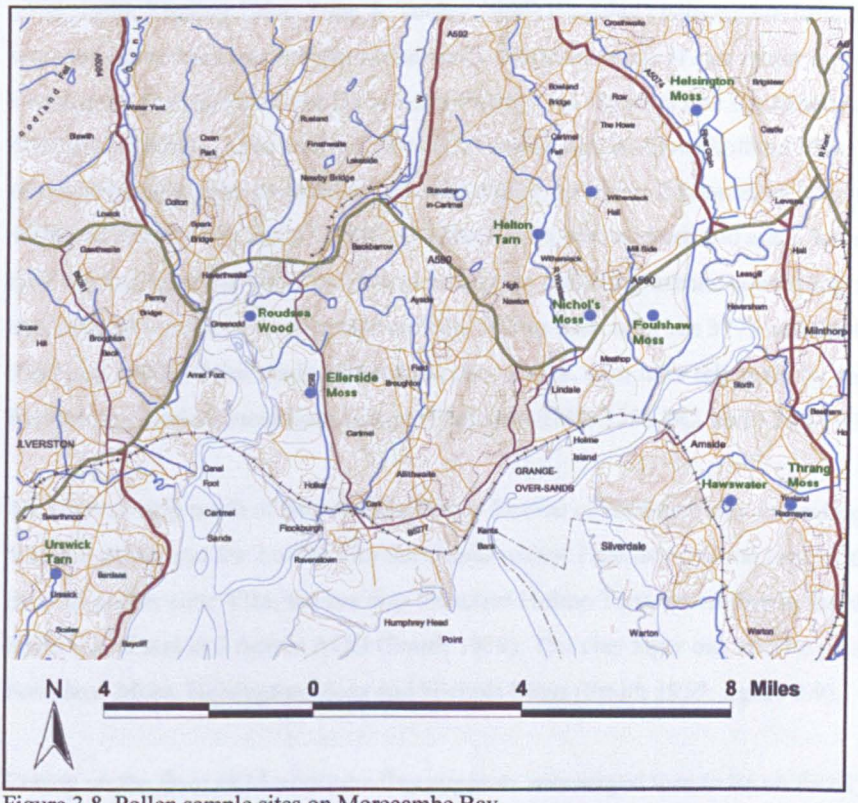


Figure 3.8. Pollen sample sites on Morecambe Bay.

The link between heathland burning and upland peat initiation is relatively well established (e.g. Casedine & Hatton 1993; Simmons 1993, 1996; Moore 1988, 1993). In many areas, whilst post elm decline episodes associated with burning do occur in such contexts, most are Mesolithic in date or occur around the zone VIIa/b boundary (Moore 1993). Other than at Angle Fell and Red Tarn Moss, there is no recorded evidence of such activity in the west and central fells (Pennington 1975). In eastern Cumbria however, managed burning was occurring as early as *c.* 5600 cal BC and carried on into the third millennium BC (Skinner 2000).

The chronology of peat formation across the Cumbrian uplands is poorly understood, however it appears processes set in motion around the elm decline culminated in peat formation. Evidence from Blea Tarn suggests this began during the Later Neolithic (Pennington 1975) and at Thunacar Knott (Clough 1973; Pennington 1975) charcoal associated with an area of axe working sealed by peat dated to between 2850 and 3250 BC (Bradley & Edmonds 1993). At Great Rundale peat formation began at *c.* 3300 cal BC (Skinner 2000). The spread of peat is however affected by very localised conditions, so cannot be assumed to have formed at the same time in different places.

Postglacial Marine transgressions

Like the circumstances surrounding peat formation, evidence for marine transgressions (Tooley 1978, 1980; Tipping 1994; Zong & Tooley 1996) illustrate changing environmental conditions were the norm from the Postglacial onwards. Flandrian I and II saw major episodes of sea level fluctuation. During Flandrian II the Early Postglacial sea level rise slackened slightly between 5000 and 4980 BC, after which levels fell dramatically. At Downholland Moss in Lancashire, the removal of marine conditions extended over a surface *c.* 2 kilometres in width (Tooley 1978). Between 4800 and 4300 BC, sea levels rose over a metre and again inundated a great deal of land. At about 4000 BC, levels fell, again removing marine conditions. Between 4000 and 3800 BC, sea levels again rose rapidly, falling back between 3775 and 3500 BC. Between 3500 and 3000 BC the sea level began to rise swiftly, then later fell again by about a metre. Further less marked incursions occurred between 2850-2595 BC, and 1750-1200 BC (*ibid.*).

The coastal strip north of Morecambe Bay is formed of estuarine clay extending into the Winster valley and for 2 miles into the Gilpin valley. Laid down at the time of the transgression early in pollen zone VIIa, the sea also breached Helton Tarn, which lies in the Winster valley 4 miles inland and at 5 metres AOD (Smith 1958). The clay layer can also be recognised at Foulshaw Moss, Helsington Moss and Nichols Moss (Smith 1959; figure 3.9).

Coring on the floor of Morecambe Bay suggests submerged forests lie on fossil interfleuves between the palaeochannels of the rivers Kent, Leven and Keer (Tooley 1978) and further

submerged landscapes are believed to occur around Walney and the Duddon estuary (Clare 2000). Pollen cores from southern and western mosses illustrate coastal mires, initiated towards the end of zone VIIa, began as fens and reedswamps with some open water, and later became converted to raised bogs, often with saltmarsh represented by fossil tidal creeks (Oldfield & Statham 1963; Oldfield 1963; Tipping 1994). Similar environments have been identified on the Solway (Walker 1966a; Bewley 1994).

Work undertaken at Eskmeals has illustrated vegetational changes occurring as a result of human interference and natural processes (Bonsall 1981; Bonsall *et al.* 1986, 1989, 1994; Tipping 1994; figure 3.9). On the west coast the process of coastal formation differs from that on the low energy shores of Morecambe Bay. At Eskmeals coastal influx between *c.* 5970-5480 cal BC and 5613-5240 cal BC meant a sea-level rise of *c.* 2 metres AOD producing a series of shingle ridges between 1 and 1.5 kilometres inland (Tipping 1994). At Williamson's Moss, these formed a barrier isolating an inland basin from marine influence culminating in the development of a lagoon (Bonsall *et al.* 1994; Hodgkinson *et al.* 2000). The maximum transgression has been identified in a number of areas situated around the 8 metre contour. Closely associated with the later shingle ridges in some areas are windblown dune systems. These formed as sea levels fell during the later third and early second millennia BC, a chronology borne out by the presence of Late Neolithic and Early Bronze Age lithic scatters in such contexts (Tooley 1990; see below).

Coastal clearings

After isolation of the basin at Williamson's Moss, anthropogenic influences are discernible at *c.* 4780-4470 cal BC (Tipping 1994; Hodgkinson *et al.* 2000). Like other sites, pollen analyses illustrate a 'double elm decline', the first of dated to 4458-4047 cal BC and the second, associated with evidence for cereal cultivation, to 3893-3381 cal BC (Tipping 1994; Hodgkinson *et al.* 2000).

The first 'elm decline' was characterised by the reduction of hazel and the expansion of oak, lime and ivy. The presence of ash, hawthorn, juniper and ribwort plantain suggest the colonisation of open areas (Tipping 1994). Forest regeneration followed, accompanied by a decline of oak and its replacement by wetland trees as a result of rising water levels. The second phase was characterised by a peak in grasses and ribwort plantain, together with a number of cereal grains (*ibid.*).

At Barfield Tarn, clearance was recorded at 4457-3825 cal BC (Hodgkinson *et al.* 2000) followed by a further episode at the VIIa/b boundary (Pennington 1970, 1975; figure 3.9). The second 'elm decline' was accompanied by the expansion of grasses, weeds and cereal pollen.

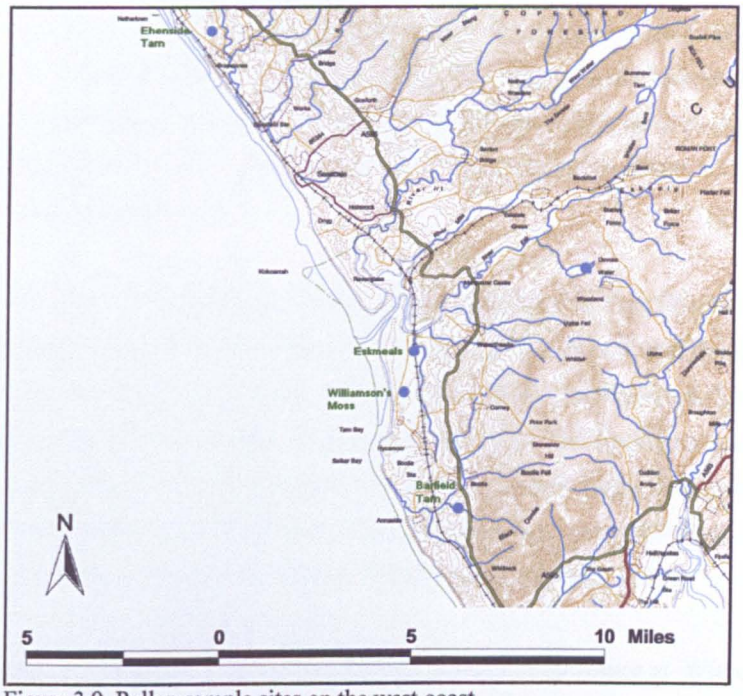


Figure 3.9. Pollen sample sites on the west coast.

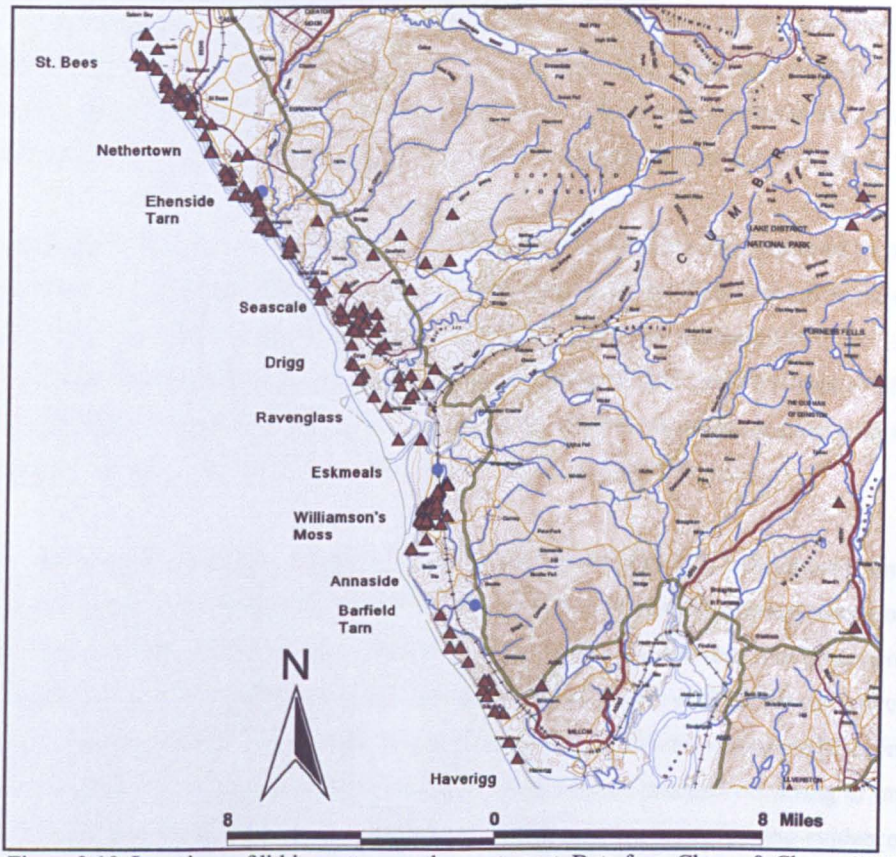


Figure 3.10. Locations of lithic scatters on the west coast. Data from Cherry & Cherry (1983, 1984, 1985, 1986, 1987b).

Charcoal associated with the steepest fall in oak suggested the use of fire in ground preparation. The core revealed a stratigraphic change from organic mud to redeposited clay, coinciding with a steep fall in elm and oak at the VIIa/b boundary. This change was interpreted as a consequence of increased soil erosion, exacerbated by climatic fluctuations (*ibid.*). Later the area around Barfield Tarn saw clearance and cultivation leading to almost complete deforestation (Pennington 1970).

Two distinct clearance episodes have been identified at Ehenside Tarn (Walker (1966a, 2001), the first taking the form of reduced values of elm and oak and the subsequent spread of hazel, ash and birch. Ribwort plantain, sorrel, mugwort and grasses also flowered. The second phase involved clearance of the smaller trees, leaving the open herbaceous vegetation of ribwort plantain, grasses and cereal pollen. Reanalysis and radiocarbon dating of pollen data from Ehenside Tarn illustrate the main periods of activity span between *c.* 3900 and 1500 cal BC with increased charcoal between *c.* 3000 and 2600 cal BC (Walker 2001).

In south Cumbria, Oldfield (1963) recorded two episodes of clearance at Witherslack Hall, Nichol's Moss, Urswick Tarn, Ellerside Moss, Thrang Moss and Haweswater where minor woodland disturbances preceded the zone VIIa/b boundary (figure 3.8). The first episode at Thrang Moss saw reduced values of elm, ivy and oak coinciding with the spread of ribwort plantain, grasses and bracken. This was followed by more extensive clearance associated with ribwort plantain, sorrel, mugwort and grasses following partial forest regeneration *(ibid.)*.

To the east of the Leven, Ellerside Moss was characterised by alder carr bordered by bog and saltmarsh. The sequence illustrated a clearly marked elm decline yielding the first ribwort plantain, but with no apparent change in grass pollen (Oldfield & Statham 1963). At Roudsea Wood, drops in elm, oak and ivy occurred between 3850 and 3150 cal BC (Birks 1982). Occasional ribwort plantain and grass occurred from 3400 BC onwards together with a further drop in elm values, and occasional cereal pollen from *c.* 3150 BC *(ibid.)*.

In contrast to the west coast, sequences from sites on Morecambe Bay exhibit only minor clearance episodes. At Witherslack Hall, Smith (1958) recorded isolated occurrences of ribwort plantain before the opening of zone VIIb, believed to have been derived from pasture on Whitbarrow Scar, a limestone fell to the east. Given the openness of the local tree cover these could be entirely natural. Helton Tarn *(ibid.)* Foulshaw Moss, Nichols Moss and Helsington Moss (Smith 1959) illiustrated similar sequences, with ribwort plantain occurring in small amounts predating a decline in elm at the VIIa/b boundary. The lack of strong evidence for early large scale clearance in the area is further emphasised by recent pollen analysis at Foulshaw and Helsington (Wimble *et al.* 2000). Between 3000 and 2000 cal BC, the record

illustrates small peaks of plantains and grasses, together with drops in elm, ash and lime. Larger scale clearances between 2000 and 1300 cal BC are characterised by steep falls in elm, ash and lime and hazel, with plantains, nettles and bracken increasingly evident. Cereal pollen in the area was not recorded until between 1300 and 900 cal BC *(ibid.)*.

The rocky and marshy nature of the terrain close to the Morecambe Bay estuaries has traditionally limited arable agriculture, with many areas used for rough grazing. Whilst the environmental evidence is poorly understood and much activity is not recognisable in the pollen record, it does reflect differences in the intensity of occupation of different areas. Although there are significant gaps in coverage, what the available evidence does illustrate is that different *sorts* of landscapes, in different sorts of topographic zones, were used in different ways. At a regional scale, the wide diversity of different landscape types across Cumbria have impacted significantly on historical patterns of landuse. Varying topographic conditions and soil types supported different vegetation communities as they do today and these would all have been used in locally specific ways. With perhaps the exception of Skinner's work (2000) pollen analysis does not have the resolution to illustrate these at an appropriate human scale. At a broad level however, around Morecambe Bay, in common with the western lowlands and the eastern and central uplands, the evidence suggests a progressive intensity of clearance and cultivation over increasingly widespread areas into the Later Neolithic and Bronze Age.

A number of the areas and locational habitats where clearance has been identified are closely associated with lithic evidence. Although interpreting both environmental and lithic data is problematic, their close analysis can begin to illustrate some of the ways different environments were exploited and how this changed over time. Before going on to integrate this evidence it is necessary to outline the character and interpretation of the lithic record in Cumbria, and explore the ways contemporary academic approaches can be drawn on in understandings of the nature and scale of occupation.

The lithic record

The ways the lithic record in Cumbria has seen interpretation in the past is intimately tied in with environmental evidence; in the uplands with the onset of axe production, and in the lowlands with coastal foreland development. Like the environmental data, the lithic record is limited by incomplete topographic coverage, with much of the densest evidence for occupation along the coast.

Landuse in many areas of Cumbria is characterised by grazing, with only limited ploughing. Although there have been a limited number of surface surveys in ploughzone contexts, the majority of collections have been recovered from erosion scars or derived from disturbance by

developments overlooked by or undertaken prior to PPG 16 (English Heritage 1991). Given the changing conditions and largely reactive processes which have characterised collection, acquiring an unbiased picture of the density, character and chronology of lithic occupation evidence is at best problematic.

West coast and eastern uplands collections

By far the largest lithic collection from the region is that of the Cherry family; since the 1960s their work has illustrated the location and extent of material from the west coast and eastern uplands (Cherry 1963, 1965, 1966, 1967, 1969, 1982; Cherry & Cherry 1973, 1983, 1984, 1985, 1986, 1987a, 1987b, 1987c, 1992, 1993, 1995, 1996, 2000, 2002; figure 3.10). Although these surveys form the majority of published material from the region, their interpretation is problematic on many levels. Most assemblages were collected prior to the implementation of the rigorous methodologies which characterise contemporary approaches to lithic collection, analysis and interpretation (e.g. Shennan 1985; Pitts & Jacobi 1979; Brown & Edmonds 1987; Ford 1987; Ford *et al.* 1987).

The Cherrys' west coast collections were derived from an area between St Bees and Haverigg, largely concentrated between the 8 and 30 metre contours (Cherry 1963, 1965, 1966, 1969; Cherry & Cherry 1973, 1982, 1983, 1984, 1985, 1986, 1996, 2002; Figure 3.11). 158 'sites' ranged from single finds to collections in their thousands. Assemblages were derived from contexts including eroding clifftops and cliff faces, sand dunes and areas of inland erosion and disturbance. Those from ploughzone contexts were completely cleared of all visible material and fields often saw visits for 'new crops' in later seasons (Cherry & Cherry 2002). Many eroding sites located between the 1930s and 60s were also returned to. A number of the significant concentrations recorded therefore represent biased densities resulting from repeated visits to particular locations. Comparison between the Cherrys' collections and those derived from more recent surveys is therefore problematic as they preclude all but the most basic qualitative analysis.

The eastern uplands collections were recovered from an area between Shap and Kirkby Stephen (Cherry & Cherry 1987a, 1995, 1996, 2002; figure 3.12). 152 scatters were identified, the majority clustered around the 270 metre contour. These were mainly less than a hundred pieces, with a single scatter of over a thousand. With the exception of the larger assemblages, identified in the spoil of a gas pipeline, most were collected from areas of rabbit disturbance and molehills. Although these have seen interpretation as 'sites' (e.g. Cherry & Cherry 1987a), they cannot be used to identify methodologically secure scatters or distributions, and should be understood merely as clusters of findspots.

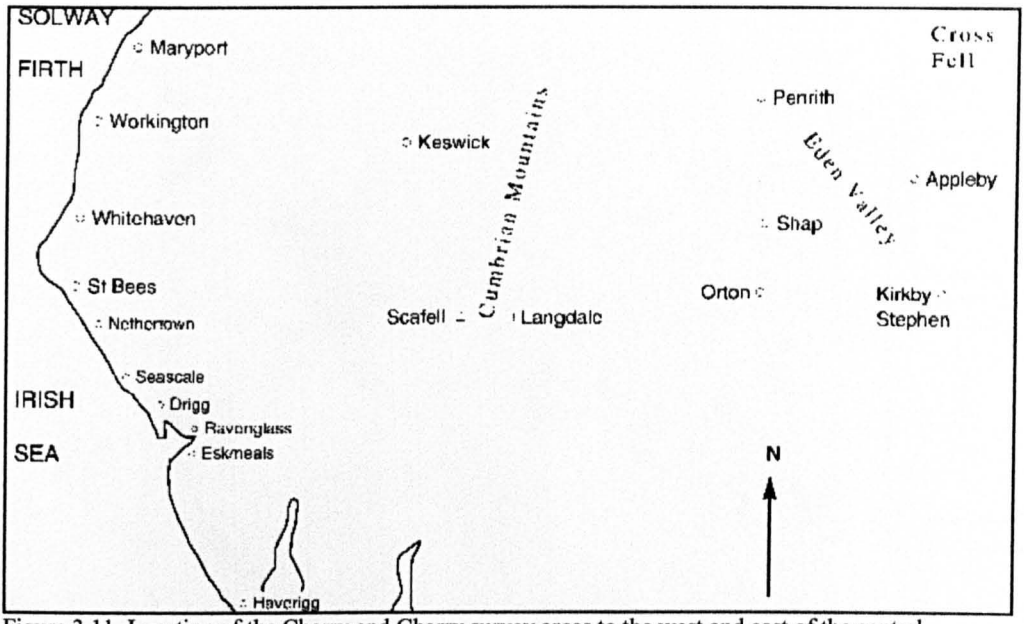


Figure 3.11. Location of the Cherry and Cherry survey areas to the west and east of the central fells. From Cherry & Cherry (2002).

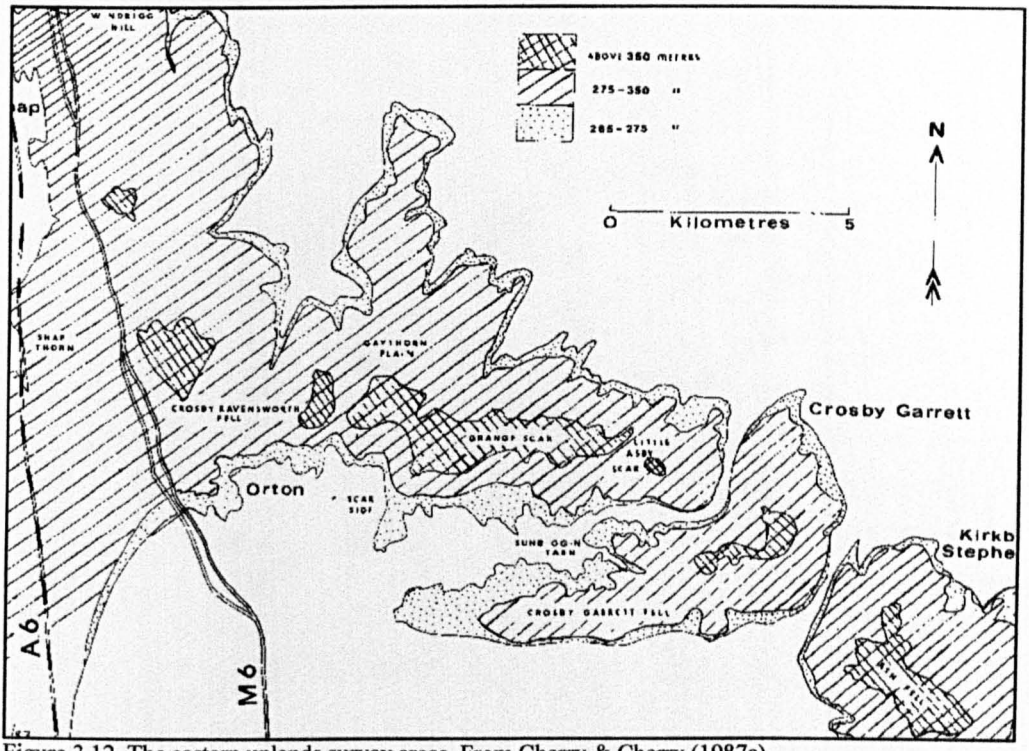


Figure 3.12. The eastern uplands survey areas. From Cherry & Cherry (1987a).

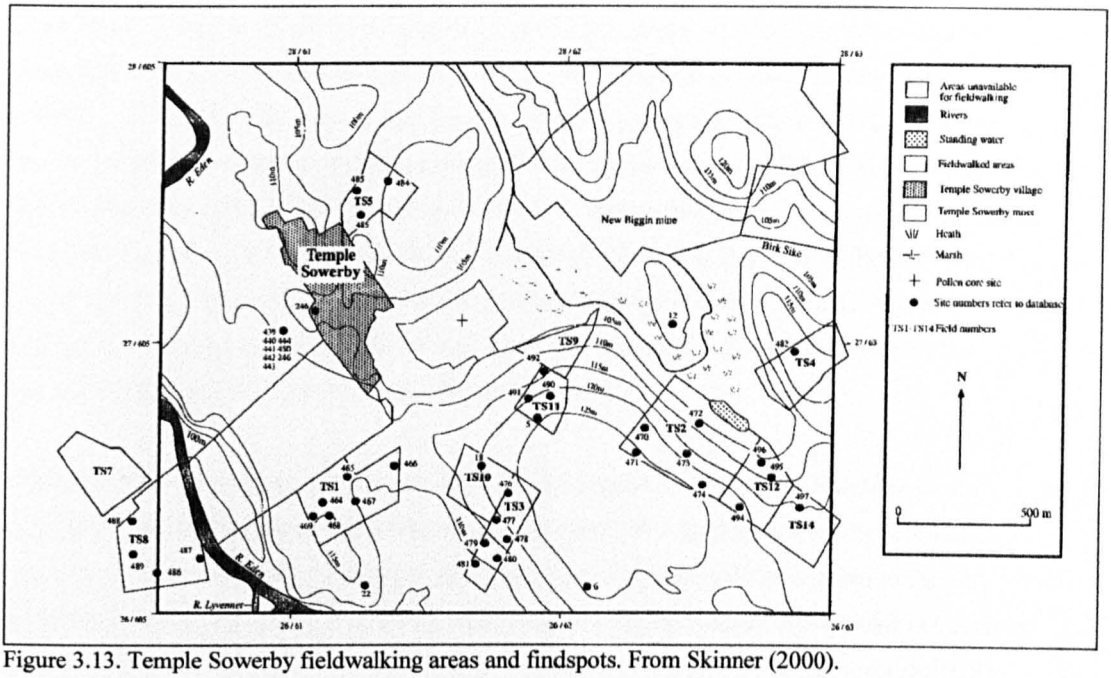


Figure 3.13. Temple Sowerby fieldwalking areas and findspots. From Skinner (2000).

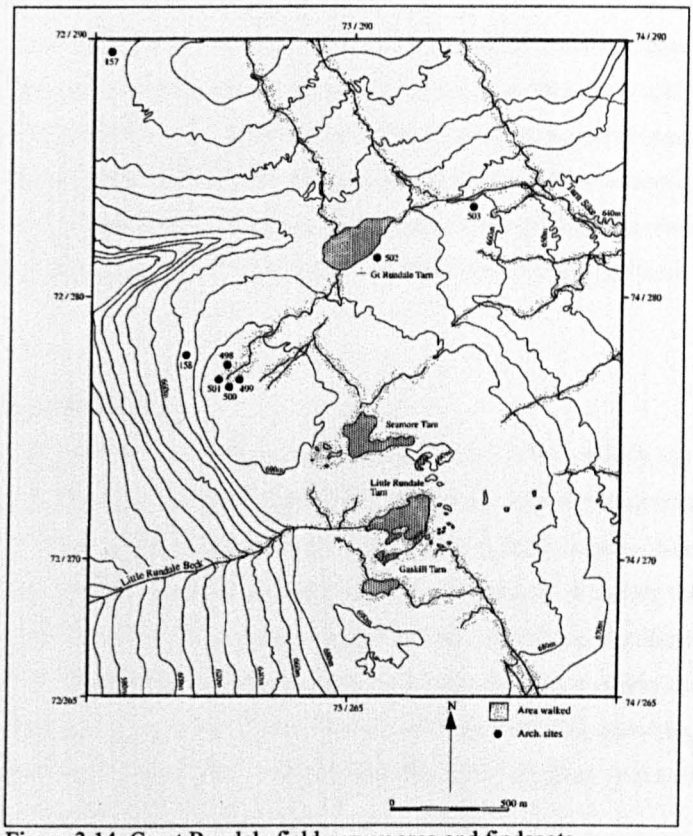


Figure 3.14. Great Rundale field survey area and findspots.

From Skinner (2000).

One of the fundamental problems with the Cherrys' work is that other than the collection and description of lithic material, there appears to have been no focussed interpretative approach. Interpretations as to the dates of particular scatters are frustrated by major problems of inference. At times, in attempts to date particular scatters, especially those which may or may not be Neolithic, the Cherrys resorted to physical associations between diagnostic forms in mixed assemblages, non-local raw material use, differential patination, the presence of polished stone axe fragments and uncritical readings of palynological data (e.g. Cherry 1969; Cherry & Cherry 1996, 2002; see below). Despite these problems however, their work is of great importance. Without this considerable resource, there would be little understanding of the character and location of lithic scatters across the region.

Skinner (2000) undertook a small scale field survey programme to analyse the presence of occupation evidence in relation to pollen sampling sites. Two main areas were covered by systematic survey. The first, at Temple Sowerby (figure 3.13) revealed a number of discrete and mixed scatters represented by a total of 78 pieces. A second survey was carried out at Great Rundale (figure 3.14), which covered 5 square kilometres of exposed peat sections above the 660 metre contour. 1907 pieces were identified in six main clusters. No lithic data at such altitudes is available from the remainder of the county, and as such this assemblage is regionally important. Although the sample data derived from Skinner's (2000) study were limited, detailed technological, raw material and distributional analyses were carried out. Clearly defined bases for the identification and interpretation of the scatters and their constituents were established. Furthermore the results of the pollen data were integrated with the archaeological record, and the landscape settings of the assemblages also saw discussion (see below).

The Furness collections

A large scale field survey project was initiated in Furness in 1997, which has continued into 2005. The lithic collection has been catalogued, subjected to metric analysis and interpreted together with Dave Coward as part of the original research for this study. Running north/south between Sandscale and Rampside and east/west from Walney to Gleaston, the transect covered a variety of landscape zones from coastal sites to inland valleys and localised uplands. The long term nature of the project has allowed the systematic survey of over ninety individual fields. Both empty fields and those containing scatters have been recorded, allowing for analysis of presence and absence of occupation remains in different topographic zones (figure 9.2).

Monitoring of coastal erosion has also produced a significant amount of material. At Sandscale, excavation of a posthole structure and pits associated with a lithic scatter of Later Neolithic/Early Bronze Age date was undertaken (Evans & Coward 2003, 2004; figure 9.48).

Developments overlooked by the planning process on south Walney have also yielded significant amounts of material similar to that collected from Walney North End during the 1930s and 40s.

The largest assemblage from the Furness collection comprises over 600 pieces with the remainder ranging from single finds to assemblages of around 100 pieces. The larger scatters are mixed in date, with many smaller clusters seemingly representative of single period activity. As a whole, the survey has illustrated relatively dispersed finds with few major clusters when compared to the Cherrys' coastal material. This is a result of the methodological sampling strategy employed, rather than repeated walking of the same areas. Where reactive collection has occurred in Furness, larger assemblages have indeed been identified.

The Furness assemblages are both locally significant, and provide an important starting point for re-analysis of lithic material across the county. Derived from a number of different topographic settings across a discrete area, these provide an important contrast to the Cherrys' material. Assemblages from the western coastal contexts or the eastern uplands, separated by c. 80 km, have often been unquestionably taken to represent the spectrum of lowland and upland occupation across Cumbria, even though raw material and monument traditions suggest differences in the character of occupation either side of the central fells. That the Furness transect covered inland, coastal and localised upland areas not only means different 'types' of assemblage have been recovered from the same area, but also these can begin to illustrate localised patterns of movement *between* landscape zones. At a closer interpretative scale, the Furness collections have seen full metric analysis, consideration of reduction technology and raw material use (appendix 5). That these assemblages can be 'dated' in relation to contemporary characterisation methodologies means it has been possible to understand why earlier classification schema have been so problematic.

The use and availability of lithic raw materials

Understandings of coastal formation and erosion are inextricably linked to the recognition and interpretation of lithic scatters as well as understandings of the raw materials in use. At Eskmeals, radiocarbon determinations have illustrated the formation chronology of the coastal foreland (Bonsall *et al.*1986, 1989, 1994). Dates from a series of shingle ridges correspond to the Postglacial marine transgressions, the highest of which is known as the '25 ft beach'. Widely believed to be characterised by the eight metre contour between St. Bees to Walney, it is along and above this feature, where it can be reliably traced, that Late Mesolithic and Early Neolithic material is clustered (Cherry 1969; Cherry & Cherry 1986, 1996, 2002; figure 3.15). As Later Mesolithic scatters are located inland of the eight metre contour, any Early Mesolithic material associated with former coastlines would have been washed away (Cherry

& Cherry 2002). A series of 'intermediate' shingle ridges formed as sea levels fell and erosion of the sand dune systems which now cover these ridges often reveals lithic material of Later Neolithic/Early Bronze Age date.

Graeme Clark (in Cross 1939) described lithics from Walney North End as characteristic of the 'poverty industries' of Northern Ireland and western Scotland. This terminology, clearly informed by culture historical concerns, was defined on the basis of the poor quality and diminutive size of the locally available flint. In geological terms, flint is entirely absent from Cumbria although chalk is present at the same latitude in east Yorkshire and County Antrim. Pebble flint does however occur in the shingle ridges characterising many west facing shorelines, in boulder clays on south Walney (Barnes & Hobbs 1952) and most likely in other contexts elsewhere in the region.

Although the coastal pebbles can be as large as a 10 centimetre cube, most are "no larger than a walnut" (Barnes & Hobbs 1952: 26). The flint is variable both in quality and colour, occurring in a continuum from pale yellow to orange, red and brown. This colour and quality variation is problematic in a number of ways, not least in terms of the identification of non-local flint.

In west and south Cumbria, coastal pebble flint is the greatest constituent of the scatters identified. In the eastern uplands, pebble flint is also present although its colour, size and quality suggests it was derived from local river gravels (Cherry & Cherry 1987a). Scatters from both areas contain chert, tuff, and other material including black and grey 'chalk' flints. Chert occurs in limestone in south Cumbria, areas of the eastern uplands (Cross 1939; Cherry & Cherry 1987a, 1995) and in the river gravels of the Eden valley (Skinner 2000). In the east it is known to outcrop on Crosby Ravensworth fell, Orton Scar and close to Newbiggin Tarn (Cherry & Cherry 1987a), and in Furness at Dalton and Sandscale (Cross 1939). Although there is little evidence of chert working in Furness and along the west coast where pebble flint was easily available, in the eastern uplands chert forms the greatest constituent of Later Mesolithic/Early Neolithic assemblages (Skinner 2000; Cherry & Cherry 2002). In contrast, later assemblages from the eastern uplands contain significant amounts of chalk flint. There is less evidence for the use of chalk flint on the west coast although this does occur in greater quantities in the south east (Cherry & Cherry 2000) and in Furness, where a variety of flint has been identified over and above that available in the coastal shingle (chapter nine).

Understanding the derivation of lithic raw materials is problematic in that prehistoric communities evidently knew of and used a variety of locally available materials, many of which occurred in pockets of glacial drift, clays and gravels away from their parent source.

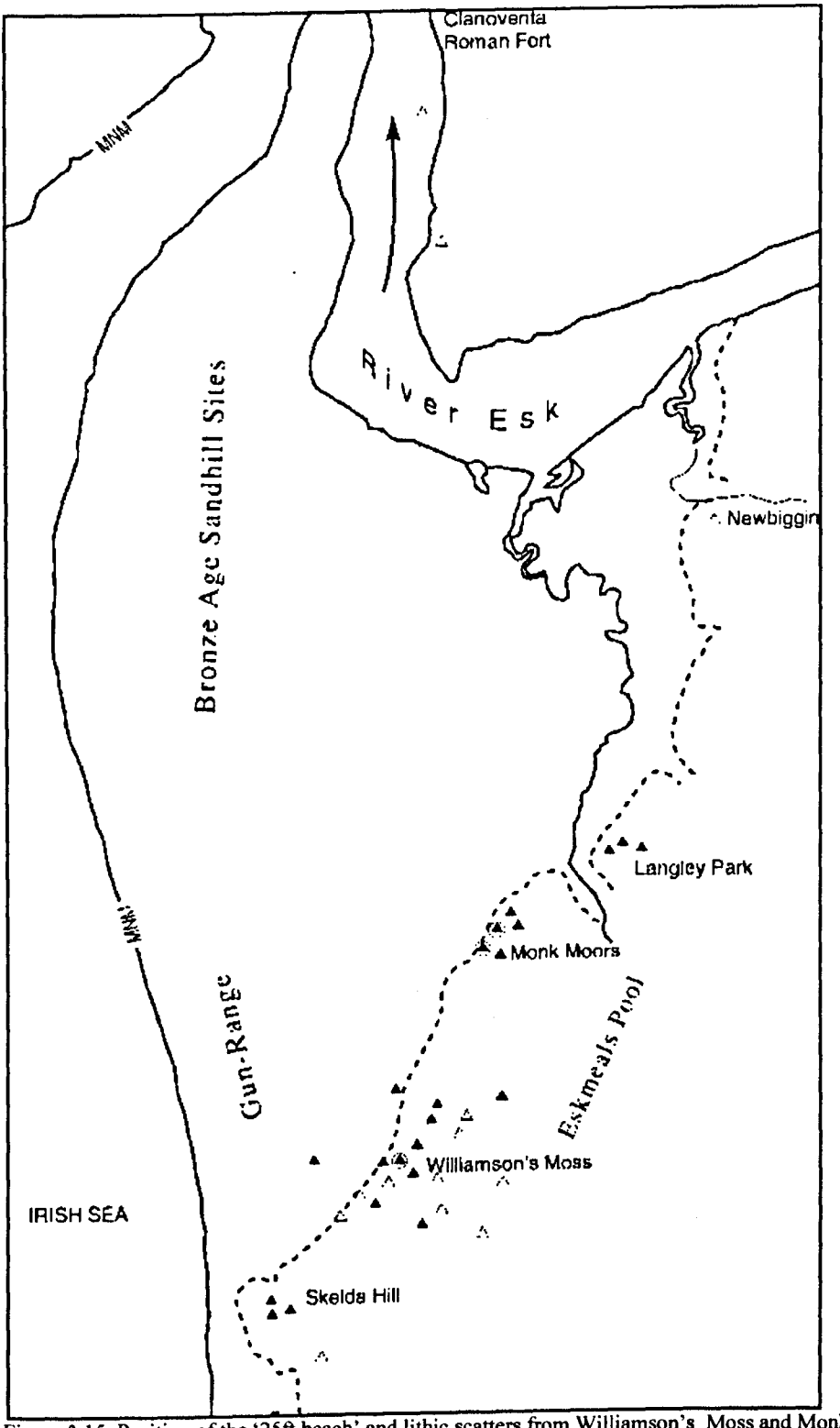


Figure 3.15. Position of the '25ft beach' and lithic scatters from Williamson's Moss and Monk Moors. From Cherry & Cherry (2002).

That the constituents of scatters differ between the east, west and south of the region results not only from the exploitation of locally available materials but also from exchange networks. These two factors are a problem. Although we know the sources of some local materials, others, particularly those in drift deposits, may yet remain to be identified. Caveats aside, trends illustrated by the differential use of raw materials suggest whilst this was dictated by local conditions, during the Neolithic, 'non-local' flint appears to have become increasingly available.

Understandings of the geological derivation of flint in Cumbrian assemblages remain highly speculative and tied in with culture historical concerns. Linked to the exchange networks suggested by the distribution of Cumbrian axes, the grey chalk flint is thought to derive from the boulder clays of East Yorkshire (Cherry & Cherry 1987a) and the higher quality black material from the coastal sources at Flamborough Head (*ibid.;* Durden 1996). At a fundamental level, there are differences between the use and availability of raw materials either side of the Cumbrian mountains. This is likely to relate to networks of contact to both the east and the west and to the exchange of Langdale axes. This issue will be discussed in due course, however it remains that the identification of exchange networks has taken precedence over understanding the importance and use of lithic raw materials in their own local contexts.

Working tuff

Although the use of Borrowdale Volcanic Series tuff for the production of stone axes in Cumbria has a significant history of interpretation, its use for the production of lithic forms analogous to those made in flint has received only cursory discussion (Cherry & Cherry 1973, 1982; Bradley & Edmonds 1993; Edmonds 2004). This is virtually unknown in wider literature; Pitts & Jacobi, in a discussion of the use of non-flint stone sources, concluded:

> "Even rocks with a conchoidal fracture habit (principally stone groups VI, VII and VIII) could neither be worked finely enough, nor could produce sufficiently sharp an edge, for the manufacture of usable flake tools" (1979: 176).

Contrary to this supposition, cores, microliths, blades, flakes, scrapers and other forms of tuff have been collected from across the region (Cherry & Cherry 1973, 1983, 1987a; Coward & Evans in prep; figure 3. 16). In general, tuff only appears in small proportions, normally only one or two pieces in what are often substantial assemblages.

Many studies of the Langdale 'axe factories' have involved the mapping of production sites and the petrological identification of tuff outcropping in the central fells (figure 3.17) These

investigations illustrated material of varying quality outcrops not only in the Langdales but also at Scafell and Glaramara (Houlder 1979). Tuff from which axes were produced appears to derive largely from this broad area (but see Fell & Davis 1988). However few have seen petrological identification, so although different petrological groups have been identified, axes made from tuff are commonly ascribed to Group VI, linking them with the Langdale sources. Possible working sites have however been discovered on Fairfield, north east of Ambleside (Jamie Lund pers. comm.) and it is likely that more remain to be identified.

Whilst it has commonly been assumed that tuff was only available in the central fells, petrological analysis of microlithic material from St. Bees identified an Ennerdale banded tuff alongside that of the Borrowdale Volcanics. Both occur as beach pebbles and are present in the glacial drift (Cherry & Cherry 1973). Unworked tuff pebbles have been found in lithic scatters on the west coast, Walney and in the eastern uplands (Cross 1947; Cherry & Cherry 1983; Cherry & Cherry 1987a). The presence of pebble tuff in such contexts has been taken to suggest that the high quality material used for the production of stone axes was not quarried at source until the Early Neolithic (Bradley & Edmonds 1993).

Although the broad chronology of axe production seems relatively well understood (Bradley & Edmonds 1993), there are no secure dates either for its onset or its demise. As discussed above, charcoal from an axe production site at Thunacar Knott (Clough 1973) produced radiocarbon dates of 3250-2850 cal BC (Bradley & Edmonds 1993). More recently, excavations have produced a series of Early Neolithic determinations; at Stake beck, charcoal from a working floor was dated to 3730-3410 cal BC, and charcoal associated with debitage at Harrison Stickle was dated to 3780-3530 cal BC and 3780-3525 cal BC (*ibid.*). At Stickle Pike, Top Buttress site 95 yielded two dates of 3690-3370 cal BC and 3500-3100 cal BC, thought to bracket the main period of its use (*ibid.*).

The earliest available dates for the production of Langdale axes comes from Thorn Crag where recent excavations produced a determination of 4209-3709 cal BC (Jamie Quartermaine pers. comm.). The two latest available dates from the complex, 3500-3100 cal BC (Bradley & Edmonds 1993) and 3250-2850 cal BC (Clough 1973) illustrate that axe production took place into the Later Neolithic and on the basis of currently available evidence, was in progress for over a thousand years.

Although the sequence of technological approaches to the production of stone axes is relatively well understood at source (Bradley & Edmonds 1993), there are major chronological problems further away. As approaches to axes have been dominated by the interpretation of exchange networks (Fell 1964; Manby 1965; Bradley & Edmonds 1993)

understandings of their use and significance within Cumbria remain problematic (but see Edmonds 2004). One of the main reasons for this is that the majority have been chance finds resulting from nineteenth century ploughing, drainage and urban expansion.

Although these are likely to represent only a small proportion of those recovered, away from the production sites, over 100 polished and roughout stone axes and at least 25 fragmentary or broken forms have been recorded in the southern half of Cumbria alone. Added to this, in the same area there are at least 40 nineteenth and early twentieth century accounts of 'celts' and 'hammers' (including a number of hoards) the majority of which are likely to be polished and unpolished examples (figure 3.18). Perforated axes of various types occur in similar densities to Group VI forms, with at least 130 recorded in the southern half of Cumbria (appendix 5).

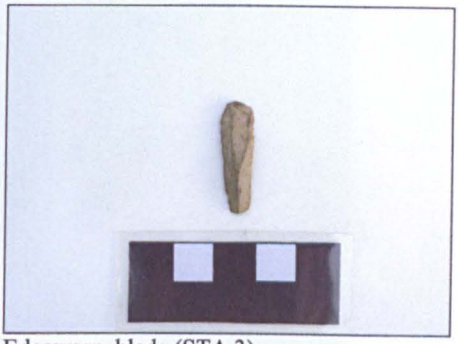
Compared to the research of Group VI axes, perforated axe types have seen little analysis other than in terms of the increasing use of localised stone sources after the Later Neolithic (Bradley & Edmonds 1993). Although a small number of perforated tuff implements exist, its conchoidal fracture habit means it is difficult to perforate. Petrological group XV, sourced to the Coniston area, was utilised largely for the production of axe hammers and adzes (Roe 1979). Group XV forms are distributed across northern England, tailing off in frequency further to the south *(ibid.)*. Few shafthole implements have seen petrological identification however although little is known of their significance or close dating, across Cumbria, their distribution is very similar to that of group VI forms (figure 3.18).

The distribution of 'Langdale' axes in Cumbria occurs in two main concentrations; the river valleys radiating from the central fells, and low lying areas such as the coastal strip and the Eden valley. Three basic forms are represented; roughouts, and the so-called 'Cumbrian' and 'Variant' types (Fell 1964; Manby 1965). Polished 'Cumbrian' axes predominate in the coastal lowlands and the Eden valley, however closer to source, there are markedly more roughouts and part finished examples. Their changing proportions suggest the final polishing and grinding of axes took place in or close to occupation areas (Bradley & Edmonds 1993; Edmonds 2004; Figure 3.19). This is illustrated by the presence of roughouts and polished stone axes together with grinding stones at coastal sites such as Ehenside Tarn (Darbishire 1873). In these sorts of contexts, 'Variant' axes are also common. These are of smaller dimensions to the classic 'Cumbrian' types, and including adzes and chisels, result from modification and resharpening of axes after their original production (Manby 1965; Bradley & Edmonds 1993; Edmonds 2004).

Bladelet core (BM1 02)

Multiuse: side blade/end scraper (LEE 411).

Retouched blade (BMB 31)



Edgeworn blade (STA 3)

Broken waste flake (BMB 35)

Roughout fragment used as a chopper (MUL 1004)

Roughout fragment with percussive damage (DEND 22)

Cutting edge and butt of polished axe (MUL 1000 & 1002).

Figure 3.16. Selection of tuff forms from the Furness transect. Scale = 5cm

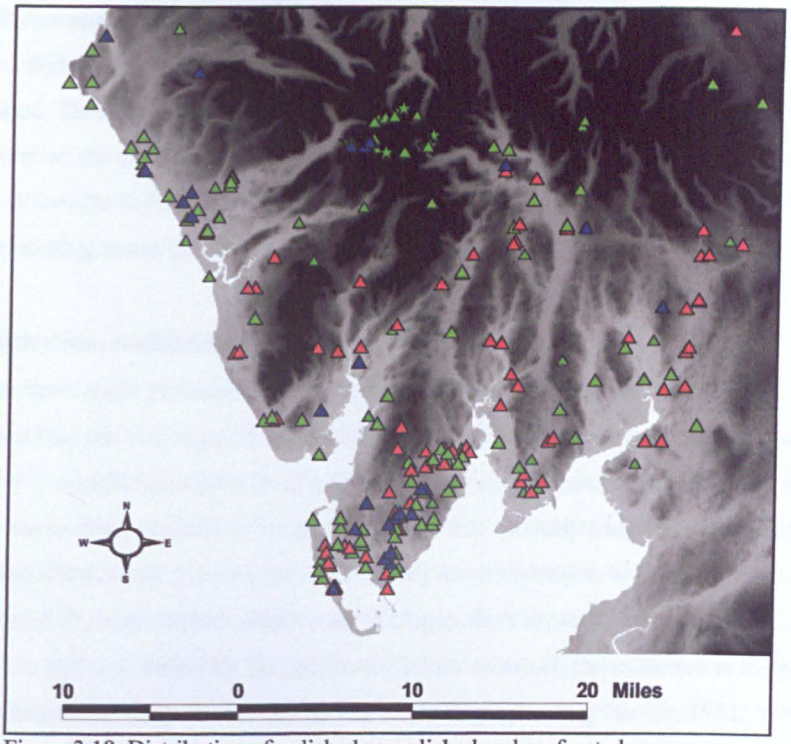


Figure 3.18. Distribution of polished, unpolished and perforated Axes across southern Cumbria.

★	Axe production sites in the central fells
▲	Polished, part polished axes or polished axe fragments
▲	Roughout axes
▲	Perforated axes (various types)

The recovery of both 'Variant' axes and fragments of re-used axes in association with lithic scatters illustrates these forms were utilised in domestic contexts as well as being produced for exchange. Axes themselves, both in polished and roughout form, were reworked to create usable flakes and blanks for the production of other implements. This is not a new observation (Manby 1965; Bradley & Edmonds 1993) however their significance has often been overlooked. These can only be identified when polished surfaces, edge facets or thinning scars are present on the dorsal surfaces of utilised flakes. As tuff from drift, coastal and riverine sources is thought to have been in use from the Later Mesolithic onwards, those forms without scarring relating to axe production remain unrecognisable.

Raw materials, technology and dating

There are three main problems regarding the chronology of lithic assemblages in Cumbria. The first is that the vast majority have been derived from insecure contexts. The second is that the Cherrys' assemblages have been subject to inappropriate dating schema. The third problem stems from attitudes towards the pebble flint 'poverty industries'; not only is this historically constituted, at a national scale, analyses of reduction technology have concentrated on demonstrably datable assemblages from areas with abundant raw materials. In areas where pebbles constitute the predominant raw material, the evidence is suggestive of different technological traditions and material chronologies (e.g. Saville 1981; Young 1987; Waddington 2000). However how far these technologies do in fact differ from the *relative* changes exhibited across the Later Mesolithic/Early Neolithic and the Later Neolithic/Early Bronze Age in other areas is far from clear. Not only has little comparative technological analysis has been undertaken, it remains that most assemblages are 'dated' on the basis of the presence of poorly understood diagnostics rather than on the basis of technology. As discussed above, analysis and characterisation of lithic material from the Furness transect has provided a context from which to re-evaluate aspects of reduction technology and chronology across the region. Before going on to discuss these issues in relation to contemporary approaches to lithic characterisation, it is necessary to illustrate some of the reasons why dating lithic scatters in Cumbria has been so problematic.

Mixed assemblages

Although many lithic scatters have been derived from along the west coast, most attention has been focussed on those from Eskmeals. At both Williamson's Moss and Monk Moors large concentrations of lithic material have seen excavation and a small number of features have provided Late Mesolithic radiocarbon determinations. Although details of the excavations and the lithic material derived remain largely unpublished (and unavailable for analysis), the density of activity has been taken to suggest year round occupation during the Later Mesolithic (Bonsall 1981, Bonsall *et al.* 1986, 1989, 1994).

At Williamson's Moss, extensive activity was centred around the banks of an inland tarn formed after 5473-5074 cal BC (Bonsall *et al.* 1994). Excavation of 125 square metres revealed an assemblage of more than 34 000 pieces, and occupation remains including stakeholes, pits and hearths. Wooden 'structures' dated to the fifth millennium BC (but not stratigraphically associated with lithic material) were taken to represent substantial occupation remains (Bonsall 1981; Bonsall *et al.* 1986, 1989, 1994). These are now, however, believed to have been entirely natural (Hodgkinson *et al.* 2000; Croft *et al.* 2002). Although the bulk of lithic material from Williamson's Moss was made up of microliths, microburins, blades and blade cores, many later forms were also present. Diagnostics included leaf and other arrowheads, knives and a roughout axe. Although stratigraphic relationships between this material is implied (Bonsall *et al.* 1994), the majority in fact occurred in a puddled topsoil context (*ibid.*).

A similar situation exists at Monk Moors where an area disturbed by construction and ploughing produced over 4000 lithic pieces (Cherry & Cherry 1986). These were primarily microlithic and included over 100 geometric and irregular microliths, hundreds of blades, blade and bladelet cores and microlithic waste. Three of the scatters yielded lumps and flakes of tuff, and a flake from site 2 with a partially polished surface suggests a Neolithic date for at least some of the material (Cherry & Cherry 1986). Monk Moors 'sites' 1 and 2 saw partial excavation in 1974 *(ibid.)*. Site 2 comprised a single shallow pit, and site 1 revealed an arrangement of hearths and stakeholes with a hearth which produced a date of 5970-5360 cal BC (Bonsall 1989; Hodgkinson *et al.* 2000).

Rather than being solely Later Mesolithic as has been insinuated (Bonsall 1981; Bonsall *et al.* 1989, 1994) the assemblages and the range of radiocarbon dates from Monk Moors and Williamson's Moss indicate multiple activity phases dating between the Later Mesolithic and the Early Bronze Age. The use of such scatters to identify Late Mesolithic activity to the detriment of other material has significant ramifications. Although these areas are of importance in that they evidently saw long histories of use, the continual focus on large and chronologically mixed assemblages means that in technological terms, we have little understanding of what changed and what remained relatively unchanged between the sixth and fourth Millennia BC. The ways this material has been interpreted has created significant problems with 'finding' the Neolithic.

Finding the Neolithic

Attribution of a Later Mesolithic or Early Neolithic date for lithic collections in Cumbria has traditionally been driven, as at a broader national scale, by the presence of diagnostic projectiles in association with blade based working. Blade based scatters in Cumbria have largely been ascribed to the Later Mesolithic on the basis of their common occurrence with microliths. Leaf shaped arrowheads, the sole typological form taken by the Cherrys to indicative an Early Neolithic date, are rare (Cherry & Cherry 1996; 2002). Lithic pieces from the west coast (Cherry & Cherry 1983, 1984, 1985, 1986, 1987b) number over 80 000, yet this included only 48 arrowheads, largely of Later Neolithic and Bronze Age date (Cherry & Cherry 1996). Leaf shaped arrowheads number only 11, of which six were found in sand dune scatters associated with later material *(ibid.)*. The dearth of diagnostic arrowheads has meant that Langdale axes and tuff flakes with polished surfaces have been taken to indicate Early Neolithic occupation (Cherry & Cherry 1996, 2002). However:

> "....if we define an early Neolithic assemblage as one based on a blade technology with leaf arrowheads and polished stone implements, excluding earlier or later tool forms, then none of the 158 sites in our coastal survey can safely be assigned to the early Neolithic" (Cherry & Cherry 1996: 61).

The eastern uplands yielded over fifteen times more arrowheads than the coastal scatters, although 'classic' Early Neolithic assemblages, according to the Cherrys, were still impossible to identify (Cherry & Cherry 1987a, 1996). Although leaf arrowheads and polished axe fragments was identified in six instances (Cherry & Cherry 1996), these were associated either with microliths or later projectiles (*ibid.*). Basically, the 'package' used by the Cherrys to identify Early Neolithic scatters is untenable. Although there is an undeniable association between these forms, stone axes were produced into the Late Neolithic, and leaf arrowheads occur into the Bronze Age (Green 1980). The association between leaf arrowheads, stone axes and axe fragments in Late Neolithic/Early Bronze Age scatters in sand dune contexts is testament to this point.

Assemblages containing material of 'mixed' diagnostic date are common in the north and west and have thrown up similar interpretative problems. Numerous instances of leaf and later arrowheads in assemblages also containing microliths have been recorded (e.g. Young 1987; Waddington 2000). In Cumbria, the presence of both Group VI axes and leaf arrowheads in scatters which would have been dated to the Later Mesolithic in their absence clearly suggests that a microlithic technology persisted into the Neolithic.

So where does this leave us? That the Cherrys' interpretative focus was based on 'finding' the Early Neolithic illustrates one of the most fundamental problems with their approach. This was driven by attempts to distinguish, on the basis of poorly understood 'diagnostics',

between Late Mesolithic, Early Neolithic, Late Neolithic and Early Bronze Age lithic scatters. Even in those areas where the character of flintworking is well understood, it is often impossible to draw clear lines between the Later Mesolithic and the Early Neolithic on the basis of surface assemblages; in many cases only when stratigraphically secure collections have been derived from sub-surface features can Early Neolithic assemblages be securely identified.

The results of recent excavations on Furness have begun to elucidate questions of chronology and association. At Holbeck Park, Barrow, deposits in a tree throw contained over 100 sherds of Early Neolithic pottery associated with a rod microlith and two tuff flakes (OAN 2002). A second site at Roose Quarry included a pit containing two leaf shaped arrowheads, a flint blade, two flakes of polished tuff, and fragments of an Early Neolithic carinated bowl (Jones 2001).

These finds might suggest the dearth of 'fine' forms such as leaf arrowheads, and the lack of Early Neolithic pottery in association with lithic scatters results from these having been placed in subsurface pits. Such patterning has been identified in other areas (e.g. Healy 1987), and can also be demonstrated by the fieldwalking assemblage from Roose Quarry within which there were no 'diagnostic' Early Neolithic forms (see chapter nine). These excavated sites illustrate two main points, the first of which being that a microlithic technology persisted in Cumbria into the Neolithic and as such, no clear distinctions can be drawn between Later Mesolithic and Early Neolithic surface scatters. The second is that given 'diagnostic' forms are problematic both in terms of visibility *and* chronology, the clearest approach to understanding lithic scatters has to be one based first and foremost around technology.

Core technology

Recent approaches to lithic analysis place emphasis on the constituents of whole assemblages, including cores and waste, rather than focussing purely on diagnostics. In terms of dating, these have been based on looking at the changing character of reduction technology between the Later Mesolithic/Early Neolithic and the Later Neolithic/Early Bronze Age. The majority of published analyses have been undertaken on assemblages from southern England, and we have to ask how far these models are applicable to pebble flint assemblages in the north and west. Across the country as a whole, lithic assemblages exhibit a remarkable degree of homogeneity, with subtle variations in reduction technology at a regional scale often related to the character of available raw materials (Edmonds 1995). It has been assumed the flint in use in Cumbria was technologically restrictive, however despite constraints imposed by its size it nevertheless possible to distinguish between scatters with high frequencies of blades from those where a flake technology predominated (see chapter nine). This means it is possible to

draw on technological analyses from other areas in the characterisation of lithics from Cumbria.

Later Mesolithic/Early Neolithic scatters are based around the production of blades (figure 3.19). Blade based assemblages often incorporate less than 20% actual blades however, with narrow flakes occurring in higher proportions (Ford 1987). Flakes are a necessary element of core reduction and those with parallel dorsal scars can also be used to illustrate blade manufacture (*ibid.*). Blade scatters often include small and exhausted single and double platform cores suggesting the maximum number of blades were produced from relatively small amounts of raw material. The constituents of such assemblages illustrate a high degree of careful working, with core preparation and rejuvenation suggesting an organised approach to the production of narrow blade and flake blanks. In terms of tool forms, Later Mesolithic/Early Neolithic scatters illustrate an emphasis on retouched and edgeworn flakes and blades, with end/side scrapers, awls/borers and multi-use forms commonly represented. This relatively restricted range of tools were easily portable and could have been used for a variety of tasks (Edmonds 1987, 1995).

Although the Cherrys drew qualitative distinctions between flake and blade based assemblages, there are some major problems with their approach to technology. Although nearly 5000 cores were collected from the coastal and upland sites, together with over 61 000 pieces of waste (Cherry & Cherry 2002), little analysis of this material has taken place. With the exception of waste considered diagnostic (e.g. bladelet cores in association with microlithic debitage), most has not seen analysis or published description. This means not only that little information regarding reduction technology or chronology can be derived from the published data but also that in the absence of 'diagnostics', a variety of other factors and associations have been used to differentiate between scatters of supposedly different date. Given these and other problems relating to the interpretation and consistency of the published data, the constituents of the Cherrys' assemblages are not recorded in detail here, or included in the appendices to this thesis.

Distinctions drawn between 'Later Neolithic' and 'Bronze Age' assemblages, for example, were based on differential raw material use. Although the reasons for this assumption are unclear, it appears the Cherrys believed non-local raw materials were present in west Cumbria only during the Late Neolithic. Waberthwaite 5 was assigned a Late Neolithic date (Cherry & Cherry 2002). The assemblage included a leaf arrowhead, a scraper made from chalk flint, retouched and edgeworn flakes/blades, a chert blade, three single platform cores and a large tuff blade made on a polished axe fragment (Cherry & Cherry 1985). At St Bees Golf Course VIII, a blade based scatter including end scrapers and a high proportion of utilised blades and

flakes, exclusively made on black chalk flint, was also assigned a Later Neolithic date (Cherry & Cherry 1983, 2002). In both cases, the presence of chalk flint clearly drove the attribution of a Later Neolithic date for blade based scatters which illustrate clear Later Mesolithic/Early Neolithic characteristics.

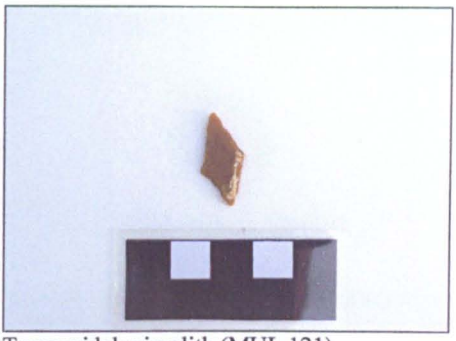
In Furness, the majority of blade based scatters incorporate significant quantities of good quality translucent flint. There is no clear difference in the occurrence of 'non-local' flint between Later Mesolithic/Early Neolithic and Later Neolithic/Early Bronze Age scatters. That black chalk flint is present in demonstrably Early Neolithic assemblages from excavated sites in Furness (Jones 2001; OAN 2002) demonstrates that 'dating' scatters on the basis of non-local materials has masked the presence of such assemblages in the Cherry collections.

Later Neolithic/Early Bronze Age scatters

Compared to the relative lack of Early Neolithic pottery and arrowheads in surface scatters, Later Neolithic/Early Bronze Age forms are less rare, and particularly in the eastern uplands (Cherry & Cherry 1996, 1996b, 1987a, 2002), have been used to date associated scatters. Assemblages interpreted as being Later Neolithic were associated with grooved and Peterborough wares and Bronze Age scatters with beaker material (Cherry & Cherry 1987a, 2002). There is an obvious problem here as the onset of beaker production is broadly contemporary with that of grooved ware (Thomas 1991; Bradley 1984; Gibson 2002) and the presence of both in 'domestic' assemblages is relatively late in the sequence (Bradley 1984). The distinctions drawn between Late Neolithic and Early Bronze Age scatters (Cherry & Cherry 2002) were also based on arrowhead forms known to span the transition. Given these problems, and that the majority of scatters from the eastern uplands were derived from erosion scars, the dating of this material to specific periods is problematic.

In technological terms, Later Neolithic and Bronze Age assemblages can be identified by their contrast to blade based scatters (figure 3.20). Flake cores, predominantly of a larger size than blade cores, appear in a variety of forms often with multiple platforms. Flakes illustrate little evidence of preparation and careful working, many lacking identifiable bulbs and platforms. Flake scatters include a variety of tool and core forms compared to the relatively restricted range in blade assemblages (Edmonds 1987, 1995). Furthermore, in contrast to the 'multi-use' forms characterising earlier assemblages, distinctive tool 'types' can be identified, which often appear to have been produced for specific tasks. Flake tools are in general larger and cruder than earlier forms, however a number of finely worked 'classic' tool types, such as thumbnail scrapers, knives and arrowheads illustrate the invasive retouch more common to earlier assemblages. Later Neolithic and Early Bronze Age assemblages are often larger than earlier scatters and are often located close to raw material sources (Edmonds 1987, 1995; Ford 1987).

Spurred tool on flake with prepared platform and dorsal blade scars (DL 1).



Trapezoidal microlith (MUL 121).

Single platform blade core (GLE 8 116).

Denticulate (STA 22).

Exhausted single platform blade core (GLE8 112).

Retouched blade (STA 8).

Retouched blade (MC 40).

Heeled tortoise core (MUTT 18).

Figure 3.19. Selection of blade based forms from the Furness transect.

Flake borer (GLE 8 78).

Thumbnail scraper (MP 37).

Edgeworn flake on pebble (HW 4 22).

Retouched pebble (MP 91).

Hollow based arrowhead (LEE 7).

Spurred point (MUL 77).

Retouched flake (MP 28).

Edgeworn flake on pebble (MUL 193).

Figure 3.20. Flake based material from the Furness transect. Scale: 5cm. For further details see appendix 5.

In the absence of diagnostics, the bases on which the Cherrys assigned Later Neolithic and Bronze Age dates to lithic scatters are unclear. As discussed above, these appear based on the idea that non-local raw materials were present in the Later Neolithic but relatively absent into the Bronze Age. Attributions of Bronze Age dates are further problematic in that many scatters dated to the Bronze Age on the west coast have been derived from shingle ridges exposed by the movement of sand dunes. Perhaps the most significant problem with this approach is that these assemblages are consistently situated on or close to sources of pebble flint. The rough technology which characterises them is commonly used to differentiate between blade and flake based assemblages (Pitts & Jacobi 1979; Ford 1987; Ford *et al.* 1987; Edmonds 1987) and has been used by the Cherrys to attribute all dune scatters to the Bronze Age. However, like assemblages from other stone sources, the constituents of these scatters illustrate the informal use of abundantly available pebble flint, the production of blanks, raw material testing and significant quantities of primary debitage (Inzian *et al.* 1992; Torrence 1986; Edmonds 1995; see chapter nine). Although the presence of scatters in dune contexts suggests a Later Neolithic/Early Bronze Age date by physical association, Later Mesolithic/Early Neolithic material associated with shingle deposits share many of the same attributes. Distinguishing between them is difficult in particular when the specific mechanics and chronologies of coastal formation are unknown.

Despite the often restrictive nature of the available raw materials, the technological changes used to separate the Later Mesolithic/Early Neolithic from the Later Neolithic/Early Bronze Age in other regions can be identified in Cumbria. However, the ways lithic collections have been treated in the past has effectively masked their recognition. The assumptions characterising previous approaches to the lithic record have created problems which have worked their way into the regional literature without being questioned even at a basic level. In order to begin to redress these problems, what is needed is a more generalised approach towards chronology and a more detailed focus on technology in line with contemporary approaches to lithic characterisation.

Re-evaluation of the published record, together with the results of surface survey undertaken in Furness allows for the identification of different 'types' of lithic scatter, in relation to landscape setting and the types of working or tool forms prevalent in specific contexts. Together with broad chronological indicators and the differential use and distribution of raw materials, it is possible to identify how localised patterns of landscape occupation changed over time. Before this can be discussed in more detail however, it is necessary to set up some models of the likely character of occupation and landuse and situate them in an appropriate academic framework.

Approaching the occupation record

The culture historical approaches characterising previous interpretations of the lithic record in Cumbria were based on identifying sites belonging to specific prehistoric cultures, the idea being that there were clear distinctions between Mesolithic,Neolithic, and Bronze Age occupation. Such lines were commonly drawn on an economic basis, concentrated on the changes thought to separate the transitory lifestyles of Late Mesolithic hunter-gatherers and the settled agriculture practised by Neolithic and Bronze Age farmers.

Understandings of lithic scatters based on identification of 'sites', are linked into perceptions of Neolithic sedentism. The traditional idea of *settled* Neolithic farmers was heavily influenced by LBK settlements in central Europe, despite their much earlier dates. Closer to home, the stone houses and field characterising elements of the Orcadian and Irish Neolithic (see Cooney 1997, 2000) were taken to indicate similar lifestyles on the British mainland. Since surveys aimed at the discovery of such sites revealed only insubstantial subsoil features (e.g. Healy 1987; Holgate 1988) it has increasingly been recognised that 'sedentary' occupation need not have been the norm even in those areas where 'settlements' can be identified.

Interpretation of the ways lithics relate to prehistoric occupation patterns has a complex history drawn from a number of disciplines. Together with changes in academic approaches over recent decades, there are some significant problems relating to the interpretation of this material, especially at a regional scale. One of the main problems with understanding localised and regional lithic data is that they are difficult to reconcile with wider academic interpretations, themselves extremely presumptive and based (often implicitly) on ethnographic analogy.

Together with challenges to traditional understandings of the Mesolithic-Neolithic transition (e.g. Thomas 1988, 1991; Bender 1978; Bradley 1993; Pluciennik 1998) academic narratives based largely on anthropological models (e.g. Boserup 1965; Ingold 1986, 1993) have become focussed on pathways, seasonal movement, resource procurement and the effects domestication had on mobility and residence (e.g. Barrett 1989, 1994; Bradley 1993; Tilley 1994; Edmonds 1999). Ironically, that the 'mobility' model is now seen as having wide application across the British Isles means we are in danger of building what Cooney has termed the "new mobility orthodoxy" (1997: 24). Even when regional diversity is increasingly stressed, academic narratives, often based on the southern downlands, have become embedded in the literature with those areas formerly taken as the exemplars of sedentary occupation now often treated as the exceptions.

The background to the 'mobility' trend is Ingold's (1986) description of tenurial perception amongst small scale societies. Whilst the landscapes of hunter gatherers are made up of paths and tracks, the territories of agriculturists are made up of blocks or plots of land. On this basis, archaeologists have tended to label prehistoric communities either as 'hunter-gatherers' or 'pastoralists', with Mesolithic and Neolithic groups associated with 'paths' and Bronze Age communities with bounded 'places' (see Cooney 1997). These labels are problematic not only in that this polarisation fails to address change over time, but also that the societies on which these models were based are modern products of localised sets of historical and geographical conditions.

Many modern societies do not conform to specific economic labels, within which there are countless different sorts of mobility and residence. Elements of 'mobile' economies often take place alongside 'sedentary' agricultural practices. Communities move around the landscape at different temporal and spatial scales, some of which are more closely structured and tied to individual places than others (Whittle 1997). Ethnographic studies clearly illustrate patterns of movement and occupation are the products of indigenous histories with subsistence strategies dictated by the seasonal and local availability of resources (Casimir & Rao 1992; Ingold *et al.* 1988a, 1988b; Ingold, 1986, 1993, 2000; Morphy 1995; Bloch 1995). At a fundamental level, it remains that occupation patterns are essentially local and their variety/variability is tied into the character and different potentials offered by specific landscapes.

In terms of understanding prehistoric patterns of residence and mobility, perhaps the most useful approach is to take on the diversity of such patterns, and the themes by which they are driven, rather than relying on ethnographic or period specific 'labels'. This diversity offers some sense of the *sorts* of subsistence practice different *kinds* of movement might entail (Whittle 1997). Although lithic scatters lack the close resolution to illustrate either the temporal or spatial scale of occupation, the underlying themes by which these patterns are created may illustrate the different times and places that were important.

The themes it is possible to draw from small scale societies in other parts of the world stress residential fluidity (Whittle 1997). Movement between different areas, at different social and geographical scales, takes place in order to exploit different resources. Domesticated animals are moved between different areas of grazing, wild animals are hunted, fruits and nuts gathered, crops are tended and woodlands are maintained and harvested. Within these subsistence related practices, lithic raw materials are exploited, worked, used and discarded.

So how do we go about interpreting the lithic occupation record in Cumbria? Recent approaches have stressed the importance of landscape scales of analysis, rejecting the 'site'

concept completely in favour of letting the data 'speak for itself' (Foley 1981a, 1981b; Schofield 1987; Zvelebil *et al.* 1992; Spikins 1995). Lithic scatters represent the reduction and discard of cores and tools rather than being clearly indicative of settlement sites or even short term occupation (Edmonds 1995). If parts of communities split off from each other to take part in different aspects of subsistence practice, the 'occupation' patterns represented by the lithic record need not represent the movement and residence of whole communities, but areas in which particular activities were undertaken. Dense concentrations of lithics in particular areas illustrate repeated visits to particularly favourable locations. Given the majority of stone tools were made for subsistence related tasks, the lithic record suggests domestic occupation was inextricably linked to subsistence activity. Together with pollen data, and the character of the landscape itself, it is possible to suggest some of the activities that took place in the different environments from which stone tools have been recovered. That occupation practice was essentially local means these need not bear close comparison with other areas of the British Isles, or even different areas of a given region (see Cooney 1997, 2000).

Places and times

Studies of both the lithic and environmental records in Cumbria have concentrated on the description and dating of 'episodes' of human activity. Few interpretations have confronted what sorts of practices this data represents, or the ways this changed over time. There are both practical and inferential limitations relating to the integration of these sources, in particular at a close spatial scale. Whilst the lithic record illustrates something of the nature of domestic and subsistence activity in specific places, the environmental record relates to agricultural practice over relatively wide areas. Furthermore the locations of 'occupation' and 'agriculture' are not necessarily equivalent and the character of each may have taken many different forms, both between areas and over time.

Despite uncertainties surrounding the interpretation of the pollen data record there is patterning in the location and extent of forest disturbance over the Mesolithic and Early Neolithic. The evidence suggests that from the sixth millennium BC, communities were actively involved in the creation and maintenance of forest clearings in a variety of settings.

- In both low lying areas and the high uplands, clearings which appear to be associated with the maintenance of open or grassland areas were established, occasionally through the use of fire.

- Small scale cultivation occurred both on the coastal plain and the eastern limestone plateau at around 4000 BC.

- The earliest episodes of forest disturbance recorded across the Mesolithic-Neolithic transition appear to be smaller in scale than those that occur later.

After the Early Neolithic, the location and extent of clearance and cultivation is more difficult to establish. However the results of early analyses, alongside dated sequences from south and east Cumbria (Skinner 2000; Wimble *et al.* 2000) illustrate some broad themes.

- Sequences indicating early clearance episodes often suggest an almost continuous presence, separated by regeneration phases, through to the Later Neolithic and beyond.

- During and after the Later Neolithic, the evidence illustrates areas of both the uplands and lowlands which had not seen sustained clearance in earlier periods saw more intensive use, both for cereal agriculture and pasture.

- Changing climatic conditions alongside the increasing intensity of human activity brought about peat formation in areas of the high uplands during the Later Neolithic.

Clearance foundation and maintenance

Although the pollen record suggests clearings were established in a variety of settings, it remains that we understand little of their nature. What was the character of landuse and how far did this relate to localised environmental conditions? The varied topography and geology of the region supported a wide variety of vegetation cover which occurred in different densities in different areas. The majority of clearance episodes identified over the Late Mesolithic and Early Neolithic appear limited and need not imply large scale or even purposeful deforestation. Windthrow, storm damage, forest fires, erosion and disease create the majority of openings in the forest canopy (Peterken 1996) and it seems likely the opportunistic exploitation of natural clearings was the cause of many clearance episodes (Simmons 1996; Brown 1997; Edmonds 1999). Animals would have been drawn to the herbage occurring in clearings and areas of browse in naturally light areas such as rivers, tarns and lakes. Such conditions would also have attracted human communities.

Evidence of woodland clearance and burning from the Late Mesolithic onwards suggests the herbaceous component of clearings and areas of open canopy were managed in a variety of ways. Grazing would have prevented regeneration without human intervention (Buckland & Edwards 1984; Veere 2000), so clear episodes of burning or disturbance can be seen as purposive manipulation to promote grazing for wild animals, and later, to provide browse and fodder for domesticates (Simmons & Innes 1987; Simmons 1996).

The introduction of domesticates would have brought about pronounced changes in both the character and perception of the environment. These may be reflected in the changing nature and intensity of clearance across the Neolithic and Bronze Age. Changes in the nature of landscape occupation that cultivation, herding, grazing and the over wintering of animals brought with it mean routines would have become increasingly structured and predictable. Not only would animals have been moved between places where water and fodder were available, clearings and woodland resources would have to be maintained.

Pollarding and coppicing may have been undertaken in clearance contexts. Although not directly analogous to prehistoric communities in Cumbria, there is historical and archaeological evidence for the use of woodland resources for animal fodder. Leafy hay was produced through the summer harvesting of leaf bearing twigs, often from pollards, and in late winter and early spring, leafless twigs, birch catkins and climbers such as ivy were harvested and fed directly to animals (Ramussen 1989; Haas *et al.* 1998; Halstead & Tierney 1998). In Cumbria and other areas, holly was farmed for the over wintering of livestock; extant hollins are still common, as are grown out pollards, traditionally lopped for spring and winter fodder (Winchester 1987; Fleming 1998; Edmonds 2004). Such practices are not clearly demonstrable by palynological data, however waterlogged wood in archaeological contexts has demonstrated that Neolithic woodland management did take place (Rackham 1977; Ramussen 1989; Edmonds 1999; Pryor 1999). In Cumbria the disappearance of ivy at the same time as clearance episodes at Bowness Common, Ehenside Tarn (Walker 1966a), Roudsea Wood (Birks 1982), Urswick Tarn and Thrang Moss (Oldfield 1963) has been taken to suggest its use as fodder (Walker 1966a).

During and after the Later Neolithic, many areas became increasingly open due both to natural processes and the effects of human activity. In the uplands, areas of heath and grassland spread. Some areas were utilised for small scale cultivation and it is possible that burning, cultivation and grazing were cyclical (Skinner 2000), separated by regeneration phases. Although the pollen record does not have the resolution to demonstrate the detail of such practices, that early clearance episodes were separated by regeneration phases may suggest patterns of exploitation shifted periodically in earlier periods, only later becoming more intensive and closely focussed.

The pollen rain on which the majority of analyses have been based was itself drawn from a mosaic of locally and regionally fluctuating habitats. Clearance episodes could reflect a variety of practices; natural openings, management cycles within open woodland, clearing maintenance and the opening of paths between clearings (Evans *et al.* 1999). Over time, pathways between clearings are likely to have become wider and more widespread, culminating in the large scale episodes identified in the pollen data. These were the results of long term processes; although many places saw repeated use from the Mesolithic onwards, this

led to the proliferation and increasing intensity of clearance into the Later Neolithic and Bronze Age.

Occupation patterns

So how do we go about using themes drawn from the environmental record in the interpretation of prehistoric occupation patterns? Beyond the data itself, the ambiguity of the pollen record means we understand little of the specific nature of activity. However, given that animal husbandry, woodland management and cultivation are closely linked to the seasonal routines of grazing and harvesting, it seems likely that occupation ran in conjunction with these cycles. Consideration of the *types* of places where clearance and occupation have been recorded may therefore imply the existence of seasonal routines. During the Later Mesolithic and Early Neolithic, pollen evidence from the high uplands suggests small scale clearances were established in sheltered valleys at the edge of the treeline and in the environs of upland tarns. Over the course of fourth and third millennia BC, deteriorating climatic conditions, exacerbated by human activity at these altitudes, brought about the onset of peat formation. Activity in such contexts is illustrated by lithics of Late Mesolithic/Early Neolithic date from peat erosion scars around Great Rundale Tarn (Skinner 2000). Domesticated and wild cattle horn sheaths and similar lithic material from peat on the Moorhouse nature reserve (Johnson & Dunham 1963) in the Pennines close to Skinner's (2000) sample sites has been taken as suggestive of hunting and grazing in the high uplands *(ibid.)*. In the central fells, it was in such contexts that stone was quarried for the production of axes. Given the proximity of upland clearance to these areas, it seems likely that axe production took place in conjunction with summer grazing (Bradley & Edmonds 1993; Edmonds 2004). The distribution of axes down the major valleys and in coastal and lowland contexts seems to suggest that communities, or parts of communities, moved periodically, and probably seasonally, between the high uplands and lower lying areas.

Whilst such interpretations are persuasive, and appear to 'fit' the evidence, they are simplistic and fail to address change over time, particularly into the Later Neolithic and Bronze Age. Whilst transhumance models forwarded for the Neolithic are a point of departure for understanding the nature of occupation, it remains that the lithic record does not illustrate specific scales and patterns of temporal or physical movement. What both the pollen and lithic data clearly demonstrate however is the long term use of particular areas, and repeated visits to specific places within them.

Although there are major problems of coverage, concentrations of lithics illustrate strong associations with specific types of environment, likely relating to the particular sorts of activity carried out there. Focussed on estuaries, raw material sources, freshwater tarns and ponds, rivers and the natural routeways they follow, these illustrate the natural world and the resources

it provided, determined some of the ways that occupation patterns played out. Lithic scatters from areas such as Williamson's Moss, Walney North End and St Bees (Cross 1938; Cherry & Cherry 1983; Cherry 1969; Bonsall *et al.* 1994) demonstrate the importance of estuarine locations from the Later Mesolithic onwards. Such areas provided a variety of resources and although scatters in such contexts have been interpreted as year round occupation (Bonsall 1981) they may also reflect repeated visits and/or potentially large gatherings of people.

The large and multi-period estuarine spreads grade out to smaller concentrations of Neolithic and Bronze Age material, the majority of which suggests relatively small scale occupation along and above former shorelines (e.g. Cherry 1982; Jones 2001; OAN 2002; Evans & Coward 2003). Given that there is little *obviously* Mesolithic material associated with these scatters, this may relate to a subtle expansion of occupation during the Early Neolithic, becoming more obvious in later periods (see chapter nine). Similar trends have been identified on the terraces of the Eden Valley and the eastern limestones (Skinner 2000; Cherry & Cherry 2002). What is common to these scatters is that they all occur in areas were lithic raw materials were available. These may represent procurement sites, close to freshwater sources, where stone was exploited and worked in conjunction with the occupation of these resource rich areas.

Inland from the coast, many scatters are located around sources of fresh water. Assemblages at Bailey Ground, St Bees 8 (Cherry & Cherry 1984, 2002) and Temple Sowerby (Skinner 2000) were all focussed around lowland tarns and ponds. Occupation evidence from Ehenside Tarn included pottery, wooden bowls and hearths (Darbishire 1873). The lack of lithic material from its wider environs (Cherry & Cherry 1984; Hodgkinson *et al.* 2000) suggest the tarn edge itself was the focus for occupation. Although not necessarily locally specific, environmental evidence from Williamson's Moss, Barfield Tarn, Ehenside Tarn and Temple Sowerby suggest such areas formed the focus for agricultural activity from the Later Mesolithic onwards (Pennington 1975; Walker 1966a, 2002; Tippping 1994; Skinner 2000).

Data available from inland contexts is significantly less detailed than that from the coast. However evidence from Furness and the eastern uplands illustrates that inland scatters, closely associated with ponds, springs and becks, are situated along natural routeways. Large concentrations of chronologically mixed material have been identified in areas where valley systems meet, with smaller dispersed clusters along the natural routeways between them. This suggests repetitive and long term movement up and down valleys, with occupation occurring at particular points on the routeways between them. In the eastern uplands, Later Mesolithic/Early Neolithic scatters have been identified in clusters along the edge of the limestone scarp, with mixed and later material occurring predominantly around the heads of major valleys, in some

cases in the environs of major monument complexes (Cherry & Cherry 1987a, 2002).

The only evidence for lithic scatters in upland contexts comes from the eastern fells. Here a distinction has been drawn between scatters containing different arrowhead forms (Cherry & Cherry 1987a; 2002). Leaf and petit tranchet derivatives were generally located in sheltered areas of relatively low ground between the 270 and 340 metre contours (Cherry & Cherry 2002). That these were commonly associated with scatters including ceramic forms suggests this occupation was not entirely transitory. Above 350 metres, barbed and tanged arrowheads were common, less often associated with scatters of other material (*ibid.*). Whilst the Cherrys have attached chronological implications to this disparity, at a general level it suggests that upland occupation centred on the lower slopes, with occasional forays onto higher ground.

In some ways, this observation brings us full circle. Interpretations of axe production during the Neolithic suggest similar sorts of practices. However, 'after the axe', the environmental record suggests proliferation, diversification and intensification of upland use. This can be illustrated by the pollen record from the eastern uplands at Bank Moor. Situated above the 300 metre contour within Cherry & Cherrys' (1987a) postulated range of 'occupation', Bank Moor was characterised by species rich grassland from the Mesolithic onwards (Skinner 2000). During the Early Neolithic, Bank Moor would have been conducive to grazing, hunting and occupation. Although activity in open areas is not discernible in the 'clearance' record, this is suggested by lithic finds in similar contexts (e.g. Cherry & Cherry 1987a). Only in the second half of the Neolithic were high levels of charcoal recorded at Bank Moor, suggesting managed burning (Skinner 2000). Charcoal was recorded discontinuously into the first half of the second millennium BC and cereal pollen from the Early Bronze Age onwards. The presence of cairnfields close to Bank Moor may indicate the charcoal present from the Later Neolithic related to vegetation stripping prior to field clearance, with limited cereal cultivation taking place from the Early Bronze Age (*ibid.*). The pollen sequence from Bank Moor, and the presence of cairnfields in its environs illustrates a significant change in agricultural practice compared to earlier periods. The timing of this shift goes hand in hand with changes to the scale and character of occupation at and after the Neolithic-Bronze Age transition. Recognisable across the region in pollen sequences, if less so with the lithic data, this is particularly evident in the monument record.

Conclusion

At a regional scale, both the environmental and lithic record are geographically skewed datasets and cannot, by themselves, be used to reconstruct the locally specific ways in which particular landscapes were utilised. Instead, they can offer a sense of broad trends which suggest that prehistoric communities were moving between landscape zones, at least from the

Early Neolithic and likely much earlier. We still understand little of the close character, organisation and temporality of occupation, or the specifics of how this changed over time. To further understand the ways, and scales, at which people inhabited and moved between different areas, we need to consider the evidence from the middle ground between them.

Between the lowlands and high central fells that have formed the main focus of this chapter lie a diversity of upland landscapes. Although lithic and environmental data are poorly represented, many of these areas are occupied by extant monuments. The following chapters are concerned with problems relating to understanding the wide variety of forms represented, and exploration of the ways their settings and distribution can inform more detailed interpretations of occupation practice and landuse. Through outlining and discussing the character of the monument record, the following five chapters culminate with detailed discussion of the character of landscape occupation, and the ways that relationships between people, monuments and important aspects of the natural world unfolded across the Neolithic and Early Bronze Age.

Chapter four outlines the ways monuments in Cumbria have been identified and interpreted in the past. Discussion of the appropriateness of conventional classification schema, and the sorts of processes that monuments are likely to represent, forms the basis for outlining a consistent approach to the available data. Chapter five is concerned with the interpretation of stone circles and henges. The geographical and interpretative scales at which they have been understood in the past have led to major inferential problems. These relate not only to the identification of particular monumental 'types', but also to the histories of individual monuments and ceremonial complexes. These issues need resolution before this large dataset can be approached in its own regional context.

Chapter six is concerned with the character and distribution of monuments. Taking the cairnfield record as the point of departure, the narrative focuses on the identification of time depth in the extant record and the ways shifts in the distribution and location of monuments illustrate changes in the scale and structure of community. Chapter seven confronts the landscape settings of monuments. At both local and closer topographic levels, how monuments sit in relation to the landscape, and to other monuments, illustrates something of the nature and scale of occupation. Discussion of how particular features were set in relation to aspects of the natural world leads to a consideration of the ways, and places, in which dispersed communities combined and separated over the Neolithic and into the Bronze Age. Chapter eight is concerned with burial and depositional traditions. Drawing on themes established in earlier chapters, the narrative is concerned with the changing ways the dead were drawn on in different contexts, and how burial and depositional practice articulated with occupation

patterns, tenurial concerns and important aspects of the natural world.

Chapter nine returns to integrate themes from the present chapter with those established through the analysis and interpretation of monuments. Detailed analysis of lithic data from the Furness peninsula together with consideration of the ways monuments, burial and depositional practice articulated with the natural landscape leads to a consideration of the character of occupation across the Neolithic and Bronze Age. Together with exploration of the ways and media through which communities operated at different social and geographical scales, chapter ten discusses the nature of local and regional traditions and, bringing together the different strands of evidence, forwards a concluding regional narrative.

Chapter 4: The monument record

Introduction

Whilst studies of monuments in Cumbria have been undertaken, like the lithic and environmental records, there is no synthesis or interpretation of existing data. As the majority of monuments have been identified by their external morphology, they have been subject to a variety of classification schema and it is problems with these that this chapter aims to address. As discussed in chapter two, it has been necessary to 'deconstruct' the evidence in order that an internally coherent dataset be produced. Although the following chapters confront different aspects of the monument record in detail, this discussion provides a background to their subsequent discussion. The first section outlines the geographical and analytical scales at which monuments have been approached, with the second focussed on the appropriateness of classification schema for understanding individual monuments and regional sequences. The final section details problems with the identification and classification of monuments in Cumbria and sets out the basis for a consistent and integrated approach.

Divisions of labour and scale

As a prehistoric region, Cumbria is best known for some of its stone circles, with the remainder of the monument record often overlooked. Widely considered to be a nationally important group of monuments, the Penrith henges, Long Meg, Swinside and Castlerigg have seen much academic attention (e.g. Collingwood 1933; Burl 1976; Bradley 1984, 1998; Bradley & Edmonds 1993). Whilst site specific work ranges from site descriptions, syntheses of antiquarian sources to detailed metric and geophysical survey (Dymond 1881; Waterhouse 1984; Topping 1992), the majority of work has focussed on national and regional stone circle typology and distribution (Burl 1976, 1988; Annable 1987; Barnatt 1989). Interpretation of stone circles has focussed either on site plans or regional distribution maps. This has meant they have often been divorced from their own landscape contexts and also from the localised and wider regional sequences of which they were part. The remainder of monuments have seen little academic attention or close characterisation. Although long cairns and enclosures have been identified, the monument record is dominated by round funerary cairns and ringcairns, often associated with upland cairnfields. Alongside the lack of academic interest, the extent and sheer numbers of these features has meant until recently, many remained unrecorded.

During the 19th century, antiquarians undertook detailed descriptive and measured surveys of a number of cairnfield areas (e.g. Clifton Ward 1878; Dymond 1893; Swainson Cowper 1888a).

With the exception of an unpublished gazetteer (Clare 1973), these were the sole records of these areas until more than century after they were surveyed and at present remain the only published sources. The 1980s and 90s saw a programme of large scale upland survey undertaken by Lancaster Archaeological Unit (LAU, now Oxford Archaeology North) for the Lake District National Park Authority. Commissioned partly in response to problems of coverage and as an administrative tool, the surveys identified over 13 000 features on the western, southern and eastern fells. The results remain unpublished at present, however alongside published interims (Quartermaine 1989; 2002), the survey data are available as Sites and Monuments Records.

The identification and interpretation of monuments in Cumbria has seen a bipartite division of labour and academic attention. This has been further exacerbated by period specific approaches to 'Neolithic' stone circles and the 'Bronze Age' upland record. The ways different types of monuments have seen identification and classification clearly illustrate the contrast between academic and administrative approaches. Although divergent in some ways however, what these have in common is a rigid adherence to typological schema. Academics have used typology to establish national chronologies which fit into clear functional and period distinctions. Administrative approaches, based on the need to manage large datasets, have conformed with these chronologies. However these have been historically constituted, changing alongside alterations to academic thought. At a regional scale, this means the ways that different monument 'types' have been classified varies between different sources and over time.

Type and typology

The vast majority of monuments recorded in Cumbria have been classified by their external morphology. This has often led to their unthinking conversion into 'type-sites' understood to relate to examples in other areas. Such normative approaches could be taken to imply we know exactly what all these monuments represent and exactly how old they are. In reality however, there are some fundamental problems here. In itself, classification is a basic theoretical construct through which we can talk about process with reference to empirical data. The use of such constructs in archaeology, in particular through taxonomic classification, has a pedigree rooted in 18th century studies of biology and plant science. In the cabinets of many collectors, fossils, plants and geological samples were arranged in order of size and material alongside archaeological specimens. During the late 19th century, the classification of prehistoric stone and metal implements, together with geological understandings of stratigraphy led to the foundation of the Three Age System, thus opening the way to the typological methods of culture history. Whilst the schema proposed by 19th century archaeologists were based on the establishment of relative chronologies, culture historical approaches became more closely

focussed on typology and geographical distribution (Renfrew 1974).

> **taxonomy 1.** The science, laws, or principles of classification. 2. *Biology.* The theory, principles, and process of classifying organisms in established categories according to observed similarities or supposed evolutionary relationships (Reader's Digest 1984).

On the basis of the excavated 'type-sites' which became the exemplars of particular prehistoric cultures, 'affinities' were drawn between monuments in different areas. Illustrating clear similarities to principles of biological classification, the relationship between dated 'type-sites' and their shared morphological similarities with unexcavated monuments in other regions had significant ramifications. Belonging to the prehistoric periods defined by the Three Age System, established 'categories' of monument were identified across the country. Dating evidence from 'type-sites' was then used to 'confirm' the chronological (or supposed evolutionary) relationship between these monuments. One of the major problems inherent to these approaches is that typological evolution and chronological process are not necessarily mutually exclusive. In other words, things may change in similar ways over time, but under different circumstances and in different places, this change may occur at different rates and in different ways.

The existence of regional diversity in monument form has long been recognised, however what may be minor architectural differences in the forms of similar monument types have commonly been treated as superficial products of wider scale social processes. Prehistoric communities may have taken on aspects of monumental traditions in different contexts, therefore, *shared* styles need not represent shared practices or common understandings (Evans 1988; Thomas 1998). If different communities had their own understandings of what monuments represented, then their construction and use was the product of localised histories, social and political conditions.

Typology and architecture

The second major problem with typology, for the purposes of this research, relates specifically to the understanding of circular monuments. The ways these have been approached illustrates interpretative issues clearly relating to the use of (borrowed) classification schema. Stone circles, ringcairns and round funerary cairns, often situated in upland regions, have traditionally seen identification and interpretation by analogy to better understood sequences from lowland Britain. That virtually all monuments constructed in Britain between 3000 and 1500 BC were circles of one kind or another (Bradley 1998) has led to problems relating to the identification of particular (and supposedly chronologically specific) architectural forms. According to conventional chronologies, henges and stone circles were constructed in the second half of the

Neolithic. However these were also constructed into the Bronze Age, when they became smaller and more architecturally varied. This 'sliding scale' of circularity is problematic in that where such features remain unexcavated they have been subject to a variety of elaborate classification schema based on their visible morphology and diameter.

Perhaps the most widely known scheme of this sort was proposed by Lynch (1972), who drew distinctions between forms exhibiting traits shared by stone circles and simple cairns. 'Variant circles' were split into two categories based on the presence or absence of an open internal area. These were sub-classified into a number of different types based on the size and spacing of uprights or kerbing, and the presence or absence of surrounding banks. Monuments with open central areas were classified as ringcairns, and subgrouped as stone rings, kerbed ringcairns, complex ringcairns and embanked stone circles. Monuments based around cairns were classified as kerb circles, circle cairns, platform cairns and kerbed cairns (figure 4.1).

There are a number of problems with the variant circle typology, not least that of geographical scale. Lynch's (1972) scheme was originally devised on the basis of excavations in north Wales. However largely as a result of comparisons drawn between the Welsh sites and excavated examples in other areas (Lynch 1979) it has been used more widely than was proposed. The variant circle typology was based on a well preserved and regionally coherent group of monuments. Identifying the same or similar forms in different contexts is difficult as both within and between different areas there are differences in preservation (Leighton 1984; Barnatt 1989). Furthermore, in many regions the specific forms identified in Wales simply do not exist, with ringcairns and funerary cairns appearing on the surface at least, as relatively simple monuments. The application of these schema at a wide geographical scale has the effect of precluding comparisons between different types of monument likely to result from localised traditions drawing on aspects of more widely recognised forms (Barnatt 1989; Last 1999).

The subclassifications proposed by Lynch illustrate a problem related to both geographical and interpretative scale which pertains equally to all monuments: that of nomenclature. The very nature of taxonomy means that the constituents of typologies need names. Whether by family or genus, these names are the signifiers of certain sets of determined conditions. Across the country as a whole monuments that *look* the same as those identified in other areas, have been assigned the same names, and by extension, the same dates and functions (e.g. Lynch 1972; Gibson 1998). Therein lies the problem. By giving things names we, in effect, deny the possibility of differences in chronology, history and use.

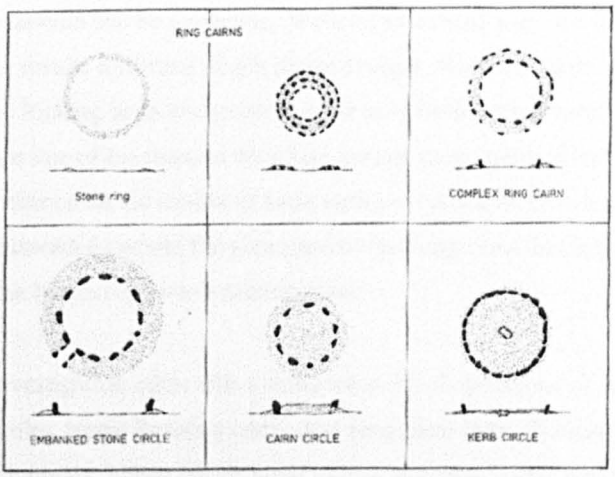


Figure 4.1. Lynch's (1972) Variant Circles. From Bradley (1998).

Clare (1973)	**Lynch (1972, 1979)**	**LAU (forthcoming)**	**Burl (1976)**
henge			henge
free standing stone circle	free standing stone circle	freestanding stone circle	large open stone circle
			small stone circle
Burnmoor type circle	encircled cairn		
Ford Hall circle			
		concentric stone circle	concentric stone circle
embanked stone circle	embanked stone circle	embanked stone circle	embanked stone circle
wall circle	kerbed ring cairn	kerbed ring cairn	small stone circle
	complex ring cairn		
dished mound	platform cairn	cairn circle	
platform cairn	cairn circle	cairn circle	
kerbed tumuli	cairn circle/kerbed cairn	cairn circle/kerbed cairn	
	stone ring	stone ring	
ring bank		small stone ring	
embanked tumuli			
ditched tumuli			
simple tumuli		round cairn	
kerbed tumuli		kerb cairn	
cairnfields		primary cairnfield	
		protofield system	
		cairnfield system	
		cultivated field system	
		arable cairnfield	
unenclosed cremation cemetery			
burials not in tumuli			
standing stones			
avenues/alignments			
long cairn		long cairn	
		starfish cairn	

Figure 4.2. Examples of different nomenclature imposed on monuments in Cumbria by different authors. This clearly illustrates the lack of compatibility between different datasets.

Constructional complexity and time depth

Looking at monuments can be confusing. We tend to assume they are static and classify them as if they are the results of formal single phase designs. However to do so is to ignore the fact that we are often looking at an end point of what may have been a variety of constructional episodes. Perhaps one of the reasons we often assume monuments were single phase forms is our traditional reliance on the results of antiquarian excavations. Nowhere is this clearer than round barrow excavations where the presumption has long been that these represented single phase monuments heaped up over a central grave.

More detailed investigation often tells a different story. Excavations of enclosures, long cairns, henges, stone circles, round funerary cairns and ringcairns have all illustrated long histories of deposition and alteration. Often taking place over hundreds of years and crossing our period distinctions, many assumed a variety of forms prior to that we see today. Monuments may then be better understood as 'projects' (Evans 1988). The many different forms in which particular monument types occur, often themselves subject to detailed classification (e.g. Lynch 1972; Burl 1976; Gibson 1998) can then be seen as stages in processes which ended at different points at different sites (Barrett 1994; Bradley 1998).

What we do know of excavated sites is that remodelling often transformed their significance. Processes such as the blocking of entrances, the addition of covering mounds, the construction of facades and the replacement of timber features with those of stone are common to all 'types' of monument. That these were subject to similar sets of processes suggests that drawing sharp distinctions between them may overlook basic similarities in the roles they assumed. Last (1999) argued that in the case of Neolithic monuments, all have their origins in attempts to mediate social relationships by controlling areas of space. Although features such as henges, enclosures, long barrows and cursuses have seen classification as separate 'types' of monument, what we understand of the activities that took place within them suggest they performed similar roles (albeit at different scales). All were used in different ways to mediate relationships with the living and the dead, and between local and wider communities (*ibid.*). Although the names of these monuments imply discrete roles, none can be securely ascribed specific functions. The logical conclusion would be to dispense with the classificatory labels that force sites into formal categories and consider them as unique expressions of shared monumental ideas (*ibid.*).

In purely theoretical terms the idea of dispensing with these labels is tempting but would be extremely counterproductive, leading to the loss of all our basic material categories. Although classification is itself normative at different levels, names as signifiers can be retained if we change the sets of conditions to which they refer. It is only by retaining broad classificatory

distinctions that it is possible to explore the similarities and differences which characterise the roles and understandings of monuments at different social, geographical and temporal scales.

Morphological classification of Cumbrian monuments

That few monuments in Cumbria have seen detailed excavation means there is no secure chronology from which to work. The subsequent reliance on identification by morphology has created problems compounded by extrapolation to other regions. The ways specific monument types have been approached and interpreted will be explored in detail in later chapters. The purposes of this discussion are to introduce these monuments and outline problems relating to their identification.

Although no Neolithic enclosures have been positively identified in Cumbria, a number of possible examples have seen recent survey (see chapter six). Occupying both hilltop locations and lowlying contexts these occur in a variety of forms not always closely reminiscent of the exemplars of the southern lowlands. In some cases this has meant monuments such as Skelmore Heads and Carrock Fell have been interpreted as Iron Age hillforts (Collingwood 1938a; Powell 1963). Given the evidence from other regions, it seems likely that particular enclosures saw use and re-use from the Neolithic into the Iron Age and later (Edmonds 1999; Edmonds & Seaborne 2000).

The identification of long cairns is equally problematic, albeit in different ways. The majority have been identified according to their morphology and it is possible that some may be natural features (Masters 1984). On the basis of problems relating to the identification of long cairns in northern England, Masters set out a number of criteria:

> "The classic long cairn is a roughly trapezoid or rectangular mound of stone...It is usually between 15 and 100 metres long and its length is at least twice the greatest width...When cairns are well preserved the profile will descend gradually from the wider end of the cairn, and if the cairn is on sloping ground the wider end will tend to be uphill" (1984: 54).

Although these are indeed 'classic' long cairn attributes, it remains that without excavation, there are significant practical problems pertaining to the secure identification of such features in the field.

Discussion of long cairns in Cumbria has been limited to structural comparisons with other areas of northern England (Manby 1970; Powell 1972; Masters 1984). As with these regions, it is clear that some share structural characteristics with round cairns. However over and above descriptions of antiquarian investigations at Raiset Pike and Skelmore Heads (Greenwell 1877; Powell 1972) we have little idea of the character or chronology of these monuments.

Given problems concerning the secure identification of long cairns and enclosures, there have been few attempts at classification, largely as they have been assumed to occur in distinctive easily identifiable forms. It is ironic that because these monuments have been *supposed* to conform to the exemplars of other regions, we in fact know almost nothing about them. As the possible or likely 'Early Neolithic' monuments identified in Cumbria are so few in number there has been no need to 'sort' them into distinct typological groups. Where the situation becomes increasingly more complex is when monuments have assumed circular forms.

How many ways round a circle?

Compared to long cairns and enclosures, stone circles have seen a long history of antiquarian attention and academic study and they have been subject to varying levels of interpretation and classification (Clare 1973; Burl 1976; 1988; Waterhouse 1985; Annable 1987; Barnatt 1988; Quartermaine & Leech forthcoming). Period specific studies have often meant the large 'Neolithic' stone circles and henges have seen classification without consideration of the smaller 'Bronze Age' monuments and *vice versa*. In other cases, investigations of type specific monuments have been based on aspects of their typological evolution without consideration of other similar forms. This means that although many circular monuments in the region have seen classification, the significance of others has been overlooked.

At a basic level, the classification of monuments commonly rests on the presence of specific architectural traits. However, there is a great deal of architectural crossover between monuments traditionally understood to relate to different periods and supposed functions. One of the reasons the Cumbrian monuments have been classified in so many different ways is that the region has been used as a battleground for understanding the relationship between henges and stone circles (Burl 1976; Bradley 1998).

Traditional classifications of henges have been based on the presence and configuration of ditches, banks and entrances (Atkinson 1951; Harding 2003). This method is problematic not least as it has been imposed, at a national scale, on monuments varying enormously in size and architecture. This has been crucial to the ways henges have been understood in relation to other monuments, in particular when the focus has been on the identification of large stone circles with 'henge' characteristics (see chapter five).

Most monuments in Cumbria lacking perceptible ditches, where analyses have taken place these have been focussed on the presence of banks and entrances. The problem with defining the relationship between henges and stone circles, and in turn, stone circles and ringcairns, is whilst they vary in diameter, there are few clearcut architectural distinctions between them. One of the ways stone circles and embanked monuments have been separated has been through

the definition of 'freestanding' stone circles. This has meant in some cases that stone circles surrounded by banks have seen identification as hengiform types and those without as freestanding circles.

The ways monuments such as henges, stone circles and ringcairns have been 'split' or 'lumped' has significant ramifications not least that as a regional group, these monuments are impossible to interpret in relation to conventional schema. Not only have stone circles been split according to the presence of henge characteristics, they have seen classification as a coherent monument group and also in relation to 'later' ringcairns. Freestanding circles themselves have been split into subgroups, often on the basis of internal features not necessarily related to their original forms. Within the broad distinction that has traditionally been drawn between the 'early' (large) and 'late' (small) circles there are a number of architectural features shared by both 'types' (and a number of ringcairns). According to Lynch (1972) and Quartermaine and Leech (forthcoming), freestanding stone circles are a subset of the 'variant circle' group. Many authors however have not used these criteria when classifying these features, instead defining stone circles as a distinct monumental 'type' (taking in both large and small examples) and/or identifying different subsets of feature, grouping freestanding stone circles with different types of 'variant circle' (e.g. Clare 1973; Burl 1976; Waterhouse 1985; Barnatt 1989; figure 4.2). Given that the classification schema imposed on the Cumbrian monuments represent at best, a significant source of confusion, it remains also that they relate to only a small proportion of the monuments identified.

One of the main problems with these varying scales of analysis is the lack of compatibility between datasets. Most investigations have not been based on primary fieldwork or data collection and many have inadvertently fed off long held interpretations and identifications that are fundamentally flawed. Many features falling under the title of 'stone circle' have been misidentified, often due to over-reliance on antiquarian descriptions. Whilst the term could apply to any circular setting of stones, it is commonly (but not always) implied that this refers to the large monuments of probable Neolithic date, rather than the smaller and more numerous 'Bronze Age' forms. A number of the 'stone circles' identified by antiquarians (nomenclature often retained by later authors) are in fact better understood as ringcairns and funerary cairns (see chapter five).

The second problem is the inconsistent selection of datasets. Academic studies undertaken by Burl (1976), Barnatt (1988), Waterhouse (1984) and Annable (1987) were based on secondary sources relating to features previously published as 'stone circles' and the number identified is different in every case. At the other end of the scale, those authors working from primary sources and unpublished survey data have had entirely different datasets from which to work

(Quartermaine & Leech forthcoming; Clare 1973). This means that the well known examples have been picked out and classified to the detriment of a wide variety of similar forms either not previously identified or not published as 'stone circles'.

The upland record: coverage and compatibility

That over 13 000 features have been identified by the LAU within the National Park has led to the production of a significantly larger and more complex dataset than was previously available. Although detailed data from the upland surveys are available through the county SMR, outside the National Park, the information available for those monuments that have been recorded is confined largely to a few published sources and Clare's (1973) gazetteer.

Although the SMR contains many references to individual monuments, there is often little detail pertaining to the nature, architectural characteristics or often the precise location of particular sites. Furthermore the identification of many has been based on those elements which individual researchers believed to characterise particular 'types' of monuments. This has led to many inconsistencies within the SMR and the duplication of records. For example at Gawthwaite, Clare (1973) described three possible ringcairns (SMR 2170, 2171). Detailed description of these features (Swainson Cowper 1893) makes it clear they were round cairns/. Together with Clare's description of an 'eccentrically placed mound & loose stones' associated with SMR 2171, this suggests they were disturbed in the intervening period. A similar sequence is illustrated on Potter Fell where the identification of a small stone circle (Plint 1960) probably relates to the remains of a burial cairn recorded by Matchell (1691).

A number of features which saw antiquarian description and/or excavation have been surveyed by the LAU. A number of these had previously been given approximate grid references on the SMR however when later identified on the ground and added again to the SMR database, it appeared as if there were discrete clusters of monuments at some locations. As such, it is only through close analysis of particular sites, and references pertaining to them, that it is possible to ascertain how many features listed on the SMR are actually physically present, accurately located and identified.

LAU methodology

Although the monument 'types' identified by the LAU are internally coherent, there are problems with the classification scheme utilised. This was based partly on Lynch's (1972, 1979) variant circle typology, but slightly altered to take in Waterhouse's (1985) 'embanked circles'. Categories of monument not characterised by Lynch were classified after Yates' (1984) work on round cairns in Dumfries and Galloway, Masters' (1984) description of long barrows in northern England, and partly defined in response to fieldwork results (Quartermaine

& Leech forthcoming). On the basis of this classification scheme, individual features were categorised into different 'types' within which were various subclassifications (Robinson 1998; Quartermaine & Leech forthcoming).

- **Funerary cairns**
  long
  round
  starfish

- **Stone circles and ringcairns**
  freestanding circle
  concentric stone circle
  embanked stone circle
  cairn circle
  kerbed cairn
  kerbed ring cairn
  stone ring
  small stone ring

- **Cairnfield occupation features**
  clearance cairns
  stone banks
  hut circles/platforms
  rectangular huts
  enclosed settlements
  stock enclosures

Funerary cairns

There are some clear problems with this scheme, in particular that monuments likely to be the end products of similar sets of circumstances were subject to inappropriate subclassification, in the case of round and kerbed cairns, even placed in different categories. Funerary cairns in Cumbria occur in a variety of round, oval and elongated shapes of different sizes, some with visible kerbing, some without. A number of the more elongated forms have been identified as possible Neolithic long cairns by the LAU, on the basis of some of the 'less diagnostic' attributes set out by Masters (1984; see chapter six). That the remainder have been classed as round cairns brushes over aspects of localised monumental architecture and/or potential chronological significance. The one exception to this is illustrated by the inclusion of 'starfish' cairns (round cairns with banks spiralling from the cairn edge) of which five examples have been identified (Quartermaine & Leech forthcoming). Although it is unclear whether the banks and cairns are contemporary, it appears these have been treated as a specific monument 'type' on the basis of antiquarian nomenclature (Taylor 1886).

The common association between round funerary cairns and cairnfields has meant that the identification of round cairns has been based partly on distinctions drawn between funerary and clearance cairns. Clearance cairns were defined as being varied in form but in general irregular,

with poorly defined edges and 3-4 metres in diameter (Quartermaine & Leech forthcoming). Round funerary cairns are more prominent than clearance cairns, with rounded profiles and regular well-defined shapes (*ibid.*). Based on examples from south west Scotland (Yates 1984) round funerary cairns have been defined as being much larger than clearance features with diameters ranging between 7 and 26 metres (Quartermaine & Leech forthcoming). Where disturbance has occurred funerary cairns have also been identified by the presence of robber cuts and exposed cists (*ibid.*). Identification is also based on landscape setting:

> "The funerary round cairn is typically located in a prominent position which has a commanding aspect with respect to the adjacent topography. This can be a hill summit or any raised position....They are often the most prominent feature in the immediate locality and this discriminates them from larger clearance cairns which are usually associated with other cairns of a similar size" (*ibid.*).

Excavated evidence from Cumbria and other regions illustrates that the commonly held distinctions between funerary and clearance cairns do not always hold true (Johnston 2000, 2001; see chapter eight). The identification of monuments as either equating to funerary/agricultural according to their morphology is interpretatively problematic, but forced largely by practical circumstance. Although there are a wide variety of round funerary cairn forms in the region, as the significant majority have been identified by the LAU (and others have been subject to rather less stringent characterisation) their methodology is retained for the purposes of this study. Issues pertaining to the settings and distributions of funerary cairns and their relationship with cairnfields are discussed in chapters six and seven.

Ringcairns

The identification of ringcairns is fraught with difficulty. Features identified as funerary cairns may be infilled ringcairns, features identified as ringcairns may be disturbed funerary cairns and ringcairns can also be indistinguishable from hut circles. The criteria used by the LAU to distinguish between ringcairns and hut circles were based on diameter ranges and associations with different 'types' of cairnfield. The cairnfield typology proposed was based on the assumption that simple cairnfields were 'early' in date and complex examples were 'late' (see below). Whilst hut circles (diameters between 4 and 18 metres) were usually associated with complex cairnfields, ringcairns (diameters between 7.5 and *c.* 25 metres) were more often found in simpler cairnfields (Quartermaine & Leech forthcoming). This correlation is not exclusive however and there are a number of ringcairns associated with complex cairnfields. There may therefore be ringcairns identified as hut circles due to their association with particular 'types' of field system.

The LAU approach to separating ringcairns and funerary cairns was to assess them in relation to their morphology and condition, their settings and their associations with other monuments;

round cairns being in prominent locations isolated from other monuments with ringcairns being more closely associated with cairnfields (Quartermaine & Leech forthcoming). Although this may work at a basic level, there are features for which these distinctions do not hold true. Ringcairns in locations more pertinent to barrows are often suggested to be disturbed funerary cairns. However the setting of a ringcairn that has been converted into a funerary cairn is, by definition, going to be the same. This not only demonstrates the complexity of the upland record, it also illustrates the rigidities of classification schema fail to take account of structural complexity and time depth.

Approaches to 'variant circles'

That the LAU classification scheme was based on Lynch's (1972) variant circles is inappropriate not least as few distinctive forms have been recorded in Cumbria. Based both on the presence or absence of orthostats and according to diameter, ringcairns were split into three main forms; kerbed ring cairn, large stone ring and small stone ring (Quartermaine & Leech forthcoming). Kerbed ring cairns were defined as kerbed annular banks incorporating a single large monolith. As with round funerary cairns (separated from kerbed cairns) their classification relies on the recognition of kerbing and orthastats which may have been robbed or obscured. That splitting kerbed ringcairns from those without kerbing is inappropriate is illustrated in that only two have been identified.

There are further problems relating to sorting different 'types' of ringcairn according to diameter, not least that the LAU have imposed different 'functions' on features of different sizes. Large stone rings (classic ringcairns) are between 7.5 and *c.* 25 metres in diameter and ring features less than 7.5 metres in diameter have been characterised as small stone rings. Quartermaine and Leech (forthcoming) suggest these are products of stone clearance rather than being associated with 'ceremonial' activity. There are a number of qualitative distinctions between classic ringcairns and small stone rings (see chapter six) however there is at present no evidence suggesting they played different roles and there is in fact no clear diameter split between them.

Approaches to the characterisation of ringcairns in other areas illustrate similar problems. In the Peak District Barnatt (1990) split ringcairns into two types based on the presence of kerbing. External measurements of 'embanked stone circles' ranged from 5.5 to 31 metres with simple ringcairns between 6 and 25.5 metres. Further analysis indicated that both belonged to the same building tradition and were probably identical in function (*ibid.*). One of the most obvious points here is that those features identified by Barnatt exhibit a very wide diameter range. In Wales, contrary to earlier analyses where ringcairns had been subdivided into 'complex' and 'simple' forms on the basis of the presence of orthostats (Lynch 1972, 1979),

Lynch (1993) split ringcairns into small (8-10 metres), medium (14-16 metres) and large (19-25 metres). However she concluded that they illustrated a similar range of activities and there were few perceptible differences between them (Lynch 1993).

While recent approaches to the classification of ringcairns have illustrated distinctions drawn between different 'types' is not clearcut, it remains that they appear in a wide variety of sizes. In Cumbria classic ringcairns and small stone rings (where these can be identified with any certainty) occur in different settings and illustrate different associations with other monuments. It may be that different forms of similar monument 'types' were constructed and utilised in different contexts and this may have changed over time. These issues will be discussed further in due course.

Cairnfield typology

There are historical implications relating to the ways cairnfields have been treated at a national scale and present understandings of the upland record in Cumbria rest on interpretations generated in the 1960s and 70s. 'Settlement' of these landscapes, often assumed to be permanent, has been understood primarily in economic and (environmentally) deterministic terms. As the onset of upland settlement was believed to begin in the Middle Bronze Age, environmental analysis from Cumbria (Pennington 1964; Walker 1966b) was taken to suggest the sequence was well understood. Although the LAU surveys have the potential to transform understandings of the character and chronology of upland occupation, discussion has largely been restricted to economic and functional interpretations built on deterministic assumption:

> "During the Bronze Age clearance appears to have extended to the uplands, particularly in the areas of south west Cumbria adjacent to the coastal plain, and the fells today contain large numbers of clearance cairns, burial cairns and field systems dating to this Bronze Age exploitation of the landscape. A combination of soil exhaustion and climatic deterioration eventually left the marginal uplands agriculturally unviable and there was an extensive retreat from the fells. Many of the upland settlements appear to have been abandoned by the Iron Age and the land was in many cases never re-occupied" (Robinson 1998:1).

Interpretation of the data generated by the upland surveys has so far been limited to the creation of a cairnfield typology, based on a presumptive chronology of 'economic adaptation' (Quartermaine 2002; Quartermaine & Leech forthcoming). According to the LAU typology (figure 4.3, appendix 3), 'Primary', 'Proto field systems' and 'Cairn-field systems' are believed to be largely Bronze Age in date. 'Cultivated field systems', on the basis of associated enclosed settlement types, are thought to date to the Later Bronze or Early Iron Age. One of the main problems with this typology is that it denies the possibility of identifying time depth in the extant record.

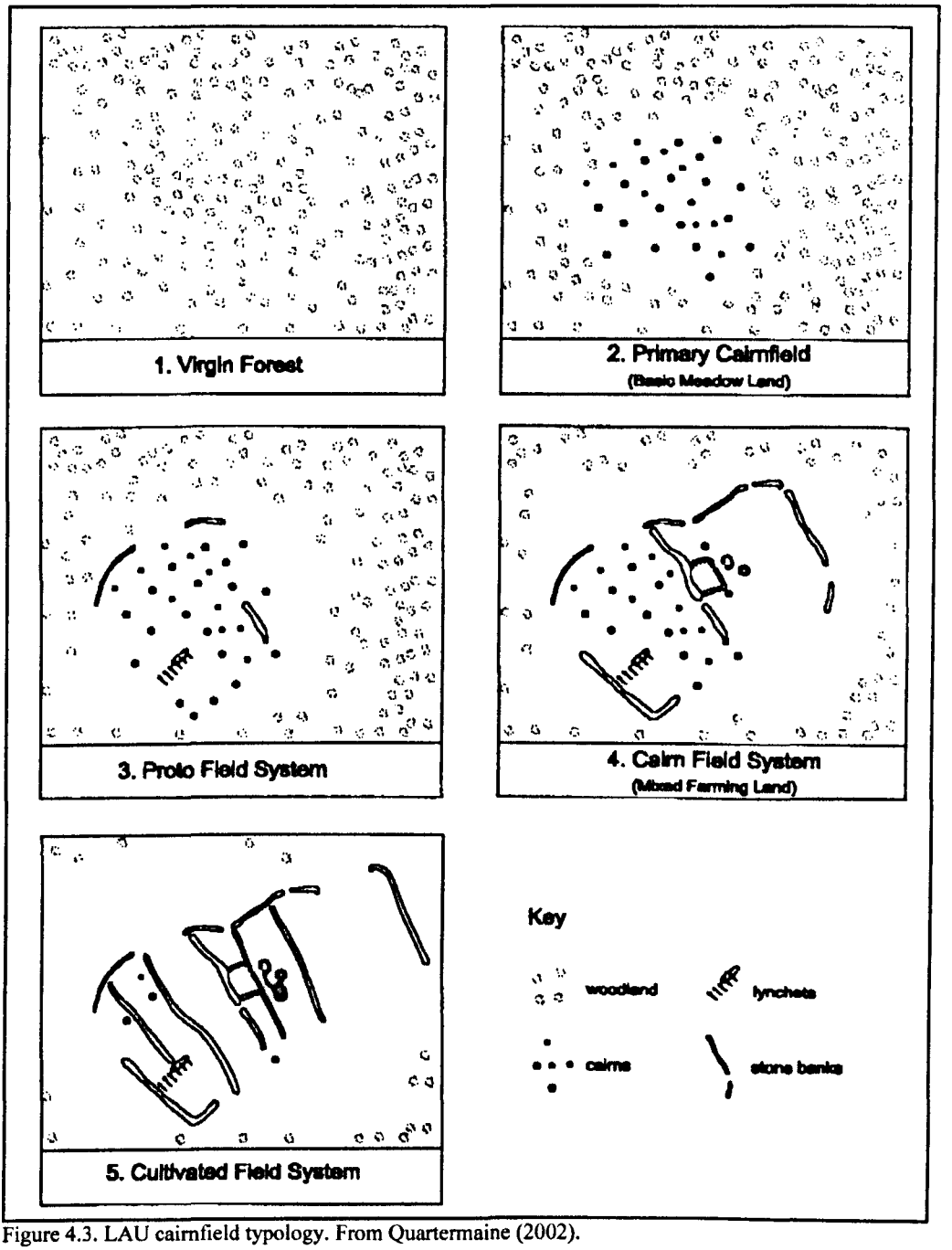


Figure 4.3. LAU cairnfield typology. From Quartermaine (2002).

Understandings of the chronological significance of cairnfields are frustrated by how they appear in the present. Small 'primary' cairnfields are assumed to be 'early' whilst more structured field systems are taken to be 'later' (Quartermaine 1989, 2002). Whilst in some cases this interpretation may be valid, there is an obvious problem here: it is likely that all areas of clearance began with a limited number of cairns. 'Primary' cairnfields could therefore relate to areas where small scale clearance occurred at any point in time, but was not sustained. Descriptions of the more complex cairnfields and field systems stress the economic adaptation of earlier clearance in order to rationalise the land for increasingly mixed forms of agriculture. The introduction of garden plots in the 'Proto-field system' has been understood as a 'significant innovation demonstrating the introduction of basic arable techniques' (Robinson 1998). Whilst this may be valid in a functional sense, there are other factors to consider.

Working on cairnfields and field systems on the Gritstone moors of the Peak District, Barnatt (1999, 2000) has argued that a broad division can be drawn between well and poorly defined field layouts. Better developed cairnfields and field boundaries appear to reflect a longer duration of use, beginning in the Later Neolithic/Early Bronze Age and running into the Iron Age. In the Peak, complex cairnfields usually occur in agriculturally favourable areas with good aspect and at a lower altitude than simple cairnfields.

Although complex cairnfields suggest longevity, the recognition of either 'simple' or 'complex' field areas depends on visibility. The visibility of field boundaries and lynchets (those features taken by the LAU as evidence of complexity and arable agriculture) can be put down to a variety of circumstances. These include the natural degree of stoniness, the propensity for soil loss due to localised topographic conditions and the nature of use to which particular areas were put (Barnatt 1999, 2000). In the Peak, the upland record is defined by two kinds of field layout; classic cairnfields, and fields defined by earthen boundaries. The "crucial distinction to be drawn is that there was no functional difference between the fields and the cairnfields...both represent agricultural areas and there is no evidence to suggest that the character of the farming in each differed" (Barnatt 1999: 28).

Interpretation of the increasing complexity of the cairnfield record as a typological indicator is persuasive but inherently problematic. Most analyses have been focussed on attempts to identify chronological evidence of economic 'adaptation'. At a broad scale, cairnfield typologies do illustrate some of the ways in which the character of upland occupation changed over time. However, this method of interpretation denies the possibility that different agricultural and occupation practices may have existed together in different areas. The character of the cairnfield record in Cumbria, together with the chronological implications of associations between cairnfield and other upland monuments form the basis for chapter six.

A consistent and integrated approach

The ways monuments in Cumbria have been classified has caused a number of problems, the most fundamental of which is that in its present form, the evidence available is internally incoherent. As discussed in chapter two, it has been necessary to produce a clear and consistent dataset in order to begin further analysis. This has demanded the establishment of a basic classification scheme, which, given the thread of this discussion, has been a problematic issue. By classifying monuments, we overlook some fundamental problems relating to what appear to be well established sequences at a national scale. Monuments of different forms were the result of localised environmental, social and historical conditions. Not only were these set within wider social processes, individual features within these 'types' likely represent the culmination of long and varied histories. However, at one level, classification is central to our understanding of empirical data. Given that monuments need names, it is necessary to acknowledge these terminologies are shorthands, through which it is possible to look in detail at the significance of particular monument forms at different scales.

In order to allow for the architectural variability illustrated by the extant record and the different levels of detail available, the terminology utilised needs to be relatively simple. After a significant time collating and analysing the data in different ways, it has been possible to identify seven broad monument 'types' on the basis of their broad morphological characteristics. Each of these 'types' take in a number of the different sub-classifications imposed on these forms in the past. It is also possible to distinguish between two broad configurations of cairnfield:

- Long cairns
- Round funerary cairns
- Enclosures
- Freestanding stone circles and hengiform monuments
- Large ringcairns
- Classic ringcairns
- Small stone rings
- Simple cairnfields
- Complex cairnfields

By definition, the nomenclature imposed on these monuments carry with them some interpretively loaded implications. However given the lack of secure dating for the majority, there is a clear need to retain some basic associations in order to establish a floating regional chronology. Furthermore is it only through the use of trans-regional labels that it is possible to tack back and forth between interpretative scales and to look at similarities and differences between monuments in Cumbria and those in other areas. Although the recognition of variety/variability at a local scale forms an important part of a regional study, it is crucial that analysis can still take in grander scales without being simplistic or involving basic and

uncritical extrapolation from elsewhere.

Within each of the monument 'types' identified, there are a variety of architectural forms and some of these relate to relatively localised traditions. There are also distinctions between the individual monument types proposed. For example, there are many different 'types' of round funerary cairn; some occupy the internal elements of stone circles, others have been found to be infilled ringcairns, and across the region, these features occur in a variety of settings and illustrate different associations with other monuments. The following chapters have been designed to confront each of these categories of monument from different perspectives and to explore the similarities and differences between them. Only through an integrated and holistic approach to the evidence is it possible to assess how the settings and distributions of monuments relate to the ways people organised themselves over local and wider regional landscapes and how the social construction of community changed over time.

Perhaps one of the clearest themes that has emerged in this chapter is that stone circles and henges have seen different treatment to the remainder of the monument record. By necessity then, the following two chapters are structured along the same lines. Analysis of henges and stone circles (chapter five) rests largely on how the imposition of inappropriate classification schema has impacted on the ways we understand these monuments in the present. Working through these problems allows some basic re-definition of their character, chronology and distribution across the region. The remainder of the monument record is discussed in chapter six. This outlines how the morphology and changing distributions of monuments can not only inform the construction of a basic chronology, but also illustrate the statics and dynamics of social change over the Neolithic and Bronze Age.

Chapter 5: Classification and distribution of stone circles and henges

"It is easy to point to Long Meg ...or to the Keswick Carles...as an example of a 'great stone circle'; but it is difficult to draw the line between these and the small stone circles which often surround Bronze Age burials. The question must be raised: is there really any essential difference? Are the great circles only enlarged and exaggerated specimens of the much commoner small? If so, the small being sepulchral and of Bronze Age date, the large too will have that purpose and be of that period; and any attempt to draw a line between these two classes will be foredoomed to failure. Here we tread on controversial ground" (Collingwood 1933: 173-4).

Introduction

Since R.G. Collingwood's (1933) *Introduction to the Prehistory of Cumberland, Westmorland and Lancashire North of the Sands,* attempts to understand the Cumbrian circles have seen little interpretative advancement. Collingwood argued that the great stone circles, including the henge at Mayburgh, were of Secondary Neolithic date and were primarily ceremonial in purpose. The ceremonial circles had a large diameter, a large number of stones and contained no burials. Circles with a smaller diameter and a smaller number of diminutive stones were believed to be sepulchral in nature and Bronze Age in date (*ibid.*).

More recent work on the stone circles has been restricted to description, classification and proposals concerning the existence of astronomical alignments (Thom 1967, Burl 1976, Clare 1975; Waterhouse 1985; Annable 1987; Barnatt 1988). Most discussions of Cumbrian prehistory or stone circles as a monumental class use Burl's (1976; 1988) analyses as a basis for interpretation (e.g. Annable 1987; Bradley & Edmonds 1993; Bradley 1998). Although the bases of Burl's arguments can be questioned at a number of levels, the wide impact and subsequent reliance on his work has impeded further characterisation of the dates, settings and significance of these monuments.

As discussed in chapter four, problems with classification schema imposed on the henges and stone circles of Cumbria are a product of grand scale typological approaches. They also result in part from an academic obsession with origins, both chronological and geographic.Before the settings and distributions of these monuments can be confronted in their own local and regional contexts, it is necessary to 'de-classify' what in its present form is an extremely complex and confusing dataset. This chapter comprises two main sections. Following close analysis of past typological schema it is apparent that a number of different 'types' of monument have been classified as 'stone circles'. This first section

concludes with a breakdown of these forms and discussion of their likely character and chronology. The second section provides an interpretation of stone circle morphology and distribution at a close regional level. The identification of a series of major monument complexes demonstrates not only that previous analyses have been set at inappropriate geographical scales, but also that consideration of time depth in the monument record is crucial to understanding local and regional sequences.

Henges and style zones

Classification of the Cumbrian circles rest primarily on two main sources; Burl's *Stone Circles of the British Isles* (1976) and Barnatt's *Stone Circles of Britain: Taxonomic and Distributional Analysis and a Catalogue of Sites in England, Scotland and Wales* (1988). Although Barnatt's analysis was quantitative, based on multivariate analysis, Burl took a more qualitative approach. However, that both imposed rigid classification schema at a national scale means present understandings of the Cumbrian monuments are problematic, not least as the region has been central to interpreting the relationship between henges and stone circles.

At a national scale, understandings of this relationship have been largely reliant on geological determinism (e.g. Fox 1932; Burl 1976). Although in general, stone circles are distributed in western Britain and henges in the east, it has been the monuments on the imaginary line separating the Highland and Lowland zones that have been the focus of interest. Burl's (1976) Circle Henges, seen as hybrids of henges and stone circles, fall into the 40 mile belt to the east and west of this line (figure 5.1). Since the 1970s however, many henges have been recognised across the Highland zone regions (Gibson 1998; Harding 2003). In west Cumbria, ditched hengiform monuments with internal circular settings have been identified from aerial photographs at Gutterby and Summer Hill (see below). Together with the ditched enclosure at Long Meg (Soffe & Clare 1988), these illustrate that what has been seen as a clearcut geological division simply does not hold true.

Circle Henges and Western Circle Henges

That monuments exhibiting a crossover between henges and stone circles have been classified according to the presence of external banks and formal entrances has meant they have been subject to a variety of confusing classifications. Not only are these internally inconsistent, there are a number of problems with the evidence utilised in the interpretation of particular monuments. Long Meg, an unusually large stone circle with a low external bank and portalled entrance has traditionally fallen somewhere between classifications of stone circles and henges.

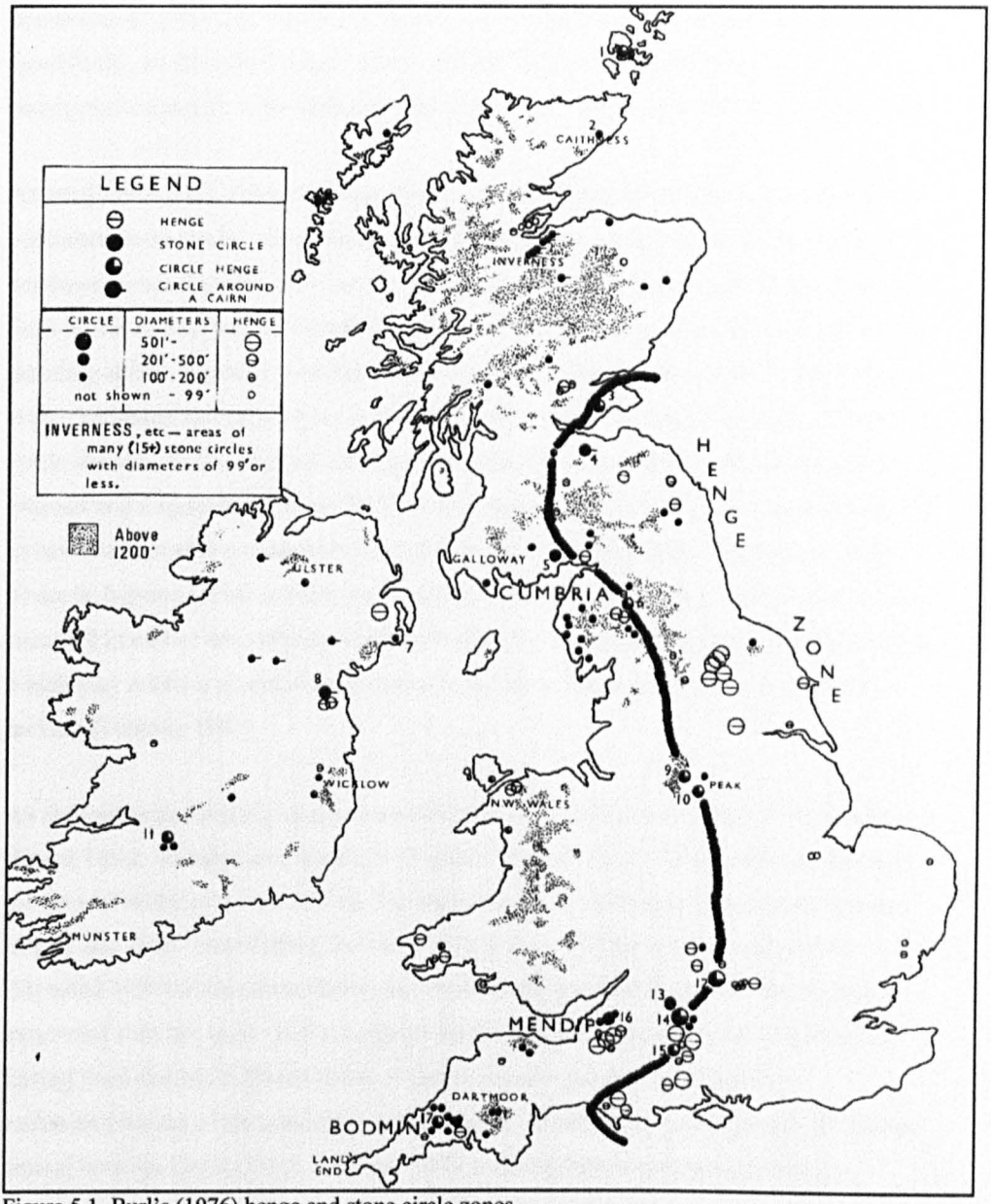


Figure 5.1. Burl's (1976) henge and stone circle zones.

"...it is possible to see the gradual change from henge to stone circle as the geology alters from the soft chalks of the east, amenable to the quarrying of ditches and the building of banks, into the more intractable limestones and sandstones of the west, where it would have been easier to transport and erect monoliths than to dig a ditch or even to scrape together material for a bank....." (Burl 1976: 280).

Burl was unsure whether to include Long Meg with the more 'obvious' henges: "several of the large open stone circles stand inside earth banks and are clearly related to henges" (1976: 38), "either in recognition of henge-ancestry, or perhaps evidence of multiphase construction" (*ibid.*:26). Although the reasons for Burl's classifications were not set out specifically, he identified King Arthur's Round Table as a classic henge (as it incorporates a ditch), with Mayburgh and *putatively* Long Meg as Circle Henges (*ibid.*).

Although both King Arthur's Round Table and Mayburgh are widely believed to have contained stone circles, the existence of such features is highly questionable. Aubrey, in his *Monumenta Britannica* of 1650 (1981) published a description of Dugdale's records from a visit to Mayburgh, recording a pair of entrance stones and a central 'cove' of four standing stones. Stukeley described two circles, the inner one being the central setting which had remained until a year or two before his visit: "One stone, at least, of the outer circle remains, by the edge of the corn; and some lie at the entrance within side, others without and fragments all about" (1776: 44). On this basis, Mayburgh is widely believed to have contained two concentric circles (Barnatt 1990; Burl 1976; Waterhouse 1985). There is, however, little evidence in Stukeley's account for an outer circle and it was not recorded in earlier descriptions. Geophysical survey illustrated the presence of anomalies which may relate to a central cove however evidence for an outer circle was entirely lacking (Topping 1992).

As at Mayburgh, flanking stones were recorded at the northern entrance of King Arthur's Round Table. Included in a sketch by Dugdale (Aubrey 1650) these had disappeared by the time of Stukeley's visit (1776). The monument has suffered an unfortunate history, largely due to its 'remodelling' between 1770 and *c.* 1829 for use as a tea garden (Dymond 1890). Excavation during the 1930s illustrated that the ditches had been re-excavated with the spoil used to heighten the banks, with a possible central grave also having been disturbed (Bersu 1940). If there was any question over Bersu's recharacterisation of the concentric timber circles identified by Collingwood (1938b) as animal burrows (Bersu 1940; Bradley 1994), recent geophysical survey found no evidence for settings within the monument (Topping 1992).

Narratives concerning the Penrith henges are often based on King Arthur's Round Table and Mayburgh as an isolated pair of monuments. However a lesser known feature, Little Round Table, is located in a field adjacent to King Arthur's Round Table. Stukeley recorded an enclosure surrounded by a small ditch (1776) however by the 1850s cottages had been built on the site, which were later demolished to make way for Lowther Lodge (Topping 1992). Geophysical surveys have illustrated a ditch 92 metres in diameter with

a north-easterly entrance (Topping 1992).

On the basis of current knowledge, although both Mayburgh and King Arthur's Table had entrance stones, and had a (Mayburgh) central cove, there is no evidence that any of the Penrith henges contained internal circles. Throwing into question understandings of these features as 'hybrid' monuments, this returns the focus towards the configuration of banks and entrances commonly supposed to characterise circles with 'henge ancestry'.

Barnatt's (1989, 1990) approach to separating henges and stone circles was to create the 'Western Circle Henge'. This new monument class resulted from drawing a distinction between stone circles surrounded by earthworks, and those that were not. In Cumbria, Barnatt's Western Circle Henges (Gamelands, Grey Yauds, Long Meg and Swinside) were characterised as being:

> "..architecturally indistinguishable from the large freestanding examples. The exception is that some Western Circle Henges have external portal stones defining a single entrance through the bank. This characteristic is not found in freestanding cases" (Barnatt 1989: 51).

The creation of a distinction between Western Circle Henges and freestanding circles is questionable not least that the evidence utilised is inconsistent. The destroyed stone circle of Grey Yauds, for example, was classified as a Western Circle Henge on the basis of a description stating it had a diameter of *c.* 47.5 metres (Graham 1907). It seems Grey Yauds was included by Barnatt (1989) solely on this basis, as there is no evidence for either an earthwork or an entrance. More generally, classifications based on the presence of earthworks and entrance stones are problematic. In many areas of Britain formal entrances to stone circles are rare, however this is not the case in Cumbria. Although Swinside and Long Meg are the only examples to have extant double portalled entrances, together with Barnatt's (1989, 1990) 'Circle Henges' of King Arthur's Round Table and Mayburgh, many stone circles in the region incorporate prominent entrance stones.

Although a number of stone circles are today visibly surrounded by earthworks, these are extremely susceptible to plough damage and erosion. At Swinside, although there is no visible earthwork an 18th century account describes one up to half a metre high (Barnatt 1989). As Dymond's excavations (1902) located only a thin layer or rammed stones, it is probable the bank was ploughed out in the interim. The bank identified at Castlerigg, on the other hand, is believed to be the *product* of ploughing (Clare 1975; Barnatt 1989). There is a further problem concerning the recognition of enclosing earthworks. In Cumbria many stone circles are set within natural bowls which has an effect similar to surrounding them with artificial banks (see chapter seven). The presence or absence of

constructed earthworks is therefore more a product of architectural classification than reflecting the ways monuments were set in relation to the natural world. These factors clearly illustrate that the separation of Circle Henges, Western Circle Henges and other stone circles is fundamentally flawed. There are qualitative differences between the more and less overtly monumental earthen and stone circles in the region. That said, before this relationship can be discussed in detail, it is necessary to explore the ways stone circles have seen classification as a monument class distinct from henges.

'Freestanding' circles

Although large Cumbrian circles (be they hengiform or otherwise) have been classified and subclassified in different ways, the term 'stone circle' has also been applied to a variety of monuments, large and small, few of which have seen close characterisation. Before going on to outline those features which can be reliably identified as freestanding circles, and what their distribution and chronology might illustrate, there are some more basic problems to consider. What is a freestanding stone circle? And how have the ways these monuments been classified coloured our interpretations of what they represent?

Approaches to the taxonomic classification of stone circles are problematic in themselves, but exacerbated by the quality and character of the evidence. Difficulties occur as a result of attempts to reconstruct the original size and makeup of circles either lost or partially extant, together with the imposition of classification schema, often at a national scale, on a large, varied and uncompromising group of monuments. That people have resorted to 'sorting' stone circles in so many different ways illustrates that little is known about their chronology. Although Barnatt's (1989) work demonstrated regional groups of circles across Britain, his conclusions as to their date remained unspecific. Analysis suggested the larger open stone circles dated to the Later Neolithic and the Early Bronze Age. The smaller circles illustrated a degree of morphological crossover with the larger examples and were predominantly Early Bronze Age although some were thought to date to the Later Neolithic *(ibid.)*.

Burl (1976) suggested that the large Cumbrian circles were among the earliest of their kind in the country and identified four phases of construction spanning from the Middle or Later Neolithic to the Middle Bronze Age. His argument focussed on two main categories of evidence. The first was the external morphology of the monuments, which were grouped according to shape and external diameter, height and number of stones and the presence of distinctive architectural features. The early features were those shared by henge monuments; an emphasis on circularity, closely spaced stones creating the effect of a continuous wall, a single entrance with portal stones, the presence of outliers and an

open central area (Burl 1969, 1976). Suggesting one of the problems with this analysis, the later traits were the absence of those features taken to indicate an early date. The second approach (discussed below) was the presence of associated burials, again taken to illustrate a 'late' date. Thirty two of Burl's Cumbrian stone circles were 'scored' against both the early and the late traits identified (figure 5.2). Focussing on the available evidence however, it is apparent that few of these 'traits' stand up to close scrutiny.

Does size matter?

Both Burl (1976) and Barnatt (1989) split the circles into groups according to their diameter, followed by further sub-classifications also based on size. Barnatt (1989) divided the stone circles of Britain into 14 subgroups determined by multivariate analysis based on diameter, number of stones, average stone spacing and spacing variation, stone height, grading and circularity. Barnatt split the large stone circles into Western Circle Henges and Western Irregular Circles (with diameters largely between 20 and 40 metres). The smaller stone circles (less than 30 metres and predominantly beneath 20 metres) were then split into eight subgroups. This illustrated the morphological diversity of these sites very well, but meant drawing comparisons between them was almost impossible. The multivariate analysis utilised in fact had the effect of averaging out the differences between the circles - those aspects which makes them 'individual' monuments - in the attempt to identify broad architectural similarities across wide areas.

Burl's (1976) typological scheme was based on a rather wider variation in both diameter and stone height with large circles having a diameter of over 27 metres and small circles less than 21 metres. There are two obvious problems with this diameter split. Firstly, some of the less easily classifiable circles fall into the gap between these figures. Secondly, although no reason is specified, one would suspect that the split is not at the 30 metre mark as the 'early' circles at Swinside (28.7 metres), Ash House (*c.* 27 metres) and Grey Croft (27 metres) would then have become small and therefore 'late'.

Circularity

Barnatt noted that very few stone circles in Britain are absolutely circular. Within a 4% deviation from a true circle, although some monuments exhibit a degree of circularity, no truly circular 'circles' were constructed in Cumbria (1989). Thom (1967) had used the shape of stone circles to postulate that their layouts conformed to predefined plans. Although Burl (1976) called these arguments into question, he proposed that circularity and flattened rings were early features connected with the large open circles. There is a very basic problem with this approach. Suggestions of predetermined shapes could only be proposed through classification according to measured groundplans, and the existence

of such reconstructed perimeters resulted from mathematical approaches to the identification of astronomical alignments (figure 5.3). This demands a bird's eye view unlikely to be available to the communities that laid out and constructed the circles. It has been noted that many monuments that were not truly circular in plan do appear to be from the ground, and this is likely a product of them being laid out by eye (Barnatt & Moir 1984). Circles would have also been laid out with reference to the local topography and to other monuments. So, for example, the layout of Long Meg (a flattened ring) is more likely a product of the monument being constructed in relation to the large enclosure it appears to post-date, rather than being typologically indicative (figures 5. 10, 7.4).

Too many or too few of the wrong sort of stones?

In some regions of Britain circles with a particular number of stones are common (Burl 1976; Barnatt 1989). Although such standardisation does not exist in Cumbria, that some examples incorporate a large number of stones has been taken as characteristic of 'early' circles. This is directly connected both to large diameters (e.g. Long Meg) and the close spacing of stones (e.g. Swinside). The number of stones incorporated in particular monuments, taken as a primary variable by both Burl (1976) and Barnatt (1989) crosscuts some basic distinctions in circle architecture. In many cases it is not known how many stones were originally present. Barnatt (*ibid.*) attempted to rectify this by adding stones where there were obvious gaps in perimeters. Stones have been removed from many of the Cumbrian circles, often to facilitate plough access. At Gamelands this took the form of toppling and burying stones and the destruction of others by blasting with explosives (Waterhouse 1985). At Kemp Howe an 18th century description reported that many stones had been utilised for building foundations and millstones, and "when polished they would make fine chimney pieces" (Nicholson & Burn 1777 cited. Waterhouse 1985).

Grey Croft and Blakeley Raise have both been reconstructed. At Grey Croft ten of an original twelve stones were re-erected in stone holes located through excavation (Fletcher 1956). Blakeley Raise, today a perfect circle of eleven stones with a diameter of 16.6 metres, saw reconstruction in 1925, the accuracy of which is in some doubt (Clare 1975). According to Thom (1967), obviously unaware of the circle's more recent history (and the concrete plinths into which the stones had been set), the monument had a diameter of exactly 20 Megalithic yards. Furthermore, the line joining stone 5, the centre of the circle, and the summit of a distant hill illustrate the position of the setting moon at its most northerly position during its 18.6 year cycle (Thom 1967). Antiquarian records describe 13 stones with a further eight having been robbed for a gateway (Waterhouse

1985). This would put the accuracy of Thom's observations into question. Burl (1976) characterised Blakeley Raise as a 'late' phase 3 circle, based on a reconstructed diameter with missing stones. The original total of at least 21 stones together with the likelihood the monument was larger in diameter, would have put Blakeley Raise into Burl's phase 2, making it an 'earlier' rather than a 'later' circle.

For many stone circles, antiquarian descriptions are the only records that survive. These descriptions are mainly focussed on describing the circle after its destruction. Some monuments survive as small numbers of standing stones, however others have been completely destroyed. Much of Burl's (1976, 1988) analysis is reliant on the integrity of published sources, some of which are more specific than others. Although Barnatt (1989) discounted poorly recorded examples from his analysis, Burl included a number of monuments which are incomplete or known only from anecdotal descriptions.

A 19th century description of Ash House stone circle (Burl's phase 2) states that the monument consisted of 22 stones (Cross & Collingwood 1929). Two stones 30 metres apart are marked on the Ordnance Survey (1998) as standing stones and have been interpreted by Waterhouse (1985) and Burl (1976) as the remains of the circle. A recent investigation (Croft 2000) suggests the site of the monument lies further to the south east where Waterhouse (1985) referred to stones from the original circle having rolled downslope, subsequently being incorporated into a wall. Although lacking in any secure locational information, Burl included Ash House in his analysis as a phase 2 circle on the basis of the former existence of 22 stones and the circle having a diameter of 27 metres or more. This measurement was based on the distance of the supposed arc between the two standing stones likely not to have been part of the circle.

A similar problem exists with Kemp Howe (Burl's Shap South) where antiquarian records refer to a 'large circle' forming the terminus of a stone avenue (Pennant 1790). Its only remains are an arc of six stones, the rest destroyed by robbing and railway construction in the 19th century. There is no evidence of an entrance and its diameter (24.4 metres) has been estimated from the remaining stones. Although the actual number of stones is unknown Burl (1976) recorded more than twenty, more than a metre high. He also recorded an outlier better interpreted as a standing stone belonging to the Shap stone avenue (Clare 1979).

Site	(A) Early Traits								(B) Late Traits										Finds
	Diameter 27.0 m+	20+ Stones	Stones 1.0 m+ high	Entrance	Outlier	Circ./Flattened	Bank Around	+ TOTAL	Diameter 21.0 m−	10–15 Stones	Stones 1.0 m− high	Concentric	Centre Stone	Assoc. Circle	Oval	Embanked	TOTAL	GRAND TOTAL	
PHASE 1																			
1. Carles, Keswick	1	1	1	1	1	F	1	7	x	x	x	x	x	x	x	x	0	+7	Stone Axe
2. Long Meg	1	1	1	1	1	F	1	7	x	x	x	x	x	x	x	x	0	+7	
3. Swinside	1	1	1	1	1	C	x	6	x	x	x	x	x	x	x	x	0	+6	
4. Grey Yauds	1	1	1	?	1	C	x	5½	x	x	x	x	x	x	x	x	0	+5½	
PHASE 2																			
1. Brats Hill	1	1	x	½	1	F	x	4½	x	x	x	x	x	x	x	x	0	+4½	Antlers
2. Elva Plain	1	1	x	x	1	C	x	4	x	x	x	x	x	x	x	x	0	+4	
3. Shap Centre	1	1	1	x	x	C	x	4	x	x	x	1	x	x	x	x	−1	+3	
4. Shap South	x	1	1	x	½	?	x	2½	x	x	x	x	x	x	?	x	−½	+2	
5. Grey Croft	x	x	1	x	1	F	x	3	x	1	x	x	x	x	x	x	−1	+2	Group VI Stone Axe
6. Gamelands	1	1	x	½	x	F	x	3½	x	x	1	x	x	x	x	1	2	+1½	
7. Ash-house Wood	1	1	x	x	x	?	x	2½	x	x	1	x	x	x	?	x	−1½	+1	
8. Broomrigg A	1	x	x	x	½	?	x	2	x	x	1	x	x	x	?	x	−1½	+½	
PHASE 3																			
1. Studfold	1	1	x	x	x	x	x	2	x	x	1	x	x	x	0	x	−2	0	
2. Oddendale	x	1	x	x	x	C	x	2	x	x	1	1	x	x	x	x	−2	0	
3. Casterton	x	1	x	x	x	C	x	2	1	x	1	x	x	x	x	x	−2	0	?Beaker burial
4. Kirk, Kirkby Moor	x	½	x	x	½	C	x	2	x	x	1	x	x	x	x	1	−2	0	
5. Blakeley Raise	x	x	1	½	x	?	x	2	1	1	x	x	x	x	?	x	−2½	−½	
6. The Beacon	1	½	x	x	x	x	x	1½	x	x	1	x	x	x	x	1	−2	−½	
7. Shap North	x	1	x	x	x	x	x	1	1	x	1	x	x	x	x	x	−2	−1	
8. Lacra B	x	x	1	x	x	1	x	2	1	1	x	½	x	1	x	x	−3½	−1½	Flint flake
9. Kopstone	x	x	½	x	x	x	x	½	x	x	½	½	x	x	x	1	−2	−1½	
10. Birkrigg	x	1	x	x	x	x	x	½	x	x	1	1	x	x	0	x	−3	−2	Early Collared Urn
PHASE 4																			
1. White Moss NE.	x	x	x	x	x	C	x	1	1	1	1	x	x	1	x	x	−4	−3	
2. White Moss SW.	x	x	x	x	x	C	x	1	1	1	1	x	x	1	x	x	4	−3	
3. Gretigate NW. (B)	x	x	x	x	x	x	x	0	x	1	x	x	x	1	0	x	−3	−3	
4. Gretigate NE. (C)	x	x	x	x	x	x	x	0	1	1	x	x	x	1	x	x	−3	−3	Haematite
5. Low Longrigg SW.	x	x	x	x	x	C	x	1	1	1	1	x	x	1	x	x	−4	−3	
6. Low Longrigg NE.	x	x	x	x	x	C	x	1	1	1	1	x	x	1	x	x	−4	−3	
7. Moor Divock 4	x	x	x	x	x	x	x	0	1	1	1	x	x	x	x	x	−3	−3	Food-Vessel
8. The Cockpit	x	x	x	x	x	x	x	0	x	x	1	1	x	x	0	1	−4	−4	
9. Lacra D	x	x	x	x	x	x	x	0	1	1	1	½	1	1	0	x	−6½	−6½	Late Collared Urn
10. Bleaberry Haws	x	x	x	x	x	x	x	0	1	1	1	x	x	x	0	1	−5	−5	Flints

Figure 5.2. Burl's (1976) Cumbrian stone circle typology.

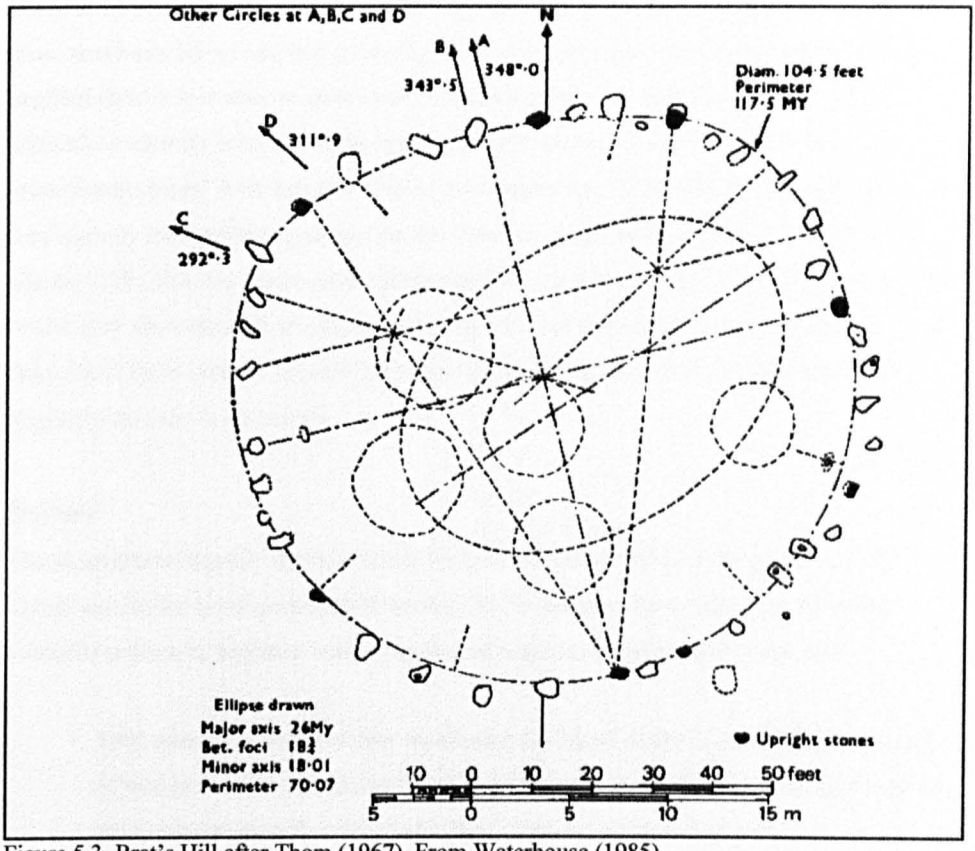


Figure 5.3. Brat's Hill after Thom (1967). From Waterhouse (1985).

"If the circle builders took so much care in designing their rings, one wonders why they were apparently so careless in placing the individual stones. Frequently they are scattered haphazardly around the reconstructed perimeter, as can be seen from Thom's plan of the type A flattened circle of Brat's Hill (Burnmoor E)"
(Waterhouse 1985: 19).

Outliers

According to Burl (1976) the presence of outliers is indicative of an early date. The misinterpretation of the outlier at Kemp Howe is a good example of the difficulties inherent to their secure identification. Outliers where originally present are perhaps more likely to be removed than the stones belonging to circles and in a number of instances those that have been recorded appear to be of natural origin. Whilst this may not have negated their importance to prehistoric communities, these features are extremely difficult to identify with certainty especially as some have been interpreted as 'directional stones' with astronomical significance (e.g. Thom 1967). Although there is a suspiciously monumental gatepost on the break of slope between Lacra A and Lacra C (figure 7.25), this has never seen interpretation as an outlier, and Long Meg herself may be the only incontestable example in the region. The outliers recorded at Castlerigg and Grey Croft lie 90 and 34 metres from their respective circles and that they are in their original positions is uncertain.

Burials

The second (and equally unsuccessful) route followed in order to assign dates to the Cumbrian circles is the presence of burials. Such analyses have been limited by the available evidence, together with a number of significant inferential problems:

- Although many stone circles were used for burial, there is a significant amount of bias in the material Burl (1976) used to reach the conclusion that the presence of burials necessarily indicated a 'late' date for particular circles.

- Burl (1976) used burial evidence to form a provisional typology for his small 'late' circles whilst not including that from the large 'early' circles.

- Some of the 'later' stone circles identified by Burl (1976), on the basis of the burial evidence, are better understood as kerbed funerary monuments, either freestanding or situated within earlier open circles.

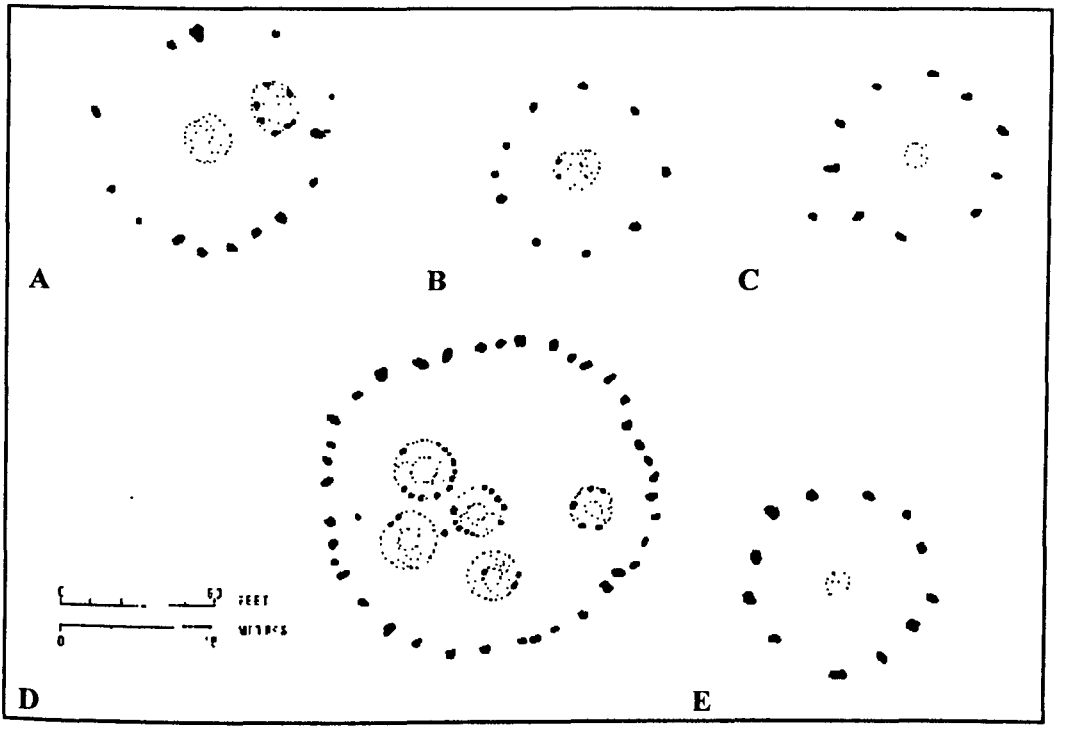
One of the main issues stemming from these points is that of excavation bias and the visibility of extant features. In the few cases where recorded excavation has taken place this has been focussed on monuments thought likely to contain burials. Large open stone circles have therefore seen little recorded excavation when compared to circles exhibiting extant internal features.

At a national scale, very few stone circles, large or small, have failed to produce evidence for burial in some form (Barnatt 1989). Barnatt suggested that in particular within large open circles, a desire to maintain a central space meant burials were often placed in subsurface pits or cists (*ibid.*). Subsurface features within the large circles of Cumbria may remain unrecognised. Although antiquarian records contain descriptions of internal cairns at both Long Meg and Castlerigg, there is some consternation regarding their authenticity. Although excavations at Long Meg produced "giants bones and a body" (Dymond 1881), these are from an unknown context. At Grey Croft, calcined human bones were recorded beneath the central cairn (Fletcher 1956), cists in two of the internal mounds at Brats hill contained burnt bone and antlers (Williams 1856, cited. Waterhouse 1985), and cists have been recorded at both Gamelands and Gunnerkeld (Ferguson 1882; Waterhouse 1985). A disturbed central grave has also been recorded at King Arthur's Round Table (Bersu 1940). These examples illustrate two main themes. The first is that of the presence of burials within the so-called 'early' circles is commonly overlooked, and the second is that where identified, these often occur within central cists and beneath cairns. This begs a significant question: do these burials relate to the 'original' use of these circles, or are they suggestive of 're-use' in later periods? This issue can be approached with reference to some typologically 'late' circles.

'Burnmoor' and 'concentric' circles: visibility and phasing

Internal cairns appear in large circles such as Brat's Hill, Grey Croft and Studfold Gate, and smaller monuments such as Lacra B, and the Low Longrigg and White Moss circles (figure 5.4). These are often classified separately from the open monuments, either as 'encircled cairns' (Lynch 1972) or 'Burnmoor circles' (Clare 1973). Grouping circles according to the presence or absence of a central mound therefore crosscuts classificatory schema in which circles have been characterised according to diameter. Notwithstanding the schema utilised to separate the 'Burnmoor' circles from freestanding examples, there are questions relating to visibility. It is possible some circles may contain mounds not visibly extant, as was the case at Lacra B where the internal cairn was not identified until the monument saw excavation (Dixon & Fell 1948).

A similar situation exists with the classification of 'concentric' circles, of which eight examples were recorded by Burl (1976). Although 'concentric' circles have been classed together with freestanding circles by Waterhouse (1985) and Clare (1973), they have been classed separately by Quartermaine & Leech (forthcoming). As with the Burnmoor circles, Burl (1976) used the presence of 'concentric' circles as a late trait. According to Burl (1976) concentric circles are extremely rare in Britain, numbering about 30.



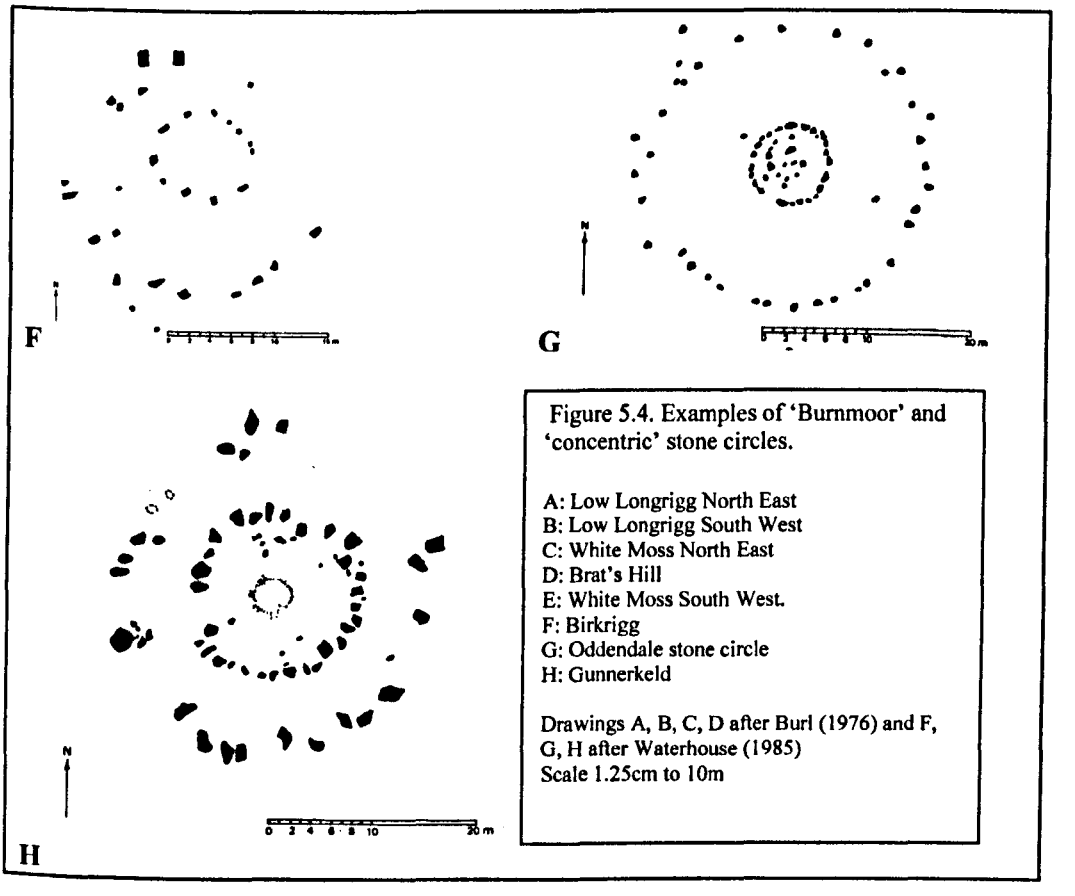


Figure 5.4. Examples of 'Burnmoor' and 'concentric' stone circles.

A: Low Longrigg North East
B: Low Longrigg South West
C: White Moss North East
D: Brat's Hill
E: White Moss South West.
F: Birkrigg
G: Oddendale stone circle
H: Gunnerkeld

Drawings A, B, C, D after Burl (1976) and F, G, H after Waterhouse (1985)
Scale 1.25cm to 10m

Barnatt believed concentric circles to be significantly rarer, identifying between nine and 14 examples, *none* of which were in Cumbria (1989: 34). Of those features interpreted as 'concentric' circles by Burl (1976), Gunnerkeld, Oddendale, and Birkrigg are characterised by large freestanding circles with internal kerbed settings. The 'concentric' circles exhibit strong similarities to the larger 'Burnmoor' circles (figure 5.4). That the only perceptible dissimilarity here is the presence of visible kerbing around the 'concentric' examples, with the 'Burnmoor' circles containing apparently simple cairns. At a regional scale this choice of building materials appears to relate to localised traditions; the 'Burnmoor' circles are all in the west of the county, and the 'concentric' circles to the east and south.

Although it is not known whether 'concentric' and 'Burnmoor' circles are the final product of a number of constructional phases, it does seem unlikely that either existed as a single phase monumental form. Given the use of small stone circles for burial, the internal elements of these larger monuments suggest cairns, visibly kerbed or otherwise, were placed within previously open freestanding circles.

These distinctions illustrate fundamental problems with the ways stone circles have been classified. Perhaps one of the reasons they do not conform to clearcut typological schema is that all monuments had individual life histories. Many may have been designed to remain as open features but saw elaboration after their primary phase of use. Others, particularly the smaller of those features traditionally characterised as stone circles, may have been constructed from the outset with rather different aims in mind.

Recent excavation of a ringcairn close to the Oddendale stone circle has illustrated four main phases of construction between the Later Neolithic and the Early Bronze Age (Turnbull & Walsh 1997). The first phase of the monument took the form of a two roughly concentric timber circles (figure 8.5). The external circle had a diameter of 18 metres, with the internal ring at 12 metres. The inner circle produced dates of 2583-2483 cal BC, and 2853-2466 cal BC and the outer circle 2859-2579 cal BC (*ibid.*). At the centre of the monument, not stratigraphically related to the timber circles was a shallow grave inhumation with a number of beaker sherds. On removal of the timber circles, the post pits were sealed by boulder settings also containing beaker material. The spaces between the settings were later infilled to construct a simple ringcairn which saw further elaboration and funerary use into the Bronze Age (see chapter eight).

At Hardendale Nab, a kilometre south west of the Oddendale ringcairn, a feature initially characterised as a funerary cairn revealed a number of phases of use and elaboration

spanning from 3030-2500 cal BC into the Early Bronze Age (Williams & Howard Davies forthcoming). The first phase consisted of an open cist surrounded by a small mound. As at Oddendale, this feature formed the focus for the construction of a ringcairn which saw a number of phases of funerary use. Unlike the sequence at Oddendale however, the ringcairn was infilled and subsequently completely covered with a cairn.

The full area excavation of these sites illustrates a number of points. The lack of modern excavation in Cumbria has meant monuments identified on the basis of morphology have been considered to result from a single phase of use. Many, however, incorporate evidence of structural addition over significant lengths of time (see chapter eight). If the Oddendale ringcairn and the 'Burnmoor'/ 'concentric' circles saw remodelling connected to funerary activity after their primary phase of use as 'open' monuments, this may be indicative of a temporal phase during which a variety of different monuments saw construction and/or structural elaboration. According to the broad national sequence, both timber and stone circles shifted from complex and overtly ceremonial monuments to forms more obviously focussed towards funerary activity during the Final Neolithic and Early Bronze Age (Gibson 1998; Bradley 1998). Some earlier open sites were reused for burial, and new monuments sharing similar architectural traits (and likely similar patterns of use) also saw construction. Whilst this is not a clearcut distinction, it is an overt change. And this seems to have taken place around the same time as burial monuments saw proliferation both in the environs of monumental complexes and across many areas of the landscape.

Although the chronology is less than well established, the cluster of monuments at Oddendale seems to conform to this sequence. The timber circle, built during the Later Neolithic, was situated less than a kilometre from the Oddendale stone circle, and it is likely these were in use at the same time. Although the timber circle was replaced by a ringcairn during the Final Neolithic/Early Bronze Age (Turnbull & Walsh 1997), nearby, the stone circle saw the addition of a central kerbed cairn. At Hardendale Nab, a sequence begun during the Later Neolithic with an open cist saw the construction of a ringcairn and a sequence of funerary use into the Early Bronze Age (Howard-Davies & Williams forthcoming). Over and beyond associations with Hardendale Nab and the Oddendale ringcairn, the Oddendale stone circle is central to a complex of funerary monuments, including those at Iron Hill and Castlehowe Scar (figures 5.5, 5.11). Before going on to explore the significance of monument complexes, it is necessary to outline the character of these features, and others like them, as they have commonly been classified as small stone circles.

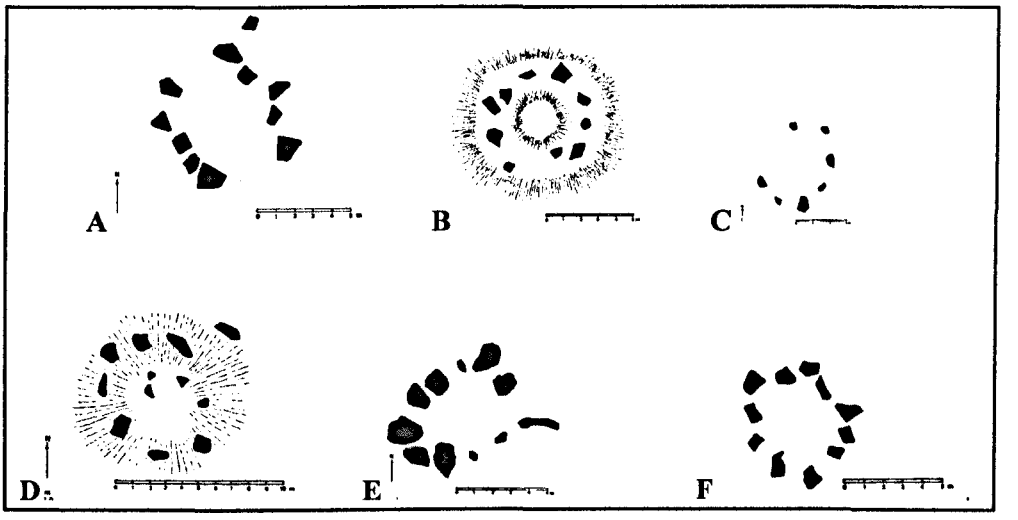
Small circles as kerbed funerary monuments

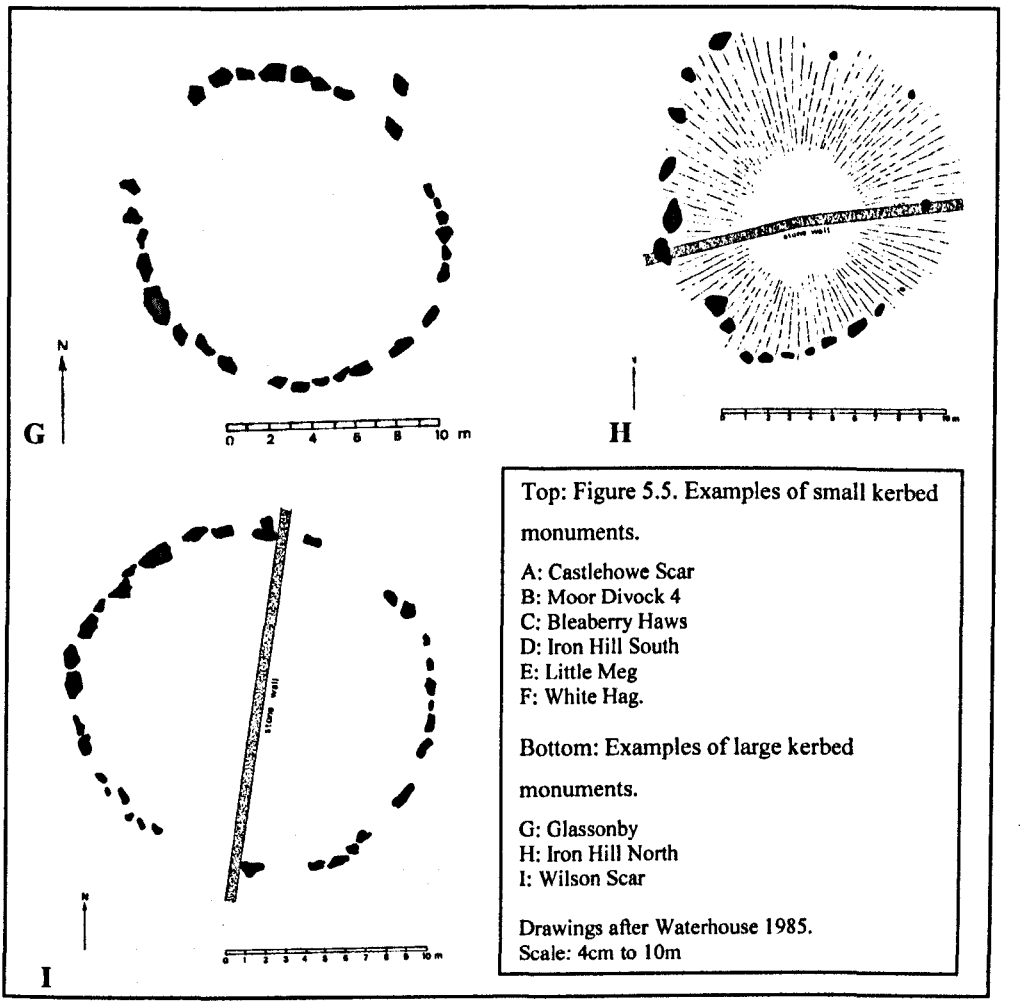
Historically, whilst it has been tacitly accepted that large open stone circles were primarily *ceremonial* and the smaller examples clearly related to *burial* (notwithstanding the lack of a clear distinction between these terms and the activities to which they relate) both large and small remain considered under the blanket term 'stone circle'. Stone settings within open circles share many characteristics with what we might term 'classic' round funerary cairns and ringcairns. Although these have often been classified together with the larger circles, many of the 'small' examples are better understood as formal funerary monuments. On the basis both of their morphology and associated burial evidence (chapter eight), these features take two main forms.

A number of small kerbed circles, between *c.* 5 and 7 metres in diameter, are similar to the central elements of the 'concentric' circles. Castlehowe Scar, White Hag, Moor Divock 4, Broomrigg B, Iron Hill South, Little Meg, and Bleaberry Haws are distinctly rectangular in plan (figure 5.5). Although Broomrigg B and C, Moor Divock 4 and 5 and Little Meg were infilled, the remainder survive as apparently open monuments. The evidence suggests these were meant from the outset to be open with the addition of covering cairns a secondary consideration (see chapter eight). Barnatt (1989) suggested this type of monument may be the 'upland' equivalent of stake circles found beneath round barrows in other areas.

The second group of monuments take the form of larger kerbed circles with relatively small, recumbent and closely spaced perimeters (figure 5.6). Exhibiting a morphological crossover with the smaller of the freestanding circles, the likelihood that these were originally open monuments is suggested by excavations at Wilson Scar (Sieveking 1984), Glassonby (Collingwood 1901) and Broomrigg C (Hodgson 1952). Although in some cases these appear in the present as 'open' monuments, Iron Hill North, Wilson Scar, Broomrigg C and Glassonby were covered by mounds either sealing the kerb or infilling the kerbed area.

The presence or absence of covering cairns has had a significant impact of the ways these features have seen classification. Particular classificatory 'types' can often be understood as stages in structural processes ending at different points at different sites (Barrett 1994; Bradley 1998). Excavation and factors of differential preservation have complicated this situation further in that what might be similar monuments have been classified differently, either by morphology or with reference to structures revealed by excavation.





Top: Figure 5.5. Examples of small kerbed monuments.

A: Castlehowe Scar
B: Moor Divock 4
C: Bleaberry Haws
D: Iron Hill South
E: Little Meg
F: White Hag.

Bottom: Examples of large kerbed monuments.

G: Glassonby
H: Iron Hill North
I: Wilson Scar

Drawings after Waterhouse 1985.
Scale: 4cm to 10m

There is a major problem of inconsistency here, illustrated by excavated monuments at Glassonby and Broomrigg B. Glassonby was initially believed to be a funerary cairn, however after excavation revealed a sealed kerbed structure (Collingwood 1901), it has seen classification as a stone circle (Burl 1976; Waterhouse 1985). The external morphology of Broomrigg C suggested it was a stone circle of 15.6 metres in diameter, and has been recorded as such by both Burl (1976) and Waterhouse (1985). Upon excavation however, the first phase of Broomrigg C was found to have been a small subcircular kerb 4.3 metres in diameter. When the larger kerbed monument was constructed on the site, this was partially destroyed, both being later infilled (Hodgson & Harper 1952; figure 8.7). However the earlier kerb, whilst exhibiting clear similarities to monuments such as Little Meg and Castlehow Scar, was not identified as a stone circle. Similar excavated structures have suffered comparable fates; the internal stone setting at Birkrigg 1 (Gelderd *et al.* 1912) has never been classified as a stone circle, neither have those sealed beneath excavated cairns at Hackthorpe Hall (Mawson 1876) or Levens (Sturdy 1976; Turnbull & Walsh 1996). Not only do these examples illustrate that excavated 'burial cairns' reveal evidence of time depth and structural elaboration, the imposition of inappropriate classification schema based on the identification of 'stone circles' rather than 'funerary cairns' means this has often been overlooked.

A new direction?

At present, although there is no way of securely dating the Cumbrian circles, there does appear to be a fairly clear sequence. It seems probable that the initial construction of the large stone circles and hengiform monuments has its roots in the Neolithic. Many of these were added to and continued in use, albeit with a shift in focus towards overtly funerary activity, into the Final Neolithic and Early Bronze Age. At this time, a variety of smaller open kerbed monuments were constructed, the majority of which also saw use, deposition, and structural elaboration into the first half of the Bronze Age (chapter eight). The most overtly monumental of such features, like those at Shap and in the environs of Long Meg, were constructed in complexes centred on the presence of earlier circles. Whilst in traditional terms the 'functions' of small circles appear to be 'funerary' in nature compared to the overtly 'ceremonial' use of the larger open circles, their forms and locations are often similar. That the open kerbed monuments occur close to freestanding circles which themselves saw a shift in focus during the Final Neolithic and Early Bronze Age suggests there may have been no clearcut distinction drawn between the activities that were being carried out within them. The architecture and use of the smaller monuments may then have been an embellishment or continuation of concerns inherent to the earlier circles. These themes are critical to understanding the nature of monument complexes and time depth and form the basis for discussion in the final part

of this chapter.

Many of the sites included by Burl (1976), Waterhouse (1985) and others do not now fall into the classification of freestanding stone circles. A definitive list of freestanding circles and hengiform monuments in the region is therefore an essential starting point for further analysis. This means there is basic question to confront: how many freestanding stone circles are there in Cumbria?

> "The stone circles of Cumbria, numbering over fifty, represent one of the densest distributions of these features in the British Isles" (Burl 1988:175).

- Burl has "at least fifty six" (1976:26).
- Waterhouse (1984) has 65.
- Annable (1987) has 44.
- Barnatt (1989) has 32.

Barnatt's (1989) analysis took many of the factors discussed above into account. His corpus included 69 recorded sites of which 37 were rejected, leaving 32 examples. According to the references used by Burl (1976), Waterhouse (1985) and Barnatt (1989), plus unpublished sites recorded on the county SMR, 76 stone circles and six hengiform monuments have been recorded. Of these 76, only 25 can be classified with any degree of confidence as large freestanding stone circles (appendix 1). The following breakdown lists the categories of circle which have been included or omitted from this total and identifies the range of forms identified.

Sites not included as stone circles

A number of circles recorded by antiquarians have been omitted from this analysis. Although many of these monuments probably existed, without close description and locational information it is impossible to ascertain whether these were freestanding circles or ringcairns/funerary cairns. Other sites are not included as it has either been established that these were not, or likely not to have been stone circles. A total of 18 stone circles have been recorded through antiquarian records. Three still have a small number of stones remaining which allows them to be located with some security. Six of the 18 circles recorded by antiquarians have been completely destroyed and seven are no longer locatable.

- **Omitted from this analysis:** Moor Divock 3, Moor Divock 6, Moor Divock 7, Moor Divock 8, Broadfield, Le Wheles, Chapel Flat, Ringlen Stones, Motherby, Grasmere, Brougham Hall, Dacre, Rawthey Bridge, Knipe Scar B, Summerhouse Hill/Yealand Conyers, Gretigate A, Gretigate B, Gretigate C, "A 4 ft stone near Seascale" (SMR 1302), Low Kingate/Herd Wood and Fenwick (appendix 1.3).

Freestanding stone circles and hengiform features

- **Stone circles partially/completely destroyed but retained for present analysis:** Hall Foss, Annaside, Kirkstones, Long Meg 2, Castlerigg 2, Swinside 2, Lamplugh, Ash house, Lacra C, Grey Yauds, Blakeley Raise (appendix 1.1).

- **Extant/semi extant stone circles:** Grey Croft, Gamelands, Kemp Howe, Birkrigg, Oddendale, Gunnerkeld, Castlerigg, Elva Plain, Swinside, Studfold Gate, Broomrigg A, Long Meg, Whitrow Beck, Brats Hill (figure 5.7; appendix 1.1).

- **Hengiform monuments and large ?timber circles:** Mayburgh, King Arthur's Round Table, Little Round Table. Gutterby, Summer Hill W, Summer Hill E, Summer Hill S (figure 5.8; appendix 1.1).

'Funerary' monuments

A number of monuments described as stone circles in the past are likely to have been constructed specifically for the purpose of funerary related activity. The larger of these exhibit strong architectural and locational crossovers with the freestanding circles, but they are consistently smaller in size. On the basis of excavated burial evidence (chapter eight) such activity appears to characterise the Final Neolithic/Bronze Age transition.

- **Small kerbed funerary monuments:** Iron Hill South, Little Meg, Bleaberry Haws, Castlehowe Scar, White Hag, Broomrigg B, Moor Divock 4, Moor Divock 5 (figure 5.5; appendix 1.2).

- **Large kerbed funerary monuments:** Iron Hill North, Leacet Hill, Wilson Scar, Shapbeck/Knipe Scar A, Potter Fell, Glassonby, Broomrigg C, Broomrigg D, Lacra D, Lacra A, Lacra B, Low Longrigg SW, Low Longrigg NE, White Moss NE, White Moss SW (figure 5.6; appendix 1.2).

- **Large ringcairns**. The Kirk, Lowick Beacon, Banniside, The Cockpit, Casterton, Kopstone and Swarth Fell (figure 6.9; appendix 1.2).

Regional morphology and distribution

The identification of a number of stone circles as either phased monuments or funerary cairns has meant simplification of the architectural forms under consideration, and as significantly, the number of monuments involved. Given problems with previous analyses, what is needed to clarify the distribution and significance of these features is a flexible approach focussed at a regional scale. Although there are qualitative distinctions between circles across the region, previous approaches have been based on too many variables. Rather than classifying them according to the presence or absence of specific architectural traits, the best way to approach these monuments is to allow them, in essence, to speak for themselves.

Perhaps the simplest approach to analysis of stone circles and henges is a consideration of their diameters. The 25 freestanding stone circles and six hengiform monuments identified occur in a number of different sizes, with diameters between *c.* 20 and 100 metres. Over the county as a whole, these fall into three main groups.

- The first group, distributed across the county, have diameters between 20 and 34 metres.

- The second group, again distributed across the county, consist of large circles and hengiform monuments with diameters between 35 -55 metres.

- The third group consist of freestanding circles and hengiform monuments with diameters in excess of 90 metres. With the exception of Lamplugh (which has an estimated diameter) these are all situated in north-east Cumbria.

On the basis of diameter, there appears to be a small element of regional clustering in the size of stone circles and hengiform monuments, with the largest situated in the north east. However, splitting them into diameter based groups has the effect of brushing over strong architectural similarities between sites of different sizes and forms. This is most clearly demonstrated by the hengiform monuments. Appearing in two different size groups, they share a broad diameter range with some of the stone circles (figure 5.8). Although stone circles of different sizes are distributed across the county, it is clear that so-called 'early' circles in different parts of the region (for example Swinside and Long Meg) are physically different in scale and overall character (figure 5.7).

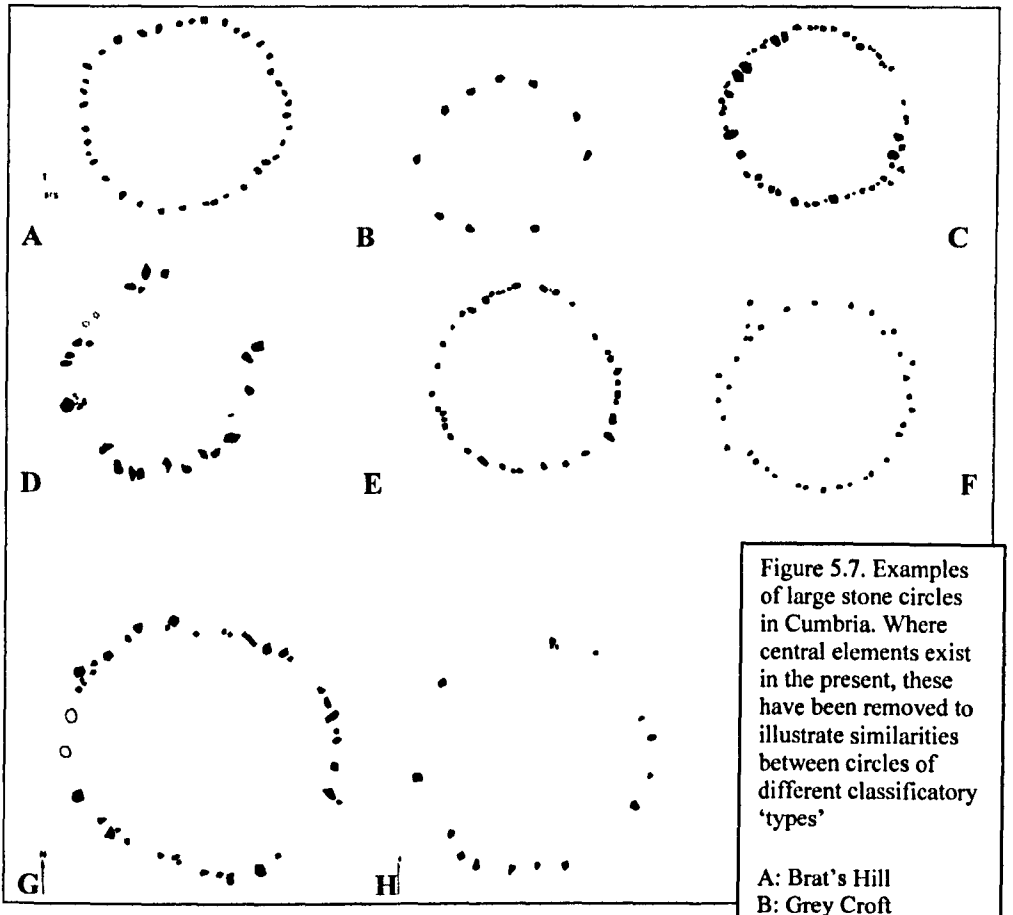
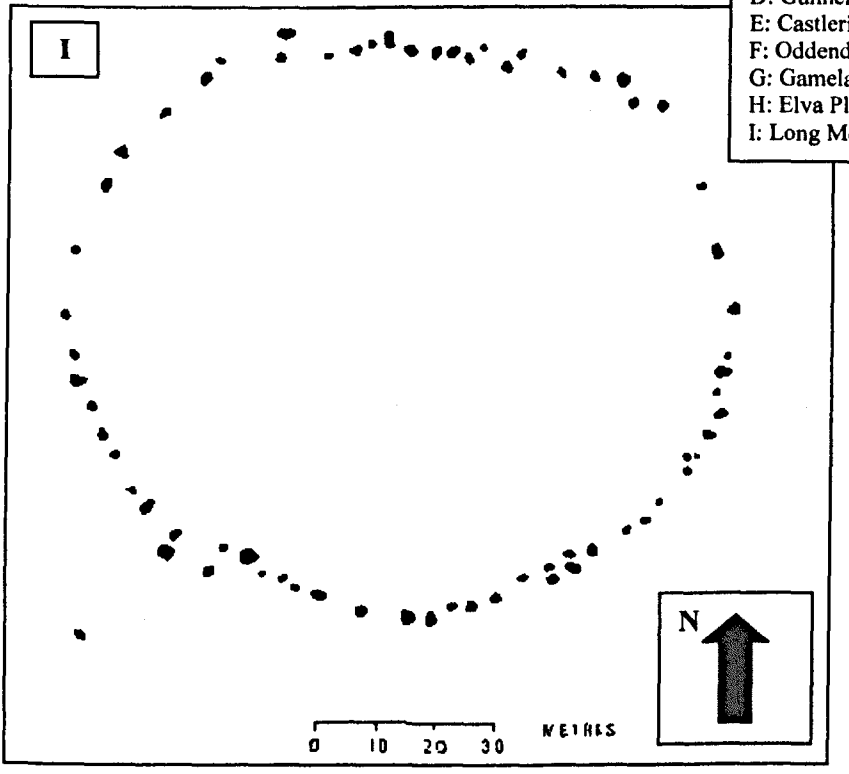
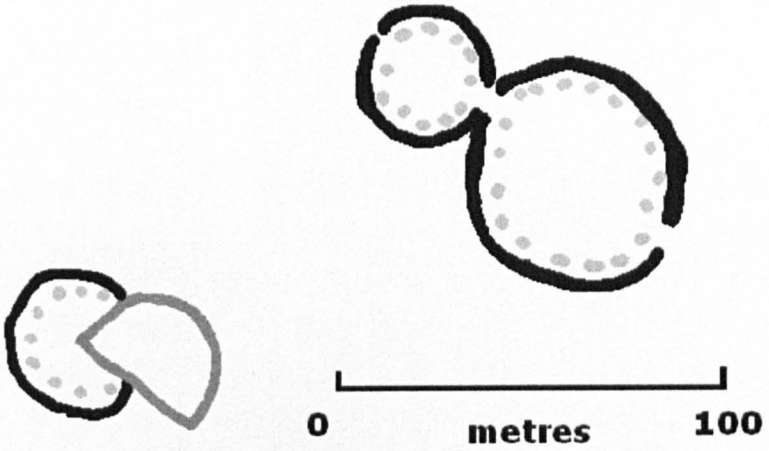


Figure 5.7. Examples of large stone circles in Cumbria. Where central elements exist in the present, these have been removed to illustrate similarities between circles of different classificatory 'types'

A: Brat's Hill
B: Grey Croft
C: Swinside
D: Gunnerkeld
E: Castlerigg
F: Oddendale
G: Gamelands
H: Elva Plain
I: Long Meg

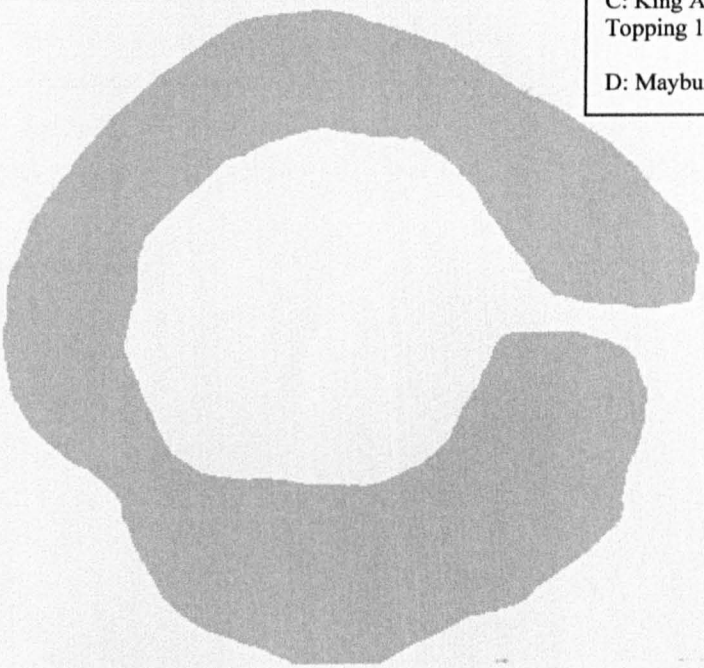




A

B

C



D

Figure 5.8. Hengiform monuments in Cumbria.

N

A: Gutterby (from sketch plot of aerial photograph). Source: LDNPA.

B: Summer Hill (from sketch plot of aerial photograph). Source: LDNPA.

C: King Arthur's Round Table (after Topping 1992).

D: Mayburgh (after Topping 1992).

Plan of Castlerigg illustrates difference in scale between the large hengiform monuments and the large stone circles.

It appears that there is no coherent patterning on the basis of size as both henges and stone circles occur in different sizes across the county. This is not a dead end however; this lack of patterning is a product of attempting to 'sort' these monuments at too wide a geographical scale.

Although the stone circles of Cumbria have commonly been understood as a coherent county-based group, approaching them from a closer perspective suggests they are better interpreted as relatively localised monument clusters. Although the boundaries of the modern county conform to a landmass defined by the Pennines to the east and the Irish Sea to the west, this huge area is made up of a number of relatively distinct regions, themselves defined by natural boundaries (chapter one). On this basis, the stone circles and hengiform monuments can be divided into four main groups (within which there are likely to be further sub-groups). These four groups are not arbitrary, but correspond to the distribution of landmasses divided by the major river valleys which radiate from the central fells (figure 5. 9).

Cumbria south west

The south western region is defined by the central fells to the east and the Irish Sea to the west. To the south this area is bounded by Morecambe Bay, the Furness Peninsula and the Cartmel fells, fractured again into discrete areas by the Duddon and Leven estuaries. To the north, the Irt valley separates the southern fells of Ulpha and Eskdale from the northern fells of Copeland and Ennerdale. Owing to the the character of the major valleys, the landmass broadly defined by Lake Windermere and Coniston to the east, and Wastwater to the north, has an overall southwest facing coastal prospect.

Freestanding circles

Annaside	*c.* 18 metres
Whitrow Beck:	*c.* 20 metres
Low Longrigg NE:	21.7 metres
Hall Foss:	*c.* 23.0 metres
Lacra C:	*c.* 24 metres
Birkrigg:	24 metres
Swinside:	28.7 metres
Brat's Hill:	30.4 metres
Swinside 2	Unknown
Ash house:	Unknown
Kirkstones:	Unknown

Timber circle

Summer Hill ?timber circle:	30 metres (from sketch AP plot @ 1:5000)

Hengiform monuments

Gutterby:	35 metres (from sketch AP plot @ 1:5000)
Summer Hill W:	35 metres (from sketch AP plot @ 1:5000)
Summer Hill E:	50 metres (from sketch AP plot @ 1:5000)

Cumbria north west

The north western Lakes is defined by the central fells and the Irish Sea. To the south it is bounded by the Irt, the Copeland fells and Wastwater. To the east it is defined by the Derwent valley which runs north-south between the Borrowdale fells then west to join the Irish Sea. The character of the major valley means that the overall coastal prospect of this area is north west facing and in some areas overlooks the Solway and the Galloway Peninsula.

Freestanding circles

Grey Croft:	27 metres
Studfold Gate	32.8 metres
Elva Plain	33.5 metres
Castlerigg	32.6 metres
Blakeley Raise:	Unknown
Castlerigg 2	Unknown

freestanding circle

Lamplugh	*c.* 90 metres

Cumbria south east

The south eastern region is defined to the west by the eastern fells and the Pennines to the east. To the west and south this broad area is defined by the Shap fells, Hawswater and the Lowther, Lune and Kent valleys. The area is defined by high ground interspersed with major north-south river valleys, bounded by the Crosby Ravensworth fells to the south east, forming the western extent of a major Pennine through-route.

Freestanding circles

Kemp Howe:	*c.* 24 metres
Oddendale:	27 metres
Gunnerkeld:	31.8 metres

Freestanding circles

Gamelands:	44.4 metres

Cumbria north east

The north eastern region of Cumbria is defined to the west by Skiddaw, Helvellyn and high fells between. To the north east it is bounded by the Eden valley and the Pennine foothills, and to the north west of Penrith by the Carrock fells and the Caldew. The southern extent of this area is defined to the south by Whinfell, Moor Divock and the Eamont as it flows into Ullswater.

Freestanding circles

Grey Yauds:	47.5 metres
Broomrigg A	50 metres

Freestanding circle

Long Meg:	109 metres

Hengiform monuments

King Arthur's Round Table	92.5 metres (external), 54 metres (internal)
Little Round Table:	90 metres (external)
Mayburgh	170 metres (external) 90 metres (internal)

Approaching the circles as geographically localised groups, it becomes apparent that there is a degree of clustering in their size. Whilst the diameters of large circles in south west Cumbria range between 20 and 30 metres, in the north east, these are more than 40 metres. The ten or so so-called 'early' circles of these geographically separate areas are often directly compared or grouped together at a county scale. However, when considered separately, they have more in common with others in their immediate locality than those on the other side of the county. The relative sizing of monuments between areas is illustrated by the Gutterby and Summer Hill henges and stone circles in the same area. The henges are larger than the south western freestanding circles, but significantly smaller in size than their north-eastern counterparts (figures 5.7, 5.8).

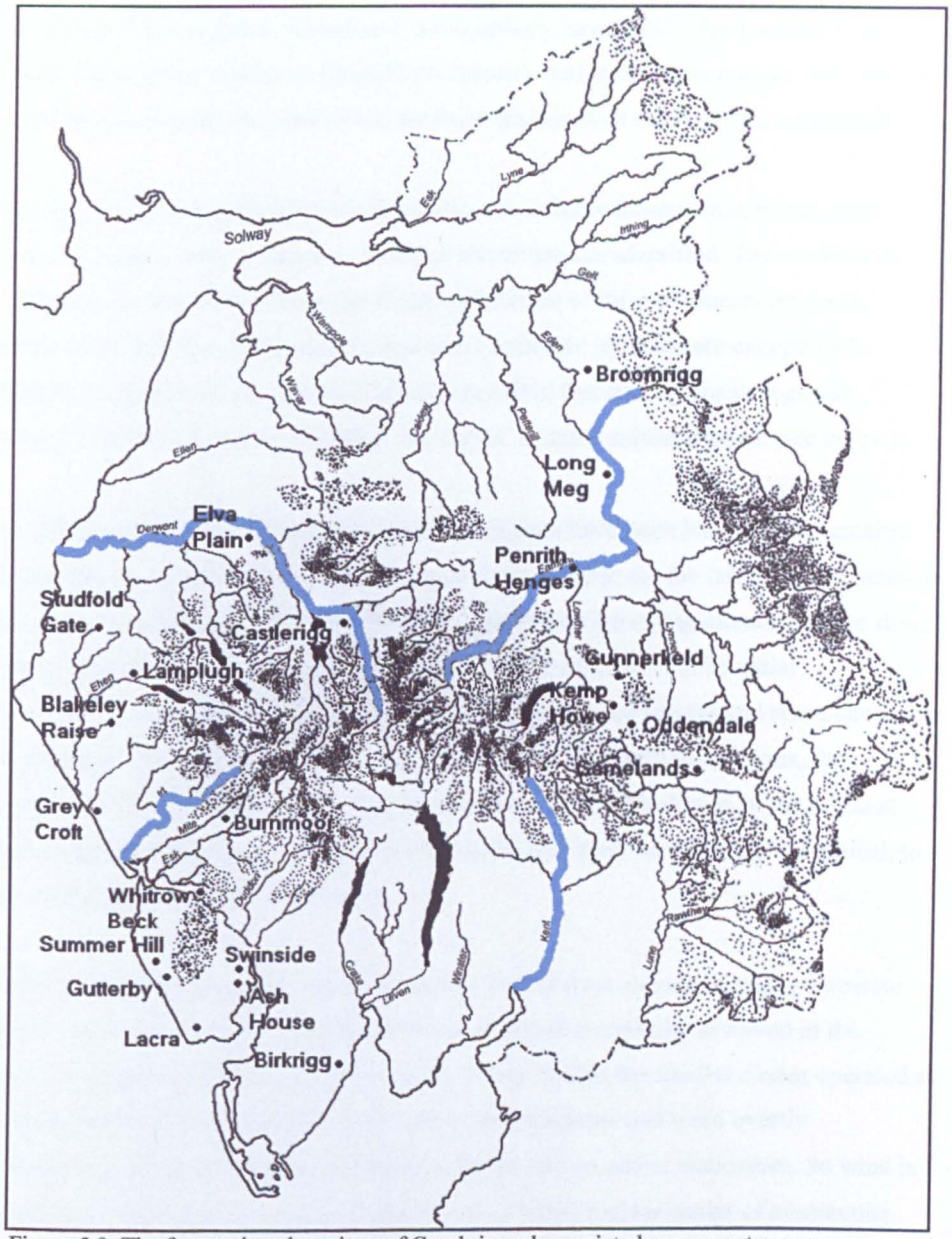


Figure 5.9. The four main sub-regions of Cumbria and associated monument groups.

In the north east, whilst the stone circles are significantly larger than those in other areas of Cumbria, the hengiform monuments are relatively larger still. The diameter clustering of both freestanding circles and hengiform features within different regions of Cumbria would therefore appear to result from localised traditions of monument construction.

Each of the regional groups proposed include one or more monuments, either stone circles or henges, overtly larger in size than the remainder identified. The evidence is problematic as it is likely that a significant proportion of the monuments originally present have been lost and it may be that those extant or recorded are exceptional examples of preservation. It seems unlikely therefore that the regions or regional 'groups' proposed equate to coherent 'territories' in any traditional sense (see below).

Notwithstanding the likelihood that many monuments have been lost, the fact remains that in those areas where henges have been identified, these are the largest monuments in their regional groups. In other areas however, the largest surviving monuments are stone circles. If this distribution is meaningful rather than a product of differential preservation, it demonstrates that distinctions drawn between henges and stone circles do not hold true. Over and beyond the lack of clearcut architectural distinctions, the implications for this argument are that the extremely large monuments in the regional groups identified may have operated at different scales, both social and geographical, to the smaller and more numerous circles.

At both regional and more localised levels, the size of these monuments may illustrate something about catchment, and the differing scales of community involved in the gatherings which took place. In other words, it may be that the smaller circles operated at a similar social scale to Neolithic long cairns, with the large and more overtly monumental circles and henges assuming a similar role to earlier enclosures. So what is this telling us about the locations of specific monuments and the scales of community that used them? That a number of the large circles and henges are located close to the major rivers defining the regions proposed suggests they were located in areas where people coming from different directions might come together. The Penrith henges, for example, are situated between the north east and south east regions of Cumbria, and between Cumbria and the Pennine regions (figure 5.9). Such monuments may therefore have worked in different ways and scales, at different times; not only might they have been used by local groups, they may also have served as arenas for regional and inter-regional gatherings.

The ways that the landscape settings of stone circles and other monuments suggest the existence and articulation of different scales of community is discussed in chapter seven. Before these issues can be explored more fully, it is necessary to change the way we often focus on the distribution of circles. We have to look at how the histories of specific places determined the locations of many stone circles and at how the identification of major monument complexes can be used in the interpretation of regional sequences.

Distribution, time depth and monument complexes

One of the main problems frustrating interpretation of the distribution of the Cumbrian circles has stemmed from approaches to territorial analysis. These have been based on ideas equating the 'early' monuments with (albeit abstracted) individual social groups at a county scale (e.g. Burl 1976, 1988; Barnatt 1989). Not only do the circles fall into discrete sub-regional clusters, it seems likely that different monuments operated at different social and geographical scales. Together with the fact that distributive analyses have been based on previous typological schema, this means territorial analyses have been fundamentally flawed.

One of the bases on which the so-called 'early' circles have been identified in the past has been their isolation from other monuments (e.g. Burl 1976; figure 5.2). However, the majority of large circles and henges lie in complexes, either closely associated with other monuments, and/or more widely spread over a few kilometres. The identification of monument complexes relates not only to analysis of extant features, but also to excavation evidence, antiquarian descriptions and aerial photographs. Aerial photographic evidence has recently brought to light a possible cursus and a number of enclosures in the environs of Long Meg, the largest of which is directly associated with the stone circle (Soffe & Clare 1988; figure 5.10). An antiquarian reference to a second stone circle to the south west of the main monument (Stukeley 1776), and the presence of funerary monuments at Glassonby and Little Meg illustrate that a variety of features saw construction and use over the Neolithic and into the Bronze Age. Although the Long Meg stone circle is often considered in isolation, not only is it probable it was built after the large enclosure and possible cursus were already in use, these features also formed foci for the construction of later monuments.

The hengiform monuments identified at Gutterby and Summer Hill are separated by 4 kilometres (figure 5.12). At Summer Hill aerial photographic evidence has illustrated a monument complex including a pair of conjoined circular ditches extremely similar in layout to the Long Meg circle and enclosure (figures 5.14, 7.5). Adjacent to the paired monuments are a cluster of two small circular ditched features and a possible timber

circle. At Gutterby, a large hengiform monument with an internal circular setting is overlain by a D-shaped enclosure (figure 5.13). Although apparently isolated, the site at Gutterby was also once part of a wider complex:

> "On the Green Moor Farm are thirty stones called Kirk-stones, forming two circles, similar in position to those at Stonehenge. About 200 yards south of this Druidical monument is a large cairn of stones about 15 yards in diameter surrounded by massive stones at the base" (Eccleston 1872: 278).

The kerbed cairn is in a suspiciously similar position to the henge monument, with the likely site of Kirkstones 400 metres to the south east. Further 'lost' circles have been recorded in the immediate area; the stone circle at Annaside (Eccleston 1872) was less than a kilometre north west of Gutterby, and that at Hall Foss (*ibid.*) approximately halfway between Gutterby and Summer Hill (figure 5.12).

Complexes such as those at Long Meg, Gutterby and Summer Hill illustrate that other circles which might appear isolated in the present may have been associated with monuments which have since been destroyed. At Castlerigg, Stukeley (1776) recorded a stone circle to the north of the main monument, and records of a second circle at Swinside have also come to light (Sharon Croft pers. comm).

As discussed above, there is a dispersed monument complex in the environs of Shap (figure 5.11); the circles of Oddendale and Kemp Howe are situated about 2.5 kilometres apart with Gunnerkeld a further 4 kilometres to the north. Defined by a series of high ridges between the Lowther and Eden valleys, the distribution of the circles frames a major complex of funerary monuments including Iron Hill North, Iron Hill South, Castlehowe Scar, the Oddendale timber circle/ringcairn and Hardendale Nab.

Whilst the present discussion has been based predominately on monuments recorded as stone circles in the past, many ceremonial complexes incorporate 'classic' round funerary cairns, and a number occur in association with long cairns and enclosures. On the Furness Peninsula, an enclosure and long cairn at Skelmore Heads lie less than 2 kilometres to the north west of Birkrigg stone circle. Not only did the circle form the focus for a funerary cairn cemetery, it saw re-use for the deposition of cremations in the Early Bronze Age (see chapter nine). On Crosby Ravenworth Fell, an area already well known as a result of the Neolithic and Bronze Age funerary cairns excavated by Greenwell (1877), a large enclosure at Howe Robin lies immediately to the east of a possible long cairn at Cow Green (Masters 1984). The enclosure lies 3 kilometres north of Gamelands, below which Raiset Pike long cairn lies a further 4 kilometres to the south east.

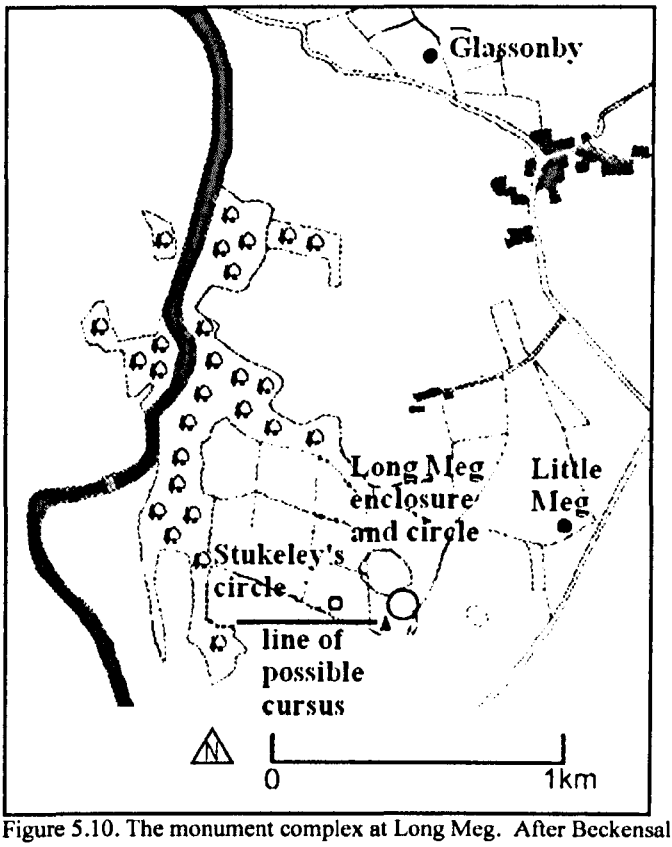


Figure 5.10. The monument complex at Long Meg. After Beckensall (2002).

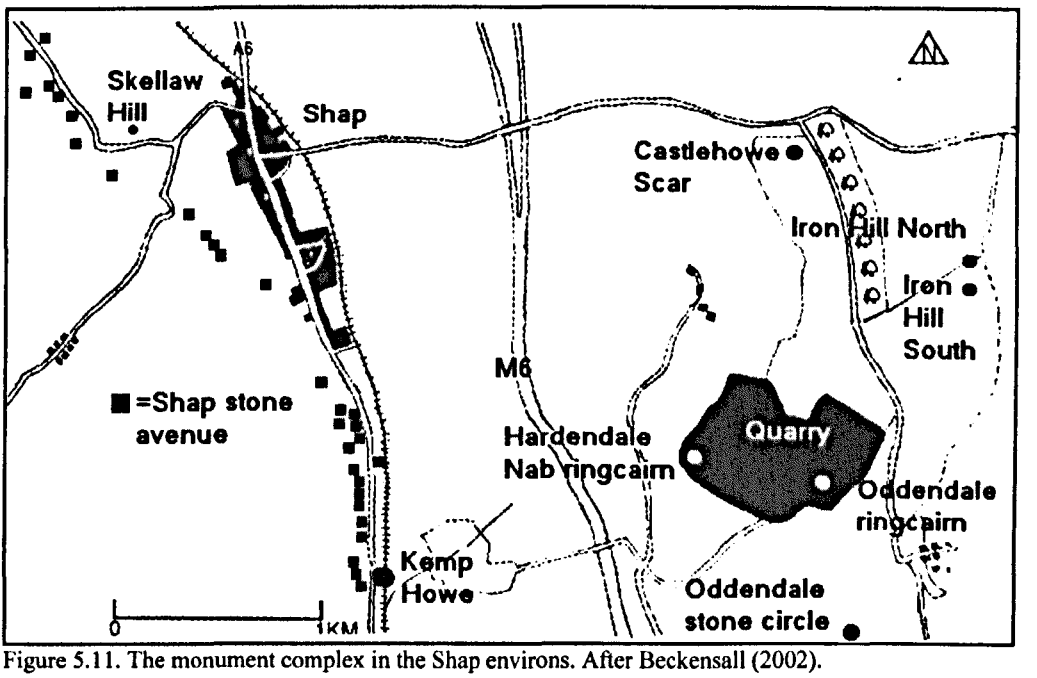


Figure 5.11. The monument complex in the Shap environs. After Beckensall (2002).

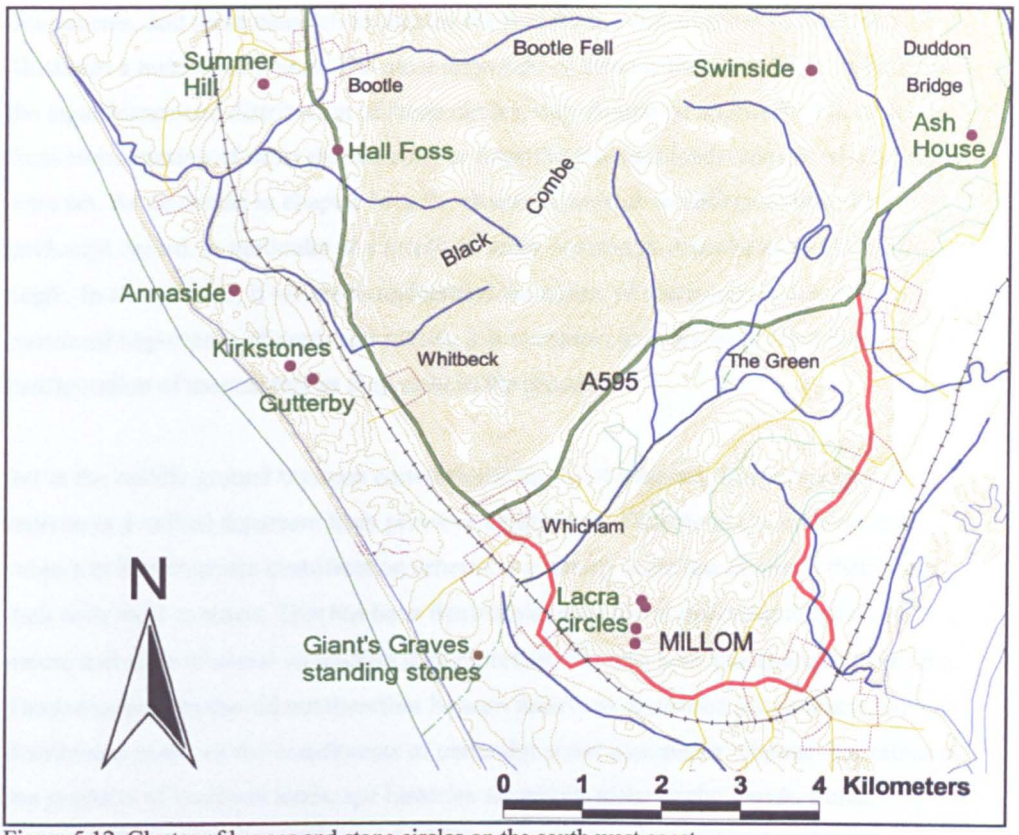


Figure 5.12. Cluster of henges and stone circles on the south west coast.


Figure 5.13. Gutterby.


Figure 5.14. Summer Hill.

Source: Lake District National Park Authority.

These monument clusters illustrate the continued importance, not only of particular places, but of particular areas of the landscape over the Neolithic and into the Bronze Age. That the location of many stone circles may have been determined by earlier monuments, and these themselves formed the foci for the construction of later ones illustrates a number of points. The most important of these is that in order to understand the significance and distribution of stone circles, they cannot be approached in isolation from consideration of other monuments, or from the physical landscapes in which they were set. As discussed in chapter two, the clearest approach to understanding the landscape record, in particular at a localised scale, is through consideration of time depth. In other words, if we are to understand the nature of these complexes and the continued importance of particular places, it is necessary to work back from the configuration of monuments as they exist in the present.

Set in the middle ground between conventional scales of analysis, this perspective represents a radical departure from previous approaches. That stone circles have been subject to inappropriate classification schema at a county scale has divorced them from their own local contexts. This has been detrimental not only to understandings of the nature and scale of social interaction they represent, but also how this changed over time. These monuments should not therefore be seen merely as measured groundplans, dots on distribution maps, or the constituents of particular static monument 'classes' but rather as the products of localised landscape histories set within wider social trends. Fuller understandings of their significance at different social and geographical scales can therefore be gained not only through consideration of earlier and later monuments in their environs, but also through exploration of how the ways they were used tied into wider patterns of landscape occupation.

New questions

If monument complexes were products of the re-use of particular locations over the course of the fifth, fourth and third millennia BC, what may the individual elements of these complexes, ranging from large enclosures to stone circles and funerary monuments, be telling us about the changing structure of the communities that used them? And what might the longevity of such monuments illustrate? The question here is that if stone circles and other monuments operated at both community and inter-community scales, then how did such groups organise themselves across the wider landscapes of the region and how did this change over time?

One of the key issues discussed over the course of this chapter has been the proliferation of funerary monuments constructed in the Final Neolithic and Early Bronze Age.

Although these have been discussed in relation to their identification as stone circles and often occur in ceremonial complexes, monuments of comparable forms saw construction across much of the landscape. Although many lowland examples have been destroyed, those that survive in upland areas illustrate a consistent association with cairnfields. Although interpreting the evidence is problematic, detailed analysis of the upland record illustrates clear themes relating to the changing structure and organisation of communities over the Neolithic and Bronze Age (chapter six). From this vantage point, analysis of the landscape settings of monuments suggests how upland occupation articulated within wider patterns of movement (chapter seven). Together with consideration of the changing nature of burial and depositional traditions (chapter eight), it is possible understand some of the ways communities operated at different social and geographical scales, combining and separating at different times and places across localised and wider regional landscapes.

Chapter 6: The upland record

Introduction

Chapter five ended with a discussion of monument complexes and with the argument that their presence and longevity has been significantly underestimated in the past. Illustrating that the histories of specific places were significant for many of the monuments we see today, we need to understand why particular places saw the construction of particular 'types' of monuments. This chapter is concerned with the *distribution* of Neolithic and Early Bronze Age monuments. Looking also at the associations exhibited between different forms, it is possible to demonstrate how the contexts in which these saw construction can inform a broad regional sequence. Whilst ceremonial complexes remained in use into the Early Bronze Age, what is unclear at present is how their continued importance articulated with wider patterns of occupation. We therefore need to shift the focus to other areas of the occupied landscape, where, across the Neolithic-Bronze Age transition, a large number and wide variety of funerary monuments were constructed. These survive predominantly in upland areas, in particular in association with extant cairnfield. It was argued in the context of ceremonial complexes that the clearest approach to understanding their significance and the chronological sequences they represent is to work back from their present configurations. Given the complexity and time depth inherent to the upland record, this means that the analysis of cairnfields is an appropriate point of departure. The first section of this chapter sets out the character and distribution of cairnfields in south and west Cumbria. Following this, an outline of the relationship between cairnfields and prehistoric monuments in other upland regions sets up a context from which to approach their interpretation. The second section is concerned with the distribution of Neolithic and Early Bronze Age monuments, analysis of their changing settings and the physical associations between particular forms. Leading to the construction of a broad monument chronology for the region, the final section outlines the ways monuments of different scales, in different places, attest to the changing structure and organisation of community from the Early Neolithic to the Bronze Age.

The cairnfield record: defining an approach

As discussed in chapter four, approaches to the cairnfield record have been defined by typological, functional and economic criteria. By their very nature, these deny consideration of how the character of particular landscapes determined the ways specific areas could have been used. That the topographic nature of many areas has dictated the availability of land suitable for agricultural use is reflected by the layout, distribution and survival of cairnfields.

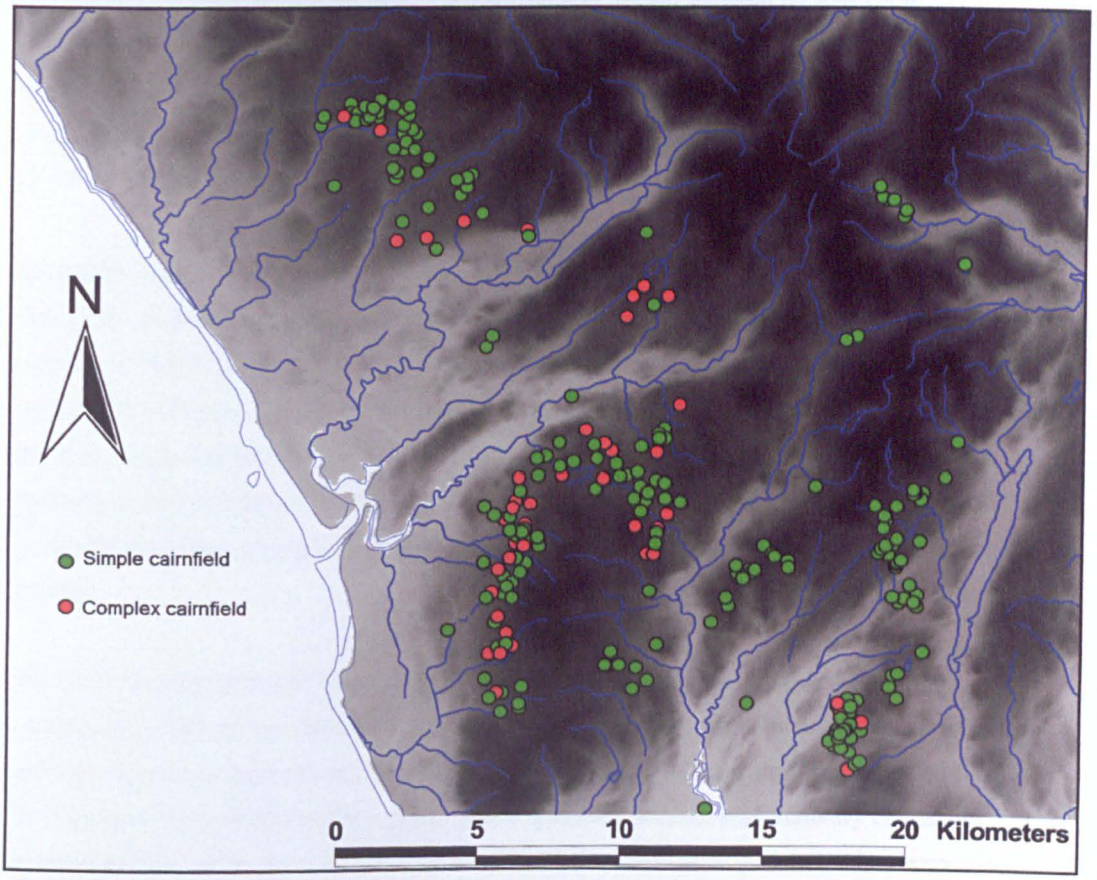


Figure 6.1. Distribution of 'simple' and 'complex' cairnfields on the southern and southwestern fells.

Where land of a suitable altitude to have allowed agricultural exploitation exists above medieval and 19th century enclosure boundaries, cairnfields are situated on shelves or shoulders of land between river valleys and the higher fells. That enclosure affected the present distribution of cairnfields is illustrated in that they often appear immediately beyond the walls demarcating the extents of cleared land. Although there are limited areas of clearance at higher levels, cairnfields predominate around the 200 metre contour. In west and south west Cumbria, where cairnfields are at their densest, these are predominantly situated on south and southwestern facing shelves on the lower fringes of the fells. Some, such as Bootle Fell, directly overlook the coastal plain, and others, such as Town Bank and Stockdale Moor, face down the major river valleys which run between the central fells and the Irish Sea (see case studies in chapter seven).

Across the southern fells the situation differs in that the major valleys are aligned north-south. East of the Duddon, cairnfields are characterised by linear agglomerations strung along narrow shelves, or clustered on south or southwest facing shoulders. On the southern limestones, evidence for clearance is sparse. The land has been heavily improved in the low lying areas and the fells, supporting only thin soils covering outcropping limestone, are not suited to arable agriculture. Isolated areas of dispersed cairns do exist, however, testament to the long term occupation histories of particularly fertile areas, many monuments survive only as antiquarian records.

The LAU (Quartermaine & Leech forthcoming) surveys have added significantly to the recognition of upland monuments. Although there are problems with the classification schema utilised, the surveys have thrown up a series of questions regarding the significance and chronology of cairnfields and their associations with other monuments, funerary cairns and ringcairns in particular. In order that this relationship be considered in detail, it has been necessary to simplify what is an extremely large and complex dataset.

The present analysis of the cairnfield record is restricted to the southern half of Cumbria, where the cairnfields recorded have been split into 'simple' and complex' forms (see chapter four). For the purposes of this analysis, 'simple' cairnfields comprise apparently random cairn clusters and those incorporating cairn alignments and small stretches of banking. 'Complex' cairnfields are those where the field layout appears organised, and includes enclosures and obvious 'later' settlement remains. Although there are more areas of upland clearance yet to be characterised, 'simple' cairnfields (recorded on the county SMR as of Spring 2002) number around 250 (figure 6.1; appendix 3.2). This includes about 120 small cairnfields composed of ten or less features. There are approximately 52 examples of 'complex' cairnfields which equate to about a quarter of those identified. 'Simple' cairnfields take in the LAU 'Primary'

and 'Proto' cairnfield types and 'complex' cairnfields broadly equate the LAU 'Cairn-Field-Systems' (figure 4.3, appendix 3.1)

Although both simple and complex cairnfields are relatively evenly distributed across the same areas, complex cairnfields are only situated on relatively low-lying and free-draining areas of land. Around half of the simple cairnfield groups (making up three quarters of the cairnfield record) comprise clusters of ten or less cairns. Where these occur alongside complex cairnfields they are situated at their margins, on slopes or dry islands of often stonier land. This is illustrated most clearly east of the Duddon, where the topography is more restrictive to clearance than on the western fells and a significant proportion of cairnfield groups comprise less than ten cairns (figures 6.1, 6.7). Although there are few large cairnfields, where these do occur, they are surrounded by smaller areas of clearance at their peripheries. The majority are situated on limited areas of usable land, defined by areas of bog, outcropping rock, breaks of slope, or situated in cols between becks or ghylls. This patterning illustrates the rocky and inhospitable nature of the area, but also that 'simple' cairnfields are often peripheral to 'complex' examples.

Simple cairnfield and monuments

Although the longevity of complex field systems may be illustrated by the presence of features such as enclosed settlements and stock enclosures, tying down a chronology for the simpler areas of cairnfield is more difficult. In the Peak District, research extending the chronology of the East Moors cairnfields into the Iron Age has concentrated on the better developed sites (Barnatt 2000). It is not known if dispersed and disorganised simple cairnfields reflect 'early' clearance that was not sustained, attempts in later periods to expand larger complex systems, or even more recent clearance episodes.

Although the evidence is problematic, Barnatt (2000) suggested that in the Early Bronze Age, occupation and clearance activity on the East Moors of the Peak District may have been more extensive than in later periods. On the basis that small stone circles, ringcairns and funerary cairns were associated with both simple and complex cairnfield, Barnatt suggested that simple cairnfields may characterise Early Bronze Age occupation (*ibid.*). Through analysis of monuments associated with cairnfield areas on the East Moors, Barnatt (2000: 44) illustrated that 60-90% of cairnfields had associated stone circles, ringcairns or other stone settings, 80-90% had funerary cairns and 50-80% had both. This correlation has led to the suggestion that in the Early Bronze Age, funerary cairns, ringcairns and small stone circles were local monuments and every small farming community may have had them (Barnatt 1999, 2000).

These associations provide a way into unravelling aspects of time depth inherent to the density and distribution of cairnfields in Cumbria. If simple areas of cairnfield represent 'early' clearance and occupation, then 'complex' cairnfields are likely products of their sustained use into the second half of the Bronze Age and likely the Iron Age. Barnatt has suggested "cairnfields elsewhere in Northern Britain need re-evaluation against the Peak District evidence" (1999: 34). Although the physical characteristics of the Peak and Cumbria are different in many ways, elements of the prehistoric record exhibit shared themes. As there are few other areas in western Britain where stone circles, ringcairns and cairnfields occur in close proximity, it may be possible to draw broad analogies between monuments in these two upland regions.

Upland monuments and landscape histories

Before looking closely at the relationship between individual cairnfield areas and Early Bronze Age monuments in Cumbria we need to confront problems relating to drawing comparisons with the Peak District. This first of these is that in Cumbria, associations between cairnfield and particular monument 'types' are not clearcut. Although a significant proportion of ringcairns in Cumbria are closely associated with cairnfields, this is not an exclusive relationship as many are situated within ceremonial complexes and cairn cemeteries. There are no large freestanding circles in the Peak, the presence of chambered cairns instead, suggestive these monuments played similar roles (see Bradley 1998b). The 'stone circles' associated with cairnfields in the Peak are small in diameter and likely to date to the Early Bronze Age (Barnatt 1990). These are therefore more comparable to the cairnfield ringcairns both in the Peak and in Cumbria than they are to large freestanding circles.

The differential distribution of monuments between these two areas illustrates a point crucial for understanding regional landscape histories. As well as being situated in regions illustrating the differential use of particular monument 'types', Cumbria and the Peak are also dissimilar in physical character. This has led to distinctive localised and long term occupation histories based on the differential configuration of upland and lowland landscapes and valley systems. This may be illustrated by the distribution of Neolithic monuments. In Derbyshire, long and chambered cairns, like the major henge monuments, are distributed across the margins of the limestone White Peak (see Barnatt 1996a, 1996b). Ringcairns and small stone circles occur almost exclusively on the East Moors in association with cairnfields (Barnatt 1990). In southern and western Cumbria however, a number of long cairns occur in or close to cairnfields, and very few stone circles are associated with cairnfields. Although there may be other factors involved, whilst the Peak monuments exhibit clearcut distributional distinctions between classic 'Neolithic' and 'Bronze Age' forms, in Cumbria these lines are more difficult to draw. As discussed in chapter five, a number of large stone circles and henges in Cumbria

are situated close to long cairns and enclosures, and the longevity of such areas is also evidenced by later funerary monuments. However, long cairns, enclosures, round funerary cairns and ringcairns also occur in isolation from overtly ceremonial complexes. So, unlike the evidence from the Peak, it is unclear how the changing distributions and associations between such features work either at a localised or regional scale.

So where does this leave us? On the basis of the LAU surveys it may be possible to identify that during the Early Bronze Age, upland 'family' farms, represented by individual cairnfield areas, were associated with ringcairns and funerary cairns. However, relating such occupation to the rest of the chronological picture is difficult. The sequence that led to the onset of upland clearance in the Cumbrian fells is unclear, as is the character of occupation and how this changed over time. Was cairnfield occupation persistent or seasonal in nature? What sorts of processes led to the formation of the upland record as it now stands? Unsurprisingly, one of the major problems frustrating clarification of these questions is the ways these monuments have been classified. Before returning to further discussion of these issues, and a consideration of the nature and scale of upland occupation, there are some basic problems to address. As discussed in chapter four, a variety of different monument types were constructed and used in the Cumbrian uplands over the Neolithic and Bronze Age and these have seen little or no systematic attention. As there are questions as to their dating, it is necessary to provide summary descriptions and outline arguments relating to their physical makeup, chronology and longevity.

Enclosures

Although the distribution of Neolithic 'causewayed' enclosures was thought to be restricted to southern England (e.g. Bradley 1984), aerial reconnaissance, field survey and excavation have begun to change understandings of their character, setting and distribution at a national scale (Oswald *et al.* 2001; Darvill & Thomas 2001). In Cumbria, this 'gap' has been thrown into sharp relief by a number of recent discoveries. A number of putatively Neolithic enclosures have been identified, surviving as stone banks, earthworks and soil marks (RCHME 1996a, 1996b, 1996c; English Heritage 2002; Horne 2000; figure 6.2; appendix 2.2).

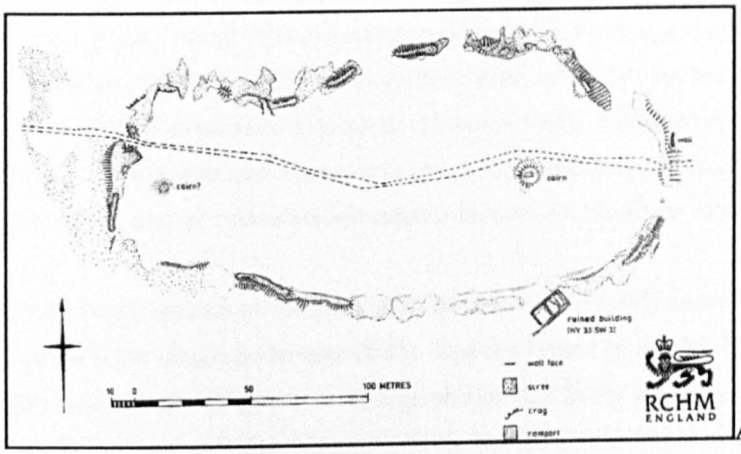
As discussed in chapter four, one of the major problems regarding the secure characterisation of these features is that many 'anomalous' upland enclosures have been identified as Iron Age hillforts. Recent work on such a monument at Gardom's Edge in the Peak District has illustrated that Neolithic enclosures need not conform to the footprints of the well known earthen enclosures of lowland England. Formed of a causewayed stone bank around six hundred metres in length, the feature is overlain in places by Early Bronze Age clearance features (Barnatt *et al.* 2001; Edmonds & Seaborne 2001). In Cumbria, enclosures at Skelmore

Heads and Carrock Fell have also been identified as hillforts (Collingwood 1938a; Powell 1963). Alongside similar examples in the region, these are formed of interrupted banks stretching between the rocky outcrops and scarps of which their perimeters are partially formed. Although their identification as hillforts rests on their 'defensive' positioning, they are not practically defensible (Edmonds 1993, 1999).

Arguments for a Neolithic foundation for the enclosures vary from site to site, and are based on their morphology, setting and more circumstantial evidence (see appendix 6.2). As discussed in chapter five, at Long Meg aerial survey has demonstrated the existence of an enclosure larger and apparently earlier than the stone circle (Soffe & Clare 1988). Unlike the majority of those identified, that at Long Meg is relatively low lying and physically associated with a stone circle. The layout of the conjoined monuments at Summer Hill exhibits a striking similarity to those at Long Meg (figure 7.4). Although the relationship between these 'paired' monuments is not clearcut, what is significant is that this suggests Early Neolithic monuments were commonly incorporated into later complexes.

The remainder of the enclosures occupy distinctive hilltop positions, and two of these are associated with long cairns and later monuments. The enclosure at Howe Robin is situated in an area dense with evidence for Neolithic and Early Bronze Age activity, including a possible long cairn at Cow Green. Neolithic occupation close to and within the enclosure is evidenced by finds including a polished stone axe, flakes struck from stone axes, part of a polished flint axe, a leaf shaped arrowhead and sherds of Grimston ware (Cherry *et al.* 1985).

Skelmore Heads is the only example of a putatively Neolithic enclosure in Cumbria to have seen recorded excavation (Powell 1963). Unfortunately, interpretations as to the results of these investigations (where a palisaded enclosure of Late Bronze Age or Iron Age date was later replaced by an earthen bank and ditch) remain equivocal on a number of levels (RCHME 1996c). On the basis of the excavation records (Powell 1963) it appears there were no stratigraphic relationships between the 'phases' identified, no dating evidence was recovered and the only diagnostic material culture the excavation produced were two unstratified flint finds. Although the monument may have seen different phases of use, there is strong circumstantial evidence to suggest a Neolithic foundation. A long cairn is situated 50 metres to its north (Powell 1972), and a cache of roughout stone axes were located in limestone outcrops which forms part of the enclosure perimeter (Barnes 1963). Skelmore Heads also forms part of a monument complex including the Birkrigg stone circle and cairn cemetery, less than a kilometre to the south east (see chapter nine).



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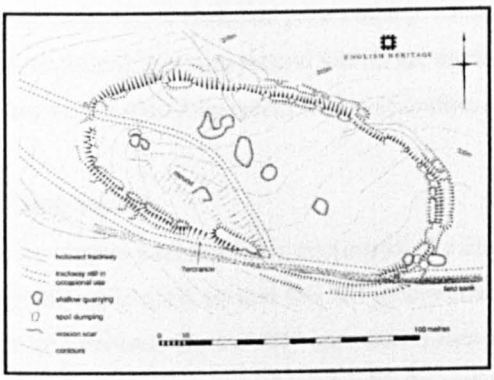

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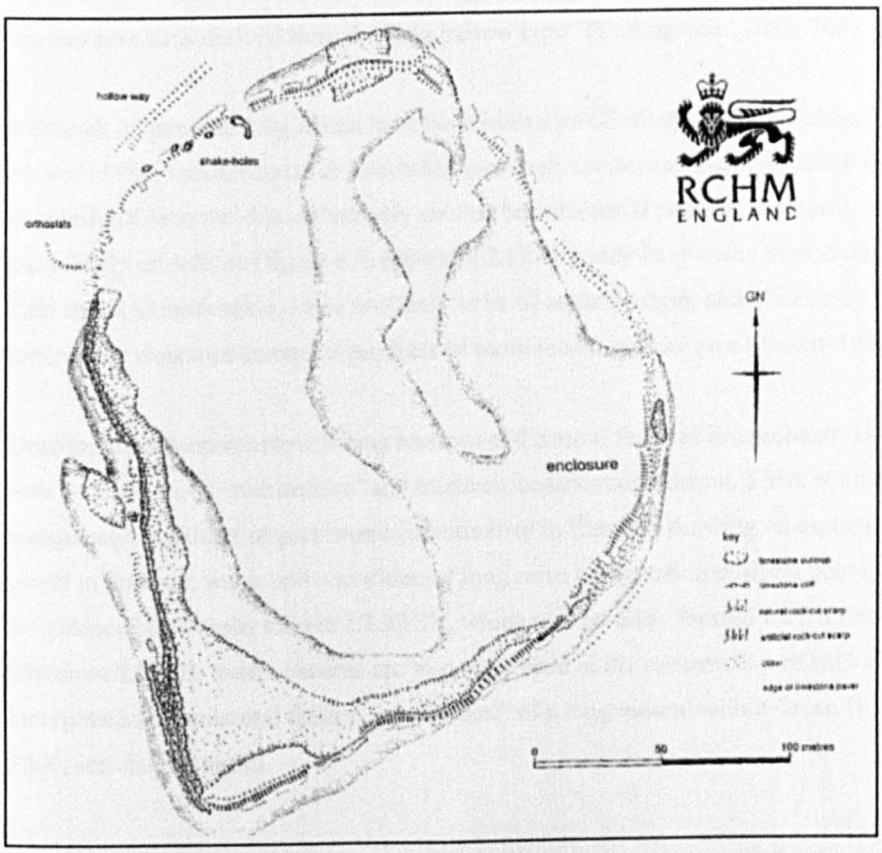


C

Figure 6.2. Plans of upland enclosures in Cumbria.

A: Carrock Fell, after RCHME (1996a).
B: Green How, after English Heritage (2000).
C: Howe Robin, after RCHME (1996b).

The morphology and setting of the enclosure at Carrock Fell, commonly known as an Iron Age hillfort (Collingwood 1938a) have recently been used to suggest a Neolithic date for its foundation (RCHME 1996a). The southern flank of the fell has been identified as the source of group XXXIV stone axes (Clough & Cummins 1988). Given the relationship between Neolithic enclosures and axe sources seems well established (Edmonds 1993, 1999), this association may provide circumstantial evidence of a Neolithic date.

Green Howe appears on the basis of its morphology to typify causewayed enclosures identified in other areas (English Heritage 2000). That the feature is overlain in places by possible Iron Age field systems (Higham 1978; English Heritage 2000) would suggest a prehistoric date for its construction, and Later Mesolthic/Early Neolithic lithic finds have been identified within its perimeter (John Hodgson pers. comm). Attention has also been drawn to a natural feature reminiscent of a long mound within the monument and as Neolithic enclosures are often associated with long cairns its incorporation may have been deliberate (Horne 2000).

Long cairns

In common with Neolithic enclosures, the identification of long cairns in Cumbria is problematic not least that this has predominately been based on their morphology. As discussed in chapter one, these poorly understood forms slipped through the culture historical 'style zones' of the western seaboard, with the region thought to contain only "a very few late degenerate cairns derived from the long barrow type" (Collingwood 1933: 168).

Although 25 possible long cairns have been identified (Collingwood 1933; Manby 1970; Masters 1984; Quartermaine & Leech forthcoming), the secure characterisation of the majority is questionable to the degree that only six can be considered possible examples, with five others more likely or definite (figure 6.5; appendix 2.1). Not only have many been destroyed since their initial identification, some are likely to be of natural origin, and others may be later funerary or clearance cairns, or products of more recent activity (see Masters 1984).

Drawing a distinction between long barrows and natural features is a problem relating to our own perceptions of 'architecture' and modern classification schema. There is however a recognisable tradition of prehistoric communities in Cumbria drawing on aspects of the natural world in different ways, and a tradition of long cairn construction utilising geological features is evidenced by Crosby Garrett CLXXIV, which was partially formed from a limestone outcrop (Greenwell 1877). Such concerns are also evidenced in the construction of enclosures and the incorporation of a natural feature 'reminiscent' of a long mound within Green Howe (Horne 2000; see chapter eight).

Such uncertainties can be illustrated by two 'long cairns' on the west coast. The Muncaster long cairn on Stainton Fell is a large oval mound oriented east-west. To the east the mound merges into the natural slope, and to the south is a natural outcrop. From the west the mound is well defined, and incorporates two groups of tall stones. These have been interpreted as portal stones, or the remains of a straight frontal facade similar to that of the Lochill long cairn in south west Scotland (Masters 1973, 1984). Although the feature is possibly natural it displays some of the long cairn characteristics set out by Masters (1984; chapter 4). Without excavation however, its nature will likely remain unresolved. The Irton Fell 'long cairn' is unlikely to be a built monument. Taking the form of a broadly linear mound 19 metres in length, 11 metres wide and 3.2 metres high the east of the feature has been thought to have been augmented by clearance including two large upright stones (SMR 31060). However, the mound does not have a coherent profile, all of the stones forming its body and periphery appear to be earthfast, and a very similar natural outcrop lies *c.* 50 metres to its east.

The second problem with the identification of long cairns is their common association with cairnfields. In these contexts it is difficult to draw distinctions between 'classic' funerary long cairns, localised architectural funerary forms, or those elongated cairns produced through linear clearance. Fourteen features classified as long cairns are located in the LAU survey areas on the south western fells, three of which had previously been documented (Samson's Bratful, Heathwaite Fell and Muncaster). According to Quartermaine & Leech (forthcoming), of those which satisfy *some* of the long mound criteria set out by Masters (1984), only two were thought to display 'sufficient' of these (Samson's Bratful and Town Bank 654/SMR 30987). These did not include the long cairns at Muncaster or Heathwaite Fell. The remaining 11 examples, identified by Masters' (1984) 'less diagnostic' criteria (oval or pear shaped mounds less than 15 metres, and often less than 10 metres in length) remain questionable. These are clustered on Town Bank and Stockdale Moor, close to Samson's Bratful which is the least refutable example of a funerary long cairn in west Cumbria. Although those on Stockdale Moor are distributed amongst a number of bounded areas of cairnfield, six of the 'long cairns' identified at Town Bank cluster in the same area of cairnfield (figure 6.4). Their structure and prominence may suggest funerary use, and a number are situated close to cairn cemetery clusters. However the spatial associations exhibited between these monuments suggests that with the exception of Samson's Bratful, they are not 'classic' Neolithic long cairns.

The majority of those features identified as long cairns on Town Bank and Stockdale Moor are oval or conform to the characteristic pear shape evidenced by Samson's Bratful (figure 6.5) but are much smaller in size. Their clustering very close to Samson's Bratful suggests that their construction echoes that of this large prominent long cairn. If so, this may illustrate very localised funerary architectural traditions based on pre-existing forms.

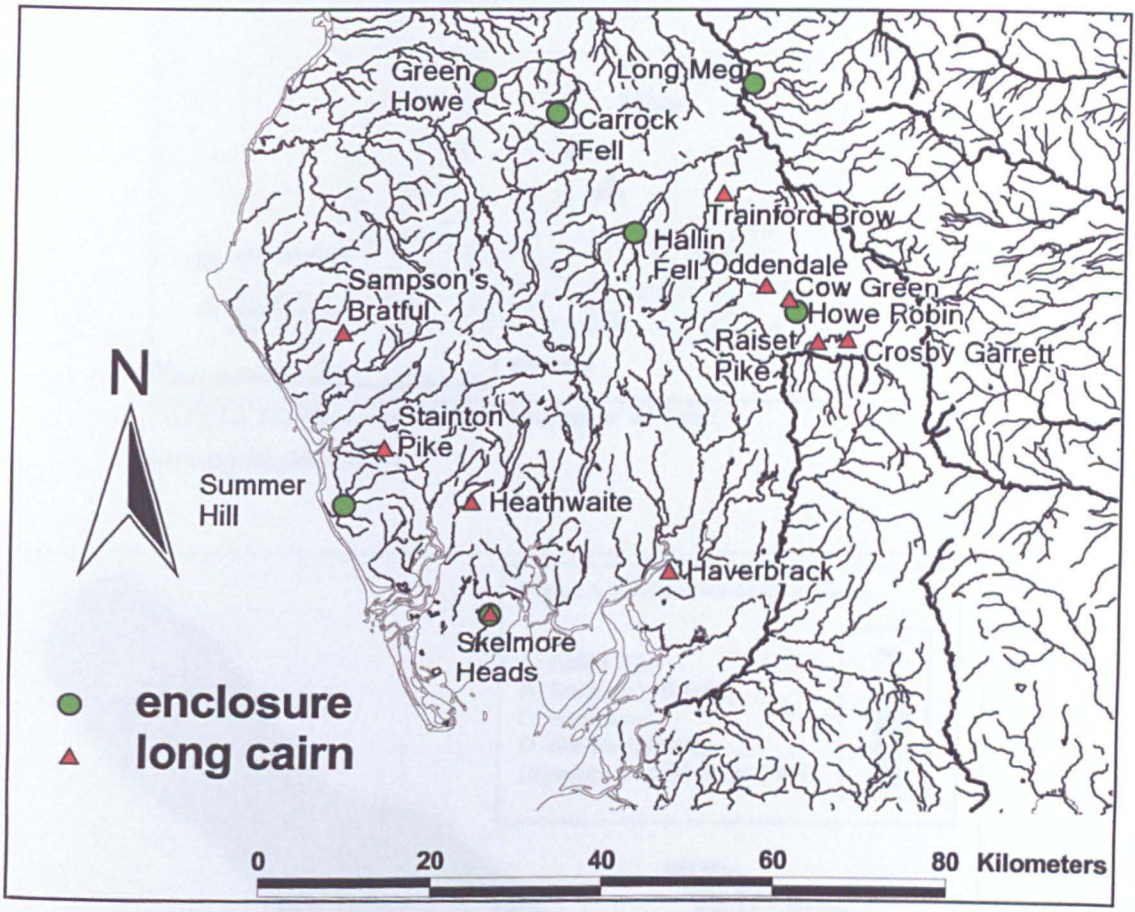


Figure 6.3. Distribution of 'likely' or 'probable' Early Neolithic long cairns and enclosures.

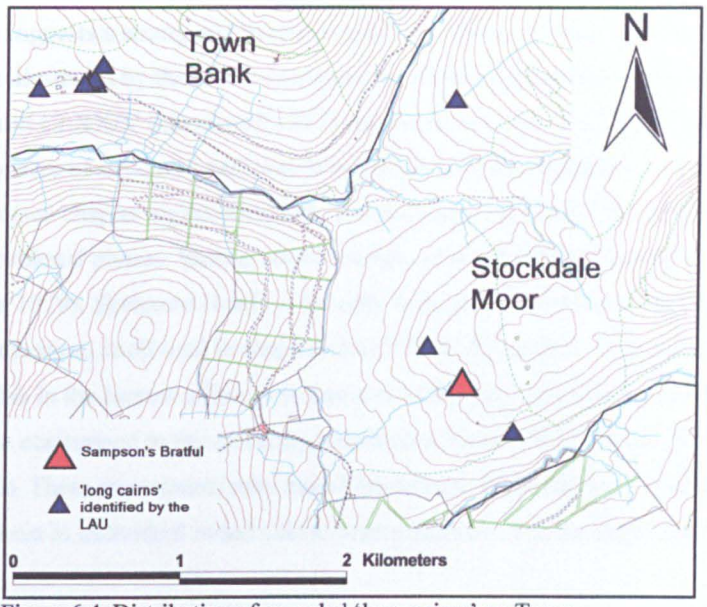
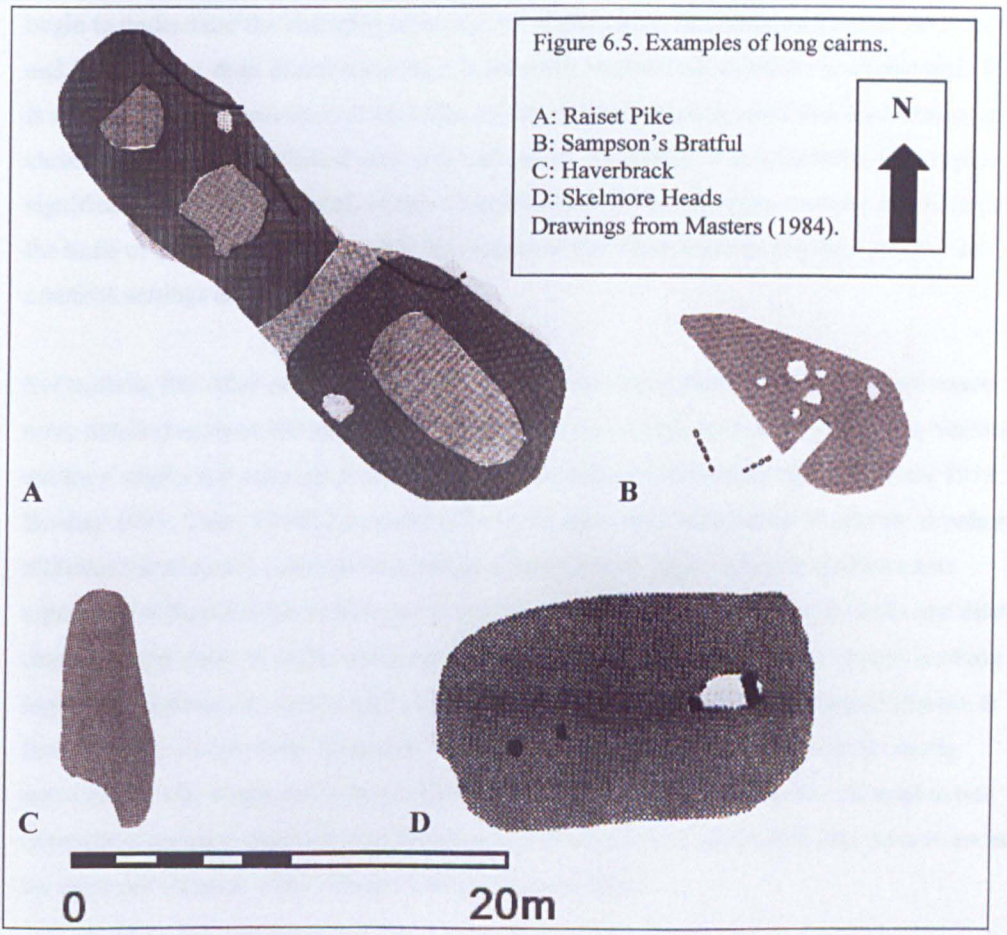


Figure 6.4. Distribution of recorded 'long cairns' on Town Bank and Stockdale Moor



At a broader level, as discussed in chapter four, the existence of oval or pear shaped funerary monuments suggests a strong architectural crossover between 'long' and 'round' cairns. This crossover is illustrated by those few examples which have seen excavation. Excavation of Crosby Garrett CLXXIV (Greenwell 1877) suggested the oval 'long cairn' resulted from a number of phases of structural addition culminating with the deposition of Later Neolithic inhumations (see chapter eight). Similarly, the long cairn at Raiset Pike (*ibid.*) resulted from several depositional phases, formed not of a single phase monument but by a pair of round cairns (Clare 1979). Skelmore Heads is the only long cairn in southern Cumbria to have seen recorded excavation, itself oval in shape (Powell 1972; figure 6.5). The existence of a large transverse slab in the barrow adjacent to one end of the previously destroyed burial deposit has been taken to correspond to the mortuary structure at Raiset Pike (Powell 1972; Masters 1984; Manby 1970). These monuments may have been similar to examples in Scotland where early burial structures in individual round cairns were conjoined to form single long cairns (Lynch 1997).

Distribution of enclosures and long cairns

Although the identification of long cairns and enclosures in Cumbria is problematic, in order to begin to understand the changing structure and organisation of communities over the Neolithic and Bronze Age, their distribution (as it is presently understood) needs to be considered. There is a clear need for excavation to take place at these monuments in order that their character and chronology can be established even at a basic level. At present, it is impossible to interpret the significance of individual sites, or their distribution over the county as a whole. However, on the basis of the evidence as it stands, it is apparent that these features exhibit a number of common settings and associations.

In Cumbria, like other areas, long cairns are relatively evenly distributed. In regions where more detailed analysis has taken place, these monuments have seen interpretation as 'territorial markers' and/or the communal burial places of individual communities (e.g. Renfrew 1973; Bradley 1993; Tilley 1994). Enclosures, however, have been understood to operate at rather different social scales, some at least acting as areas where dispersed communities came together at different times of the year. It has been argued that the interrupted banks and ditches characterising many Neolithic enclosures are the product of different social groups working together to maintain broader social ties in the creation of a communal monument (Startin & Bradley 1981; Evans 1988; Edmonds 1993, 1999). Such monuments also exhibit strong associations with death; not only are they often associated with long cairns, excavation has shown in some cases that both the ditches and internal areas of enclosures may have been used for exposure (Mercer 1980; Thorpe 1984; Edmonds 1993).

The relationship between isolated long cairns and those associated with enclosures in Cumbria is not clearcut (figure 6.3). It may be that the areas where enclosures were situated also formed the 'home range' of particular social groups, or that the long cairns close to enclosure sites operated at different social scales to more isolated examples. The former may be suggested by stable isotope evidence from Hambledon Hill which illustrated individuals in the internal long barrow had similar diets, whereas burials from the ditches represented a variety of dietary habits (Richards 2000). Although this could relate to 'elite' members of society with exclusive access to certain foodstuffs, this disparity is likely to suggest that whilst dispersed communities came together at such sites, many also operated at more localised scales.

In Cumbria, the likelihood or identification of such uses cannot be determined by extrapolation to sites elsewhere. With the exception of associations between enclosures and long cairns, we understand little of the activities which took place. Recent syntheses and discussions (e.g. Bradley 1988; Thomas 1999, Edmonds 1993, 1999; Oswald *et al.* 2000) demonstrate variability within and between regions in terms of how enclosures were used over time, and how these related to regional and localised patterns of occupation. This begs a number of questions: were enclosures in Cumbria the focus for persistent occupation, and if so, at what scale? Did they see more consistent use as places for gatherings and ceremonial activity, and did this vary according to the landscape setting of individual sites? What, if any, was their relation to the production and circulation of stone axes?

Excavation of enclosures in southern Britain has revealed strong associations with the working and deposition of lithic materials. In some cases, significant volumes of primary waste appears to reflect the working of stone which outcropped close to particular sites (Edmonds 1993, 1999). The working, polishing and deposition of axes, both of local and non local stone is also common. Cumbrian axes in particular have been singled out for discussion as they consistently appear in such contexts (Bradley & Edmonds 1993, Edmonds 1999). So if Langdale axes were treated in special ways in enclosures in southern England, what was their significance closer to source? Although the evidence is slim, there are consistent associations between stone axes and enclosures in Cumbria. As outlined above, the southern flank of Carrock Fell has been identified as the source for group XXXIV stone. Chance finds of axes and axe fragments have been located within the Howe Robin Enclosure (Cherry *et al.* 1985), as well as a cache of group VI roughouts at Skelmore Heads (Barnes 1963). Until further work is carried out however, their significance cannot be reliably established.

Given the problems inherent to the interpretation of long cairns and enclosures in Cumbria, all that can be derived from their distribution at present is that they appear to conform with broader national trends; operating a different social and geographical scales, these monuments

served different scales of community and many formed the focus for the construction of later monuments. For the purposes of this discussion, one of the most important points to be made here is that in other areas, such sites saw a change in focus in the Late Neolithic. Long cairns saw closure or 'final' phases of deposition associated with beaker material or single inhumations, and oval and round barrows within or close to enclosures appropriated and transformed their original significance (e.g. Bradley 1992a; Thomas 1999; Edmonds 1999). As discussed in chapter five, such transformations signal a change in the architecture and use of monuments at a national scale. In Cumbria, this is evidenced by the construction of stone circles, followed by a proliferation of smaller circular funerary monuments. This changing scale of monument construction is illustrated through comparison of the distribution of long cairns and enclosures to that of stone circles (figure 6.6).

The long cairns are evenly distributed, separated by major river valleys or on the eastern limestones, positioned where valley systems come together. That some stone circles were constructed close to long cairns suggests that their distribution conforms broadly to the major regions outlined in chapter five. However that markedly more stone circles and round funerary cairns were constructed into the Later Neolithic and Early Bronze Age suggests a significant change from earlier periods. This may relate to the dispersal or fragmentation of the communities which made up broader social groups. Whilst these groups continued to come together at major monument complexes, what is clear is that the proliferation of funerary monuments reflects an increased concern with marking attachments to place at closer social scales. Before these long term social processes can be discussed in detail, it is necessary to explore the character, settings and associations of round funerary cairns and ringcairns in the Cumbrian uplands.

Round funerary cairns: methodology and approach

Alongside cairnfields, round funerary cairns represent a significant proportion of the prehistoric sites identified across the Cumbrian uplands. Beyond factors of differential preservation, what is clear about their settings and locations is that they saw construction across all areas of the occupied landscape. As with enclosures and long cairns, with the exception of those formerly interpreted as stone circles, these features have seen little attention beyond their initial identification.

As of Spring 2002, over 200 features were recorded as round funerary cairns on the county SMR for the southern half of Cumbria. Of these, over 70 are not classed here as funerary cairns as their records lack coherent description or locational detail. While many may be funerary monuments, analysis of better recorded examples is more pertinent to the purposes of this study. The remaining 147 'round' cairns occur in a variety of contexts (appendix 3.3). This

total includes features situated within freestanding circles, a number formerly interpreted as small stone circles and those monuments on Town Bank and Stockdale Moor previously classed as long cairns.

Around half the round cairns recorded in the southern half of Cumbria occur within the LAU survey areas. This illustrates not only that they commonly occur in association with cairnfields, but also that where detailed survey has not taken place, many more likely remain unrecorded. Although there are few clear distinctions between cairns deemed 'funerary' or 'agricultural' it remains that the available survey evidence has been based on maintaining distinctions between their morphology and setting (see chapter four). Although this simplistic approach does not have the flexibility to take into account localised variation in monument architecture, for the purposes of this study, the LAU methodology is retained. Further analysis of the architectural traditions and likely chronology of particular round cairn 'types' will be further discussed in relation to burial and depositional traditions (chapter eight).

Summit cairns

A significant proportion of the round funerary cairns identified in the Cumbrian uplands are isolated from other monuments. Situated on ridges and summits these features are locally prominent and many hold wide vistas. The majority have not seen detailed description since they were initially mapped by the Ordnance Survey, and others may remain concealed beneath modern marker or walker's cairns (see figure 7.56). The locations of these features are specific to the topographic areas in which they are set and in some cases their recognition has been influenced by later landuse. In those areas where the landscape is low-lying, in particular on the southern and eastern limestone fells, only small numbers of funerary cairns have been identified, some through antiquarian excavation or description. Most are relatively isolated, and are distributed along prominent ridges and scarp edges overlooking the valleys that dissect the fells. These are likely to be localised variants of the summit cairns occupying the higher fells of the western and central Lakes. Neither of these landscape 'types' are suited to large scale agricultural exploitation and both have traditionally been used for summer grazing.

Funerary cairns in cairnfield contexts

The opening section of this chapter was concerned with analysis of the cairnfield record and discussion of the relationship between upland clearance, ringcairns and funerary cairns. By analogy with evidence from the Peak District it was suggested that where these monuments are associated with areas of cairnfield, they may relate to Early Bronze Age occupation, ostensibly of individual 'family' groups (Barnatt 1999, 2000). Such associations illustrate the proliferation of funerary monuments, with particular social groups increasingly concerned with marking their attachment to localised areas.

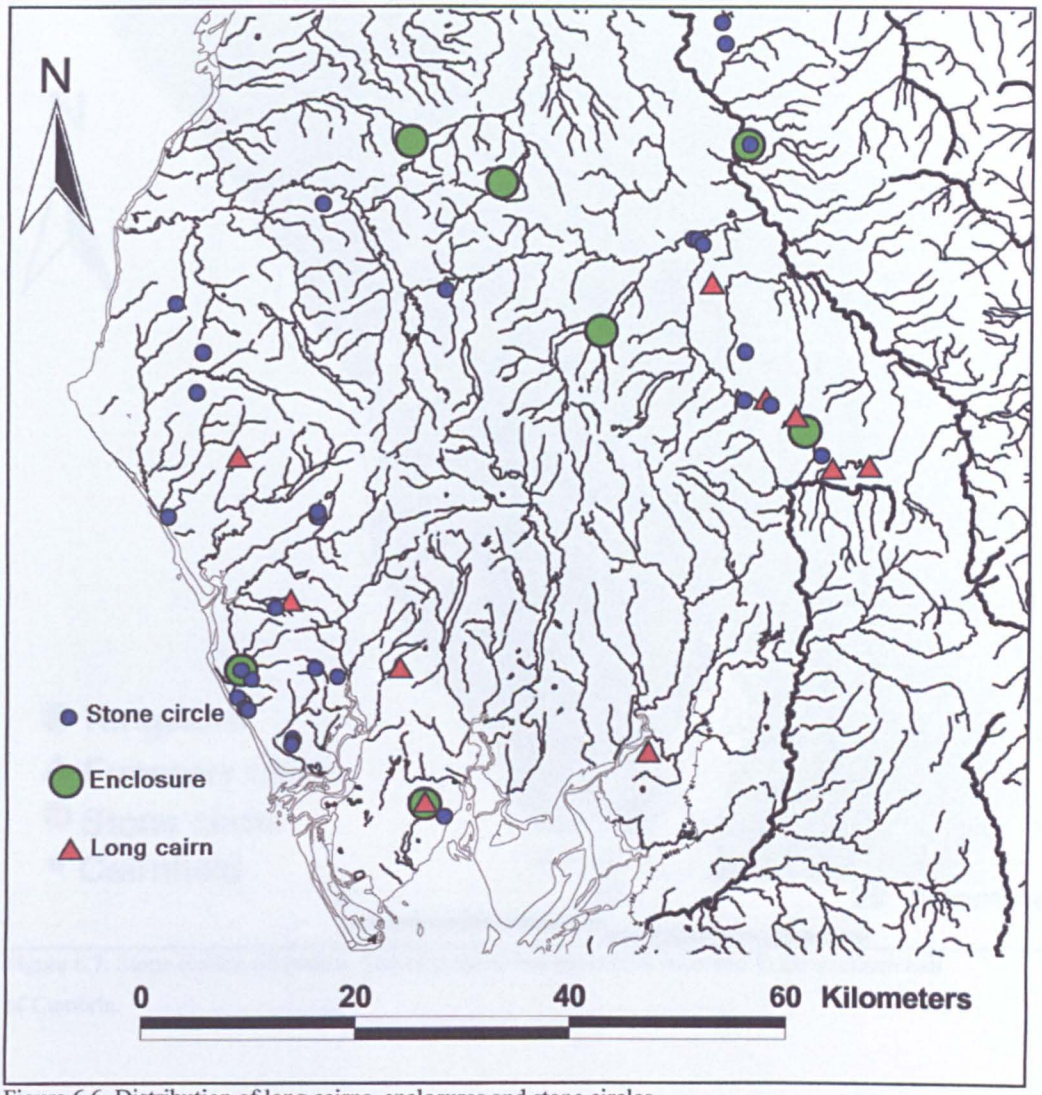


Figure 6.6. Distribution of long cairns, enclosures and stone circles.

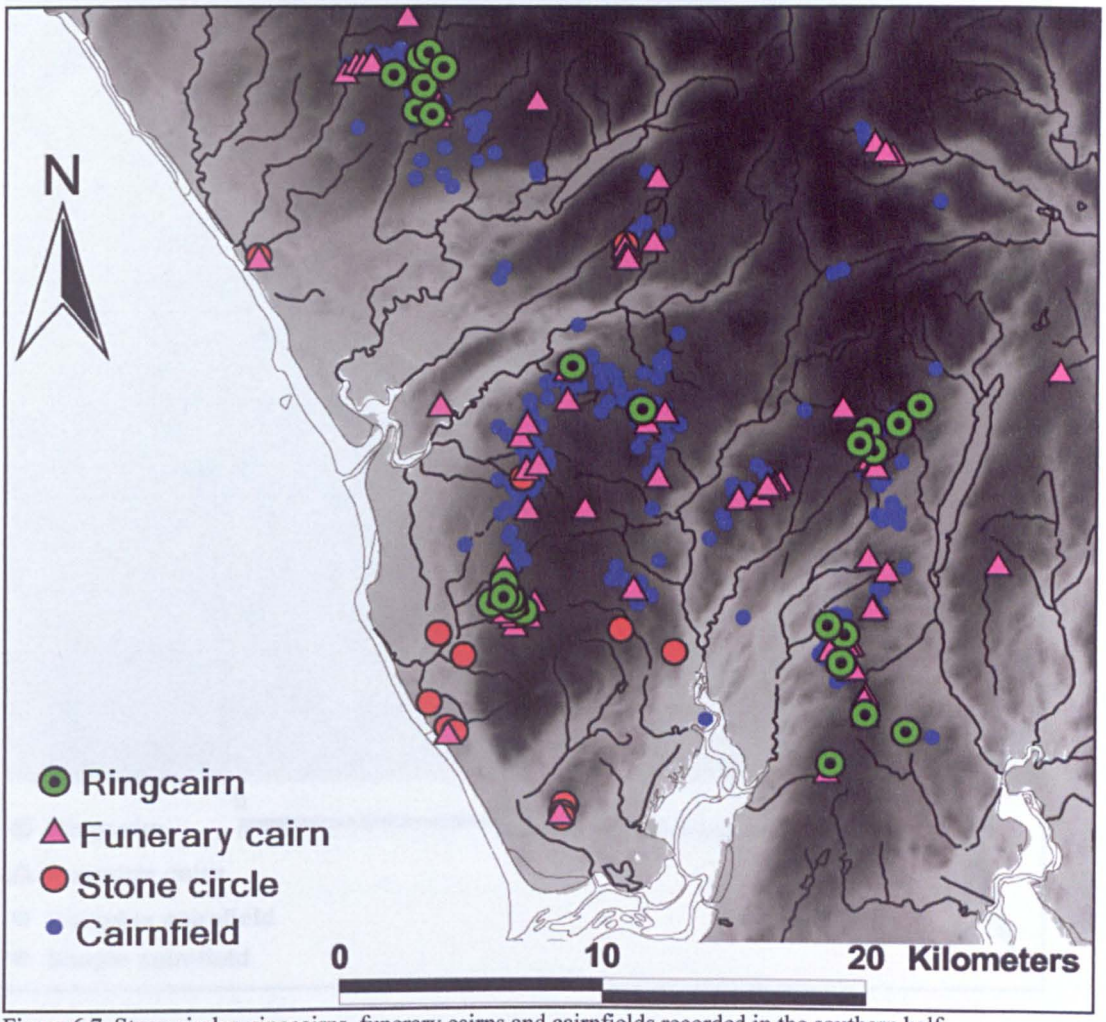


Figure 6.7. Stone circles, ringcairns, funerary cairns and cairnfields recorded in the southern half of Cumbria.

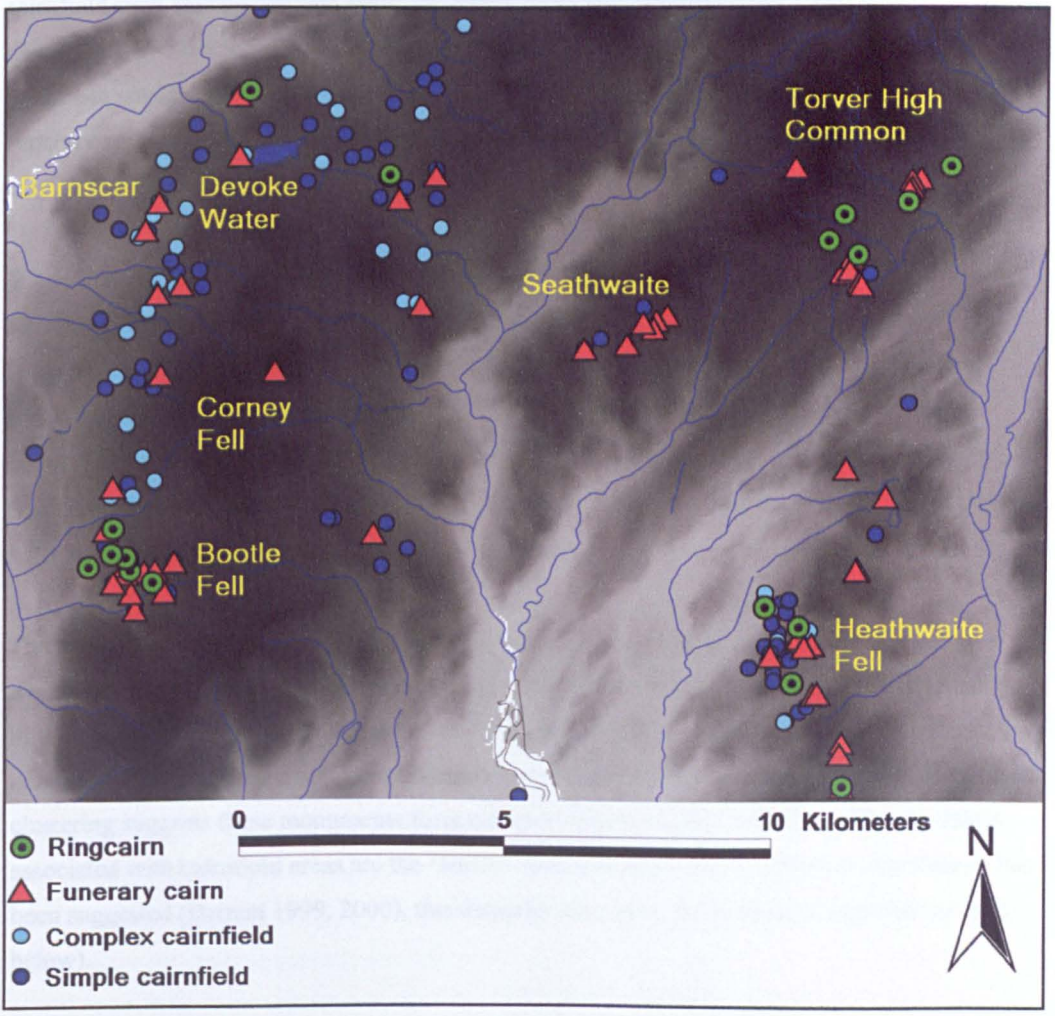


Figure 6.8. Relationship between simple and complex cairnfields to ringcairns and funerary cairns on the south-western fells.

So how does the distribution of funerary cairns in cairnfield contexts relate to the identification of such areas? Across the southern and western fells, the tightest clusters of funerary cairns are associated with major groups of simple cairnfield (figures 6.7, 6.8). In dispersed areas of cairnfield such clusters are less apparent, with funerary cairns more evenly and widely distributed. In other words, major cairnfield groups contain significant numbers of funerary cairns but small areas of cairnfield are more often than not associated with only one or two funerary cairns. Their distribution at this scale therefore suggests that individual cairnfields may be associated with their own funerary cairns.

While this correlation is clear where individual areas of cairnfield can be identified, the situation is more complex in major cairnfield clusters. By approaching these at a closer scale, it is possible to identify distinctions between the settings and associations of funerary cairns, which are located in two main settings. The first, more common location is that they are situated on localised points of high ground within or slightly peripheral to areas of cairnfield. Such monuments are relatively low lying and likely to equate to the funerary cairns associated with individual field areas.

The second locational theme illustrated by funerary cairns exhibits a disparity with those clearly associated with individual areas of cairnfield. These are located along contours upslope of the main concentrations of cairnfield. Unlike the isolated and low lying examples, these commonly occur in clusters and are situated on natural routeways overlooking wide areas. Such clustering suggests these monuments form cemetery groups. If the individual funerary cairns associated with cairnfield areas are the 'family' monuments of an Early Bronze Age date as has been suggested (Barnatt 1999, 2000), this disparity may have chronological implications (see below).

Cairn cemeteries and ceremonial complexes

Few funerary cairn cemeteries have been recognised in Cumbria and distinctions between funerary cairns in cairnfield contexts can only be drawn through close analysis of their settings and associations. Across upland Britain cemeteries are less common than, for example, on the Yorkshire or Wessex chalklands. Where these do exist they are usually small, comprised of less than 10 monuments compared with the 20 or 30 that are commonplace in other areas (Lynch 1993). Across Britain, cemetery clusters are known in different concentrations, some tightly grouped with others more dispersed (Fleming 1971; Woodward 2000). Both exist in Cumbria, and although there are no clear distinctions, localised groups of funerary cairns occur largely in upland and cairnfield contexts with more dispersed examples situated in the environs of ceremonial complexes. In both cases these monuments occupy ridgetops and scarps overlooking valleys. The upland cemeteries are consistently associated with ringcairns.

Ringcairns: methodology and approach

Like funerary cairns, the interpretation of ringcairns in Cumbria is thwarted by difficulties (see chapter four). As of spring 2002, 67 possible/probable ringcairns were recorded on the SMR in the southern half of Cumbria and/or were known from published sources (appendix 3.4). The identification of at least 23 is questionable in that they may better be interpreted as hut structures or disturbed funerary cairns. Although some of these features may be, or may have been ringcairns these will not see detailed discussion. As with funerary cairns, analysis of better recorded examples may bring out themes equally pertinent to those that have not been securely characterised.

There are a number of reasons suggesting that the presently understood distribution of ringcairns is skewed. Although the LAU surveys have significantly increased the numbers identified in cairnfield contexts, it is likely more remain to be identified outside the upland survey areas. This is illustrated clearly by walkover survey in the central fells which has resulted in the identification of around 20 ringcairns of different forms (Rogers 2000). Situated in analogous settings to the summit cairns, these monuments may also be related to seasonal occupation of the high uplands (see below).

Although ringcairns have been subject to sub-classifications in the past, largely defined by Lynch's 'variant circles' (1972, 1979), recent analyses have led to the recognition that these may have been overstated (Lynch 1993). Given the nature of the data concerning ringcairns in Cumbria, the most useful approach to their interpretation is one of simplicity. Like the stone circles, the main problem with the characterisation of these monuments is that there are a number of qualitative (if not clearly quantitative) physical distinctions between features classified under the broad heading of 'ringcairn'. In Cumbria, although ringcairns share many architectural traits, they can be split into three broad 'types' on the basis of their sizes, their settings and their associations with other monuments.

Large ringcairns/embanked circles

A number of large and overtly monumental ringcairns in Cumbria are morphologically similar both to freestanding circles and 'classic' ringcairns but have commonly been grouped together with stone circles (Burl 1976; Waterhouse 1985). As discussed in chapter five, these are The Kirk, Lowick Beacon, Banniside, The Cockpit, Casterton, Kopstone and Swarth Fell (figure 6.9). Sharing a broad diameter range with the smaller freestanding circles and the larger of the 'classic' ringcairns these features are between 20 and 30 metres in diameter and are characterised by substantial ringbanks with or without surviving kerbing. Problems with their classification are illustrated by interpretations of the Cockpit. This large ringcairn has been interpreted as a 'concentric' stone circle (Quartermaine & Leech forthcoming), an 'embanked

circle' (Waterhouse 1985), an 'embanked stone circle' (Burl 1976) and a 'wall circle' (Clare 1973).

The large embanked monuments and their likely chronological relationship with freestanding circles was discussed in chapter five. Excavations at Oddendale and Hardendale Nab (Turnbull & Walsh 1997; Howard Williams & Davies forthcoming) illustrated complex structures which saw different constructional and depositional episodes over the Later Neolithic and Early Bronze Age. These date ranges, and those from other areas (see Lynch 1993) suggest large ringcairns are later in date than freestanding circles. What is common to the majority is they occur both in ceremonial complexes and in cairn cemeteries isolated from cairnfield occupation areas. The Cockpit and Kopstone are situated within a cluster of monuments on a routeway followed by the High Street Roman road. Neither have seen recorded excavation but are associated with a number of funerary cairns on Moor Divock (previously identified as stone circles) some of which contained Early Bronze Age cremations (Greenwell 1874; Taylor 1886). These monuments may be similar to those at the cemetery excavated at Brenig (Lynch 1993) which contained a variety of complex burial and ringcairn structures in use from the Later Neolithic into the Bronze Age.

'Classic' ringcairns

Classic ringcairns, characteristically between 10 and 20 metres in diameter, illustrate architectural crossovers with the larger ringcairns but are in general smaller and less overtly 'monumental'. These features occur in a variety of forms with and without visible entrances or prominent kerbing (figure 6.9).

The thirty eight ringcairns identified in the southern half of Cumbria fall into four main geographical clusters, corresponding to the densest areas of cairnfield. As with the funerary cairn clusters with which these are commonly associated, the majority are either relatively densely but evenly distributed within wide expanses of cairnfield, or occur as more isolated examples associated with less densely clustered cairnfield areas (figures 6.7, 6.8).

Within cairnfield contexts, ringcairns, like funerary cairns, occur in two main settings. They are commonly situated on localised hillocks or high points slightly isolated from the areas of cairnfield with which they are associated. In general they occur singly although there are a limited number of paired ringcairns and double features incorporating funerary cairns. However, these features also occur in association with funerary cairn cemeteries, located upslope and isolated from cairnfield areas and situated along valleyside routeways.

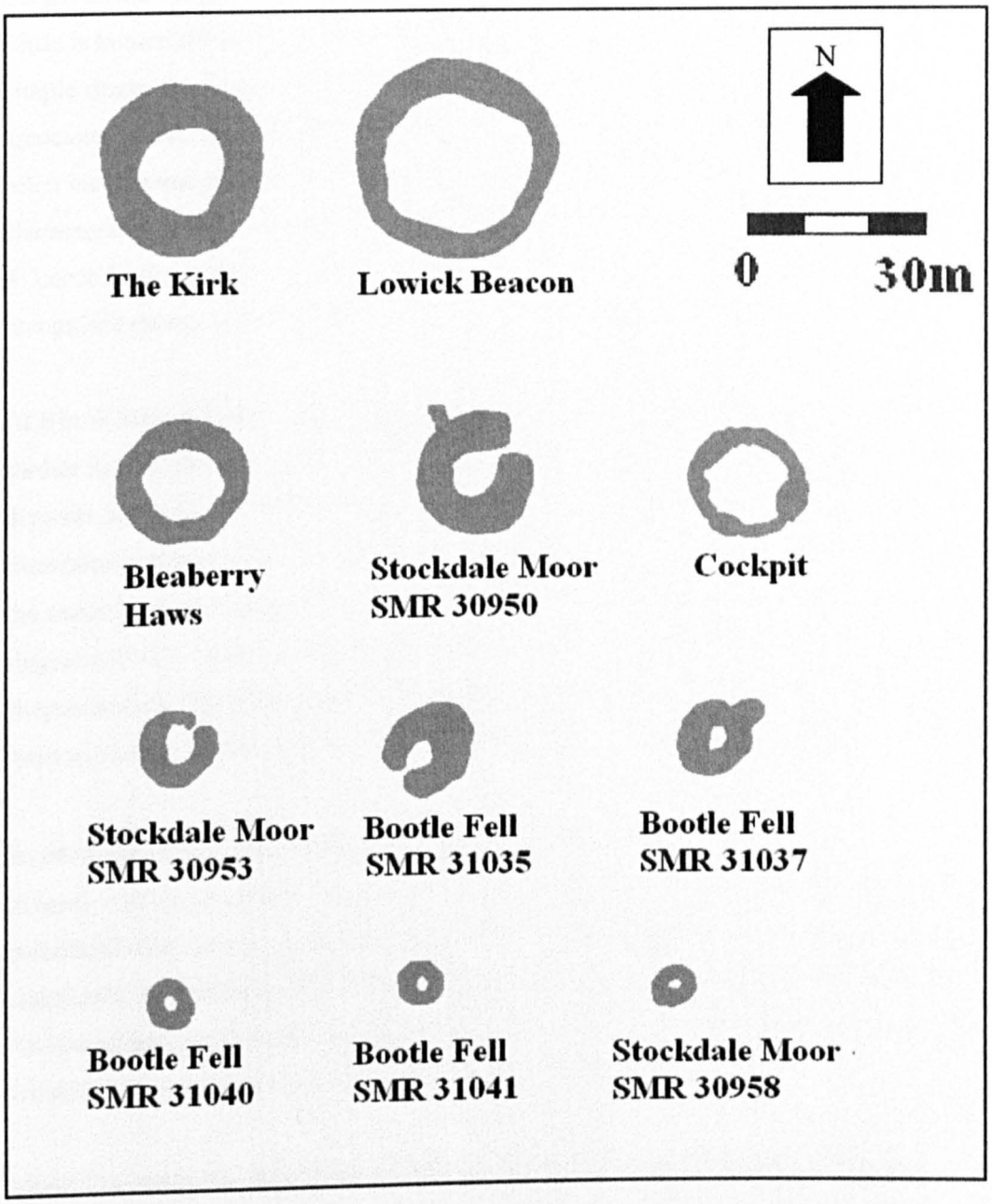


Figure 6.9. Plans of ringcairns. Top row: Large embanked ringcairns. Second and third row: 'classic' ringcairns, bottom row: small stone rings. The lack of a clear diameter differentiation between the forms illustrated demonstrates the 'sliding scale' of ringcairn size. The settings and associations of these monuments are further discussed in chapter seven.

Small stone rings

Little is known about the character and distribution of small stone rings (figure 6.9). These simple ringbanks, in general between 5 and 10 metres in diameter, occur in localised clusters associated within or upslope from cairnfield areas. As with 'classic' ringcairns, these features often incorporate prominent earthfast stones on their perimeters and whilst they are usually characterised by the presence of an open central area this is sometimes infilled (Quartermaine & Leech forthcoming). It is likely that small stone rings are more common than has been recognised owing to their morphological similarity to other small circular forms.

At Birrell Sike, a feature initially characterised as a 'hut circle' saw excavation alongside a further four 'clearance' cairns. The internal area of the feature revealed structured charcoal deposits dating to the Early Bronze Age (Richardson 1982; see chapter eight). The excavation illustrated the feature was neither a 'conventional' robbed clearance cairn and on the basis of the existence of a cluster of these features within the cairnfield it is unlikely it was a 'classic' ringcairn (*ibid.*). There are other clusters of such features in the central fells (Rogers 2000; see chapter seven). These are largely isolated from cairnfields and like classic ringcairns and funerary cairns in such contexts, may represent the use of the high uplands for summer grazing.

Architecture and chronology: circles at variance?

In some regions of western Britain, ringcairns occur exclusively in monument complexes, often associated with barrow cemeteries (Lynch 1993). In Cumbria however, ringcairns occur in complexes, in cairnfields and in relative isolation from other monuments. The question is, what can the settings, associations and diameters of the three 'types' of ringcairn identified tell us about the character and chronology of upland occupation?

Morphologically, the large ringcairns share a diameter range and other architectural characteristics with both freestanding stone circles and classic ringcairns. The bottom end of the diameter range of classic ringcairns also illustrates a crossover with the small stone rings. Although drawing clearcut distinctions is problematic, the three broad ringcairn types illustrate a 'sliding scale' of size. This mirrors the increasingly localised associations illustrated between ringcairns and other monuments. To recap; both large and classic ringcairns are commonly associated with ceremonial complexes and cairn cemeteries. Large ringcairns in general appear associated with dispersed cemeteries such as that at Moor Divock, and classic ringcairns in more localised clusters situated above cairnfield areas. Classic ringcairns and small stone rings occur in contexts more closely associated with individual cairnfield areas, and apparently isolated in areas of the high uplands. Although the possibility that there are chronological implications here is difficult to establish, at a broader scale it is possible to identify some points in the processes which led to these changing associations.

In chapter five it was argued that large stone circles with internal stone settings illustrated the remodelling of earlier open monuments. This change in focus towards overtly funerary ritual is echoed by the construction of ringcairns over earlier monuments (such as those at Oddendale and Hardendale Nab) and by the proliferation of funerary monuments across all areas of the occupied landscape. So, while new monuments were built in many areas, features which had seen earlier use often saw remodelling and deposition under different contexts and conditions.

Few large stone circles in Cumbria are associated with cairnfield. Those that are (Brat's Hill and Whitrow Beck) are situated in 'gaps' between clusters of classic ringcairns (figure 6.7). This may be a product of different landscape histories. For example, although Burnmoor is covered with extant cairnfield, no ringcairns and only a limited number of funerary cairns have been recorded. However Brat's Hill, a large circle of likely Neolithic date, saw five funerary cairns constructed in its central area and internal cairns also occupy each of the four smaller circles at Low Longrigg and White Moss (figures 5.4, 7.12). Where concentrations of small upland circles exist in the south western Cumbrian uplands it is possible these represent Later Neolithic and Earlier Bronze Age occupation. These monuments may predate cairnfield occupation and may have performed similar functions to the 'classic' ringcairns and funerary cairns which saw construction in other contexts.

Ringcairns have traditionally been understood as Middle Bronze Age 'cremation cemeteries', largely on the basis of antiquarian excavations. Although few modern excavations have taken place, changes in archaeological method and funding have begun to reveal long and complex histories for these monuments. Although close dating is problematic, many appear to have seen construction at or around the Neolithic-Bronze Age transition. Excavations in Cumbria and other areas have revealed earlier structures such as Neolithic timber circles, beaker burials and domestic beaker associations (e.g. Lynch 1993; Turnbull & Walsh 1997; Owoc 2001). Such monuments were then used for burial and deposition into the Bronze Age. This illustrates a number of important points, the first of which being that these features are often much earlier in date than has commonly been supposed. This has important ramifications for understanding the chronology of cairnfield occupation.

Ringcairns where detailed excavation has revealed 'early' dates have almost exclusively been associated with ceremonial complexes. However like funerary cairns, these features also occur within dispersed cemetery clusters, closely associated with cairnfields and in the high uplands. This may be chronologically significant. Put simply, ringcairns in individual cairnfield areas may represent similar 'kinds' of features to those in monumental complexes, but situated according to slightly different, and more localised principles.

The changing distributions and settings of monuments of similar morphological 'type' has implications for understanding the crossover between stone circles, kerbed funerary monuments and ringcairns, a problem illustrated by the definition of many such forms as 'variant circles' (Lynch 1972, 1979, 1993; Bradley 1998). The construction and use of architectural 'variants' drew on the significance of earlier stone circles and funerary monuments and it appears that particular monumental forms remained in use over long periods. Over these periods these were constructed in a variety of different contexts and settings and in a number of different size ranges. Nowhere is this clearer than when looking at different monumental 'types' sharing similar architectural traits. Both stone circles and ringcairns surround open circular areas, and many examples of both 'types' incorporate prominent or distinctive stones on their southern perimeters. As discussed above, morphological similarities between long and round cairns illustrate similar architectural crossovers. This can be illustrated at a localised scale on Town Bank and Stockdale Moor where a number of pear shaped funerary monuments were constructed with conspicuous reference to the nearby long cairn of Samson's Bratful.

Whilst in some cases monuments were constructed with reference to earlier features in their immediate environs, broader similarities between monument forms are likely to result from constructing and using these features with reference to the past. At both a theoretical and landscape level, this is not a new idea, having been discussed in relation to the life histories of individual monuments, the growth of cemeteries and ceremonial complexes and at more interpretative scale, the changing structure of community across the Neolithic and Bronze Age (e.g. Barrett 1994; Bradley 1998).

The distribution of ringcairns, funerary cairns and cairnfields across the Cumbrian uplands clearly illustrates a major change in occupation practice and monumental use around the beginning of the Early Bronze Age. Across Britain, this change has seen interpretation as the point of departure from which importance of 'ritual' landscapes of stone circles and ceremonial complexes declined, and was overtaken in significance by the concerns of localised communities with 'agricultural' landscapes (e.g. Barrett & Bradley 1980; Barrett *et al.* 1991, Barrett 1994; Bradley 1998). Although this has been assumed to mark a clearcut change into the Middle Bronze Age, it is apparent this is a culmination of processes emerging in the final stages of the Neolithic.

Architectural similarities between stone circles, ringcairns, funerary cairns and roundhouses have been taken to suggest an overarching prehistoric cosmology crossing what are often considered to be relatively clearcut distinctions between the Neolithic and the Bronze Age (Barrett 1988b, 1994; Bradley 1998). However what such broad scale analyses fail to recognise

is that these monuments operated at a variety of different social scales, as did the communities that built and used them. These similarities in architectural form may also be seen, more simply, as reflecting the legitimation of social change across these periods, through the retention, in different social and geographical contexts, of 'traditional' architectural forms and the practices with which they were associated.

Discussion: distribution of Neolithic and Bronze Age monuments

If the last three chapters have illustrated anything at all, it is that the classification of monuments has frustrated fruitful interpretation of the changing character of prehistoric occupation. Not only did the same 'sorts' of monument operate at different social and geographical scales, morphological classification has meant analyses of such features have commonly divorced them from their settings and the other monuments with which many were associated.

Over the course of this chapter it has been suggested that reference to the architecture and use of earlier monuments was one of the media through which social change occurred. Whilst there appear to be 'dynamics' illustrating the changing construction and use of particular monuments over time, drawing clearcut distinctions between these forms has overlooked the 'statics' which held such processes together. In other words, whilst the forms of monuments do illustrate change over time, similarities between them demonstrate clear references to the past.

So how are these elements of continuity and change reflected by monuments in Cumbria? The constituents of the upland record clearly suggest that cairnfield occupation was the culmination of wide scale social processes begun with the construction of the first large scale monuments during the Early Neolithic. But how do we go about understanding what appear to be significant social transformations over the course of these periods? Although the character and survival of aspects of the monument record means the picture is not clearcut, there are a number of common themes illustrated by the scale and distribution of monuments across the Neolithic and Bronze Age.

Early Neolithic long cairns and enclosures in Cumbria are in general widely and evenly distributed (figure 6.6). Long cairns separated by major valleys are likely to be indicative of the 'home ranges' of individual communities, with the distribution of enclosures at the heads of valley systems acting as places where widespread and dispersed communities may have come together at particular times of the year. The distribution of stone circles could be said to echo similar concerns. As discussed in chapter five, it seems likely that the overtly large monuments within the regional groups identified, for example Long Meg and Summer Hill, may have operated at similar scales to the earlier enclosures. This is further suggested in that both circles

were situated adjacent to such features. These reflect a continuing concern with communities coming together at the meetings of valley systems, often in places which already had significant histories. The smaller and more widely dispersed circles may have played similar roles to the earlier long cairns, being the monuments of particular social groups (figure 6.6). However at a basic level, that stone circles are significantly more numerous than long cairns may suggest that individual communities were marking out connections to more closely defined areas of the landscape.

During the Later Neolithic and into the Early Bronze Age, there is a clear shift towards the construction and use of round funerary monuments. The changing significance of large stone circles is illustrated by the addition of central elements to previously open monuments, together with the construction of funerary monuments in their environs. The size of round funerary monuments and their common association with individual inhumations has been linked to the fragmentation of large scale communities (Thomas 1991, 1998; Bradley 1984; 1998; Barrett 1994; Edmonds 1995). Rather than the 'communality' stressed by burial in Neolithic cairns, such monuments have been interpreted as the expressions of overt concerns with lineage and genealogy. Although this opposition has been significantly overstated (see chapter eight), these monuments do suggest an overt change in the structure of community. From a quantitative perspective, this is demonstrated not only their relatively small size, but also by their sheer numbers and the diversity of contexts in which they were constructed.

The proliferation of funerary monuments and the growth of upland cairn cemeteries into the Bronze Ages suggests concerns with marking increasingly localised patterns of occupation. Individual funerary cairns and ringcairns were constructed on high summits and along ridgeways, and cemeteries grew up on natural routeways between areas of low and high ground. In some cases in places already occupied by earlier monuments, these may relate to patterns of movement and transitory occupation set in motion during earlier periods. If so, cairn cemeteries including both ringcairns and funerary cairns cannot necessarily be assumed to be contemporary to the cairnfields that they commonly overlook. It is possible that elements of such cemeteries may have been constructed before the onset of the large scale upland clearance, established under conditions not hinged on persistent upland occupation.

Although this may have been the culmination of gradual and long term processes, large scale clearance of the Cumbrian uplands becomes archaeologically detectable during the Early Bronze Age. Accompanied by the construction of ringcairns and funerary cairns closely associated with individual cairnfields, this clearly illustrates that particular areas, likely associated with 'families' within wider social groups, became foci for the expression of localised tenurial concerns. On this basis it has commonly been supposed that such

communities became increasingly isolated. However, as will be discussed in relation to the burial and depositional traditions associated with upland monuments and those in ceremonial complexes (chapter eight), that both saw use during the Early Bronze Age is testament to the continuing importance of wider networks of contact. Whilst the continued use of ceremonial complexes may have been an expression of affiliations between different social groups, in contexts closely associated with upland occupation the use of funerary cairns and ringcairns drew on more localised concerns.

Conclusion

Through consideration of the upland record at different geographical scales it has been possible to identify common themes pertaining to the setting, distribution and associations between particular monument forms. This has allowed a broad sequence of monument use to be established, which, for the purposes of this study, culminates with the onset of large scale upland cairnfield agriculture. Through deconstructing the typologies imposed on these areas in the past it has been argued that 'simple' areas of cairnfield associated with funerary cairns and ringcairns reflect upland occupation likely to correspond to the Early Bronze Age 'family farms' identified by Barnatt (1999, 2000) in the Peak District. Working back from these configurations it has been possible to identify the sorts of processes that led to the formation of the upland record as it exists in the present, and to address a number of questions regarding the changing scale of occupation across the Neolithic and Early Bronze Age. It has been established that monuments not only operated at different social and geographical scales, but also that they illustrate strong and long term connections between communities and the physical worlds in which their lives were played out. However, it remains that we still understand little of the character of routine occupation that these monuments represent. In order to demonstrate the nature and temporalities of occupation, and the ways communities drew on and organised themselves in relation to aspects of the natural world, it is necessary to confront the monument record from a more localised perspective. The following chapter is designed to address these issues, through analysis and interpretation of the topographic setting, architecture and distribution of monuments discussed over the last two chapters.

Chapter 7: Landscape setting of monuments

Introduction

Chapter six was concerned with illustrating how different scales of community are evidenced by different 'types' of monuments and the ways this changed over time. This chapter explores how these long term processes played out across local and regional landscapes. Analysis of the settings of monuments ties into understandings of the character and temporality of occupation. Not only are many situated in or between landscape zones traditionally exploited on a seasonal basis, they also illustrate the relationships between different scales of community and specific types of landscape feature. The first section of this chapter outlines the settings of long cairns, enclosures, stone circles and henges, their relationships with the natural world and what their locations suggest about the nature and scale of occupation. The architecture, settings and embellishment of stone circles illustrate the formalisation of processes begun in the Early Neolithic, which in turn carry through into later monuments. The second section confronts the landscape setting of ringcairns, round funerary cairns and their associations with cairnfield areas. Through a number of case studies it is possible to look at how the organisation of upland occupation changed over time and the ways this related to the long term processes evidenced at ceremonial complexes. The discussion culminates with exploration of how monuments in different settings suggest the ways different scales of community articulated over the Neolithic and Early Bronze Age, both across the physical landscape and within wider social worlds.

Long cairns and enclosures

Recent interpretations of Early Neolithic occupation practice have suggested that earlier patterns of movement became increasingly formalised, linked to changing attitudes to the land that came with the herding of domesticates (Bradley 1993, 1998; Thomas 1988; 1991; Pluciennik 1996; Edmonds 1999). Such arguments often draw on the common location of long cairns on pathways between landscape zones, areas also often associated with Later Mesolithic activity (e.g. Tilley 1994). Although little is known about long cairns in Cumbria, they share common locational themes and their settings illustrate what in other areas has been interpreted as reference to the natural 'monuments' of the Mesolithic (Bradley 1991a, 2000a; Tilley 1994, 1996).

Long cairns in Cumbria are located on natural routeways between upland and lowland areas. Samson's Bratful is situated in a classic position on a shoulder of Stockdale Moor between the

Bleng valley and the steep incline towards the central fells. Situated above the spring of a tributary beck, and overlooking the Bleng and the Irish Sea beyond, the cairn lies beneath a locally dominant ridge, almost hidden between outcrops (figure 7.1). Other long cairns illustrate similar settings. That at Heathwaite is situated above a tributary of Kirkby Pool, which runs into the Duddon below. Lying hidden beneath a locally prominent outcrop, it is oriented downslope and along the natural routeway between the Duddon estuary and the Coniston uplands (figure 7.2). Skelmore Heads long cairn is situated in a shallow east-west orientated valley above which is the prominent scarp occupied by the Skelmore Heads enclosure. The long axis of the monument is oriented east-west, following the line of a routeway between the Furness Fells and the Leven estuary (figure 9.29). Raiset Pike is set between outcrops on a route between the Lune and Eden valleys to the Crosby fells. The long cairn at Haverbrack is situated adjacent to and below a limestone outcrop on a routeway between the Kent estuary and the south eastern fells. Unlike those monuments today situated on open moorland, Haverbrack lies in woodland and wide views from it are impeded. It is likely that the other long cairns were situated in similar contexts and visibility of areas they referenced would have been obscured. Knowledge of their location may have meant being able to physically 'see' these areas did not hold great importance. In wooded contexts, these monuments, situated on already well trodden routeways, could be 'found' through reference to the outcrops close to which they were located.

Similar locational themes have been identified elsewhere in western Britain (e.g. Tilley 1994, 1996; Tilley & Bennet 2001).). Discussing the settings of Neolithic burial chambers in south west Wales, Tilley (1994) suggested that the rock outcrops themselves were the dominant foci, and the monuments, often indistinct from the natural features that surround them, drew on the past significance of particular places. Alongside cursus monuments, the significance of long cairns has been seen to illustrate the embellishment of existing places on routes and pathways (Thomas 1991; Barrett 1994; Last 1999). In south west Wales, as in Cumbria, the viewsheds from, and linear orientations of these monuments focus on natural routeways. This suggests they were intended to be approached from particular directions and they were the focus for movement between landscape zones.

Whilst operating at a wider social scale, Neolithic enclosures incorporate similar concerns with the natural world. That the majority enclose prominent hilltop locations means they hold unrestricted views for many miles. Skelmore Heads overlooks much of the Furness Peninsula, and on a clear day, the central fells are clearly visible beyond the Furness Fells. Similarly, Green Howe is situated to overlook the Solway and the northern and western fells, and Howe Robin overlooks both the Lune and the Eden valleys.

Figure 7.1. Samson's Bratful, looking towards the coastal plain.

Figure 7.2. Heathwaite long cairn, looking towards the Duddon. Note the distinctive rocky outcrop to the right.

Figure 7.3. Limestone scarp forming the eastern extent of the Howe Robin enclosure.

Like long cairns, enclosures also drew on more localised aspects of topography. The construction of banks in some cases may have been the embellishment or 'monumentalisation' of areas already defined by the natural topography. At Skelmore Heads, Carrock Fell, Howe Robin and Hallin Fell, for example, the enclosure banks run along scarps joining areas of outcropping rock (figures 6.2, 7.3, 9.31).

Distinct from the hilltop enclosures are two relatively lowlying features now identifiable as soilmarks. The enclosure at Long Meg (figure 7.4), in contrast with the stone circle, is situated in a shallow valley where wide visibility of the surrounding area is impeded. The larger and more irregular of the two 'hengiform' enclosures at Summer Hill (figure 7.5) is situated in a similar setting downslope of the smaller monument, again on the edge of a shallow valley. At Long Meg, a possible cursus monument has been identified to the south west of the circle and enclosure (figure 5.10). In general these sorts of features are considered to be of Middle Neolithic date, chronologically juxtaposed between the better known sequences of 'Early' and 'Late' (Harding & Barclay 1999). Like Early Neolithic long cairns, these linear monuments fixed earlier patterns of progression through and between particular places (*ibid.*; Last 1999). Drawing on topographic contrasts to formalise the transitional aspects of movement between upland and lowland areas, it has been argued that cursus monuments represent the increasing formalisation of social territories after the Early Neolithic (Last 1999). At Long Meg, if the possible cursus and the enclosure predate the stone circle, it is possible they represent the processes leading up to the construction of major ceremonial monuments during the Later Neolithic. Both the Duggleby Howe and Maes Howe enclosures, which have been drawn on in the interpretation of that at Long Meg (Bradley & Edmonds 1993) have been described as 'formative' henges; monuments with more in common with enclosures than 'classic' henge forms (Harding 2003). Their location in shallow valleys would have restricted wide visibility of the world beyond. If the higher surroundings of these monuments were wooded, these may have performed similar functions to the banks which were to surround henges and large stone circles (see below).

Landscape setting of the Cumbrian circles

The settings of stone circles in Cumbria has been addressed at a number of different levels in the past. At a regional scale their distribution has been seen as significant as many are situated close to the natural routeways thought to be utilised for the transportation of stone axes from the central fells to the world beyond (Fell 1964; Manby 1965; Burl 1976; Bradley & Edmonds 1993; Harding 2003). Indeed, some authors have visualised a virtual ring of stone circles around the central Lakes defining the 'entrance' to its mountainous centre (e.g. Burl 1988).

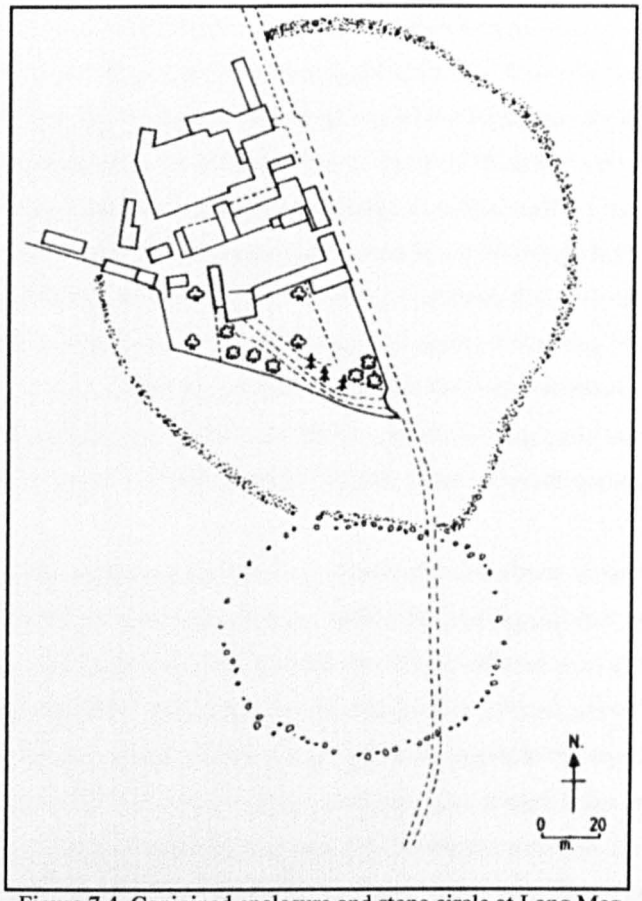


Figure 7.4. Conjoined enclosure and stone circle at Long Meg Source: Cumbria County SMR).

Figure 7.5. Conjoined enclosures at Summer Hill (Source: LDNPA).

Outside Cumbria, the distribution of stone axes has also been used to interpret the location of monuments on major through routes. The Thornborough henges, for example, are situated along the river Ure as it descends from Wensleydale into the Vale of Mowbray, interpreted as a route used for the passage of axes from Cumbria over the Pennines (Harding 2003). Other henge complexes in the area are situated close to the river Wharfe; "a possible routeway for Group VI axes known to have been moving in large quantities to the Lincolnshire Wolds and Trent Valley" (*ibid.*: 100). While there appears there is a relationship between the location of the stone circles and the distribution of axes, within Cumbria, discussions have consistently failed to consider the localised settings of these monuments. Focussing exclusively on the distribution of axes, the people that carried them have also been overlooked. At a fundamental level, axe distributions are the products of hand to hand exchange, and their 'movement' could only be achieved by people coming together at both local and wider geographical scales.

It is likely that major henge monuments and ceremonial complexes, situated close to major rivers and the natural routeways they follow, reflect the coming together of dispersed communities; indeed, the sites at Thornbrough have been referred to as a "centre for pilgrimage" (Harding 2003: 98) bringing in people (and axes) from across wide areas. These monuments may have operated at different geographical scales to the enclosures of the Early Neolithic. However, in terms of social if not physical scale, stone circles and henges were not dissimilar to the earlier enclosures and it seems likely that the activities carried out within them were similar. That stone axes have been found in association with both monument 'types' suggests that these included, but were not exclusively centred around the exchange of material culture. Compared to the settings of many enclosures overlooking localised valley systems, henge and stone circle complexes, often associated with major rivers, are suggestive of wider networks of contact, but with gatherings contained within smaller and increasingly formalised arenas.

In many ways, ideas generated by analyses of the circles at a county scale have illustrated broad themes concerning their settings in relation to the wider world. However, as discussed in chapter five, it has not been considered how stone circles were set in relation to the local topography or prominent local landscape features, how they were set in relation to earlier monuments, or how later monuments were set in relation to them. Consideration of such issues is fundamental to understanding both the character of occupation and the broader social processes and networks of contact these monuments represent.

Stone circles, routeways and landscape zones

Although the topographic settings of the Cumbrian circles appear varied, their locations incorporate common themes. These illustrate continuity with earlier monuments which is also reflected in that circles are locally distinctive, relating closely to both the characteristics of their immediate surroundings and the world beyond. Some stone circles in Cumbria are situated in the high uplands, and some on the lowland fringe. Others were constructed in lowlying locations close to the coast and/or major rivers. Although there are differences in scale, there are few obvious architectural distinctions between circles situated in different landscape zones.

Like long cairns, many stone circles are situated in areas where the high uplands meet the lowland fringe, for example on low hills between areas of higher land, or on plateaus between upland shoulders and lower lying areas. This may be illustrated in that circles are often at or close to the junction between later unenclosed and enclosed land. The propensity for modern farms to be situated close to stone circles (e.g. Swinside, Long Meg, Birkrigg, Whitrow Beck, Lacra, Gunnerkeld, Oddendale) also illustrate they are set between landscape zones. Upland farms are often situated in sheltered locations between upland and lowland areas to suit the needs of seasonal grazing regimes.

Big Hills

Circles were also set in relation to local landmarks. This works at two scales, the first of which is localised in that like long cairns, they are often situated in relation to locally distinctive knotts or outcrops. The second is that they are often situated below more prominent landmarks. To the west of the central fells, Whitrow Beck stone circle is situated at the foot of Stainton Pike (figure 7.6), Hall Foss at the foot of Black Coombe, Lacra below Great Knott, and Swinside at the foot of Raven Crag (figure 7.7). In the east and north, Gamelands is situated at the foot of Great Asby Scar (figure 7.8), Castlerigg below Londscale Fell and Skiddaw (figure 7.9) and Grey Yauds under Lawson Hill.

The location of these monuments suggests strong connections between prehistoric communities and visible landmarks. Alongside clear similarities to the location of long cairns beneath locally distinctive outcrops, this aspect of setting was maintained at later monuments. Banniside ringcairn for example, is situated at the foot of Coniston Old Man, The Beacon below Lowick Beacon, Bleaberry Haws beneath High Pike Haw and Heathwaite Giant's Grave at the base of Blawith Knott. It may be that across the Neolithic and Bronze Age, these distinctive peaks assumed totemic significance. Such associations have been noted in relation to Neolithic (if not Early Bronze Age) monuments in other areas (Cummings & Whittle 2004; Cummings 2004; Whittle 2004).

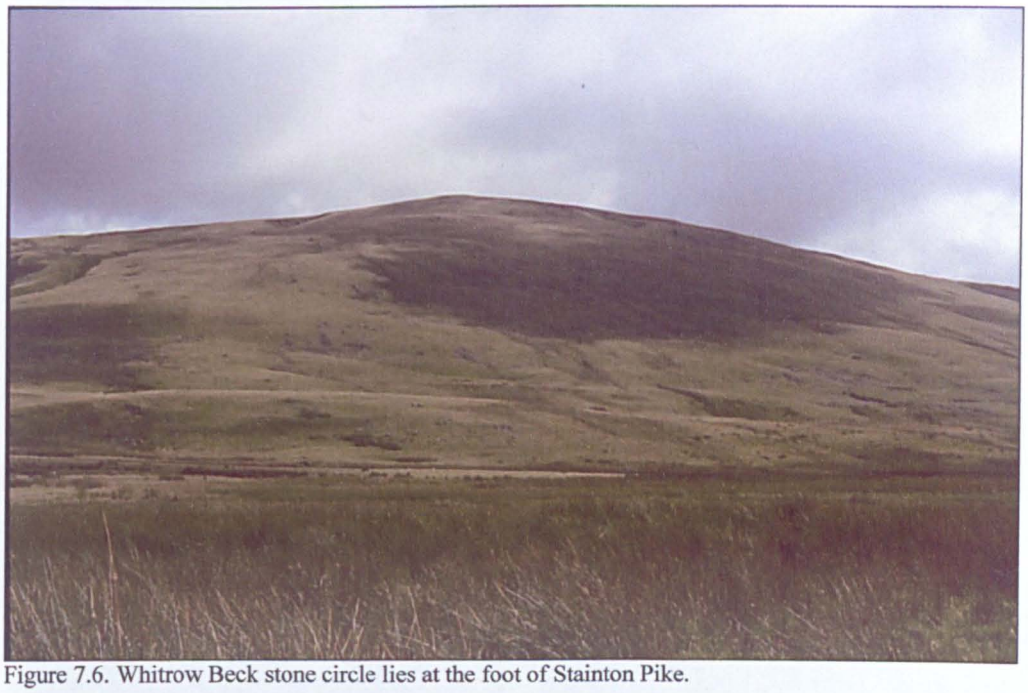


Figure 7.6. Whitrow Beck stone circle lies at the foot of Stainton Pike.

Figure 7.7. Swinside below Raven Crag.

Figure 7.8. Gamelands at the foot of Great Asby Scar.

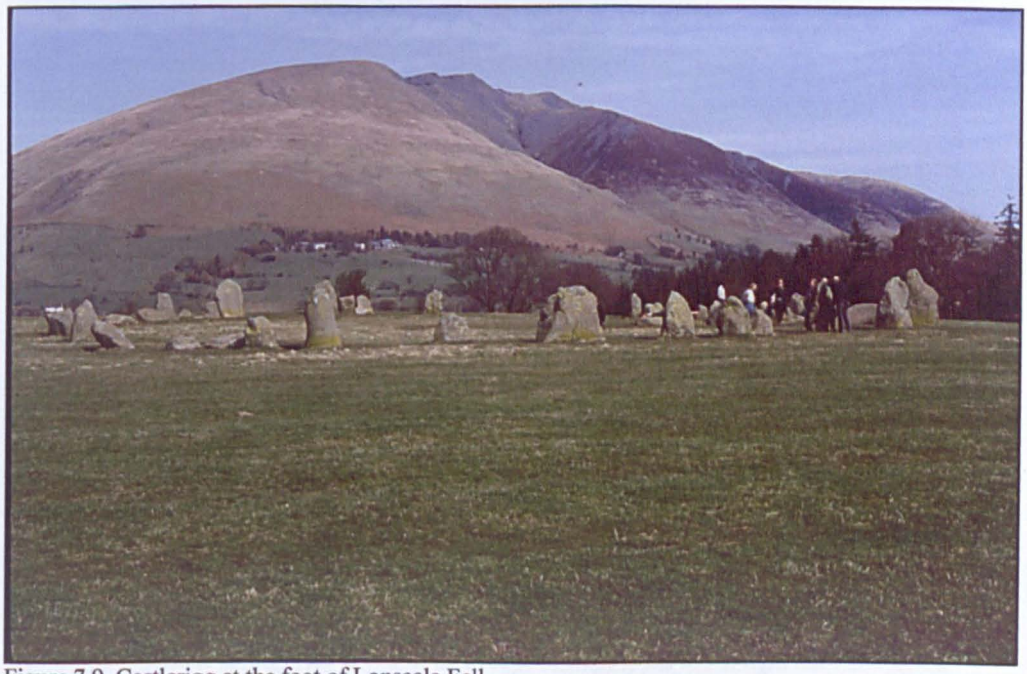


Figure 7.9. Castlerigg at the foot of Lonscale Fell.

Figure 7.10. Gunnerkeld above Gunnerkeld Sike (which runs along the other side of the wall in the foreground). Note the raised 'island' location of the monument.

Figure 7.11. Gamelands. The circle is situated on a slightly raised island formed by the fossilised course of a limestone spring. This is visible as a break of slope at the lower right hand side of the picture.

Becks, springs and coastal circles

Little is known about the circles of the western coastal lowlands. Although the location of Grey Croft may appear unique, the henges at Gutterby and Summer Hill illustrate similar coastal settings. Circles such as Hall Foss, Annaside and Kirkstones were destroyed by agricultural improvement and others such as Ringlen Stones, by urban expansion. If the upland circles are situated in 'intermediate' landscape zones, then the coastal examples are set between land and sea. There is a problem of terminology here, as the term '*land*scape' is a product of modern land perception. If the sea was understood as an extension to the land rather than separate and impassable as it is perceived today, then coastal circles may be seen to mediate between these two zones in a similar way as the upland circles between high and low ground.

Annaside, Kirkstones, Gutterby and Summer Hill were situated close to the coast on areas of raised land. The hillocks on which these were located are today surrounded by areas of drainage and these monuments may have originally been situated on islands of dry land between wetlands and the sea. The location of the Penrith Henges between the rivers Eamont and Lowther has seen discussion in terms of the relationships often illustrated between henges and water (Richards 1996b; Harding 2003). Similar scales of reference have been used to interpret the proximity of Kemp Howe to the Lowther, and Swinside to the Duddon (Burl 1976). Although the locations of these monuments close to major rivers would have been of significance for contact between dispersed communities, at a closer level, they are also located adjacent to small rivers and tributaries, in river bends, below waterfalls and close to springs.

Many circles are situated on plateaus formed by river bends, often giving the impression of an 'island' location. This is also reflected by the names given to particular circles; Whitrow Beck stone circle is situated in a bend in Whitrow Beck and Hall Foss shares its name with the waterfall close to which it was located (Foss being a derivative of force). Similarly, Gunnerkeld (Keld being a Scandinavian word for spring) is situated on a low plateau above a bend in Gunnerkeld Sike (figure 7.10), close to which are a number of springs. Gamelands and Kemp Howe are also situated on plateaus defined by fossilised watercourses associated with seasonal springs (figure 7.11).

The settings of circles on 'islands' is common to their positioning in both upland and lowland contexts. Although difficult to assess under modern conditions, the areas around some circles may have been prone to seasonal flooding. This may have affected access to some circles, many of which are today situated on dry land surrounded by bogs, springs or waterlogged ground. The suggestion that stone circles and henges may have been perceived as islands (and situated on islands metaphorical or real) has not gone unnoticed in wider interpretations (Bradley 1998; Richards 1996; Parker Pearson & Ramilisonina 1998; Harding 2003). In

Cumbria such themes appear to have had a particularly vivid and consistent expression.

Architecture, movement and visibility: framing a way?

The experience of standing inside circles reinforces the metaphor of monuments as islands, or as architecturally and topographically defined areas set in relation to both the local and the wider world. There are many metaphorical layers implicit within the broader settings of these monuments, and at a closer scale, the use of topography as an element of circle architecture.

Recent theoretical approaches to henges and stone circles have made much of the ways their architecture reflects the wider landscape. Some circular monuments make reference to vistas and prominent landscape features. This has been taken to suggest that perceptions of circular landscapes were linked to an overarching prehistoric cosmology (e.g. Richards 1996a, Bradley 1998; Harding 2003). Drawing on the ways in which monuments are set to reference aspects of the 'wider' world, such approaches have consistently overlooked more localised concerns. Furthermore that they are set at generalised scales has meant that previously drawn differences between stone circles and henges have been maintained.

Bradley (1998) argued that one of the most significant distinctions between the architecture and settings of henges and stone circles concerned the visibility or concealment of the surrounding landscape. The continuous earthwork of the henge was seen to form a closed horizon, masking the landscape immediately beyond but referencing the wider, circular horizon visible in the distance. The henge bank therefore formed a closed microcosm of the wider world. The stone circle however was entirely open and reflected the characteristic features of the landscape and the configuration of the surrounding country. "Thus a well-known circle like Castlerigg seems to crystallise the characteristic features of the landscape in which it was built, with a facade of standing stones confronting a chain of mountains" (*ibid.*:122).

In Cumbria, the use of localised topography in the setting of large circular monuments has a number of effects, none of which are specific either to stone circles or henges. Achieved more often through careful location than the use of constructed architectural features these effects include the visibility or concealment of wide vistas, prominent local features and other monuments in the immediate area. The close physical setting of circles often determines what is visible from their interiors and in which direction. The character of the local landscape means these effects are different for each monument, however a number of shared themes are illustrated by their settings. This would call into question distinctions drawn between 'open' circles and 'closed' henges, and can be illustrated through a number of case studies.

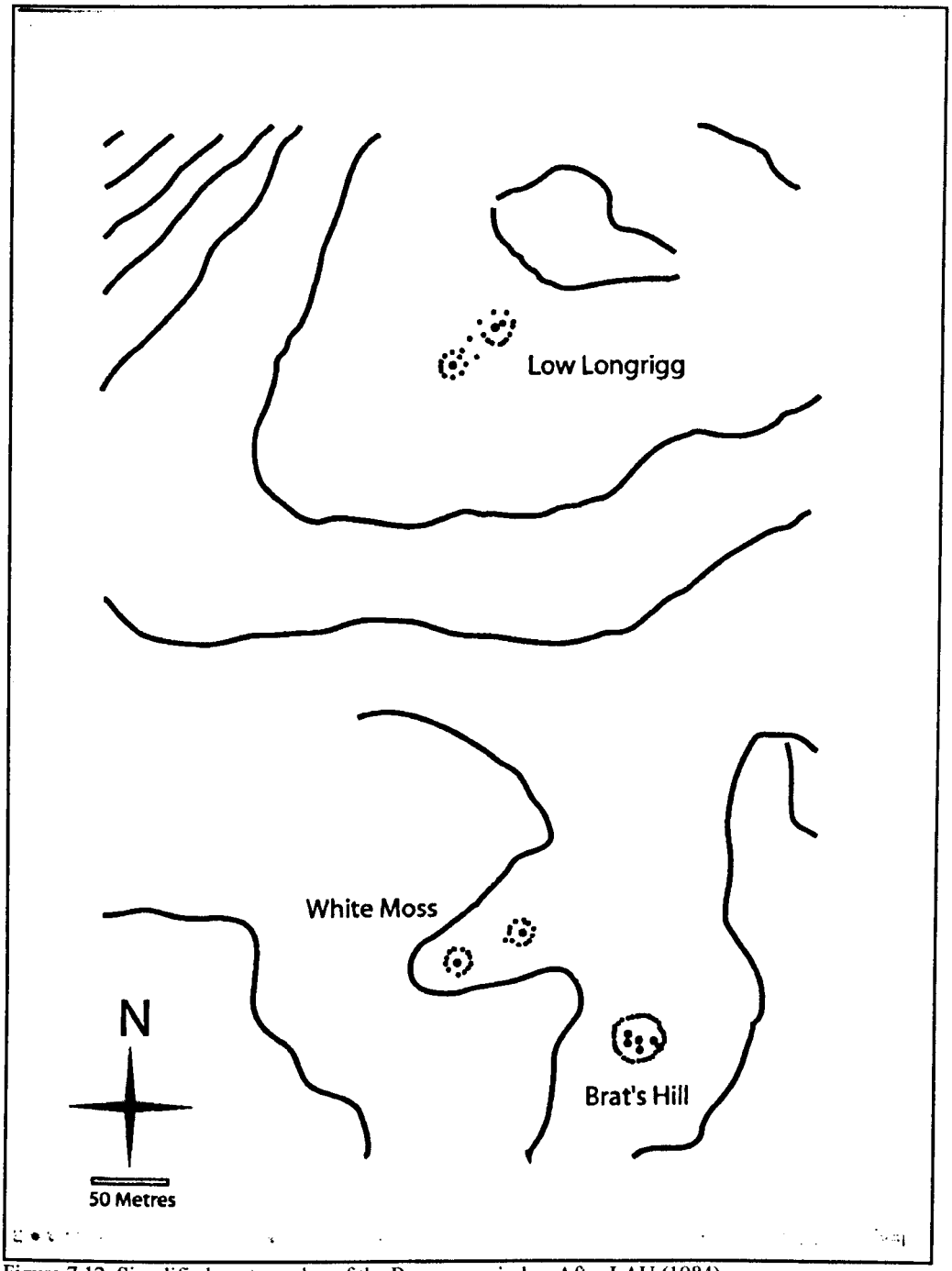


Figure 7.12. Simplified contour plan of the Burnmoor circles. After LAU (1984).

Burnmoor

The Burnmoor circles are a distinctive and seemingly atypical group of monuments. It has been argued (chapters five and six) that the smaller paired circles at Low Longrigg and White Moss can broadly be interpreted as Early Bronze Age 'burial' circles, with their architecture and setting drawing on Brat's Hill. That the smaller circles likely represent an embellishment of the concerns inherent to earlier monuments is clearly suggested by their settings.

From Burnmoor there are extensive views of Scafell and the central fells to the east and the coastal plain and the Irish Sea to the west. The five circles are situated on a shoulder below which the land drops sharply towards the coast. This shoulder is defined by Boat Howe below which the circles at Low Longrigg and White Moss are located on two promontories. Brat's Hill lies to the south of the lower lying land that the promontories define (figure 7.12).

Brat's Hill, one of Burl's (1976) 'early' circles, is situated in natural bowl formed by two rocky outcrops (figures 7.13, 7.14). Although the environs of the monument afford wide vistas, from its interior views of the sea and coastal lowlands are obscured, with the central mountains only partially visible over the outcrops which frame the monument. When climbing to Burnmoor from the village of Boot or descending from Boat Howe, the circle is not visible. The outcrops both conceal the presence of the monument, but also act as waymarkers by which to approach it. This sort of setting is closely analogous to that of long cairns.

A shallow valley separates Brat's Hill from the circles at White Moss, which are situated on a low ridge defined to the west by a promontory below which the land drops sharply into the valley below. White Moss SW is situated at the western extent of the promontory, with White Moss NE 46 metres to the north east (figure 7.15). From the interior of the south west circle there is a clear view of the coast and the valley below (figure 7.16). However from the north east circle, the outcrop defining the western extent of the ridge obscures the visibility of all but the sea/sky horizon (figure 7.17).

The Low Longrigg circles are on the higher promontory to the north west of Brat's Hill and White Moss. These monuments are situated at the highest western end of this spur, from which the land falls steeply into the valley below. As at White Moss, the south western circle is situated at the end of the spur from which the valley and coast are clearly visible (figure 7.18). From the north eastern circle, 35 metres from Low Longrigg SW, the local skyline to the west is the end of the spur upon which the circles are situated. As such, the visibility of the coastal plain and valley below are again precluded from its interior (figure 7.19). Looking east from both circles are wide vistas of Scafell and the central fells.

Figure 7.13. Brat's Hill, situated in a natural bowl. Visibility of the coast and valley to the west are obscured. Facing north west.

Figure 7.14. Brat's Hill, situated in a natural bowl defined to the south east by a prominent outcrop, and to the north and west by a subtle rise in the topography. Facing south east.

Figure 7.15. The White Moss circles, looking east towards the fells. Photo: Adrian Chadwick.

Figure 7.16. View from White Moss South West takes in the valley below. On a clear day the coastal plain and the sea are clearly visible! Photo: Adrian Chadwick.

Figure 7.17. As the view from White Moss south west takes in the valley below, from White Moss north East, with the exception of the sea/sky horizon, this vista is obscured.

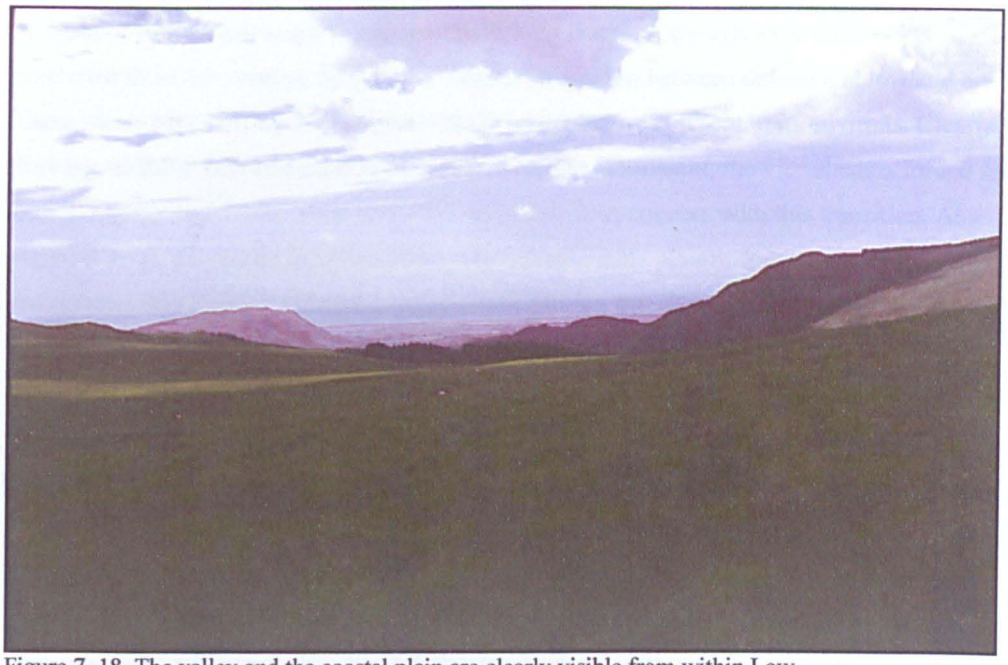


Figure 7. 18. The valley and the coastal plain are clearly visible from within Low Longrigg south west.

Figure 7.19. From inside Low Longrigg North East, the promontory occupied by Low Longrigg South West obscures the view towards the coast.

Brat's Hill illustrates architectural elements usually associated with henge monuments however in terms of setting, has much in common with long cairns. Although wide visibility is precluded from the interior, its location suggests transition between upland and lowland areas. These views may also have been precluded if woodland was present in its environs. Clearly drawing on the architecture and location of the earlier monument, the viewsheds afforded from Low Longrigg and White Moss illustrate a more obvious concern with this transition. At a physical level, movement between these paired monuments plainly draws upon and exaggerates this change. Situated on high promontories, the views suggested by the positioning of the circles would probably not have been obscured by localised tree lines.

The twofold division of henges (closed) and freestanding stone circles (permeable) does not hold true for many of the Cumbrian circles. In addition to those such as Castlerigg that are indeed set with the wide visibility of a circular landscape (and often thought to be illustrative of the Cumbrian circles as a regional group) there are those, such as Brat's Hill, that are set in natural bowls so the main characteristics of the surrounding landscape are precluded from view. So as the henge is isolated and defined by its surrounding earthwork, many stone circles are isolated and defined by their setting within natural bowls. It is perhaps the deficit of an obviously constructed earthwork that has meant that these stone circles have in the past been interpreted rather differently to henges.

Not all circles are located to obscure views of the world beyond. Some circles are more 'permeable' than others. Often situated on localised promontories, visibility from these monuments is often framed in order that particular vistas are *suggested* by the setting of circles, and movement between them. Whilst this would appear only to only be at the more 'permeable' of the monuments, the provision of entrances at henges and stone circles, as well as avenues of standing stones, suggests circles were intended to be approached from particular directions. Whilst the close landscape settings of monuments may have changed over time, the emphasis remained on movement, both between monuments and between transitional areas of the landscape.

The majority of circles in Cumbria were positioned to promote a particular directional view. Inland and coastal circles, whilst being set in visually different locations, are consistently located below prominent hills. Although communities may have attached totemic significance to particular landmarks, these settings also have wider ramifications. At Castlerigg for example, passing through the portalled entrance at the higher northern end of the circle, the observer tends to look south east down the valley of St John's in the Vale (figure 7.20). Londscale Fell, Blencathra and Skiddaw to the north form a backdrop and preclude a long distance view in this direction (figure 7.21).

Figure 7.20. View from Castlerigg down St. John's-in-the-Vale.
Photo: Adrian Chadwick.

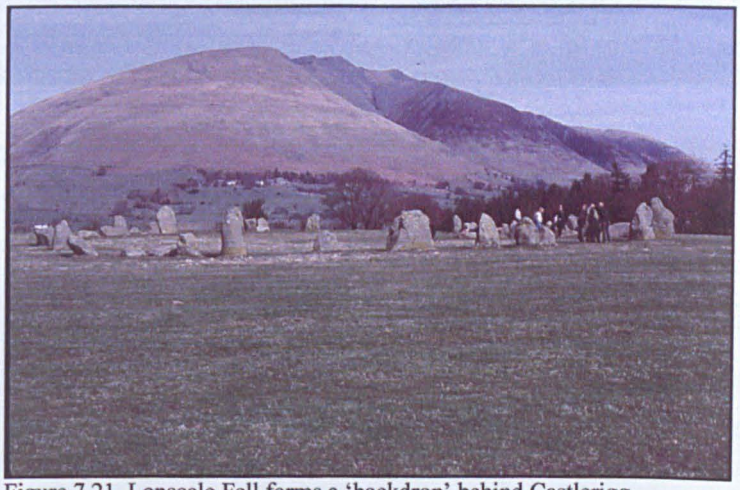


Figure 7.21. Lonscale Fell forms a 'backdrop' behind Castlerigg.

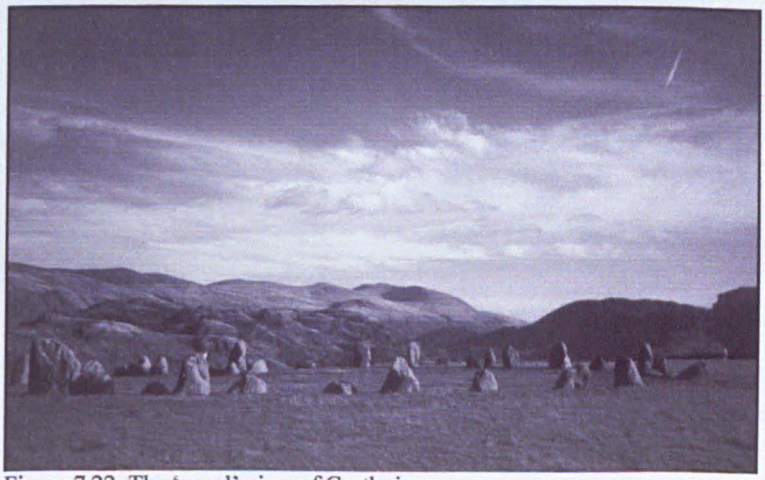


Figure 7.22. The 'usual' view of Castlerigg.

Figure 7.23. The Esk estuary from Whitrow Beck stone circle.

Figure 7.24. The Duddon estuary from Lacra C.

Significantly, this is not the view of Castlerigg as it has traditionally been perceived, largely as analyses of the monument have looked at the ways it references aspects of the 'wider' world, rather than its localised significance (figure 7.22). Like the upland coastal circles of Lacra and Whitrow Beck this aspect of location and visibility is echoed by the situation of Birkrigg stone circle. To its north the local summit of Birkrigg common obscures visibility inland, and to its south the land drops sharply towards the coast (figure 9.37). Like Whitrow Beck (figure 7.23) and Lacra C (figure 7.24), the wide view downslope of Birkrigg takes in the mouth of the estuary below. These circles are all therefore positioned so that the onlooker will tend, or be persuaded by the architecture and positioning of the circle, to look up or down through the natural valley routeways with which these monuments are associated.

Second circles and lost monuments: what are we missing?

The Burnmoor complex may appear atypical if not unparalleled in Cumbria. However as discussed in chapter five, there are a number of distinctive complexes of paired monuments in the region, including those at Summer Hill, Penrith and Long Meg. At Lacra, a badly disturbed group of circles illustrate similar locational tendencies to Burnmoor, with intervisibility between them and aspects of the local landscape being precluded through their settings. What was probably a large circle at Lacra C is only identifiable as a curvilinear arrangement of three boulders. It is however different in character and setting to the others in the complex, occupying a plateau overlooking the Duddon estuary (figure 7.24). A stone avenue (Dixon & Fell 1949) between Lacra A (situated within a natural bowl from which wide visibility is precluded) Lacra D (a possible funerary cairn) and Lacra C is suggestive of a paired circle complex. An extremely tall pointed standing stone now utilised as a gatepost is situated on the line of the avenue on the break of slope between these monuments (figure 7.25). This may be an outlier, and is situated in a position relative to that at Long Meg (see below).

As outlined above, Castlerigg, whilst being surrounded by a continuous horizon of hills, is situated overlooking St. John's in the Vale (7. 20). The location of Stukeley's (1776) second circle is not securely identifiable but was probably to the west and downslope of the extant circle. The two monuments may not have been intervisible and like Lacra and Long Meg, an outlier lies on the break of slope between them. From the probable location of the second circle (recorded as being larger in size than the extant example and in a setting more akin to other of the large circles), there is a clear view down the Greta valley. This is not afforded from within the extant circle.

The extant circle at Swinside has a south easterly facing entrance which leads the observer to look upslope through the valley leading towards Thwaites Fell (figure 7. 26). That this view is suggested by the architecture of the circle is uncommon as the majority of other circles are set

to look downslope. Knott Hill, to the immediate south of the circle obscures visibility to the south. If the second circle recorded at Swinside was situated to the south east of the present circle, it would have held a clear view down the Duddon valley towards the coast.

The likely settings of the second circles at Castlerigg and Swinside have significant implications. The 'pairing' of these monuments suggests similar concerns to the small paired Burnmoor circles: transition between landscape zones. Similar themes are more clearly echoed at Long Meg. Here, Bradley (1998) noted that when the enclosure was *replaced* by the stone circle, despite the monuments being contiguous, they were located according to different principles. Whilst the ditched enclosure was situated in a shallow valley where visibility is impeded by the local topography, the stone circle commands a virtually continuous horizon of hills and mountains (*ibid.*). Although the recognition of this distinction is an interesting observation, it does not fully address the settings of these monuments.

As discussed above, the lack of a clear view from the interior of the Long Meg enclosure illustrates similarities with henges and stone circles set in natural bowls. Although the setting of the stone circle has commonly been related to those exhibited by henges, the 'continuous horizon of hills' noted by Bradley (1998) has been overstated. Like Castlerigg, the monument has consistently seen interpretation as relating to the 'wider world'; whilst there are hills in one direction, below the circle, and clearly visible downslope to the east, to the south and west this view is restricted by a slight rise in the natural topography. It was on top of this rise that Stukeley's second circle was located, on a plateau now occupied by a barn. Looking from the centre of the extant circle, its location is clearly visible through the entrance and aligned with Long Meg herself (figure 7.27). The second circle would have held a wide view down the Eden valley. Although the rise to the south west of the Long Meg circle may have restricted visibility between the two monuments, Long Meg herself, situated on the break of slope between them, would have been visible from both.

The enclosure and cursus monuments at Long Meg, incorporating aspects of Earlier Neolithic forms, represent the increasing formalisation of linear patterns of movement between different areas of the landscape after the Early Neolithic and the use of 'central' places for the coming together of geographically dispersed communities. During the Later Neolithic, it is likely the stone circle we see today was constructed directly adjacent to the enclosure. Although it has been assumed that the circle *replaced* the enclosure (Bradley 1998), the presence of aligned entrances between them suggests both remained significant (figures 7.4, 7.28). Channelled movement between the ditched enclosure and the upstanding stone circle drew on themes relating to 'transition' between them. The juxtaposition of entrances at Summer Hill may illustrate similar concerns (figure 7.5).

Figure 7.25. Overtly monumental gatepost at Lacra. Situated on the break of slope between Lacra C, A and D (Lacra D in background).

Figure 7.26. Passing through the entrance of Swinside, the observer looks upslope towards Thwaites Fell. This is unusual as most circles promote a downslope view.

Figure 7. 27. Through the entrance of Long Meg, and aligned with Long Meg herself, the location of Stukeley's (1776) second circle is visible where a barn now stands.

Figure 7.28. The flattened north eastern perimeter of Long Meg. The outlying stone in the background illustrates the position of the entrance between the stone circle and the enclosure (see also figure 7. 4)

Stukeley's second stone circle at Long Meg, like those recorded at Castlerigg and Swinside, suggests movement between 'paired' circles referenced different landscape zones as well as being set in relation to the wider world. By the Early Bronze Age, it is possible all the monuments in the environs of Long Meg, including the burial circles at Glassonby and Little Meg (see below) were in use concurrently. Located in settings clearly referencing the importance of linear movement both through the landscape and between monuments, similar themes became increasingly formalised and embellished over the Neolithic and into the Early Bronze Age.

Movement, transition and the seasonality of circles

In other areas of Britain, monument complexes, more consistently researched and understood than those in Cumbria, are relatively common. Features such as cursuses, stone avenues or processional ways link monuments across relatively wide areas. Although these sorts of features are not well known in Cumbria their presence is illustrated by the Long Meg cursus and the stone avenues at Lacra and Shap. At Shap, an avenue of standing stones, of which twenty seven survivors have been identified (Clare 1979), runs for a distance of between 2.5 and 3 kilometres from Kemp Howe to a funerary cairn on Skellaw Hill (figure 5.11).

The use of standing stones as 'waymarkers' is well established (e.g. Bradley 1992b, 1993). In Cumbria these exist as outliers to stone circles, and as constituents of avenues or processional ways. Usually on natural routeways close to or between ceremonial complexes, these also occur as isolated or paired standing stones (figure 7.29). Along with earthfast rocks, standing stones were sometimes embellished with rock art motifs, and may represent the formalisation of particular paths. The demarcation of routeways, not only close to ceremonial complexes but stretching into the wider landscape, suggests increasingly structured movement into the Early Bronze Age. Although these were already in use, such pathways became ritualised and controlled through their partial monumentalisation (Thomas 1991; Barrett 1994; Last 1999). Forming foci for the construction of a variety of monuments, they linked natural features, topographic zones and the monuments which marked them, both in space and time. The pairing of many circles, and their linkage through proscribed and channelled progression, suggests movement between monuments acted to mediate journeys between landscape zones. The settings of these monuments would also have lent themselves to mediation between other sorts of physical, social and seasonal transformation.

So under what sorts of contexts did these journeys take place? As discussed in chapter three, both the lithic and environmental evidence can taken to suggest transhumant movement, closely tied to the seasonal rhythms of grazing, animal husbandry and agriculture. That different scales of community made journeys to monument complexes at particular times

suggests these journeys were tied into seasonal cycles. Therefore, the transitional aspects of the settings of circles relate not only to transition between particular landscape zones, but also the times that these were exploited. This may be suggested also by specific elements of monumental architecture.

Standing stones, sometimes embellished with rock art motifs, are often closely associated with stone circles. A number of these illustrate orientations towards celestial alignments (Thom 1967; Burl 1976; Ruggles 1999). Whilst these have been an important aspect of prehistoric cosmologies, they should not, however, be considered as the prime motivation for the construction of these monuments. Decorated stones at both Long Meg and Castlerigg have been linked to the observance of celestial events, motifs being particularly visible when being 'lit up' by the setting midwinter sun (e.g. Hood & Wilson 2002, 2003; figure 7.30). Whilst this decoration may have been important, it illustrates the embellishment of particular features in places that would already have been significant. By focussing our attention on decorated stones we prioritise sites where rock art has been identified to the detriment of other important features.

A number of circles have particularly prominent stones on their southern and south western perimeters. Like the overtly decorated stones, their incorporation may have been concerned with referencing particular alignments. At White Moss NE, the south western stones are particularly pointed (figure 7.17), and Castlerigg and Gunnerkeld, among others, have large prominent large stones on their southern perimeters. Many circles incorporate a single stone of a different lithic raw material. Grey Croft, for example, is formed of Borrowdale volcanic agglomerates, apart from a single sandstone at the south east (figure 7.32). At Gamelands all but one of the stones are Shap granite with the exception being a limestone boulder on its south eastern perimeter (figure 7.33) and at Lacra B a single stone with quartzite inclusions breaks the circle to the east (figure 7.34).

The use of particularly large or pointed stones, stones of different raw materials and rock art illustrates that different media were used to draw reference to the southern and eastern perimeters of stone circles. Alongside the 'transitional' settings of these monuments then, referencing particular celestial alignments may have been significant to understanding the changing seasons. Where such themes are perhaps more clearly demonstrated is in the architecture and embellishment of open funerary monuments. As discussed in chapter six, many ringcairns and small kerbed circles in the region incorporate prominent stones on their southern and eastern perimeters. This illustrates not only continuity with the architecture of stone circles, but also that these features were closely associated with funerary practice into the Bronze Age.

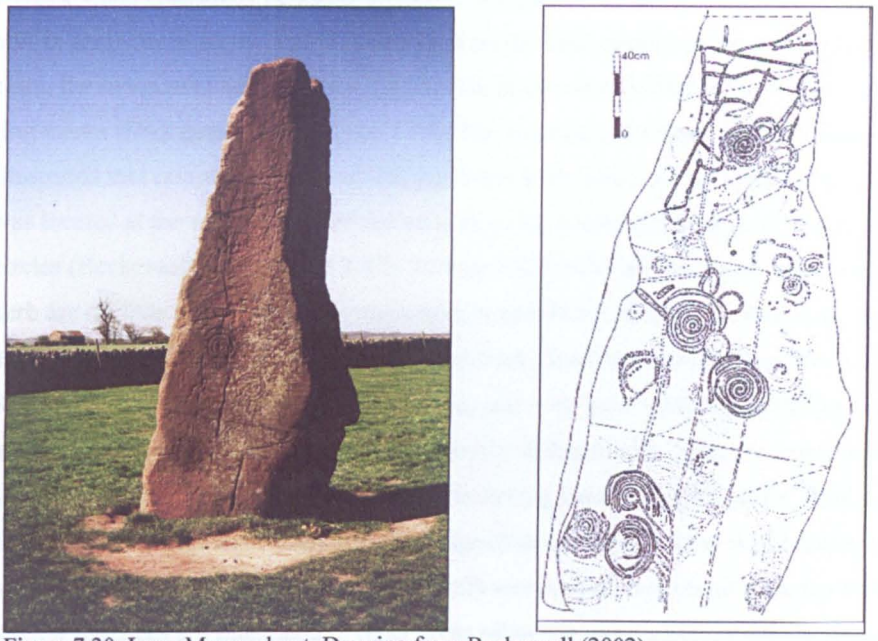


Figure 7.30. Long Meg rock art. Drawing from Beckensall (2002).

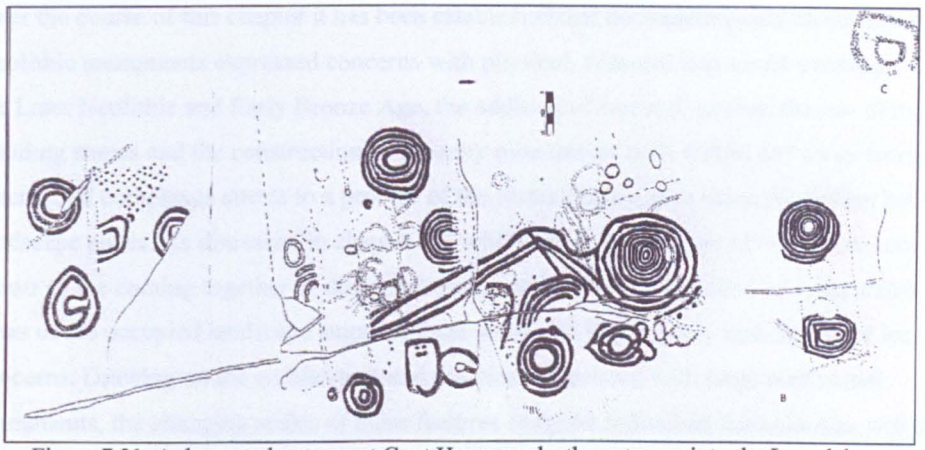


Figure 7.31. A decorated outcrop at Copt Howe marks the entrance into the Langdale Valley. Although some of the markings are relatively recent, these overlay what appears to be the 'genuine article'. From Beckensall (2002).

Decorated stones have been identified, for example, at Little Meg, Iron Hill South, Moor Divock 4 and Glassonby (Beckensall 2002). At Little Meg two stones marked with spiral motifs are situated on the inside of boulders on its north eastern perimeter. Covered by a later cairn, the monument surrounded a central cist, stones from which were decorated with cup and ring marks (Beckensall 2002; figure 7.36). The excavation of Glassonby (Collingwood 1901) illustrated that two stones on its sealed perimeter kerb bore rock art motifs. One (now missing) was located at the south west, and the second, at the south east, is decorated with concentric circles (Beckensall 2002; figure 7.37). At Iron Hill South, all but one of the stones forming the kerb are of Shap granite, with the remainder, a sandstone, being decorated with six simple cup marks (*ibid*; 7.35). As at Little Meg, the markings identified both at Glassonby and Iron Hill South were on the internal faces of the kerbs, and were later sealed by covering cairns. The incorporation and embellishment of these stones within overtly funerary monuments may well have been symbolically linked into ideas concerning the seasonality of life, death and re-birth. These themes would have been of further significance at the point at which these monuments were sealed by covering cairns, and the motifs were buried, separated from the living world. Similar practices are illustrated in other areas of western and northern Britain (Bradley 1992b, 1993; Barnatt 1990), the significance of which will be further discussed in chapter eight.

Over the course of this chapter it has been established that the locations and closer settings of Neolithic monuments expressed concerns with physical, seasonal and social transition. Over the Later Neolithic and Early Bronze Age, the addition of 'second' circles, the use of rock art, standing stones and the construction of funerary monuments both within and away from major ceremonial complexes attests to a process of the formalisation of existing routeways between landscape zones. As discussed in chapter six, whilst the continued use of ceremonial complexes attests to the coming together of dispersed communities, the proliferation of monuments into all areas of the occupied landscape suggests these were also increasingly tied into more localised concerns. Drawing on the architecture and practices associated with large ceremonial monuments, the changing scales of these features suggests individual communities within wider social groups became increasingly concerned with marking out their connections to specific areas of the occupied landscape. In terms of the monument record, these processes are particularly evident in upland contexts.

Figure 7.29. Giant's Graves standing stones, marking the coastal entrance into the Whicham valley, below Lacra. Both are decorated with simple cupmarks.

Figure 7.32. Pink sandstone at Grey Croft.

Figure 7.33. Limestone at Gamelands.

Figure 7.34. A stone with quartzite inclusions at Lacra B.

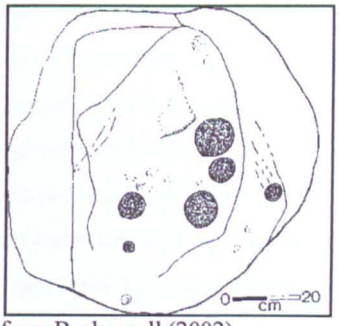
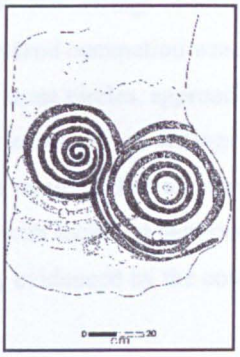


Figure 7.35. Iron Hill South and decorated boulder. Drawing from Beckensall (2002).



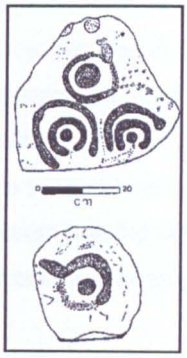


Figure 7.36. Decorated stones at Little Meg. Left: kerb, right: cist. From Beckensall (2002).

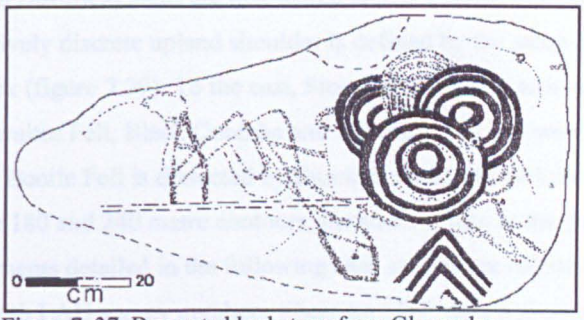


Figure 7. 37. Decorated kerbstone from Glassonby. From Beckensall (2002).

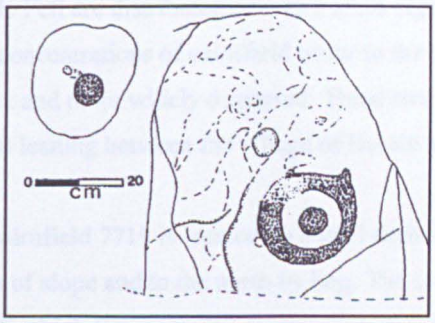


Figure 7.38. Decorated kerbstone at Moor Divock. From Beckensall (2002).

Landscape setting of ringcairns and funerary cairns

The final sections of this chapter detail the layout and setting of cairnfield and associated upland monuments through a number of case studies. In chapter six it was suggested that cemetery clusters situated on valleyside routeways may represent upland activity prior to large scale cairnfield clearance. Possibly established under conditions not hinged on sustained occupation, these might relate to the formalisation of routes between landscape zones discussed above. Monuments more closely associated with areas of cairnfield, however, suggest the presence of the Early Bronze Age 'family farms' identified in the Peak District uplands (Barnatt 1999, 2000). The settings of cairnfield groups and associated monuments therefore illustrate the ways upland occupation was organised, and how this may have changed over time. Alongside the stone circles, approaching these monuments at a close landscape scale illustrates how their locations and settings drew both on localised topographic features and referenced the wider world. Taken together, it is possible to suggest how upland monuments articulated not only with localised patterns of landscape occupation, but also with the different scales of community evidenced by the continued use of ceremonial complexes.

Bootle Fell

On Bootle Fell, a shoulder of land adjacent to and overlooking the west Cumbrian coastal plain, a number of cairnfield areas are distributed across a series of terraces above the river Annas. This relatively discrete upland shoulder is defined by the steep ghylls of Crookley Beck and Kinmont Beck (figure 7.39). To the east, Stoneside Hill rises to a height of 422 metres then plateaus onto Thwaites Fell, Black Coombe and Swinside Fell, before dropping into the Whicham valley. Bootle Fell is dissected by Damkirk Beck and Oldclose Gill which spring from between the 180 and 240 metre contours, the same height as the densest areas of cairnfield. Monuments detailed in the following case studies are referred to by their county SMR numbers, with LAU survey numbers where no SMR data was available.

The cairnfields on Bootle Fell are distributed over two areas separated by Oldclose Gill (figure 7.40). Relatively dense concentrations of cairnfield occur to the west, whilst to the east, clearance is less complex and more widely dispersed. These two areas are also separated by a ditched droveway (1490) leading between the village of Bootle and Thwaites Fell.

Close to the trackway, cairnfield 7719 is located on a well defined terrace bounded to the west, east and south by breaks of slope and to the north by bog. The area is dissected by the eastern tributary of Oldclose Gill which flows into the western tributary below. Five ringcairns are associated with cairnfield 7719 (see figure 6.9). One example (31049) is adjacent to the droveway, at the edge of the main concentration of cairnfield. Although the feature is relatively lowlying it overlooks the valley of Crookley beck as it drops to the south.

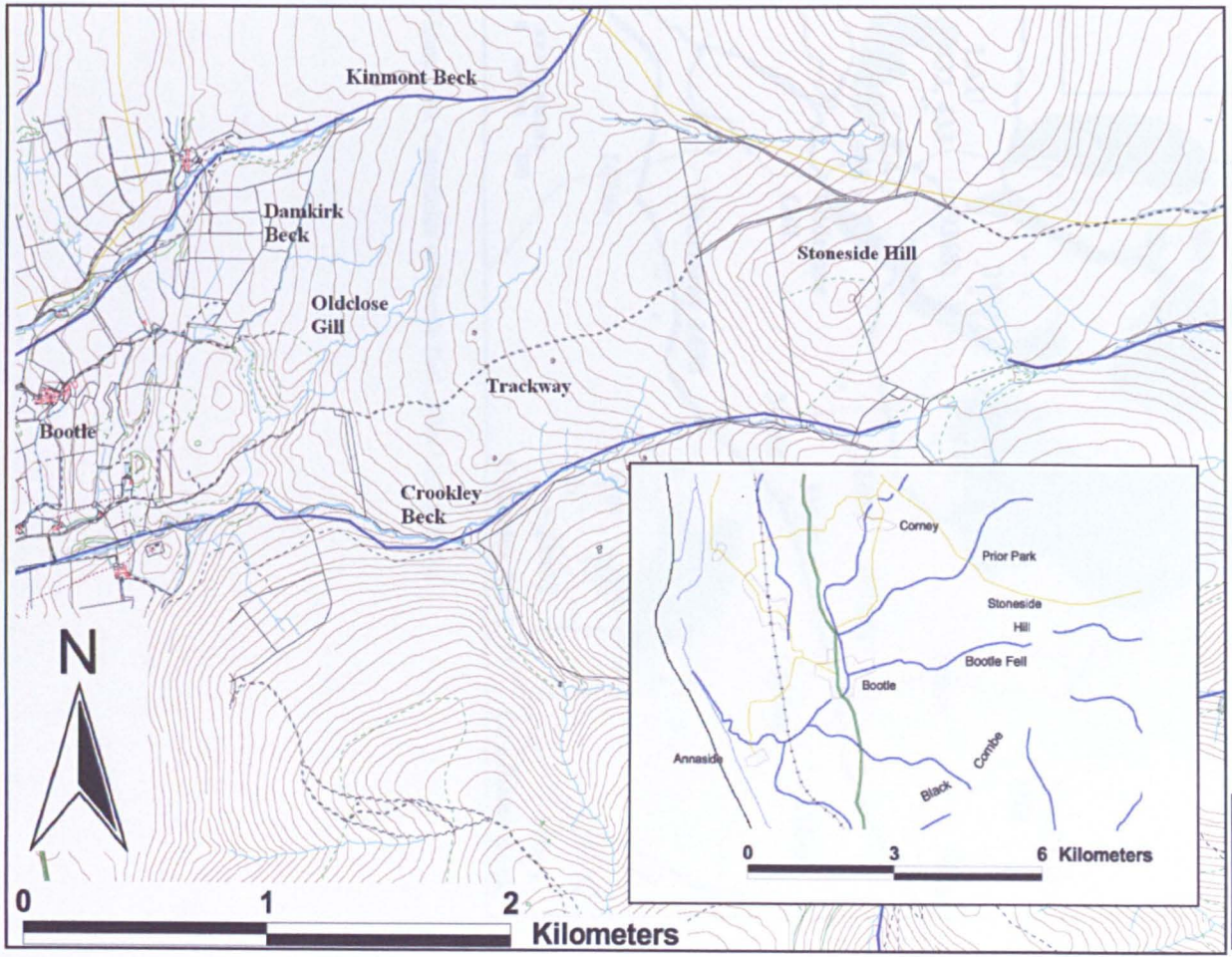


Figure 7.39. Location of Bootle Fell between Kinmont and Crookley becks.

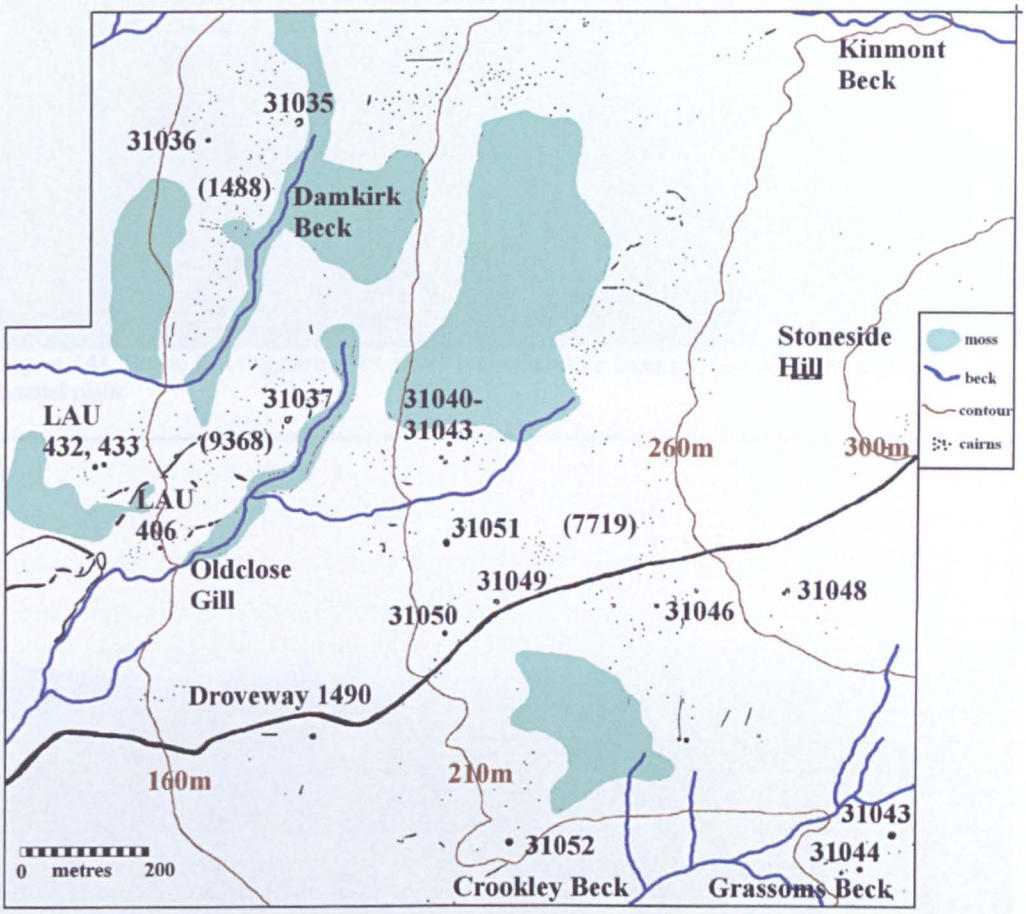


Figure 7.40. Cairnfields on Bootle Fell. After LAU (1987).

Figure 7.41. Bootle Fell ringcairn SMR 31048 is overlain by a funerary cairn and overlooks the coastal plain.

Figure 7.42. Bootle Fell funerary cairn 31046, overlooking the coastal plain.

On the same contour and to the north of ringcairn 31049 is a cluster of four small stone rings (31040, 31041, 31032, 31043). These are situated on a raised rocky hummock, an island within the otherwise boggy delta formed by the tributary springs of Oldclose Gill.

Ringcairn 31048 (figure 7.41) is amongst the highest features recorded on Bootle Fell, located on the 270 metre contour 100 metres south of the droveway. Partially overlain by a funerary cairn, the feature is isolated on a high plateau overlooking the coastal plain, the valleys of Crookley Beck and Oldclose Gill and the cairnfields below.

Funerary cairns across the eastern part of Bootle Fell are relatively evenly distributed. Located on localised knolls and outcrops amongst small discrete areas of cairnfield, they are clustered close to the trackway and ringcairns. Situated slightly downslope and to the west of ringcairn 31048 a large funerary cairn (31046) occupies a high localised hummock on an otherwise flat area occupied by a simple cairnfield (figure 7.42).

Between the cluster of small stone rings and ringcairn 31049 is a large round cairn (31051) situated on a localised knoll. Although there are a number of poorly defined cairns in its environs it is not associated with any major areas of cairnfield but overlooks the denser areas of clearance west of Oldclose Gill. Downslope and to the south another round cairn (31050) is situated in a prominent position but occupies the back edge of the localised hummock so wide views of the cairnfields and coastal plain below are largely obscured. On the same contour to the south is a further funerary cairn (31052). This monument again occupies a distinctive promontory position and is set back from the break of slope.

Although there are no ringcairns south of Crookley Beck there are a number of low lying funerary cairns situated within areas of cairnfield. A group of four (1483) are located on a lowlying shoulder overlooking the junction between Crookley and Grassgill becks (not illustrated). In a similar setting, slightly isolated from the simple cairnfield with which they are associated are a pair of sizable funerary cairns (31043 and 31044) located on a break of slope overlooking the confluence of Grassoms Beck and Crookley Beck (figure 7.40).

West of Oldclose Gill the distribution of monuments is different to the east. The western areas are defined by broadly linear agglomerations of dense cairnfield incorporating stretches of banking and cairn alignments. These areas are defined by terraces situated between the beck courses, and are associated with two ringcairns and four funerary cairns.

Ringcairn 31035 is situated 20 metres from the head of Damkirk Beck, located on a rise above the eastern edge of cairnfield 1488. The area occupied by this relatively dense area of simple

cairnfield is defined by Damkirk Beck, areas of bog and the course of Kinmot Beck to the west. There is a single funerary cairn (31036) associated with this cairnfield, west and downslope of the ringcairn.

Ringcairn 31037 is situated south of 31035, 150 metres south of the western tributary head of Oldclose Gill. The feature, which is prominent and well defined, overlooks the main area of cairnfield 9368. The northern and western extent of the cairnfield is separated from cairnfield 1488 by Damkirk Beck. To the south and east the area is confined by Oldclose Gill. Three funerary cairns (LAU 432, 433 and 406) are associated with cairnfield 9368. These are located on the edge of the main area of clearance, overlooking Oldclose Gill where it descends to meet Damkirk Beck below.

The cluster of funerary cairns on the eastern side of Bootle Fell are relatively widely dispersed, situated on localised hillocks and promontories. Although some are related to particular areas of cairnfield, many are isolated on higher land. These cluster within a similar contour range in the environs of the trackway and overlook the eastern part of the fell and the coastal plain. To the east of Oldclose Gill, the two ringcairns separated by the trackway, difficult to relate to particular areas of cairnfield, are associated with the cluster of funerary cairns and small stone rings. This suggests they were situated according to different principles than the lower lying examples. The cluster is clearly focussed on high land adjacent to the droveway, and may predate the onset of large scale cairnfield clearance. It is of significance then, that the ceremonial complex at Summer Hill lies close to Bootle village, where the trackway leads down onto the coastal plain.

Funerary cairns situated in lower lying contexts on Bootle Fell are located on the margins of cairnfields. They are frequently set at a lower contour than the cairnfields, and overlook the confluences of the tributary becks and the larger watercourses into which they flow. The four 'classic' ringcairns on Bootle Fell are situated almost equidistantly across areas where land suitable for relatively large scale clearance is available. The two on the western side of the fell are closely associated with, and situated overlooking dense areas of cairnfield. These features are also located adjacent to the springs of tributary becks. This locational factor is echoed by the setting of the cluster of small stone rings, situated upslope of the cairnfields, between the tributary heads of Oldclose Gill.

As discussed in chapter six, dense distributions of upland monuments are likely to be the products of time depth, relating to the sustained use of particularly favourable areas. If the density of the cairnfields on the lower lying western part of Bootle Fell results from sustained and long term use, it is possible the initial distribution of funerary cairns and ringcairns in

relation to cairnfield was at a similar scale on both sides of the fell. In other words, variation in the character and density of cairnfield and associated monuments relates clearly to their longevity. That agriculture was sustained on the accessible western part of Bootle Fell is illustrated by the presence of medieval field systems and homesteads close to the main cairnfield areas.

Town Bank and Stockdale Moor

All of the ringcairns so far recorded in west Cumbria north of the Esk are associated with cairnfields on Town Bank and Stockdale Moor, at the southern extent of the Copeland fells, north of Wastwater (figure 7.44). Defined by the Calder and Bleng valleys the area is bisected by Worm Gill (figure 7.43) which separates Town Bank from Stockdale Moor. The Bleng and Worm Gill valleys form natural passes up towards Caw Fell and the central fells. These passes go up either side of the Stockdale Moor promontory, on the lower shelves of which Samson's Bratful long cairn is located. A number of summit cairns occupy the high peaks and ridges above the cairnfield areas. Although many of are overlain by walkers cairns, some are likely to be of prehistoric origin.

The main clusters of cairnfield on Town bank are situated between the 200 and 300 metre contours between Worm Gill, Kinniside Common and Lank Rigg, which rises to a height of 541 metres. To the north of Town bank a packhorse bridge spanning the Calder was a crossing point for a Medieval droveway crossing Town Bank and Worm Gill, then following the valley below Stockdale Moor to Skalderskew (Hindle 1984).

The majority of cairnfields on Town Bank (figure 7.45) are complex. Closely associated with the former droveway, these incorporate 'homesteads' associated with field systems, enclosures and hut groups (Quartermaine 1989). Although this configuration suggests longevity, there are areas of simpler dispersed cairnfield on more marginal land to the east. Again closely associated with the route of the droveway, the group of six pear-shaped 'long cairns' (see chapter six) are situated between the 230 and 250 metre contours within an area of cairnfield (9353; figure 6.4). Situated close to the steep northern edge of Worm Gill, ringcairn 30982 is associated with a limited area of clearance.

Two round funerary cairns have been recorded on Town Bank (9360, 30995). These are situated on a promontory above the watershed of Worm Gill and the Calder. Overlooking the Calder as it flows towards the coast (figure 7.46) funerary cairn 30995 has seen partial excavation revealing a cist in its south east quadrant (Spence 1938). Downslope and to the east is a prominent pear-shaped cairn adjacent to a ringcairn (30990) at the margin of a complex cairnfield (9358).

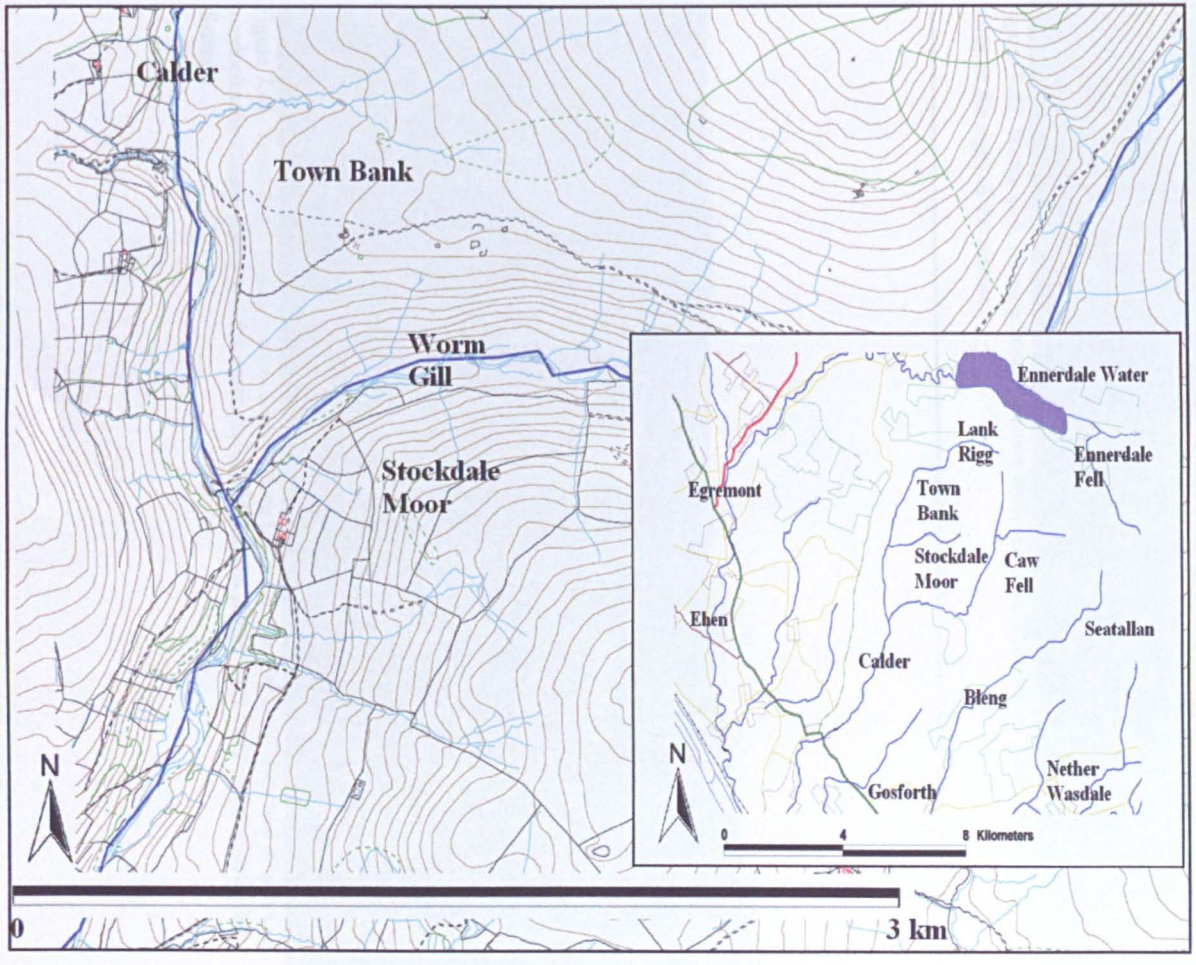


Figure 7.44. Location of Town Bank and Stockdale Moor.

Figure 7.43. Worm Gill, flowing between Town bank and Stockdale Moor. Town Bank lies to the north, at the right of the picture.

Figure 7.46. Town Bank funerary cairn 30995 above the confluence of the Calder and Worm Gill, overlooks the Calder valley and the coast. Sellafield and the site of Grey Croft are visible in the distance.

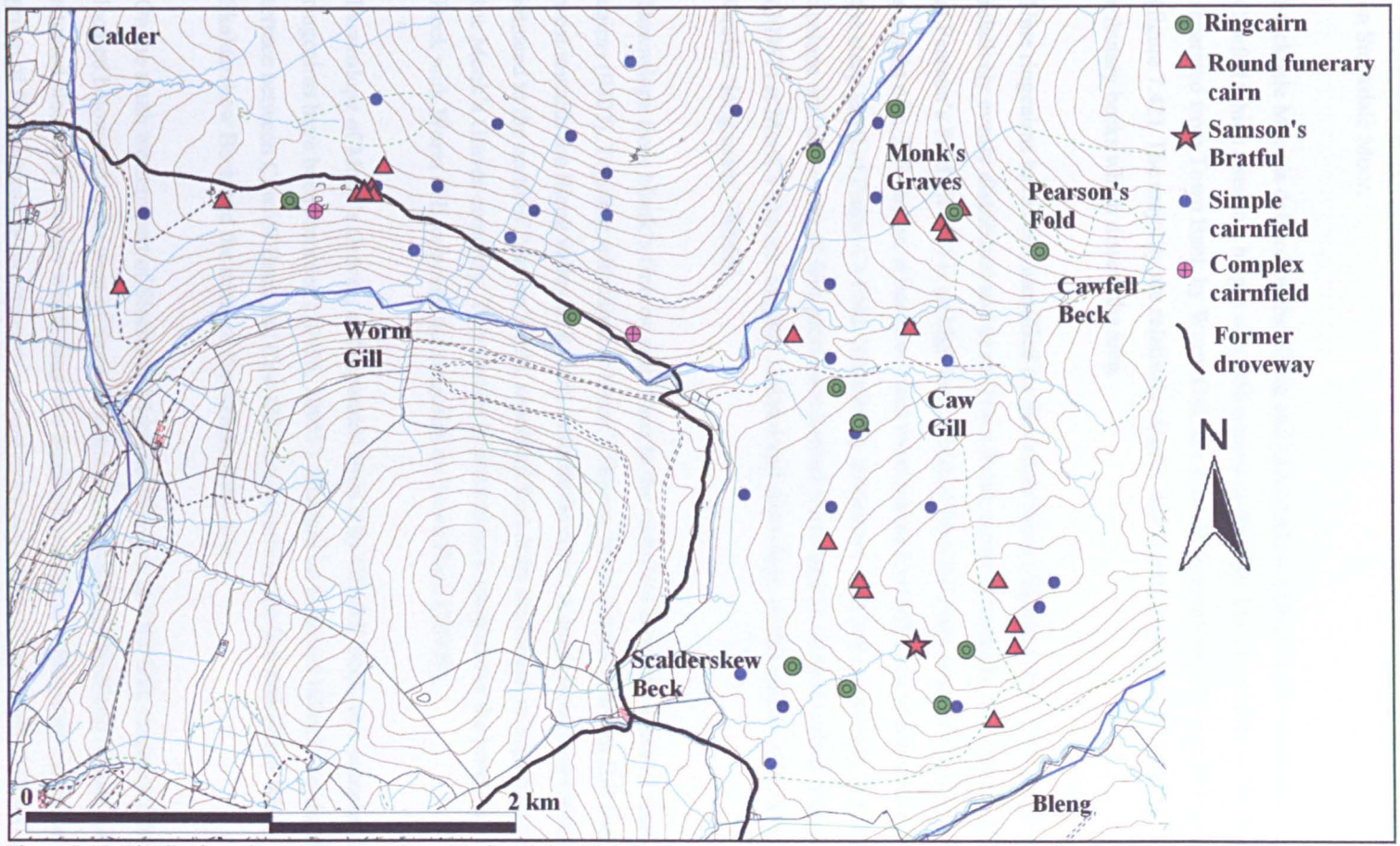


Figure 7.45. Distribution of monuments on Town Bank and Stockdale Moor.

The third ringcairn recorded on Town Bank (30979) is situated 320 metres to the east of the main areas of cairnfield. On a promontory adjacent to the northern edge of Worm Gill, and overlooking its confluence with Swarth beck, it is directly opposite a small stone ring (30958) on Stockdale Moor.

Stockdale Moor is defined by the Bleng and Skalderskew valleys to the west and south, and Cawfell which rises to a height of *c.* 650 metres in the east. The cairnfields on Stockdale Moor, separated from Town Bank by Worm Gill, are situated between the 250 and 280 metre contours (figure 7.42). The majority are relatively simple, due in part to the proliferation of small tributary becks which dissect the area.

Nine ringcairns have been identified on Stockdale Moor (figures 7.45, 7.47). These are relatively evenly distributed and as on Town Bank, occur in a variety of contexts. The ringcairn at Pearson's Fold (30791) is on high land, isolated from the main areas of cairnfield. Located at a height of *c.* 300 metres, it lies above and overlooking Cawfell Beck which runs down from the steep ghyll of Pearson's Fold. Not closely associated with any cairnfields, this feature lies upslope and to the east of four prominent kerbed cairns and an infilled kerbed ringcairn (30967) at Monk's Graves. Slightly isolated and downslope of this cluster is the Monk's Graves 'long cairn' (30966).

Downslope from Monk's Graves, and closer to the cairnfield areas are a pair of sizable round cairns (9307). Together with those at Monk's Graves, these overlook Worm Gill and south west towards the Bleng valley as it leads towards the coast. A small stone ring (30958) is situated to the north of Pearson's fold, separated from it by the tongue of high land occupied by the Monk's Graves cemetery. This feature is situated on a scarp above the junction of Swarth Beck with Worm Gill, opposite the ringcairn on Town Bank (30979).

Downslope of Monk's Graves, and separated from it by Cawfell Beck, two complex double ringcairns have been recorded (30956, 30957). Situated on localised hillocks on the flat boggy terrace between Cawfell Beck and Caw Gill, they overlook the junction of the Worm Gill and Skalderskew Beck and the route of the former droveway.

On the south western part of Stockdale Moor, to the south of Caw Gill, ringcairn 30953 is located below and to the west of Samson's Bratful, overlooking the Bleng (figure 7.47). It is situated close to a tributary which runs into Scalderskew Beck. Upslope and to its north east a group of funerary cairns incorporates a round and a pear shaped cairn (30960, 30961) on the same contour as the Samson's Bratful, and another round cairn further downslope (30959).

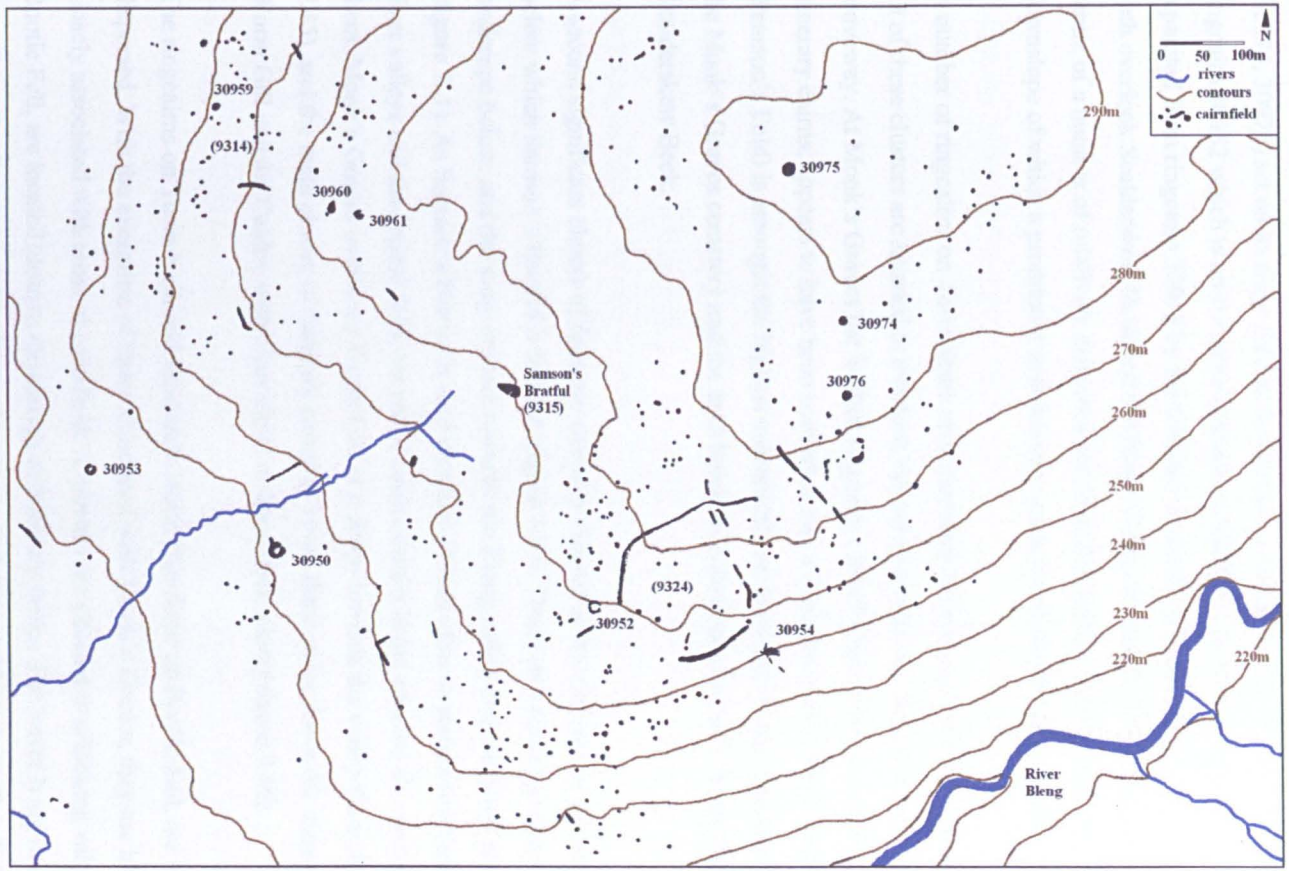


Figure 7.47. Monuments on the southern extent of Stockdale Moor. After LAU (1985).

The cairns are located between a flat boggy shoulder with dispersed areas of simple cairnfield (9314) and the distinctive rocky promontory which separates the north and south of the moor.

A further group of funerary cairns is distributed along the south eastern slope of this promontory. One of these (30975) occupies the summit of the promontory with two more (30974, 30976) set on its ridge further downslope. These overlook ringcairn 30950 and ringcairn 30952 which is on the same contour as Samson's Bratful. Ringcairn 30950 is separated from ringcairn 30953 by the tributary beck that springs below Samson's Bratful and both overlook Scalderskew Beck and the Bleng valley. Ringcairn 30952 is situated towards the centre of a number of relatively dispersed clusters of cairnfield (9324) to the east and downslope of which a prominent oval funerary cairn overlooks the Bleng valley (30954).

A number of ringcairns on Town Bank and Stockdale Moor occur with cairn cemeteries, and all of these clusters are situated to overlook the natural routeway occupied by the former droveway. At Monk's Graves the infilled ringcairn (30967), set amongst a cluster of prominent funerary cairns, appears to have been converted into a funerary cairn. The second ringcairn (Pearson's Fold) is amongst the highest monuments on Stockdale Moor, situated overlooking the Monk's Graves cemetery and the land below as it descends towards Worm Gill and Skalderskew Beck.

A second significant cluster of funerary cairns is situated in the environs of the promontory below which Samson's Bratful is located (figure 7.47). These are situated to overlook the landscape below, and the steep descent towards the Bleng valley and out towards the Irish Sea (figure 7. 1). As Samson's Bratful is on a shoulder of land close to passes between the main river valleys and the central fells, the round cairn clusters in the area are also set in relation to them; Monk's Graves overlooks Worm Gill as it drops towards the valley floor (figures 7.43, 7.45), and the main cluster of funerary cairns at Town Bank is set above the watershed of Worm Gill and the Calder, with clear views of the coastal plain (figure 7.46).

The ringcairns on Town bank and Stockdale Moor, like those on Bootle Fell, are widely dispersed. With the exception of those associated with Monk's Graves, they are lowlying and closely associated with areas of cairnfield. A number are situated overlooking valleys and as at Bootle Fell, are located close to the springs of tributary becks. The lower lying funerary cairns over Town Bank and Stockdale Moor also share similarities with those on Bootle Fell, being situated below the cairnfields with which they are associated and set directly overlooking watersheds. Across Town Bank and Stockdale Moor as a whole, those oval or pear shaped funerary cairns previously identified as long cairns and likely localised variants of 'round' funerary monuments (chapter six) are relatively lowlying. Where isolated examples of this

form occur they are situated downslope of round cairn clusters. While their chronology is unclear, this may mean, as well as being architecturally similar to classic long cairns, they were set in analogous locations. Like Samson's Bratful, they may have formed the focus for later monuments.

As discussed in chapter six, the differential setting of monuments in relation to cairnfield areas may be chronologically significant. Cemetery clusters are situated upslope of the main cairnfield areas, on or overlooking routeways and river valleys. Summit cairns and ringcairns in the higher uplands hold similar views. The viewsheds afforded from these monuments have much in common with stone circles. That funerary cairns and ringcairns associated with cairnfields are situated overlooking or adjacent to localised becks and ghylls may suggest a change over time. That the cairnfield monuments are situated to look 'inwards' may suggest that localised tenurial concerns began to assume greater importance than the broader landscape connections illustrated by earlier monuments.

Coniston and Torver

The Coniston Range forms the northern extent of the Furness Peninsula and is separated from the main body of the southwestern fells by the Duddon. To the north east of the Seathwaite fells, Bannishead and Torver High Common form a narrow shoulder running north east-south west along the base of the southern slopes of Coniston Old Man which rises to a height of 802 metres (figure 7.48). To the south east, the land slopes down to Coniston and Torver. The Walna Scar road runs from Coniston across the foot of Coniston Old Man, to Brown Pike and Walna Scar before beginning its descent to Seathwaite where it joins the Duddon. The pass, regarded as an 'ancient trackway', was used as a packhorse route in the Medieval period and to transport slate from quarries in the Coniston fells until the last century (Hindle 1984; Evans 1991).

Evidence for upland clearance on the southern fells is composed largely of cairnfields comprising less than ten cairns. In the Torver area the majority, comprising dispersed clusters of five or less cairns, are strung out between the 250 and 300 metre contours. It is close to this contour range that the proliferation of small springs and tributaries flowing from the high crags join larger becks which flow down steep ghylls towards Coniston Water and the river Lickle. The funerary monuments identified form coherent groups separated by the main ghylls and are associated with cairnfield clusters. High above the main cairnfield clusters there are a number of summit and ridgetop cairns, including a 'quartz' cairn close to Goat's Water (Poucher 1956). Most were not within the LAU survey areas (1994) and are not recorded on the Sites and Monuments Record. Many were identified by the Ordnance Survey (1998) and although a number are covered by walker's cairns they may be of prehistoric origin.

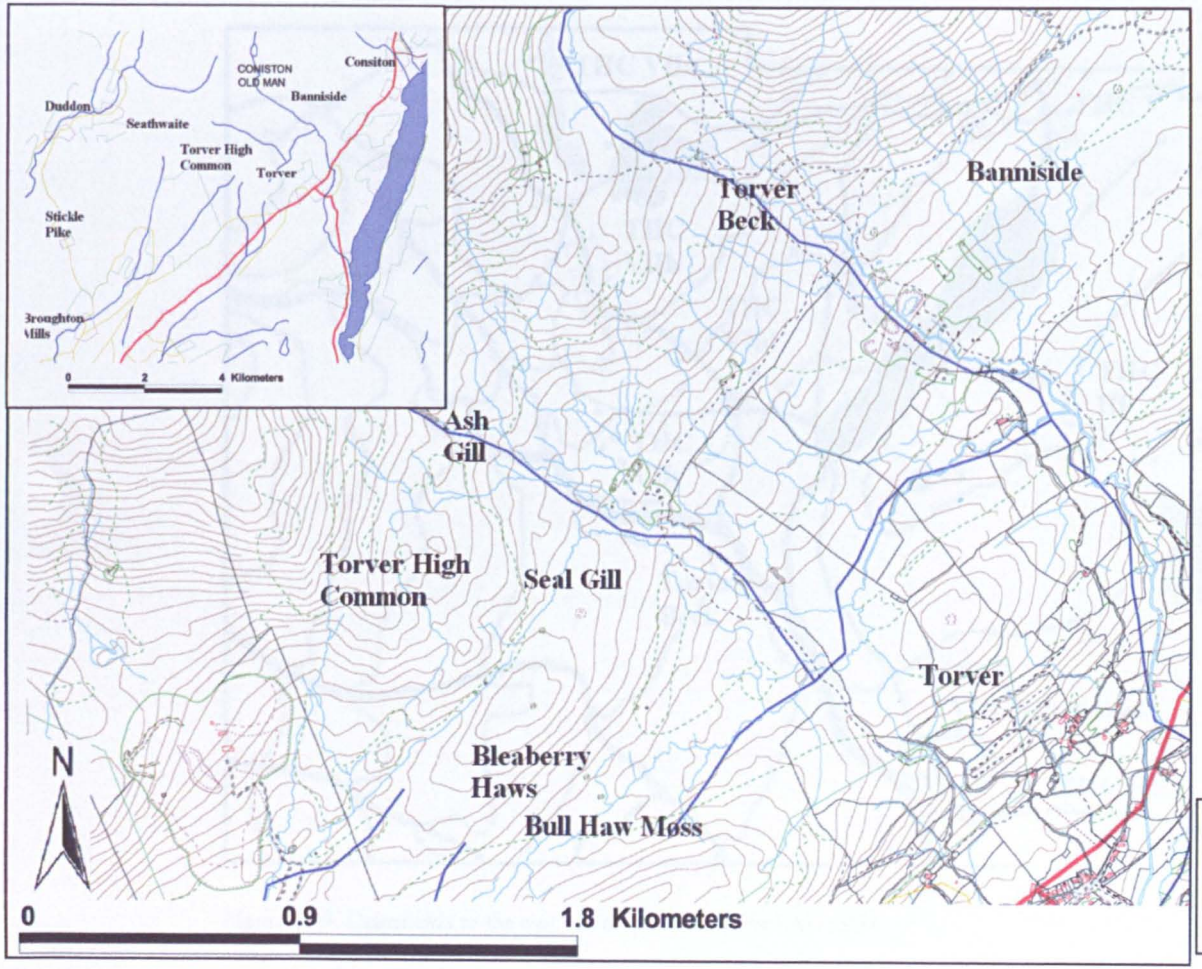


Figure 7.48. Location of Banniside, Torver High Common and Bleaberry Haws.

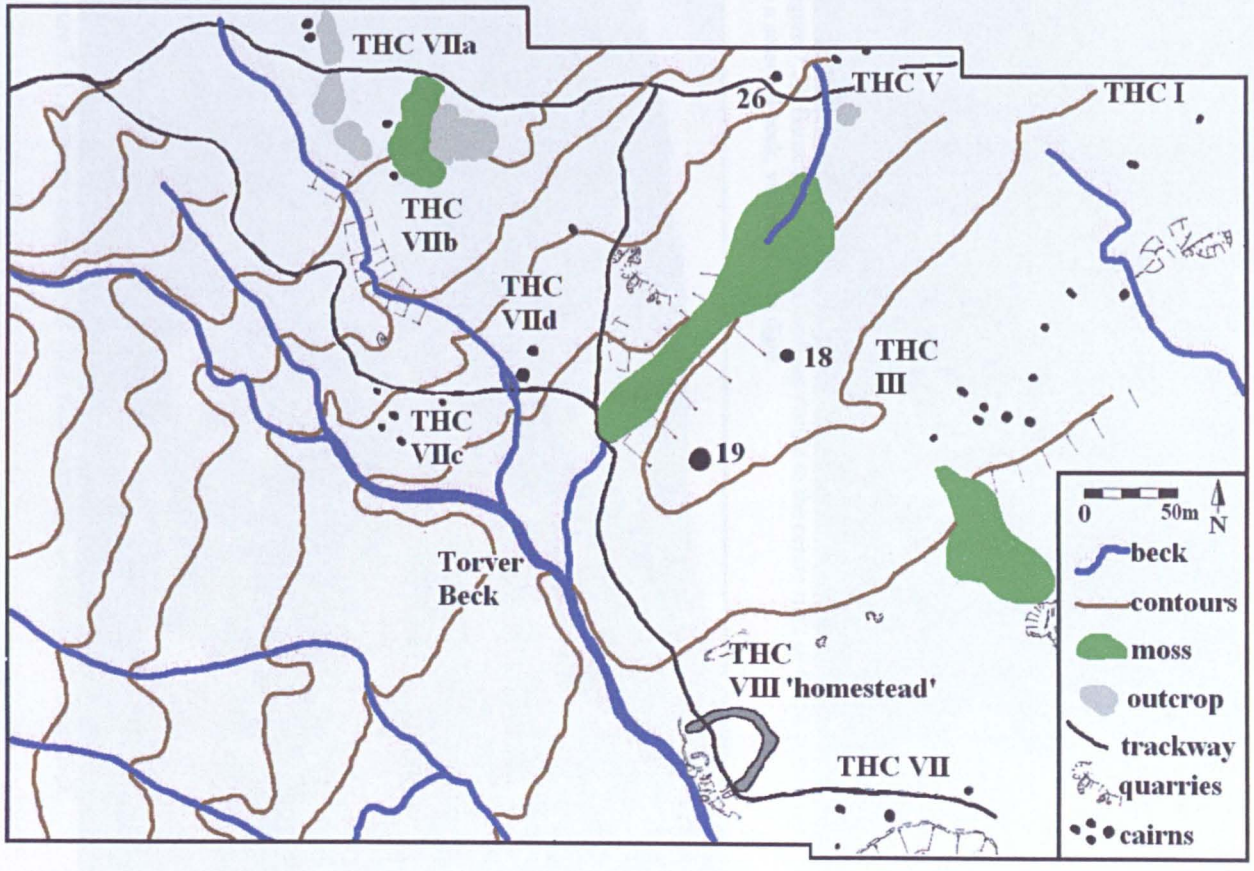


Figure 7.49. Cairnfields to the east of Torver Beck. After LAU 1994.

Figure 7.50. Banniside ringcairn (kerbing visible to the centre right of the picture) situated close to a seasonal beck, visible bottom right.

Figure 7.51. Funerary cairn THC III 19 in the foreground, overlooking Torver Beck.

The following section refers to the monuments recorded by their LAU (1994) survey numbers for Torver High Common (THC) as this data was not available on the county SMR.

Banniside

A number of dispersed simple cairnfields are situated amongst the crags and becks east of Torver beck at Banniside (figure 7.49). At the foot of Coniston Old Man, Banniside ringcairn is directly below a junction between the Walna Scar road and a track running along the scarp edge towards Bleaberry Haws. Situated below the 250 metre contour, the monument was excavated by Collingwood (1912) and is set on what appeared to be a man-made boulder clay platform added to an outcrop next to the course of a seasonal spring (figures 7.50, 8.13).

In a sheltered position adjacent to and overlooking Torver Beck, an enclosed settlement is associated with a small number of cairns (THCVII; figure 7.49). Above and to the north are six clusters of clearance cairns (THC I, THC VI). Directly above and overlooking the cairnfields, on the trackway along the escarpment, four large kerbed cairns occupy the highest point of the ridge (THCV/26, THCIII/1, THCIII/19, THCIII/18 and are situated to overlook the steep ghyll where a number of tributaries conjoin to form Torver beck (figure 7.51). A trackway up the ghyll leads towards Goatswater, Coniston Old Man, and the Walna Scar pass.

A kilometre to the south east of Banniside, another group of tributaries flow down from Brown Pike and Walna Scar, conjoining at the 300 metre contour to form Ash Gill Beck (figure 7.52). Ash Gill forms the easternmost of a complex formation of becks running south east towards Coniston Water, and south west towards the river Lickle and the Duddon. Bull Haw Moss and Seal Gill run south west along the high valleys to the north west and south east of Bleaberry Haws. It is associated with this promontory, beneath the peaks of White Maiden and White Pike, that a cairn cemetery is situated in association with scattered cairnfields.

High Pike Haw and Bleaberry Haws

North of Seal Gill and Bleaberry Haws two small stone rings are located on Torver Bottom, between the tributaries of Ash Gill and overlooking Bleaberry Haws (figure 7.49). The easternmost (THC XII) is on the 350 metre contour above a marshy area close to a spring. Amongst crags on terraces above the beck tributaries are number of clearance cairns (THC XVI). The second small stone ring (THC XVI) is south west of the first, on the back edge of a promontory at 370 metres, above a marshy area between two spring heads. These examples illustrate similar settings to small stone rings in other areas, situated between tributaries on high ground overlooking areas of cairnfield. Five dispersed groups of cairnfield (THC XI, THC XIII, THC XV, THC XVIII), all uncharacteristically above or around the 320 metre contour, occupy land between the crags and becks of High Pike Haw, immediately north of Seal Gill.

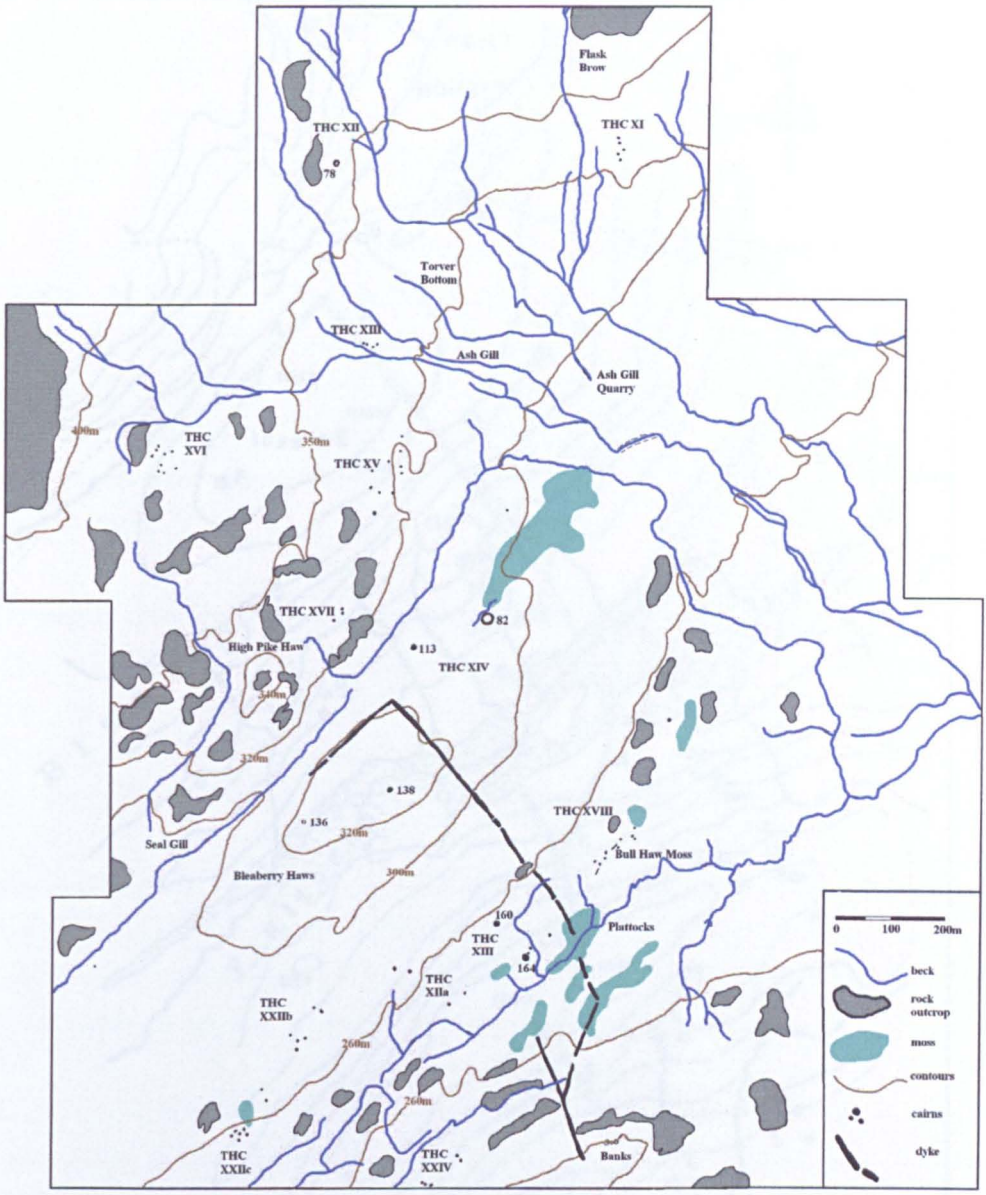


Figure 7.52. Cairnfield and monuments on Bleabery Haws. After LAU 1994.

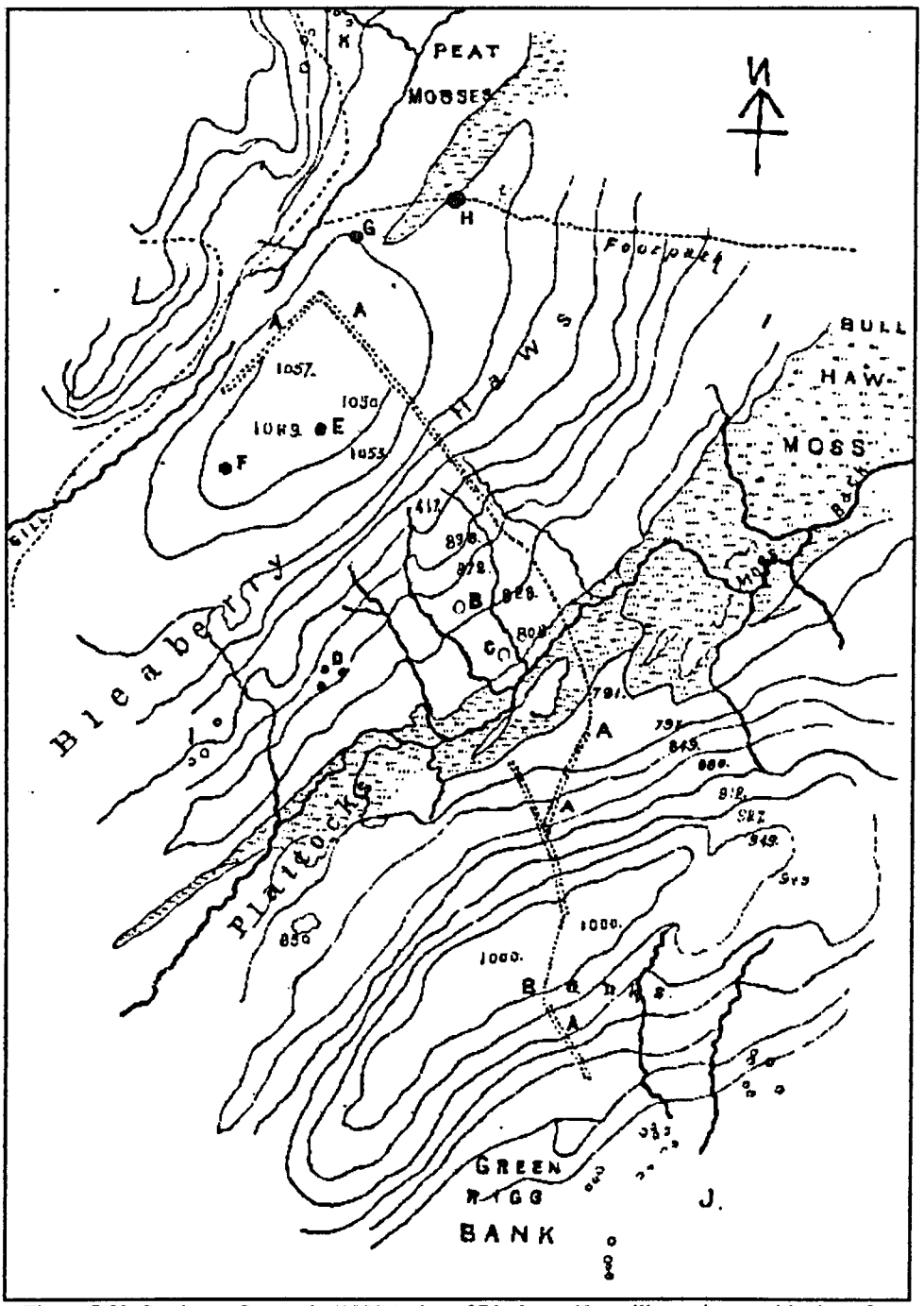


Figure 7.53. Swainson Cowper's (1888a) plan of Bleaberry Haws illustrating positioning of monuments.

The densest clusters of cairnfield on Bleaberry Haws are on the lower south western slopes of Bleaberry Haws, which rises to 320 metres. 13 groups of small simple cairnfield are clustered along the contour above Bull Haw Moss (250 metres). A linear stone and earth dyke (SMR 1625; Swainson Cowper 1888 A) stretches for 1360 metres from Bleaberry Haws, downslope to Bull Haw Moss, dog-legs to join a second linear section to the west and carries on up and over Banks (figures 7.52, 7.53). Although the boundary is associated with a complex of prehistoric monuments, and has been compared to those in such areas as Dartmoor, it is thought equally likely to be medieval in date (LAU 1994).

On a shoulder below and to the north east of the summit of Bleaberry Haws is a large ringcairn (THCXIV/92; SMR 1612; Swainson-Cowper 1888 H; figures 6.9, 7.50). It is situated adjacent to a spring joining Seal Gill, which occupies a shallow valley on the 300 metre contour separating Bleaberry Haws from High Pike Haw. Visible from the ringcairn on a localised horizon to its north west, below the summit of Bleaberry Haws and overlooking Seal Gill, is a large funerary cairn made of river cobbles (THC XIV 113; SMR 1614; Swainson-Cowper 1888 G; figure 7.55).

The summit of Bleaberry Haws is occupied by a prominent funerary cairn (THCIV 135; SMR 1613; Swainson-Cowper 1888 E) from which there are extensive views; south-west towards the coast, and to the north east, the Coniston Range. The feature is overlain by a walker's cairn (figures 7.56, 7.57) and although and burial deposits had previously been removed, Swainson Cowper's (1888a) excavation revealed it had been constructed on a natural outcrop.

West and downslope of the summit cairn, a feature described as a small stone circle (Burl 1976; Waterhouse 1985; LAU 1994) is situated on a terrace above the 320 metre contour (THCXIV 136; SMR 1615, Swainson-Cowper 1888 F). The monument is similar to the small kerbed settings at Iron Hill South and Little Meg (figure 5. 5).

Swainson Cowper (1888) excavated a further two cairns at Bleaberry Haws (discussed in chapter eight). Downslope and to the south of the complex around the ridge summit, these are associated with small cairnfields on Bull Haw Moss. Situated on the valley side is a large cairn (THC XXIII, 160; Swainson-Cowper 1888 B). Although it is relatively lowlying there is clear visibility of the Bull Haw Moss valley below. The second cairn (THC XXIII 164; Swainson Cowper 1888 C) is extremely lowlying, situated below the 250 metre contour on the valley floor adjacent to the Bleaberry Haws dyke (SMR 1625).

Figure 7.54. Bleaberry Haws ringcairn (THC XIV 92. SMR 1612).

Figure 7.55. Bleaberry Haws funerary cairn (THC XIV 113, SMR 1614), situated beneath High Pike Haw and above Seal Gill.

Figure 7.56. Bleaberry Haws summit cairn (THC IV 135, SMR 1613) looking south towards the coast.

Figure 7.57. Bleaberry Haws summit (THC IV 135, SMR 1613) looking north towards the central fells.

Although the monuments at Banniside and Torver are distributed at a different scale to those on Bootle Fell, Town Bank and Stockdale Moor, their settings and associations illustrate clear similarities. The monuments at Bannishead and Torver High Common are distributed along the same ridgeway, but situated on individual parcels of land defined by becks flowing from the fells. Dispersed cairnfields are separated by tributary becks and associated with funerary cairns and ringcairns. Ringcairns are located adjacent to springs and tributaries of these becks, and, like the earlier stone circles, are situated directly beneath prominent landmarks; Banniside at the foot of Coniston Old Man, and the Bleaberry Haws ringcairn below the twin peaks of White Maiden and White Pike. These monuments are associated with groups of funerary cairns situated on localised promontories on routes between lowland valleys and the fells. At Banniside a cluster of funerary cairns overlook Torver Beck as it descends to Coniston Water, and at Bleaberry Haws, the cairn cemetery is set to overlook the route of the river Lickle and its tributaries as they flow towards the Duddon and the Irish Sea.

Discussion: monuments, journeys and identities

The setting and architecture of monuments on Bootle Fell, Town Bank, Stockdale Moor and Torver illustrate a number of common themes in different landscapes. For the purposes of this discussion, perhaps the most pertinent is that these features, in common with other monuments, illustrate consistent concerns with routeways between landscape zones and with water. These associations are unsurprising given the nature and often uncompromising topography of the region. Access and movement between landscape zones is restricted, in particular in the fells. Rivers and becks, of which there are many, follow the easiest routes through these imposing landscapes. As well as being important sources of water for both humans and animals, as outlined in chapter one, they have historically impacted on the ways settlement, agriculture and communication have been organised.

Together with the environmental and lithic records, prehistoric monuments in Cumbria suggest seasonal occupation patterns with communities, or parts of communities, moving between upland and lowland areas. Whilst the settings of monuments clearly reference these transitions, at a closer level, these also relate to more localised features. Particular 'sorts' of natural feature were drawn on across the region. At a local scale, the referencing of these specific features suggests long term connections between communities and particular places in the landscape and may illustrate tenurial concerns. Long cairns were closely associated with rock outcrops and prominent hills. A number of these distinctive hilltops, which are likely to have been of earlier significance, were formalised through the construction of Neolithic enclosures. Drawing on connections between communities and aspects of the natural world, stone circles and ringcairns were located beneath both localised knotts and prominent mountains and hills, often visible from long distances. Many such features were further appropriated through the

construction of summit cairns. It is likely then that particular communities and wider social groups identified themselves and were identified by others in relation to these features.

As well as being located with reference to geological features, monuments drew heavily on watercourses. Whilst long cairns were located in relation to localised becks and tributaries, where these features appear to have been drawn on more overtly is through the construction of stone circles. These closely referenced river courses and in many cases were set on islands, metaphorical or real. In upland and cairnfield contexts similar concerns are echoed in that ringcairns were located on raised areas close to springs, with funerary cairns set to overlook ghylls and watersheds. That these monuments referenced such localised features may also indicate that the identities of particular communities were intimately tied in with the landscapes in which their daily and seasonal lives were played out.

By looking at monuments in relation to the watercourses with which they were associated, it is possible to identify the ways their positioning referenced both local landscapes and tied into wider networks of communication. In other words, their settings reflect the ways communities operated at different social and geographical scales and how these concerns were articulated across the landscape.

> "Like the becks it [life] begins at the dale head, gathers tributaries from farms and hamlets, and descends to the comparative lowlands where it usually finds a village or small town ..."
> (Nicholson 1972: 16).

Cairnfields and other upland monuments illustrate clear concerns with the tributary becks which run off the fells into the larger rivers below. The beck heads, their watersheds and the routes of the rivers physically defined the land available for agriculture in the uplands and these features formed natural boundaries between cairnfield groups. Given that many cairnfield areas had their own funerary monuments and ringcairns, it seems likely that watercourses defined boundaries between the areas exploited by individual small scale social groups.

As the tributaries run off the fells, they combine to form larger rivers. In the east of Cumbria these flow through regional routeways, associated with which are major monument complexes, for example at Penrith and Shap. In the west and south, the becks and rivers conjoin to form estuaries where they meet the Irish Sea, places also marked by monuments such as Summer Hill, Grey Croft and Birkrigg. The localised becks and spring heads which characterise many areas of the uplands not only form the points from which the larger rivers are derived, many were themselves marked by monuments.

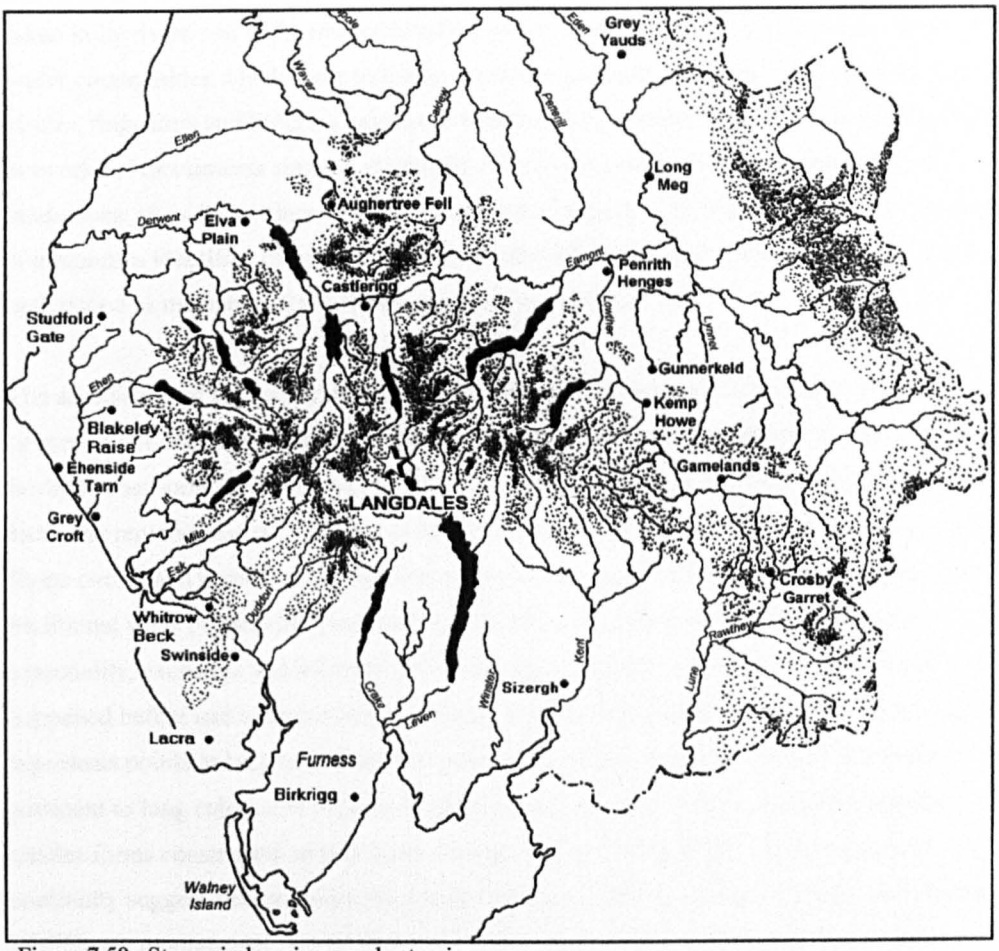


Figure 7.58. Stone circles, rivers and estuaries.

Birkrigg stone circle overlooks the conjoined rivers of the Leven, The Crake and Rusland Pool as they flow into Morecambe Bay (figure 9.37).

The Lacra circles overlook the estuary formed by the Duddon and Kirkby Pool (figure 7.24). Whitrow Beck stone circle is positioned above the estuary formed by the Esk, the Irt, the Mite and Whitrow Beck itself (figure 7.6).

Grey Croft is situated on a plateau above the estuary where the Calder, the Ehen and Newmill Beck join the Irish Sea. The sources and tributaries of these rivers are closely associated with other upland monuments. Worm Gill, flowing between the cairnfields on Town Bank and Stockdale Moor, joins the Calder beneath funerary cairns on Town Bank, from which the estuary at Grey Croft is clearly visible (figure 7.46). One of the sources of the Calder springs close to the circle at Blakeley Raise, and a tributary of the Ehen flows from below the Studfold Gate circle. The association between the Ehen and Neolithic and Bronze Age occupation is well known; Ehenside Tarn produced numerous wooden implements, stone axes and pottery (Darbishire 1872). Together with the density of coastal lithic scatters between Nethertown and Seascale (Cherry & Cherry 1984), these rivers clearly formed the focus for occupation and movement between landscape zones.

The settings of circles and henges in relation to estuaries and watersheds suggests the areas taken in by rivers and their tributaries reflected the 'catchment' of individual groups and the wider communities which came together at these monuments. Henges, upland and lowland circles, ringcairns and funerary cairns can therefore be understood as constituents of complex networks of monuments situated at specific points within both local and wider regional landscapes. If, as the settings of many monuments suggest, individual social groups and wider communities identified themselves with particular tributaries and rivers, these features could be understood as metaphors for different scales of community.

The association of circles and henges with estuaries and confluences illustrates the conjunction or meeting of disparate rivers, supporting dispersed communities, with the sea and the world beyond. That some circles are set to overlook the physical and metaphorical combination of the local, the regional and the inter-regional may reflect the need to mediate between these worlds. Stone circles and monument complexes served as locales in which to undertake formal or traditional ways of mediating and dealing with issues of transition and transformation, seasonality, exchange and interaction at community and inter-community levels. What happened before and after the stone circles is of equal importance, however their construction represents points in long term processes; not only did these monuments draw on themes pertinent to long cairns and enclosures, they themselves saw addition and embellishment with similar forms constructed in analogous settings across the landscape. These aspects of continuity suggest similar issues were being addressed and understood through the construction of different monumental 'types' (see Last 1999). By focussing on movement and transition between topographic zones, journeys through the landscape, often following the lines of watercourses, can be understood as key metaphors in increasingly formalised ritual practice (Richards 1996b; Last 1999).

Conclusion

The ways monuments were situated in networks across the landscape may indicate how patterns of seasonal movement played out over the Neolithic and into the Bronze Age. The relationship between monuments at a close landscape scale illustrates the significance of rivers, their tributaries and aspects of the natural world such as mountains and more localised landscape features to the social identities of particular communities. At a physical level these also defined the ways people organised themselves across and moved between different areas of the landscape. The significance of these journeys and their associations with seasonal transition and transformation are clearly evidenced by the burial and depositional record. Attesting to the ways that different scales of community articulated and how they drew on and appropriated aspects of the natural world in the maintenance of social identity and tenurial ties, these traditions form the focus for the following chapter.