# Chapter 2

## Moving Through the Forest – Mesolithic to Early Neolithic

### 2.1 Introduction

The time-span of this chapter covers parts of two traditional archaeological periods – the mesolithic and early neolithic. I will first discuss the Peak District evidence to identify the regional context of patterns of land-use and long-term historical processes. Then I will describe and interpret the evidence for occupation in the Upper Derwent, including its changing nature from the early mesolithic to the later mesolithic/early neolithic, the character of the mesolithic–neolithic transition and how this relates to the regional picture. Environmental evidence and lithics provide the sole sources of data in the Upper Derwent, an area that is devoid of any built structures until the later neolithic. Lithic assemblages indicate some of the locations of activities and settlements which can be interpreted in the context of the assemblage compositions, topographical relationships and published regional vegetational histories.

The adoption of agriculture is one of the major archaeological issues of this time-span and is viewed as one of the defining phases in the history of human society. The nature of the evidence in the Upper Derwent has encouraged me not to separate the two periods into two chapters, but to interpret them together in order to explore the issues of change and continuity.

The question of the impact of agriculture on existing communities, or the mesolithic–neolithic transition, has been debated: was it solely an economic phenomenon (Zvelebil 1986) or an ideological one (Thomas 1991)? Was it a revolution that quickly moved society from wild to tame accompanied by the rapid introduction of a complete neolithic package including material culture, domesticates and burial rites (Childe 1963; Thomas 1991), or was it a more prolonged diffusion of ideas exhibiting both greater continuity of mesolithic traditions and a much slower spread of new forms of material culture with significant regional variations (Pluciennik 1998)? Greater regional variation and longer time frames have led some to define the whole of the neolithic as the period of transition (ibid).

Indigenous communities encountered what we call the neolithic in different ways and had different perceptions of the elements we define the neolithic as comprising – pottery, polished lithics and domesticated animals and plants (Armit and Finlayson 1992). Domesticating cattle did not automatically include the adoption of pottery or new forms of lithics, and people may have chosen to use or ignore exotic types of material culture. The overall impression for the Peak District is that the latter was the case (Garton 1991), with very few changes being observed in the lithics record during the early neolithic, and different elements appearing at different times (Hind 2000).

There are differences apparent in the size and density of lithics assemblages in the Upper Derwent, especially between moorland and valley locations, and explanation of this variability is another issue that will be explored in this chapter. I shall investigate to what extent this is a factor of lithics retrieval, including the physical nature of finds locations, the effects of erosion and collection strategies, before moving on to the interpret whether differences in the assemblages relate to land-use at the time of deposition. Influencing factors may be the nature of tasks undertaken in relation to resources associated with variations in vegetation and topography, and the scale and longevity of settlement.

The nature and degree of settlement mobility has been identified as an important research question in northern England neolithic studies (Frodsham 2000), and requires investigation in the Upper Derwent. While it has long been recognised that mobility was central to the occupation of the landscape during the mesolithic (G. Clarke 1954; Radley and Mellars 1964), the neolithic has traditionally been seen as a period when settlement became permanent (Barker 1985; Megaw and Simpson 1979; Piggott 1954). More recently, mobility has been interpreted as an important factor of the neolithic (Edmonds 1999; Ford 1987; Pollard 1999; Thomas 1991; Whittle 1997). In approaching the question of occupation permanence, attempts have been made to define mobility and sedentism as settlement options in the later mesolithic and early neolithic (Pollard 1999; Whittle 1997). Settlement mobility/sedentism can be characterised into residential mobility, which involves wholesale movement at varying intervals; logistical mobility, which involves establishing the whole community at a base, with tactical forays into surrounding landscape; and embedded mobility, where a territorially restricted group visits the same places each season using fixed facilities such as houses (Whittle 1997). These patterns of mobility may be associated with short-term sedentism where individual settlements last a single year to a generation.

Mobility does not necessarily end with the adoption of farming – the building of houses, cultivating crops and tending livestock can be incorporated into planned movement. Fully sedentary lifestyles, involving the permanent occupation of specific sites over generations, can only be identified with confidence during the neolithic in the Northern Isles of Scotland (Pollard 1999). Complex patterns of short-range shifting settlement may have been common, with people relocating occupation from one locale to another, perhaps within a well-defined region, and possibly every few years (Whittle 1997). The whole community is not necessarily tied to living together all year long and sections may separate to occupy other locations in relation to perceived needs and desires, such as lithics acquisition or livestock pasture.

## 2.2 Peak District Context: Mesolithic to Early Neolithic Vegetation History

Environmental work with results relevant to the mesolithic and early neolithic has been conducted at a small number of locations in the Peak District. Work by Tallis in the High Peak, north of the Upper Derwent, provides the most comprehensive study of the vegetational history and was conducted in a landscape comparable to the study area (Jacobi, Tallis and Mellars 1976; Tallis 1964a, 1964b, 1991; Tallis and Switsur 1990). Cores taken on the limestone plateau have produced results relevant to the impact of later mesolithic and early neolithic activity on vegetation (Taylor et al 1994; Wiltshire and Edwards 1993). Some of Sheila Hicks's work on the Eastern Moors is relevant to the 5th and 4th millennia BC, as is work at Ringinglow Bog to the east of the Upper Derwent (Conway 1954; Hicks 1971, 1972).

### *2.2.1 Early Mesolithic*

In the High Peak, the immediate post-glacial vegetation has been characterised as arctic tundra from peat cores taken at Robinson's Moss, Longdendale (Tallis and Switsur 1990). Non-arboreal pollen, including *Calluna*, Cyperaceae, *Empetrum*, Filicales, *Filipendula*, Poaceae and Tubuliflorae dominate the basal part of the pollen diagram (ibid, 861). These open conditions were slowly colonised by birch, hazel, pine and willow by the early 8th millennium BC, 8950±80 BP (8290-7820 Cal. BC - Q 2320). Oak, alder, ash and lime followed to form an altitudinally zoned forest approximately 8775±90 BP (8250-7600 Cal. BC – Q 2321). Tallis has interpreted the evidence as indicating that in the High Peak, mixed forests filled the valleys with oak dominating on the lower moors up to about 425m O.D. Above this, the woodland began to thin out and oak gave way to pine

and birch. Ground above approximately 500m was covered by hazel, willow and birch scrub. At this time Britain basked in the best climate of the last 20,000 years and its most extensive woodland cover (Simmons 1996). If the Upper Derwent vegetation was similar to that at Longdendale, approximately 4km to the north-west, it would have been wooded like this during the early mesolithic with even the high plateaux around Bleaklow, Margery Hill and Kinder being covered with light scrub.

Within the altitudinal banding of species, the nature of the forest would have been extremely diverse in terms of extent of the canopy, age of trees and distribution of species. There would have been significant gaps in the woodland, caused by the death and regeneration of trees as a result of a number of factors including storms, fire and grazing animals (Vera 2000). Vera has investigated the lowland woodlands in Europe and the eastern United States, and concluded that the traditional view of the forest as a stable and continuous entity was wrong, and that a more dynamic and diverse landscape existed in the post-glacial 'wildwood'. To summarise Vera, grasslands are created in gaps by grazing mammals, thorny scrub colonises these openings from adjacent woodland and spreads progressively across the open ground. Seedlings growing amongst the scrub are protected from herbivores and grow to maturity to form extensive woodlands. The shade of the canopy limits scrub regeneration and allows grazing animals to browse amongst the woodland, so reducing the regeneration of trees. The canopy slowly opens up as fewer dead trees can be replaced, allowing more grasses and herbs to establish themselves and slowly create open grasslands. This theory indicates a landscape that was a mosaic of woodlands, scrub and grasslands that comprised a diversity of habitats, plants and animals.

### *2.2.2 Later Mesolithic to Early Neolithic*

During the later mesolithic there is stability in the composition and altitudinal zonation of the High Peak forests until the mid-5$^{th}$ millennium BC, as indicated by the consistency in pollen spectra at Robinson's Moss between 7675±65 BP (6640-6420 Cal. BC – Q 2273) and 5470±50 BP (4460-4160 Cal. BC – Q 2434) (Tallis and Switsur 1990), and comparison of pollen diagrams with profiles taken from Alport Moor and Snake Pass, both Hope Woodlands (Tallis 1991). However, while species composition remains mostly constant, this period is matched by increases in quantities of grassland and bog species, including *Calluna*, Cyperaceae, Poaceae, Potentilla and Rumex, and the presence

of Corylus charcoal (ibid). This has been interpreted as a sequence of peat formation beginning during the later 6th millennium BC off flat or gently sloping high altitude plateaux above 550m O.D., such as the Kinder massif, and reaching a lowest elevation of 400m O.D. in the fourth millennium BC (Tallis 1991; Tallis and Switsur 1973). Peat formation was dated at Leash Fen, on the lower lying Eastern Moors, to 4300±150 bc – GaK 2284 (Hicks 1971).

Peat forms where water transpiration and run-off is reduced so ground becomes waterlogged (Moore and Bellamy 1974). As peat grows it acts as a reservoir, further reducing drainage of precipitation. Blanket mires, characteristic of north-west Britain, tend to first develop as bogs in water-collecting basins and depressions. Under favourable conditions, the reservoir capabilities of peat can allow bog to spread across surrounding areas, covering large tracts of land where topography is suitable (ibid). Podsolisation, too, occurs in wet conditions, whereby organic material washed down from the peaty layer attacks minerals in the underlying soil and forms soluble iron compounds that are then leached down the profile and redeposited as a thin, hard layer of iron-pan (Ball 1975). This further limits drainage, and creates more acidic soils, so encouraging the rate at which blanket peat can spread away from basins. Peat accumulation was a slow process, with an average of between 20 and 80cm every 1,000 years calculated for British bogs, with the greatest rate of formation occurring during the 8th and 7th millennia BC (Walker 1970).

At Carsington, on the south-east edge of the limestone plateau, unpublished work by James Grig shows the development of lime dominated woodland in the mid-Holocene (pers comm). At Lismore Fields, a pollen core taken at approximately 300m O.D. indicates a more open landscape of woodland, grassland and heath compared to the High Peak prior to 6000 BP, a date estimated from a radiocarbon date of 6630±80 BP (4550-4160 Cal. BC – OxA 1978) (Wiltshire and Edwards 1993). This was followed by the regeneration of a mixed deciduous woodland within which there were open areas. Cereal pollen appeared sometime between the estimated dates of 5740 and 5045 BP, and became more abundant by 4460±100 BP (3500-2850 Cal. BC – OxA 1977) (ibid). Cereal grains from post-holes of a building were radiocarbon dated to 4930± 70 BP (3950-3530 Cal. BC – OxA 2434) and 4970±70 BP (3950-3640 Cal. BC – OxA 2436) (Garton in prep). More sustained and

extensive clearance begins in the late part of the millennium, while both tree and cereal pollen increases during the 4th millennium BC (Wiltshire and Edwards 1993).

A temporary phase of forest clearance in the mid-5th millennium BC, shortly above a date of 5780±90 BP (4850-4400 Cal. BC – Beta 68243) and widespread disturbance at 5190 ±60 BP (4230-3800 Cal. BC – Beta 64033) accompanied by an increase in non-arboreal pollen (but no cereals) is indicated in pollen cores from Lathkill Dale (Taylor et al 1994). Studies across the Eastern Moors indicates that by the early 5th millennium BC, the natural vegetation on the gritstone hills was dense woodland up to altitudes of at least 400m (Conway 1954; Hicks 1971, 1972). A reduction in woodland associated with a widespread decline in elm and the appearance of grassland species, is dated to the late 5th and early 4th millennium BC; (3040±140 BC (4250-3350 Cal. BC – GaK 2293) and 2820±110 BC (3800-3100 Cal. BC – GaK 2294) at Totley Moss and Hipper Sick respectively (Hicks 1971, 1972). Cereal pollen was not securely identified until later. Hicks took samples from a transect that ran north to south along the approximate watershed of the gritstone moorlands, with sites located at Ringinglow Bog, Totley Moss, Salter Sitch, White Edge, Leash Fen and Hipper Sick. The nearest of these to the Upper Derwent are Ringinglow Bog, approximately 6km to the south-east at 410m O.D., and Totley Moss, 8km to the south-east at 370m O.D.

These environmental samples show that in various areas of the Peak District, there was a transition from dense woodland cover to mixed vegetation containing open areas of grassland during the 5th to 4th millennia BC. In the High Peak this began in the 6th millennium and was associated with the spread of peat. Small amounts of cereals appear in the 5th millennium at Lismore Fields. Variations in the pollen composition and chronology of vegetational changes between different samples indicates that they give a localised record of the environment rather than a regional depiction (Edwards 1979). The heavily wooded environment would reduce the distances of pollen travel to the immediate local area (Hicks 1971). It is therefore impossible to use a group of samples from one geological zone in the Peaks, such as the Eastern Moors, as a model to directly transfer to elsewhere in the region (Garton 1991). Instead, they are of greatest use as comparative material to discuss the patterns of land-use elsewhere in the region and to frame potential research questions for future environmental work in the Upper Derwent.

A slowly shifting pattern of woodland, scrub and clearings would have provided a diverse range of habitats throughout the mesolithic and neolithic (Vera 2000). Clearings are important because they attract large game animals, such as deer, to the more abundant vegetation that grows with better access to light, are suitable for pasturing livestock and growing cereals, and provide the space for settlement areas. Clearings appear naturally as a result of lightning strikes, wild fires, gales or wild grazing pressure and it is likely that they always formed an element of the post-glacial landscape. Once made, they may be maintained over long periods of time, potentially lasting hundreds of years, by repeatedly attracting herbivores even after human occupation is abandoned (Buckland and Edwards 1983). Studies of European and North American forests have shown that traces of previous human clearance activity can remain in the landscape as patterns of differential vegetation colonisation for periods of over 500 years (Vera 2000). This does not imply that clearings were permanent features, but that natural and human activity created a slowly shifting mosaic of mature forest, clearings and regenerating growth.

The gradual increase in open areas seen in the Eastern Moors and limestone plateau pollen evidence during the 5$^{th}$ and 4$^{th}$ millennia BC, and the spread of peat moorland on the gritstone uplands in the 6$^{th}$ to 4$^{th}$ millennia BC, suggest that there were influences on the landscape that reduced the natural extent of woodland regeneration as part of the mosaic. Tallis views the High Peak evidence as suggesting that human activity during the mesolithic, in tandem with the onset of a wetter climate, led to the extensive spread of peat. It is thought that the vegetation and ground cover of the High Peak was repeatedly burnt, as suggested by the concentrated finds of carbon and charcoal, typically at the junction between the mineral soil and overlying peat, in virtually every palaeoecological sample contemporary with the mesolithic (Jacobi, Tallis and Mellars 1976; Simmons 1996). It is difficult to distinguish between anthropogenic and natural fires, however, the high quantities of charcoal, preserved both as fine charcoal rain and spreads of charcoal, are greater than can be explained by domestic or natural fires, and tree pollen indicates that woodland growth above 350m O.D. was suppressed during the later mesolithic even though small numbers of preserved tree stumps indicate suitable growing conditions (Simmons 1996; Tallis 1991). This coincidence of charcoal, mesolithic occupation and vegetational change is unlikely to be accidental. The most compelling interpretation of this evidence is the use of burning to modify woodlands as part of landscape management strategies, including the creation or improvement of clearings to encourage

lush ground vegetation to attract grazing animals and the use of fire to drive animals towards hunters (Lewis 1982; Simmons 1996). While forest clearance, or at least impeding natural regeneration, was a sustainable strategy in lowland areas, where woodland regenerated easily, this was not so on the higher ground of uplands such as the Dark Peak which have naturally high rainfall (Barnatt and Smith 1997). It was not until the 4th millennium BC before most of the higher ground above 400m O.D. was covered, while below this, mixed woodland remained (Tallis 1991; Tallis and Switsur 1973). The spread of peat occurred over a long time-span and was, therefore, not something that would be obvious within the lifetime of one generation.

## 2.3 Peak District Context: Review of Regional Evidence and Interpretations

### *2.3.1 Mesolithic: Archaeological Evidence*

Archaeological evidence for mesolithic activity in the Peak District largely comprises stone tools and waste from their production, though hearths and arrangements of post-holes or stones afford tantalising glimpses of settlements. We define the mesolithic in both technological and chronological terms as a post-glacial period when people employed characteristic microliths that were much smaller than palaeolithic tools. Worked stone, mainly dark chert from the limestone plateau or flint from sources beyond the region, has been found in almost every parish of the Peak District (Barnatt and Smith 1997).

Distribution maps of the Peak District show the densest concentrations on the shales to the south of the limestone plateau, where ploughing is most common, and in the north of the High Peak where erosion of peat is greatest (Hart 1981). There are a number of mesolithic assemblages on moorlands around the Upper Derwent in the High Peak (Illustration 2.1). Sites have been found on Broomhead Moors, Mickleden Edge, Hingcliffe Hill, Pike Low, Bradfield, Deepcar, Stanage Edge, Burbage, Moscar Cross and Totley (Hind 2000; Radley and Mellars 1964). The moorland assemblages vary in size from under 10 to over 400 implements, while approximately 23,000 pieces have been discovered at Deepcar overlooking the confluence of the Don and Porter valleys (Radley and Mellars 1964). Sites are widely scattered, except at Mickleden Edge where four concentrations lie in close proximity to each other, and most common on east to south-east facing slopes off the summit between 300 and 400m O.D. (ibid). A wide range of flint and black chert implements are common. Chert originates from the limestone

plateau and Yorkshire Dales, and flints from the Yorkshire/Lincolnshire Wolds, tills to the east or on the Cheshire Plain, and the Trent gravels to the south (Brooks 1989; Buckland and Dolby 1973). Approximately 18km to the north of the Upper Derwent lies Marsden Moor which has the highest density of recorded mesolithic findspots in England and Wales, including assemblages at March Hill, March Hill Carr, Dan Clough, Lominot and Dean Clough (Spikins 1999).

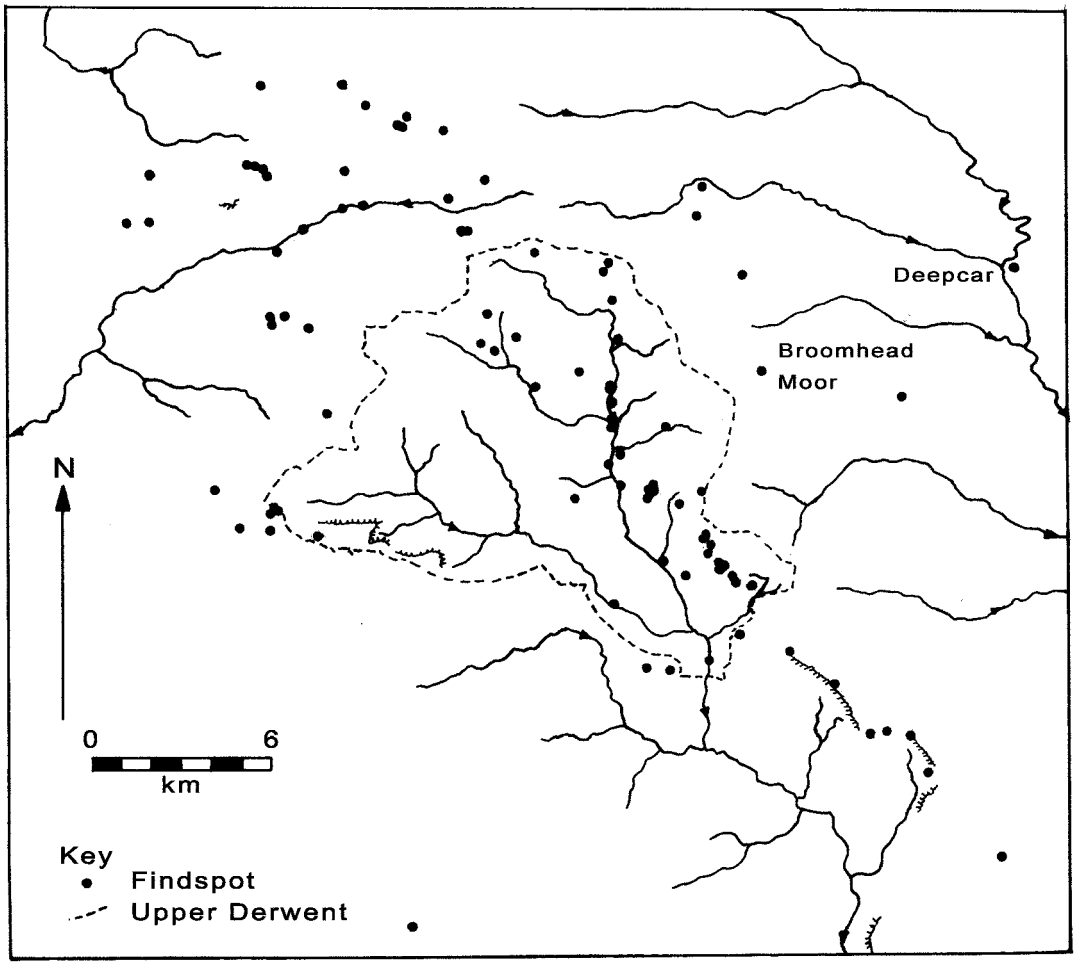


Illustration 2.1. Locations of Mesolithic sites in the Dark Peak

Most mesolithic finds in the uplands of northern England, including the Peak District, are found between 350m and 450m O.D., which approximately corresponds with the upper edge of enclosed pasture and the start of moorland (Simmons 1996). Upland sites tend to be found at places of high visibility, often on south-facing slopes and at riverheads (Spikins 1999).

It is recognised that there are spatial biases in the locations of finds caused by the uneven distribution of amateur collecting and the concentration of ploughing in the south-east of the region (Barnatt 1996c; Garton 1991). Hind (2000) has suggested that the high occurrence of finds in the High Peak is a product of the high number of amateur collectors who have focused their attention on the moorlands. Until recently, amateur collections provided the bulk of lithics evidence in the region. He also makes the point that local moorland distributions are related to locations most susceptible to peat erosion and the favoured footpaths followed by collectors. On a broader scale across the southern Pennines, there appears to be little correlation between the densest locations of lithics sites and the most severe peat erosion (Spikins 1999).

Recent fieldwalking projects have investigated some of these distributions with a more systematic approach to collection strategies, including the ongoing work of the Peak District Fieldwalking Project. This is an east–west transect running from the Dove Valley in the west to the Eastern Moors in the east investigating ploughed fields in all of the major landscape zones of the region: limestone plateau, shale valleys and gritstone uplands (Myers 1991; John Barnatt pers comm). Preliminary analysis of work done along this transect in the 1980s indicates that 50% of fieldwalked fields on the limestone plateau contained later mesolithic material compared to 25% in the valleys and 29% on the gritstone uplands (Myers 1991). Studies of material discovered during a second phase of fieldwalking in the late 1990s emphasises this contrast in terms of lithic densities, which were higher on the limestone plateau. Over 20 finds per hectare were made in 50% of fields on the plateau, while only 14% of fields in the valleys and no fields on the gritstone managed more than 10 finds per hectare (Hind 2000). On the Eastern Moors, mesolithic artefacts mainly comprise individual finds and small scatters with very few discrete concentrations. During an assessment of the effects of peat erosion on known lithics findspots recorded in the county SMR on Tintwhistle Moor, to the north of the Upper Derwent, sites were inspected in the 1980s and early 1990s (Garton [n.d.]). Ten scatters were discovered, ranging from a single blade to an assemblage of 40 pieces including flakes, cores and blades, all of which were mesolithic in date. Less than ten artefacts were found at five locations, between 11 and 20 pieces at one site and 21 to 40 pieces at four sites. Subsequent excavation of one of the larger findspots resulted in the recovery of a further 74 pieces. Flint, probably from the Cheshire Plain, and black and grey chert from the limestone plateau or Yorkshire Dales were present. Of possible

significance for interpreting mesolithic use of the high uplands was the observation that scatters were either predominantly knapping waste or solely implements suggesting a separation of production and use (ibid).

Many scatters are very small, sometimes no more than one or two tools, while others are the much larger assemblages of dozens or hundreds of pieces. They are most commonly found near watersheds or scarp edges above valleys; there is an almost continuous sequence of knapping sites along the top of Stanage Edge, for example, which would have provided relatively clear routes around the dense valley forests (Hind 2000).

Earlier assemblages are dominated by non-geometric microliths mainly made from flint, while those of a later date comprise smaller, more-geometric microliths produced in both flint, predominantly from the Cheshire Plain, and fine-grained black chert from the limestone plateau of the Peak District (Hind 2000; Myers 1986). Early mesolithic findspots also tend to comprise smaller numbers of pieces and an abundance of preformed cores, while many later assemblages are larger and include unmodified blocks of source material (ibid).

A number of mesolithic structures have been found on the fringes of the Peak District. At Deepcar, South Yorkshire, 12km east of the Upper Derwent, one of the few structures of the early mesolithic was excavated in the 1960s (Radley and Mellars 1964). Quartzite blocks and sandstone flags were arranged in an oval pattern interpreted by the excavators as the possible footing of a windbreak. Within this was a roughly circular setting of gritstone blocks approximately 4 by 3m across, inside which were three hearths. A total of 23,000 flint and chert tools and waste flakes were found concentrated within the structures and continuing to the south. Most of these were Wolds flint. A series of five stakeholes on Broomhead Moor, approximately 4km east of the Upper Derwent, have been interpreted as a windbreak near to a paved area and hearths radiocarbon dated to 8573 BP ± 100 BP (8000-7350 Cal. BC – Q 800) in association with lithics (Radley et al 1974).

### *2.3.2 Into the Early Neolithic: Archaeological Evidence*

Lithics scatters also dominate the early neolithic, assemblages of tools and waste flakes representing the locations of settlements, tool-production sites, the deliberate funerary or

ceremonial deposition of implements in the ground and hunting (Barnatt and Smith 1997). As for the mesolithic, fieldwalking has provided the bulk of data and has been prone to the same distributional biases towards the limestone plateau, based on amateur collecting and recent ploughing. The Peak District Fieldwalking Project (see section 2.3.1) was again able to identify early neolithic lithics as being distributed across the three topographical zones of the Peak District. Differences between zones were less marked when compared to later mesolithic material – 20% of fieldwalked fields on the limestone plateau contained material, 33% in the shale valleys and 14% on the gritstone uplands (Myers 1991). At Roystone Grange, an extensive test-pitting survey identified later mesolithic to early neolithic material (Hodges 1991a). Small concentrations of 7$^{th}$ to 4$^{th}$ millennium material are distributed across the landscape, typified by small concentrations of limited tool types or stray finds (Myers 1992). The only discernable shift in distribution is one from an even coverage of 7$^{th}$ to 5$^{th}$ millennium material in the valley and on the surrounding hills, to an absence of 4$^{th}$ millennium material in the valley (Hind 2000). Similarly, at Dirtlow and Bradwell Moor there is evidence for 7$^{th}$ to 4$^{th}$ millennium activity on the limestone plateau overlooking the Hope Valley (Dearne 1997; Guilbert et al 1995, 1997). There is also the identification of mesolithic and neolithic material occupying the same area at Lismore Fields (Garton in prep). This correspondence in the patterning of later mesolithic and early neolithic material is seen across the Peak District (Hind 2000) and throughout much of the Central Pennines, so indicating a continuity in the use of places across the early mesolithic, later mesolithic and early neolithic (Spikins 1999).

There are a number of difficulties in assigning fieldwalking assemblages to either the later mesolithic or early neolithic. The difficulty in separating the two periods is because many of the early neolithic tool-working practices, involving the systematic working of cores, and raw materials are similar to those of the later mesolithic (Hind 2000). Microlith manufacture appears to continue relatively late in the Pennine Chain (Spikins 1999). The two most common diagnostic early neolithic implements found by fieldwalking are polished stone axes and arrowheads, the latter being a category of tool most likely to be lost away from settlement locations and incorporated into assemblages of other periods (Garton 1991).

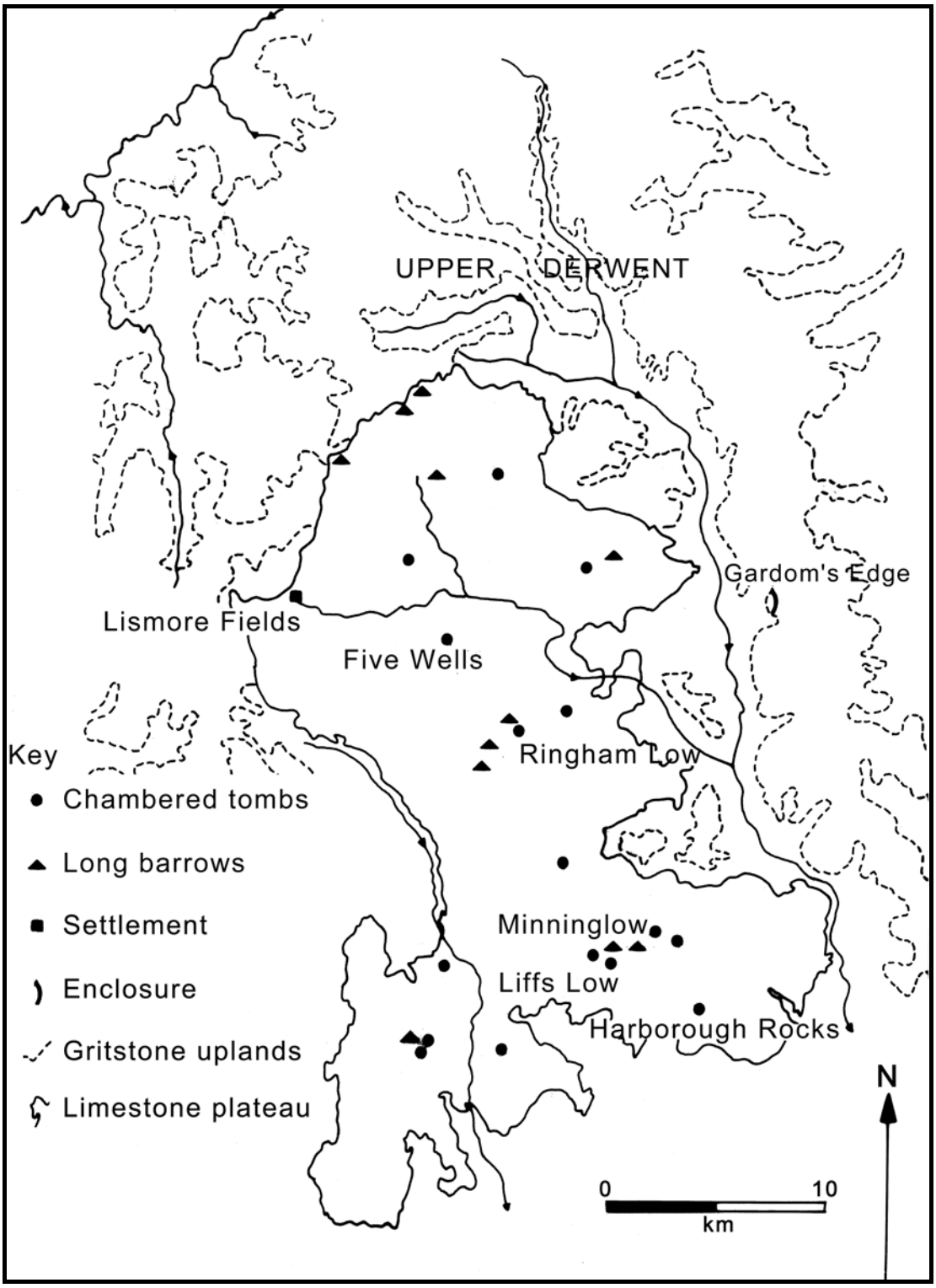


Illustration 2.2. Locations of Early Neolithic chambered tombs, long barrows, settlement and enclosures in the Peak District

Perhaps the biggest identified difference between the mesolithic and early neolithic was in the construction of monumental tombs and gathering places during the latter. There are between seven and 11 long barrows and between eight and 16 chambered tombs, three of which comprise chambers within long barrows, surviving in the Peak District

(Illustration 2.2). By analogy with monuments in other regions of Britain, the majority are most likely to date to the 4th millennium BC, though there are no radiocarbon dates and few diagnostic artefacts in secure contexts (Barnatt 1996a). There is evidence at some sites for long and complex histories, which may have continued to the 3rd millennium BC (Edmonds and Seaborne 2001), and a great variety in layout and design between individual tombs (Barnatt 1996a). All were built on the limestone plateau and tend to occupy positions located either near to watersheds or overlooking lower shelves and basins (Barnatt 1996c). At least four of the chambered tombs, including Minninglow and Five Wells, are passage graves where access to the interior was maintained; while up to 12 of the sites, such as Liffs Low and Ringham Low, are closed chambers that lack easy access to their interiors (Barnatt 1996a). A passage grave at Harborough Rocks contained a rear chamber where skulls and pelvic bones were deposited, a passage with limb and rib bones, and in front of this was a deposit of the remains of at least five humans accompanied by pottery and very fine leaf-shaped arrowheads (J. Ward 1890). Possible forecourts between simple horns have been observed at Long Low and Ringham Low (Barnatt 1996a).

A large stone-built bank enclosing the top of Gardom's Edge, Baslow, has recently been proposed as early neolithic in date because of its stratigraphic relationship to elements of a later prehistoric cairnfield and the clustering of earlier lithics, recovered within test-pit transects, in its vicinity (Barnatt et al 1995, 2002. Illustration 2.3). The bank is over 600m long and displays variability in build along its length, which is broken by a number of entrances. There is evidence for phasing, the erection of timber posts and burning of large amounts of wood at the northern end (Barnatt et al 1998). The interior of the enclosure is densely boulder-strewn. Charcoal samples are still awaiting dating that will securely date the bank. Another, similar, enclosure has recently been discovered at Cratcliff Rocks, Harthill (Makepeace 1999) and the enigmatic enclosed outcrop of Carl Wark, Sheffield, has also been interpreted as an early neolithic enclosure, though iron age and early medieval dates have also been postulated (Edmonds and Seaborne 2001; Hart 1981; Savage 1999). In contrast to tombs, which are restricted to the limestone plateau, the enclosures are all on the gritstone of the Eastern Moors and outlying outcrops.

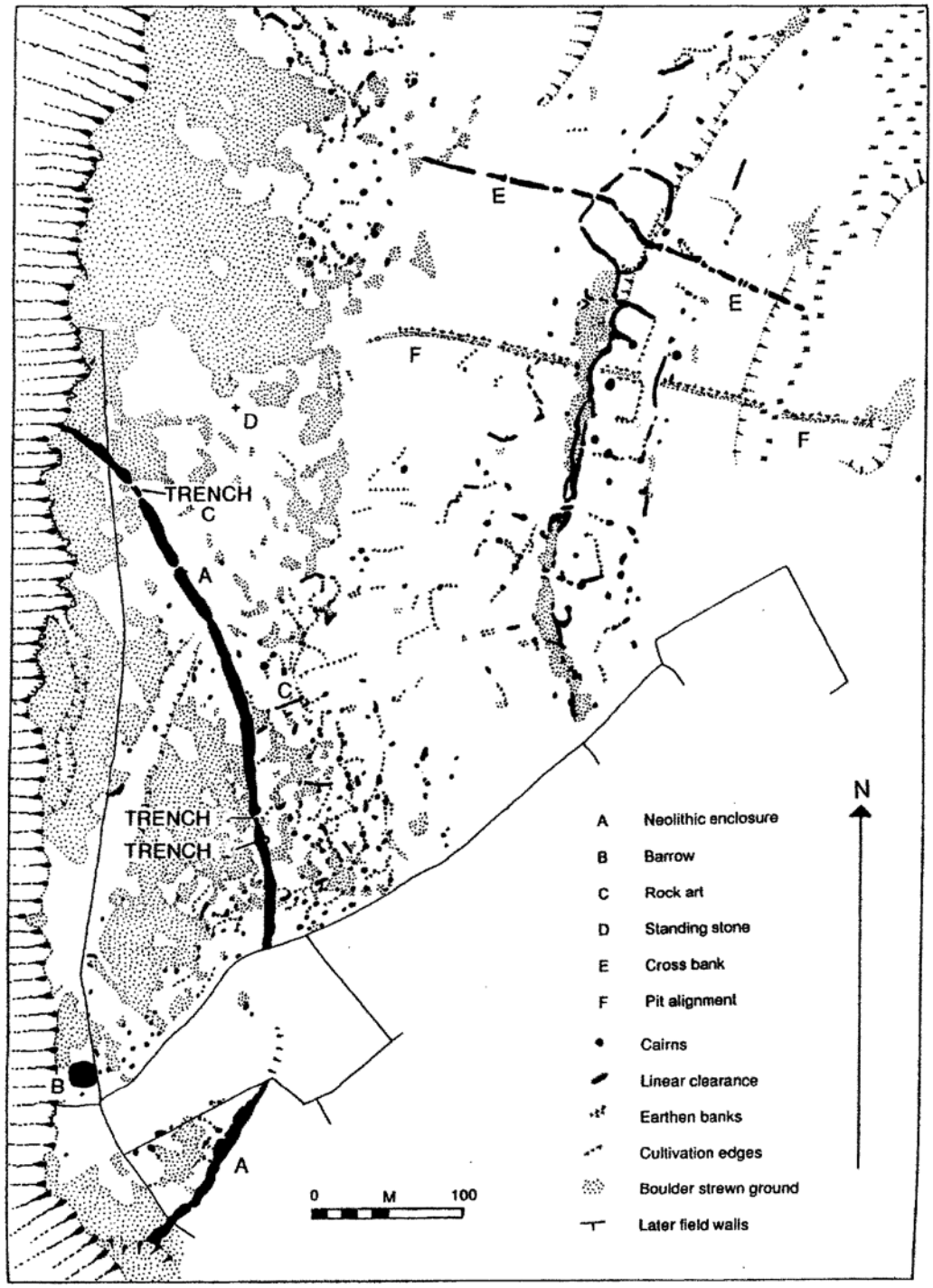


Illustration 2.3. Gardom's Edge enclosure, Baslow. From Barnatt et al 2001

### *2.3.3 Lismore Fields and Roystone Grange*

There are two locations in the Peak District where occupation locales dating to the mesolithic and early neolithic have been investigated in some detail: Lismore Fields, Buxton, and Roystone Grange, Ballidon.

Lismore Fields is a settlement site lying on clays of the upper Wye basin at 300m O.D. which was excavated in the late 1980s by Daryl Garton for Trent and Peak Archaeological Trust (Illustration 2.2. Garton 1991, in prep). The site is located on a small plateau situated between two tributaries of the River Wye, one of these watercourses issuing as a spring approximately 90m south of the excavation trench (Garton 1991). An area of approximately 3,000m$^2$ was opened within which were found post-holes, pits, hearths and lithic scatters. Small clusters of later mesolithic and early neolithic lithics, including knapping debris, were found across the site. Between the 5$^{th}$ and 4$^{th}$ millennia BC pits were filled with burnt stones, charcoal and further lithics. Two or three timber-built rectangular buildings were constructed during the 4$^{th}$ millennium BC as indicated by radiocarbon dates from post-holes (Garton 1991). They are associated with charred cereal grains and pottery in which residues of beeswax, honey, apples and dairy products have been identified (Beswick in Garton in prep).

A pollen sample taken close to the excavations has provided some contemporary data to the excavated lithics and features (Wiltshire and Edwards 1993). Charcoal deposits have been found dating to the 6$^{th}$ millennium BC and have been interpreted as resulting from vegetation fires, perhaps the deliberate burning of woodland to maintain small clearings to attract grazing animals (ibid; Edmonds and Seaborne 2001). Cereals were cultivated from the early 5$^{th}$ millennium BC with a continued presence throughout prehistory (Wiltshire and Edwards 1993). Over this time there were repeated episodes of woodland loss and regeneration in the vicinity. Edwards and Wiltshire interpret these as evidence for small-scale clearing of woodland to grow cereals and creating grazing.

Garton (1991) argues that the buildings are evidence for sedentary occupation, while Thomas (1991) views them as temporary dwellings built within long-term cycles of movement with short visits to specific places occurring on a seasonal basis. Another interpretation is that they represent sustained occupation over a number of years within a pattern of shifting settlement (Pollard 1999).

Analysis of prehistoric artefact distributions was an important element of the Roystone Grange project. The farm is currently undisturbed pastureland and the interpretation of agricultural settlement since the Romano-British period suggests that pasture has dominated the valley for at least 2,000 years (Hodges 1991a). In the absence of ploughed

fields for fieldwalking, transects of test-pits across the hill-tops surrounding the valley were employed and compared with material found in the valley-based excavations. Though not analysed indepth at the time, a later study of the material showed that there was activity or occupation across the study area during the mesolithic and early neolithic (Hind 2000). The material was dominated by local cherts with the presence of some flint. Small concentrations and stray finds of lithics were evenly spread on the hills and in the valley, while larger concentrations were absent. A group of worked cores was found by a sheltered water source, suggesting the manufacture of tools for later use at this favoured location. Diagnostic early neolithic tools were absent from the highest ground with the largest assemblages being found on the lower hills and slopes.

### *2.3.4 Contrasting Interpretative Models: Myers and Hind*

The region's evidence for the mesolithic and the transition to the neolithic has been interpreted very differently in two major studies. One model sees mesolithic activity revolving around the procurement and processing of game within the context of a mainly meat-based diet with activity being largely environmentally determined (Myers 1986). Another model builds on the work of Myers but sees mesolithic diet as being more balanced between meat and plants, and proposes that the gathering of plant foods, creation of clearings and procurement of stone was more socially involved than a simple reaction to the environment (Hind 2000).

Beginning with Myers, he proposes that differences in sizes and composition of lithics scatters indicate differences in the locations and types of procurement strategies employed (Myers 1986, 224). In the early mesolithic, spring and summer were taken up with encounter-based hunting, while valley locations were used in the autumn for specialised intercept-hunting of red deer. Meat from the autumn hunt was then stored and used over winter, which was spent in coastal locations. The interpretation of an upland to coastal occupation range is based on two elements. First, Myers has identified White flint, attributed to sources on the Wolds, as comprising 80-99% of pieces in early mesolithic Peak District assemblages (ibid, 311). Second, Myers has used a model of embedded procurement as the main form of stone acquisition (ibid, 66). The spread of woodland by the 7$^{th}$ millennium BC is thought to have removed conditions suitable for an autumnal intercept-hunt by blocking deer-migration routes (ibid, 221). In the later mesolithic, the raw material composition of assemblages changes. There are much higher

percentages of chert and till/gravel flint, often comprising over 80% of a scatter, while White flint is absent or forms a negligible proportion of sites (ibid, 367). Raw materials were transported in unmodified form from procurement sites to longer-occupancy settlements to provide an adequate supply of tool blanks for use where needed. Tool styles became more regionalised and raw materials more locally sourced, suggesting that territories shrank. Myers sees this as resulting from adaptation to the wooded environment by more generalized and opportunistic subsistence strategies that replaced the logistical mobility of the autumn hunt with the hunting of dispersed, non-migratory animal populations accompanied by greater residential mobility (ibid, 375). People are thought to have actively hunted in winter, and developed strategies to manage game, such as creating clearings.

He does not consider gift exchange as a predominant means of acquiring flint because there is no observed linear reduction in numbers of pieces over distance from source, both in the early and later mesolithic (ibid, 395). He therefore interprets the acquisition of stone materials during the mesolithic as by visiting sources embedded as part of routines of movement across the landscape. The transition to early neolithic is explained by Myers as a continuation of the long-established economic goal of developing further risk-reduction strategies. Organising labour for crop planting, weeding and harvesting is seen as tying people to areas, so replacing mobile lifestyles with sedentary ones. He sees this as affecting lithics procurement because the reduction of residential mobility would leave many communities isolated from lithics sources.

Turning now to Hind, he concentrates on the later mesolithic and early neolithic. He interprets differences in lithics scatters as showing that different places were visited at different scales of occupation and longevity of stay: some were home to persistent use over a long time, some were used over more limited periods and others were used episodically over and over again. Quite often their size suggests residence by no more than an extended family. The time taken to create and/or maintain clearings suggests that these were far from opportunistic, but bound up with the creation and maintenance of personal and communal identity. Decisions taken and activities required to make clearings would be within the context of communal experience of previous woodland clearance. Within traditions of clearance, people would have expectations about the right sorts of places to create them, how to go about it as a group and the form of personal

involvement. Once made, they then give a strong sense of place and tenurial responsibilities within residential mobility. Hind sees people as moving along paths of least resistance in a variably wooded landscape: the edges of precipitous dry valleys, rivers and the high watersheds. River edges were important locations because they supported a variety of resources such as edible seeds, tubers and greens as well as medicinal plants and herbs. Human selfhood would have been developed in part through interaction with other people and with animals in the context of attachment to land. Procuring stone would have been carried out within the context of inter-community relations and affirmation of tenurial identity. People from different communities may have come into contact at procurement sites in different ways and combinations to other tasks, as well as experiencing the remains of previous visits by others. Flints from the Wolds, Trent gravels and Cheshire Plain may have been acquired by exchange.

Hind's study of stone tool assemblages from the Peak District has led him to the conclusion that the mesolithic to neolithic transition is practically invisible in the lithics record, with blade-working traditions continuing much the same from the 5th to 4th millennia BC. Microlith manufacture in the Pennines appears to continue alongside the use of post-buildings and long cairns. While domestic livestock and cereal cultivation were adopted in the 5th and 6th millennia BC respectively they supplemented forager diets rather than replaced them. None of the so-called neolithic indicators occurred at the same time. It is therefore inappropriate to speak of two distinct periods, each with a set of essential practices. In Hind's model, the tasks associated with agriculture would have been incorporated into existing traditions of landscape occupation.

### *2.3.5 Interpretation: People, Places and Paths in the Mesolithic and Early Neolithic*

Based on the evidence of vegetation, lithics material, monuments and the important Lismore Fields excavation, and with reference to the work of the researchers who have produced theoretical models for the Peak District, I shall now give an interpretative overview of the region in the mesolithic and early neolithic.

Attempts have been made to interpret how society was organised in the mesolithic and early neolithic, for Britain generally (Bradley 1987a; Edmonds 1999; Simmons 1996; Thomas 1991; Tilley 1994) and the Peak District specifically (Barnatt 1996c; Edmonds and Seaborne 2001; Hind 2000). All see individuals identifying with the extended family

as the main community of social identity, complex relations being based on ties between kin. Other important social affiliations would have been based on gender, age and groups engaged in tasks such as gathering, tending herds or quarrying chert. These were the groups that an individual spent his or her day-to-day life amongst, the 'face-to-face community' to borrow a term from Fleming's study of medieval Swaledale (1998).

The varying sizes of mesolithic scatters along with the character of stoneworking have been interpreted as indicating a mobile population (Edmonds and Seaborne 2001; Myers 1986). In these models, variations in assemblage size and composition represent different levels of inhabitation. Smaller sites with little debitage and a restricted range of tools are taken to be the locations of brief visits where occupation was not long enough for large amounts of material to be deposited (Myers 1992). These might be locations where specific tasks were undertaken, such as tool or plant procurement, game hunting and butchery (Binford 1978). Larger assemblages may indicate regularly revisited places. If there is a wide variety of implements, a balanced assemblage representing a range of tasks, the scatter may be the location of more prolonged residence (Hind 2000).

Another aspect of mesolithic and early neolithic stoneworking is that good-quality stone was systematically worked to produce portable blades and flake cores. This has been interpreted as being the production of readily carried blanks that could be worked into tools as needed by relatively mobile communities (Edmonds and Seaborne 2001; Hind 2000; Myers 1986). The scale of mobility has been explored in relation to the dominant source material for stone tools. Myers has interpreted the change in bias from flint sourced outside the region in the early mesolithic, to chert, from the limestone plateau, in the later mesolithic as indicating that people moved between the Pennines and the neighbouring lowlands in the early mesolithic but were more constrained in their movements to the Peak District during the later mesolithic (Myers 1986). This takes the view that lithics are procured from source rather than obtained by exchange.

How people moved around the landscape, how mobile they were, is a debatable issue which we have seen is more complex than a choice between complete mobility and full sedentism (see section 2.1). Studies show that foraging communities can be sedentary or move great distances annually, the whole group may move en masse or smaller groups may separate for specific tasks over short periods (Hayden 1981; Jochim 1976; Riches

1982; Whittle 1997). Visiting some places repeatedly and some anew would require a good working knowledge of the landscape and of other groups of people who might be encountered. I would suggest that such movement was undertaken according both to traditional rights and new exploration, possibly linked to the seasonal changes in climate and natural resources or in relation to more immediate needs. A strong sense of place is created and reworked through the routine inhabitation of the same locations – making and managing woodland clearings, acquiring chert from known seams, revisiting the same positions, travelling the same paths over and over again. With a sense of place, ideas of tenure and social identity linked to the landscape are established (Edmonds and Seaborne 2001; Hind 2000).

Evidence for the transition to the early neolithic is unclear in the Peak District, largely because of a paucity of securely dated evidence and the ambiguity of the data. Small concentrations of 7$^{th}$ to 4$^{th}$ millennium material are found across the Peak District, many being small concentrations or stray pieces. There is a continuation in tool-working practices, including microlith production, the use of similar raw materials and types of locations, so indicating that there was no radical change in the lithics record contemporary with the advent of agriculture (Hind 2000; Spikins 1999). Hind accounts for this as indicating that there may have been little distinction in the range of procurement and manufacturing activities practised over this time at these locations (Hind 2000). Cereal cultivation appears to be adopted in the early 5$^{th}$ millennium BC at Lismore Fields, and is present on the Eastern Moors in the 5$^{th}$ millennium BC (Hicks 1971, 1972; Wiltshire and Edwards 1993). How prevalent arable was is unclear, but on the basis of the small quantities of cereal pollen it has been argued that there was no wholesale adoption of cultivation, with livestock rearing, gathering and hunting being of greater importance (Barnatt 1996c). Mortuary deposits radiocarbon dated to the end of the 5$^{th}$ millennium and beginning of the 4$^{th}$ millennium BC from Whitwell long cairn, 20km to the east of the Peak district, display tooth wear indicating a diet that was still largely based on coarse fibrous plant material typical of foragers (Chamberlain and Witkin 2003). This evidence, as it is, blurs the boundary between the later mesolithic and the early neolithic.

The lack of dramatic change in the lithics record suggests that communities continued to incorporate some levels of mobility, possibly related to the seasons and different resources, from the 6$^{th}$ to 4$^{th}$ millennia BC. This is a view proposed by a number of archaeologists

(Barnatt 1996c; Edmonds and Seaborne 2001; Hind 2000), though Daryl Garton sees the Lismore Fields evidence as indicative of a sedentary population (Garton 1991, in prep). As Pollard and Whittle have demonstrated, there is not a simple dichotomy between fully permanent or highly mobile populations, rather the evidence for the neolithic in Britain suggests that communities were involved in more complex patterns of shifting settlement comprising long-term residence and short-term occupation related to perceived needs, and without requiring the whole community to move together (Pollard 1999; Whittle 1997).

The main valleys, such as the Derwent, would have been heavily wooded and ideally suitable for over-wintering, while more open landscapes of the limestone plateau and gritstone uplands would have been ideal for summer grazing (Barnatt 1996c; Barnatt and Smith 1997; Edmonds and Seaborne 2001; Hind 2000). The animal husbandry regimes are unknown due to a lack of surviving faunal remains, but the dominance of woodland in the Peak suggest it was on a small scale, and Myers has interpreted small lithic scatters comprising a restricted range of tool types as suggesting a few individuals tending herds (Myers 1992). Cultivation may have been restricted to spade and ard horticulture wherever light, fertile soils were found. Areas of light soils are common on the gritstone and limestone but may also be found amongst the shales of the valleys as alluvial or outcropping deposits. Some of this may have been undertaken in traditional clearings, originally made to improve vegetation and attract game, and the spatial and temporal patterns related to agriculture are likely to have been related to existing traditions of land-use. New tasks are required of farming, and time previously spent in gathering and hunting may have been more occupied with herding cattle, growing fodder and cultivating crops. This model sees aspects of the 'neolithic package' being adopted at different times by communities and incorporated into existing patterns of landscape occupation.

Chambered tombs are interpreted as built where people reworked their right of tenure and social relations through invoking ancestral links to land and kin (Barnatt 1996c; Edmonds and Seaborne 2001). Their concentration on high locations in the limestone plateau placed the monuments in areas which would have been suitable as summer upland grazing for livestock, hunting grounds and routes across the landscape for movement of people and livestock (Barnatt 1996c). As such, the limestone was a place where people from different communities were most likely to come in contact with each other, the mingling of comparative strangers with their herds being likely to cause tensions over rights to land

tenure (Edmonds and Seaborne 2001). The tombs reinforced traditional claims to the most contested seasonal pastures (Barnatt 1996c) and bonds of kinship between different families (Edmonds and Seaborne 2001). On the basis of morphological comparison with well-investigated tombs elsewhere in Britain, access was probably maintained into the passage graves so that new deposits could be made and the bones could be used (Barrett 1988). Bones may have been used in ceremonies as the material representation of ancestors, the mythologised forebears of the kin, in ceremonies where human remains were manipulated and venerated to give guidance or justification to social practices (Edmonds 1999).

The location, variation in bank build, number of entrances and boulder-strewn nature of the interior of the enclosure at Gardom's Edge, Baslow, have been interpreted as a place built and used by different communities. The density of boulders and low numbers of finds suggests against settlement within the interior. Within the more mobile model, this would be a place where comparative strangers from different families and communities across the region, including areas to the east of the gritstone outside of the Peak District, held ceremonial meetings (Barnatt et al 1995). Gatherings could give the opportunity for different communities to exchange gifts, negotiate where they intended to go during the following seasons and to acknowledge or contend access to certain places. Such relationships with other communities may have had some influence on subsistence because food is likely to have been an important element in expressing inter-community relations through feasting, ceremony, exchange and marriage (Ingold 1980).

The tombs and enclosures would have been impressive reference points in the landscape, built by shared labour to give a permanence and validity to their rights of access to the land. The conducting of rites which invoked the ancestors through the display of their bones at tombs would reinforce a community's links with the land and the importance of fertility, death and rebirth. Such ideals might not have been new because gatherers and hunters need to be aware of fertility and the reproductive cycles of wild animals and plants to schedule procurement activities. However, domesticates require careful attention to ensure successful birth and germination, which involve the development of stronger ideas about fertility and the links between the productivity of the community, its domesticates and rights to land.

With evidence strongly suggesting that people lived mobile lifestyles, they probably lived in and travelled within a defined geographical area they had the right to inhabit, based on traditional claims passed from one generation to another and reinforced through storytelling and by the very act of dwelling there. Some of these places, such as tombs, may have been regularly visited again and again, but this would not necessarily be the case for all settlement locales, which may have been occupied for a number of years before another site was chosen (Pollard 1999). Over time some areas of the landscape may have become identified with or claimed by one group, while other areas were shared by a number of groups.

This is, therefore, the current state of knowledge for the region, and the basic interpretative model that I shall use as the context for interpreting and comparing the Upper Derwent material.

## 2.4 Upper Derwent

### *2.4.1 Lithics: Context of Artefact Recovery*

#### 2.4.1.1 Collectors

There are a total of 54 findspots of mesolithic to early neolithic lithics in the Upper Derwent. The majority of the artefacts have been discovered by amateur collectors, and of those most finds have been made by two people, Alistair Henderson and Paul Ardron. Henderson ranged wide over the Peak District's rights of way and open access moorlands between the 1930s and early 1970s, amassing a huge collection of flint, chert and other stone tools and waste flakes. His fieldwalking was so prolific that a joke circulated the Hunter Archaeological Society in the 1960s which went something like –

> *Question*:
> 'Where is the mesolithic of the Peak District?'
>
> *Answer*:
> 'Under Alistair Henderson's bed.'
> (Hind 2000)

Henderson deposited his collection in the Sheffield City Museum, where it resides today. Paul Ardron, an ecologist, began his fieldwalking in the early 1990s, and has focused much of his attention on the High Peak moorlands where he is actively collecting. Ardron's collection is in his own possession.

Details of Henderson's collection have been entered into the Derbyshire and South Yorkshire Sites and Monuments Records (SMRs). Other less prolific fieldwalkers' collections have also been entered in the SMRs, when, and if, they contacted the relevant counties or the Peak District National Park about their finds. Ardron's collection has not been made so publicly available at present, however he kindly provided me with basic information about location, numbers and types of pieces and estimated dates. I have had to rely largely on dates ascribed to assemblages by the SMRs or Paul Ardron himself, except for Sheffield City Museum's Henderson Collection, which was re-evaluated by Hind (2000) in the context of his study of the mesolithic to neolithic transition in the Peak District.

It is certainly a tribute to Henderson, Ardron and others that we have such a breadth of information about prehistoric lithics in the Upper Derwent. However, the locational information does come with some caveats. As the nature of their interest would suggest, neither has taken a systematic approach employing measured transects and statistically proven sampling strategies. Both have walked across most of the varying types of landscape present in the Upper Derwent, except for within walled fields. Finds are distributed across moorland, in woodland, on the reservoir draw-down zone and along rights of way. Once Henderson discovered artefact-rich locations, he appears to have repeatedly revisited the same places. Ardron has done likewise though after a long period of prospecting across much of the landscape (Paul Ardron pers. comm.). When collecting material, both pinpointed the location of each scatter with a six or eight-figure grid-reference, but neither recorded the locations of finds within the scatters. Much of our lithics evidence is therefore determined by the places these collectors chose to investigate, in part influenced by rights of way, but not wholly so. Resolution of locational information is at the level of the scatter, rather than at the level of intra-assemblage patterning.

Accessibility and public transport may also have played a part in the distributions. Both Henderson and Ardron reached the Upper Derwent from their Sheffield homes either by walking across the intervening moors or catching buses; a bus service has, and still does, run along the Derwent Valley but not the Ashop Valley. Forty-four of the total of 54

findspots are located in the Derwent, its minor tributaries or on the moorlands between it and Sheffield. These all lie to the east of SK 1460.

Finds distributions are therefore greatly influenced by favoured livestock sheltering spots, places where the wind catches peat edges and rights of way. This partial spatial information shows where people were present but by no means gives a comprehensive picture of the places that were visited.

In an attempt to analyse some of Henderson's and Ardron's valley distributions, I organised three seasons of limited fieldwalking within the draw-down zone of the reservoirs. These were undertaken with the help of ARTEAMUS, a local archaeological society, who carried out the fieldwalking and lithics analysis (Hind 2000; Peet 2002). Transects were located to sample five known findspots by covering both the artefact-rich areas and neighbouring 'artefact-free' areas to see if the recorded boundaries of scatters were real, or a result of collectors focusing on those places where they expected to find lithics. The results of this small survey indicate that Henderson and Ardron's concentrations appear to be real and are related to areas of level or gently sloping ground, avoiding the steeper slopes, and lying within the reservoir zone where there is erosion to the subsoil rather than redeposition of silts (see section 1.3.4.2).

I am, therefore, indebted to Ardron, Hind and Peet for providing the data descriptions on which I base the interpretations of lithics and landscape use upon in the following sections.

#### 2.4.1.2 Character of Findspots

Another factor that determines where finds have been made is the locations where the soil is broken and artefacts come to the surface. As for much of the uplands of Britain, the Upper Derwent's landscape is dominated by peat moorland and permanent pasture. Within these areas, the main places where artefacts are found are patches of erosion caused by walkers, livestock and wind. On moorland, the effect of rights of way on lithics distributions is indicated by seven out of 18 findspots being on footpaths. Footpaths strongly influence distributions, but do not dominate them. Erosion has a significant effect on the distributions of findspots, as demonstrated by a project undertaken by Trent and Peak Archaeological Trust on Tintwhistle Moor, an area of peat moorland

comparable to the Upper Derwent moors and situated 6km to the north-west of our study area. The project concluded that lithics distributions in peat uplands are governed by the locations of peat erosion, rather than representing a complete picture of prehistoric activity (Garton [n.d.]).

However, the Upper Derwent has another side to it, one that is common to many upland valleys near to cities and towns – its use for reservoirs (Illustration 1.2). From the paucity of finds below 350m appearing in the mesolithic literature about the uplands, it would seem that reservoirs have not been greatly exploited for fieldwalking elsewhere (Simmons 1996). That may not seem to be much of a surprise, given the obvious limitations of fieldwalking underwater. However, the water levels of reservoirs usually rise and fall throughout the year so revealing the eroded beds around their edges. These are the draw-down zones that attracted Henderson and Ardron down from the moorlands. The drop in water levels of the three reservoirs in the Upper Derwent varies according to rainfall and routine maintenance operations, however the levels stay at maximum only in unusually wet summers. Though restricted by the fluctuating levels of reservoirs, this provides a significant window of opportunity to study the patterns of prehistoric activity in the valley bottoms and lower valley sides.

*2.4.2 Lithics: Description of Finds*

The 56 findspots vary enormously in character, size, date and topographical location. Early mesolithic material can be confidently identified at six locations, later mesolithic to early neolithic can be likewise recognized at 26 locations, and 22 findspots contain lithics which can only be broadly characterised as mesolithic (Table 2.1 – see rear of thesis). A number of these findspots are palimpsests of material from different periods, two of the locations of early material also containing later artefacts. The problems of chronological resolution are indicated by the proportions of finds which can be dated with confidence. In interpreting the Henderson collection, Hind was able to assign 3.3% scatters to the early mesolithic, 17% later mesolithic, 26% undifferentiated mesolithic, 15% early neolithic and 2.7% undifferentiated neolithic (Hind 2000). Nearly half, 48.4%, of the scatters could not be closely dated with any confidence, while the remainder were later neolithic or bronze age in date (ibid). Most of the undateable assemblages comprised small episodes of tool making producing non-diagnostic tools or waste flakes. These problems of chronological resolution are not unique to the Upper Derwent but are

similar across the Peak District (ibid). Care also has to be taken in dating assemblages containing arrowheads. They are the most likely tools to be lost by chance and may be found in scatters to which they are chronologically and functionally unrelated (Barnatt 1996c; Garton 1991).

The following sections will describe then interpret the lithics evidence by period: early mesolithic, later mesolithic/early neolithic and undifferentiated mesolithic.

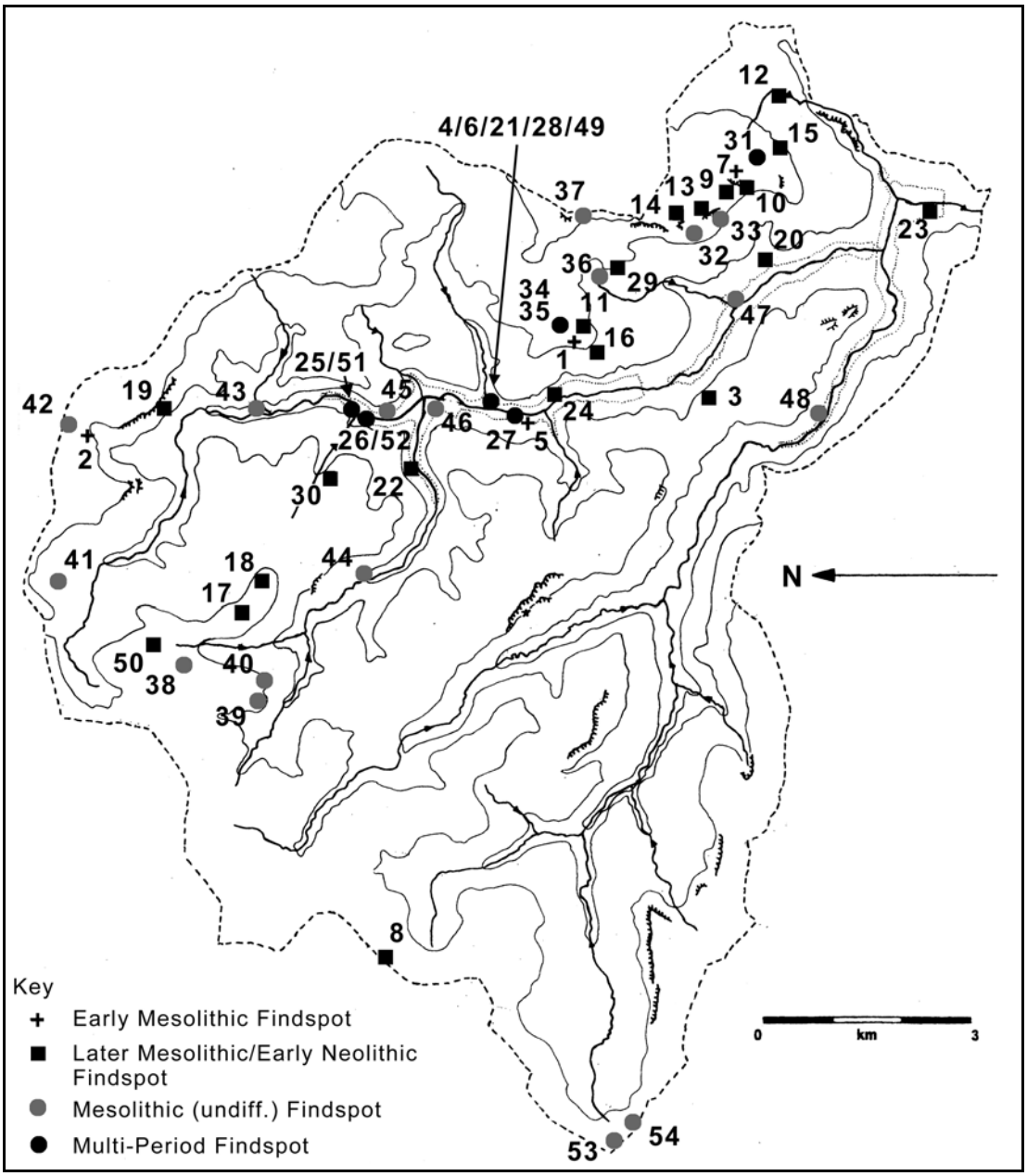


Illustration 2.4. Locations of Mesolithic to Early Neolithic findspots

*2.4.3 Early Mesolithic Lithics: Description of Finds and Interpretation*

Early mesolithic findspots (Illustration 2.4) comprise a flint blade found on a moorland shelf at 410m O.D., a scraper accompanied by a flake and hammerstone found between crags and a watercourse on a moorland clough-side at 460m O.D., a flint knife at 350m O.D., a group of knives and a blade found on the valley side at 230m O.D., a core, flake and a broad blade microlith found together by a tor on Derwent Edge at 480m O.D., and an unknown number of points, blades and scrapers found by the confluence of two watercourses on the valley bottom at 230m O.D. All of the findspots where numbers of artefacts are known comprise small assemblages of less than 10 individual pieces.

The small size of the assemblages suggest the locations of temporary camps or stray losses. The amount of early mesolithic material is so small as to make it impossible to interpret in more detail how people would have inhabited the landscape. At best, they indicate that both the valleys and the uplands were visited and tools were manufactured at high altitudes, presumably in relation to anticipated needs.

*2.4.4 Later Mesolithic to Early Neolithic Lithics: Description of Finds and Interpretation*

2.4.4.1 Description

The more numerous locations of later mesolithic to early neolithic implements are found both on the higher ground of the moorland and in the valleys (Illustration 2.4. Table 2.2).

| Topographical Location | Number of Scatters |
|---|---|
| Moorland Edge inc. tops of valleys | 7 |
| Moorland plateau and shelves | 9 |
| Valley sides | 1 |
| Lower valley sides and bottoms | 10 |

Table 2.2. Topographical locations of Later Mesolithic to Early Neolithic findspots

The single valley-side findspot comprises a blade and a blade core, both made from flint, and is located within a plantation woodland. The nature of the assemblage is similar in content and size to many found both on the moorlands and in the lower valley. Its significance is not so much that it shows the presence of people in valley-side contexts, but that, in its singularity, how little material has come from these contexts which are currently dominated by permanent pasture and plantations. These are two areas not conducive to

finding lithics by fieldwalking, though they could be investigated by a systematic test-pitting exercise as undertaken at Roystone Grange.

Of the 16 moorland findspots, six are located on featureless expanses of topographically undifferentiated ground and ten are at more prominent locations such as edges, tors, watercourses or immediately above the tops of valleys. Ten of these locations are at altitudes above 440m O.D., which would have been covered by light woodland and open scrub if Tallis's work in the High Peak can be extrapolated to the Upper Derwent (Tallis and Switsur 1990). Six are situated between 350m and 430m O.D., and therefore in or alongside much thicker woodland. The distributions of these finds are in part created by the current network of moorland footpaths, seven being found on public rights of way. The other four are found in erosion scars. At seven of these locations only a single implement was found: two have leaf-shaped arrowheads, three have blades, and there are a 'sub-triangular' flint and a polished stone axe. Six findspots consist of small assemblages of blades, scrapers and waste flakes numbering no more than 12 pieces at each place. Three findspots comprise over 20 pieces each. The smaller findspots are comparable to results of the Peak District Transect Survey on the Eastern Moors where densities are recorded as below ten finds per hectare (Hind 2000). The three scatters of 20 or more finds are, therefore, twice the size of these Eastern Moors finds and more densely concentrated.

Of the ten findspots adjacent to prominent landscape features, six are at altitudes placing them within or near to the thicker forest spilling up from the valleys. Two are by watercourses running across a shelf, one is immediately above the valley side and three are likely to be on or near to the forest edge itself. At four higher sites, most likely to be within light woodland or scrub, three are next to tors and one is by a watercourse in a deep clough.

If we descend from the moors and return to the valleys, we see something of a different picture emerging. While six locations are of individual finds and groups of ten or fewer pieces similar to those found on higher ground, four are much larger in scale (Illustration 2.4. Table 2.1). Running from north to south, 120 pieces have been found in an area covering approximately 1,000m$^2$ to the north of Linch Clough at 260m O.D., 291 in an area 100m long by 30m wide to the south of Linch Clough again at 260m O.D., at least

50 covering an extensive area almost 600m long and 50m wide extending north from Ouzelden Clough at 230m O.D. and at least 173 across 10,000m$^2$ to the south of Abbey Brook at 225m O.D. The numbers of finds at these latter two sites only include those in the Henderson Collection and not the reported hundreds more artefacts of this period collected by Paul Ardron (pers comm). A variety of flints and cherts from both primary and secondary sources are present, but chert, and mainly black chert, is most common. These four locations are the largest known later mesolithic to early neolithic lithics sites discovered by fieldwalking in the Peak District situated below 350m O.D., though they are tiny in comparison to the 23,000-piece assemblage found at Deepcar (Hind 2000; Radley and Marshall 1963; Simmons 1996).

They share many things in common in addition to the large sizes of the collections and areas they cover. They are all multi-period sites. As well as later mesolithic to early neolithic material, they contain finds dated as undifferentiated or early mesolithic, later neolithic and bronze age. The later mesolithic/early neolithic material comprises a range of microliths, blades, blade cores, knives, awls and flakes. A perforated macehead fragment was found amongst the scatters by Abbey Brook. There is a high percentage of waste flakes and chunks, varying from 50% to 75% of each assemblage, most of which are from secondary or tertiary reduction of flakes and blades so suggesting that the working of already prepared cores (Hind 2000; Peet 2002). The findspots are all on areas of gently sloping to level ground that break up the steep valley sides, close to the River Derwent, yet above the narrow floodplain. All but one are concentrated near to the confluences of the River Derwent with tributary streams.

#### 2.4.4.2 Interpretation

##### 2.4.4.2.1 Living it High

The seven individual finds on higher ground represent places where a single implement was lost or discarded while being used. The remaining nine moorland findspots are similar in character and landscape situation to the majority of those found by survey by the Peak District Fieldwalking Project, and are comparable to those from the Eastern Moors (Hind 2000). They may indicate places where people spent more time, either pausing for a short period to furnish tools for immediate use or occupying temporary camps. However, it is possible that only a small proportion of the 'target' population of originally deposited lithics has been discovered at each location. Much larger assemblages

were found immediately above the valley side above 300m O.D. on Tintwhistle Moor (with one totalling 114 pieces after excavation), in the Central Pennines and on moorlands to the east of the Upper Derwent (Garton [n.d.]; Radley and Mellars 1964; Spikins 1999). The settlement site on Broomhead Moor shows that occupation structures were built in moorland contexts (Simmons 1996), and its proximity to the Upper Derwent indicates the likelihood of similar settlements and large scatters across the plateaux. There is the possibility that the Upper Derwent moorland assemblages represent the partial discovery of more sustained residences. This would require a systematic sampling of findspots, similar to that undertaken by Trent and Peak Archaeological Trust on Tintwhistle, to elucidate further.

The finds of ten scatters by prominent landscape features place them at locations which would aid navigation through woodland and provide resources. As well as the obvious availability of water at the streamsides, the tors provide shelter and are highly visible landmarks. The tops of the valleys are approximately coincidental with the upper edge of the dense valley forest. Forest edges provide abundant resources such as animals attracted by the combination of woodland cover and greater open-growth vegetation.

2.4.4.2.2 Into the Valley of Life

The size, tool range and high percentages of debitage in the four valley assemblages indicate the range of activities carried out at these places in addition to the manufacturing of tools themselves from prepared cores. There are implements used for cutting, scraping, piercing, carving and slicing.

The Upper Derwent locations would have been deep in the thick valley forest though within openings of the canopy by the water-edge. The sizes of the assemblages indicate areas inhabited over longer periods of time than the transient stopping points common on the higher ground. Aggregations of finds, in themselves, do not equal long-term sedentary settlements, because they may have been deposited as the result of repeated, intermittent occupation. However, the range of activities represented in the composition of the assemblages does suggest sustained settlements, where a whole community or some individuals stayed for longer periods. The clearings, would have been maintained or repeatedly recreated according to the rhythms of occupation at these locations. Acts of clearance in the valleys were undertaken by small communities, involving conscious

decision-making related to the immediacy and anticipation of perceived needs and rights, and based within a known tradition of dwelling in the forest. Once made, the potential longevity of clearings would have drawn successive generations, so creating a structure to land-use that transcended the life time of the individual. Close-grained environmental evidence is required to further understand the potential for such small-scale changes in vegetation in these valley settings.

The nearby river would have provided a range of resources. Salmon and other fish in the water itself, water-washed pebbles are ideal hammer stones, sedges and rushes are suitable for making baskets, water-edge plants provide numerous food supplies, while the lush forest-edge vegetation is attractive to grazing animals. It has also been suggested that this was the highest navigable point of the River Derwent for much of the year, and quantities of chert could have been transported by boat to these riverside locations, then prepared for greater portability while crossing the surrounding, higher land by foot (Hind 2000). Travelling by boat along the river would have been one means by which people moved between the Upper Derwent and other areas of the Peak District further south. We could be seeing the different residences of a number of kin-groups occupying the Upper Derwent, where their tenure in the same landscape overlapped with each other rather than the area being the reserve of one group. This complexity of local inhabitation may have also been incorporated into patterns of movement, possibly related to seasons and changing resources, that took in broad landscape swathes, including the High Peak, eastern foothills of the gritstone moors, the Don and lower Derwent valleys, limestone plateau and the Central Pennines.

Comparison can be made with Lismore Fields, which was also situated in a valley, a wide basin at approximately 300m O.D., within 90m of a spring (Garton 1991, in prep). Later mesolithic and early neolithic flints comprised hundreds of pieces spread in distinct clusters across the 3,800m$^2$ of excavation trench. A polished stone axe and sherds of pottery made in Grimston-type fabric were associated with features of one of the timber buildings. While no pottery or stone axes have been found in the Upper Derwent, the sizes and extent of lithic scatters situated near to watercourses in sheltered positions, suggest that these are likely locations for settlement activity similar to that excavated at Lismore Fields.

Within the Upper Derwent, groups may have commonly moved between valley and upland, repeatedly staying at favoured locations in the valleys while camping less frequently or stopping for short periods of time at sites on the higher ground. The Upper Derwent is not a huge area and, for me, it takes little more than an hour to climb from valley bottom to moorland. While I cannot comment on my fitness and ability to cross rough ground relative to prehistoric people, I can guess that the abilities of people inhabiting such a landscape might be somewhat better. Routes through the valley and on to the valley sides would have been through dense woodland, and forest navigation techniques such as maintaining paths or marking trees would be important. Once on the scrub-covered highland, more open views would enable navigation by prominent landmarks, including edges, tors and the forest edge. The lower shelves below 500m are dissected by cloughs that create barriers to movement of up to 100m in depth. The cloughs can be crossed by clambering across steep ground or circumnavigated by following watersheds. Community and individual conceptualisation of the world would have moved between the inward-focused, enclosed familiarity of the surrounding woodland and the more outward-looking, open experience of the higher ground. For people crossing the landscape on longer journeys, the watersheds would provide the easier paths, while people using the landscape locally may not have found many benefits in following such routes and may have actively wanted to enter cloughs for the resources and shelter they provide. Cloughs also provide more gently graded approaches onto the higher ground, but the valley sides are not so steep or high as to prevent their straight forward ascent. It is easy to overplay the importance of valleys and cloughs as routeways and barriers to local movement.

### *2.4.5 Undifferentiated Mesolithic: Description of Finds and Interpretation*

As nearly half of the findspots comprise material that can only be assigned to the mesolithic in general, rather than earlier or later, we cannot ignore or overlook them (Illustration 2.4). What do they add to the picture of landscape inhabitation interpreted above? Six are part of larger assemblages of later mesolithic/early neolithic material and add to the existing interpretation of these locations as being significant locales. The remainder follow the same distribution and scatter size patterns as noted above, 11 are located on the moorlands and five in the valleys. They extend the presence of people throughout the area, mostly as background scatters of individual or small groups of finds away from the main concentrations.

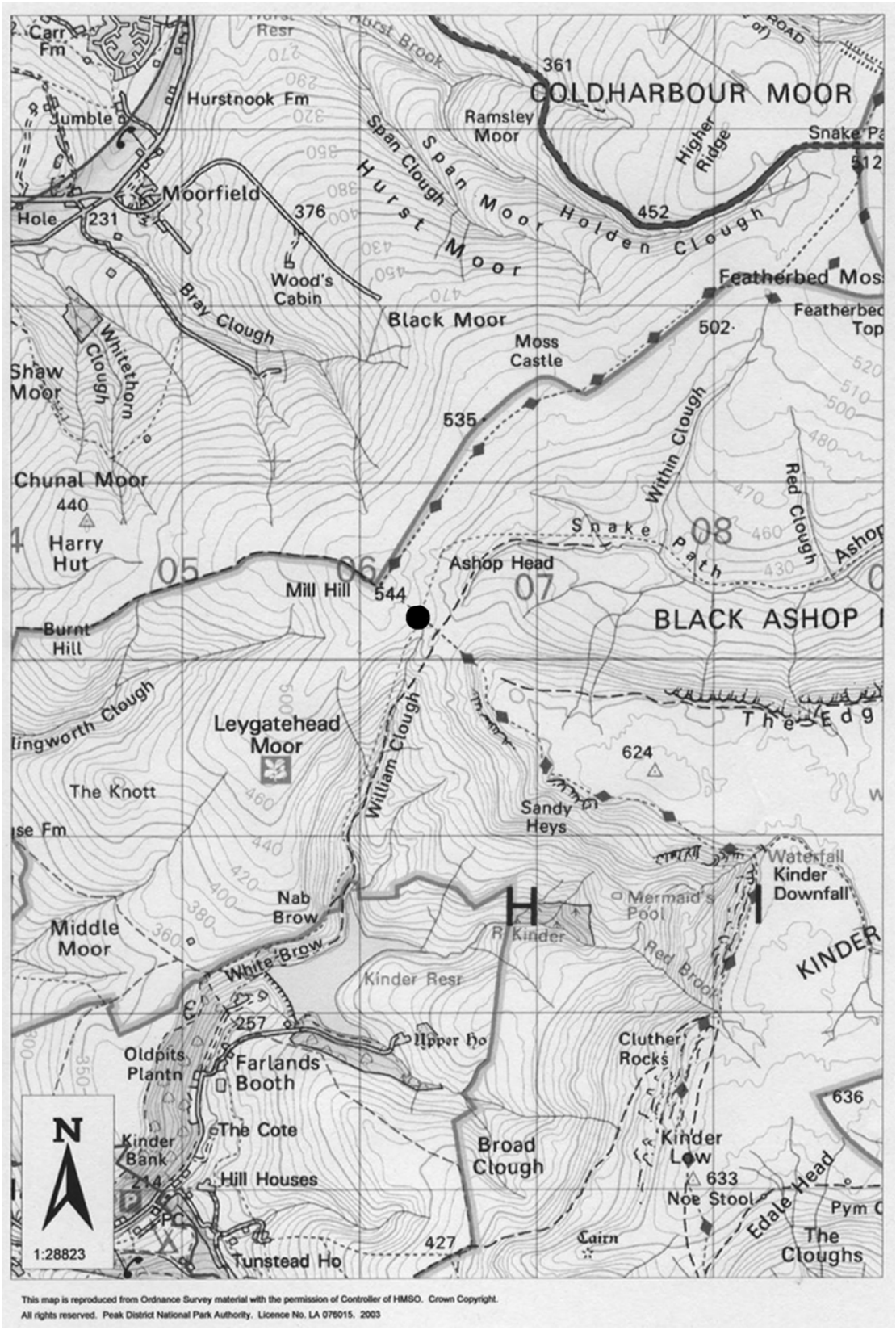


Illustration 2.5. Topography of Ashop Head, where a findspot of over 200 mesolithic flints (marked as a black dot) occupies a high-altitude pass over steep ground

One significant topographical location that may indicate something of hunting practices is Ashop Head (Illustration 2.5). The findspot comprises over 200 flint pieces found within a 20m long stretch of footpath on a pass across a ridge between Ashop Clough and Hayfield at 520m O.D. The pass forms a natural routeway between relatively gently sloping ground on either side, and is bounded to the south-east by the steep scarps of the Kinder plateau and has the Mill Hill to Featherbed Moss ridge to its north-west. This may be one location where deer might be expected to regularly navigate through the high terrain and the finds could indicate a location used for intercept-hunting. At such an altitude the locale is most likely to have been occupied for short periods of time, so the quantities of material were probably deposited from repeated visits.

*2.4.6 Mesolithic – Neolithic Transition*

What of the evidence for the mesolithic to neolithic transition in the area? As I have discussed above (see section 2.3.5), the evidence for the Peak District and Central Pennines suggests that there was no dramatic change to sedentary cultivation contemporary with the beginning of the neolithic (Hind 2000; Spikins 1999). There are similarities in tool-working practices and findspot locations, only small-scale opening of woodland to create grasslands, and low quantities of cereal pollen. Some of the diagnostic new tool types, such as leaf-shaped arrowheads, are present in the Upper Derwent but only in very small numbers. They appear on the uplands and in the valleys in the same sorts of locations as the more widespread flint and chert blades. The majority of the lithics are similar in terms of raw materials and the systematic reworking of cores and blades. There is also a continuity in the locations of findspots. From the later mesolithic to the early neolithic, the same places were occupied and similar patterns of land-use were maintained between the valleys and the higher ground. People seem to have been inhabiting the Upper Derwent during the early neolithic much as before.

Chambered cairns are absent, so it is unlikely that the Upper Derwent was a shared upland pasture, akin to those on the limestone plateau, where different kin-groups regularly brought their herds and mingled. Their absence from the Upper Derwent suggests no such competing interests in an area that may, therefore, have been held by one kin or open to many without contention. The high altitudes of the moorlands and spread of peat would have reduced the potential of the highlands of the area for upland

pastures and the frequency or density of use may have been much lower than on the limestone. Neither are there any large ceremonial enclosures, such as at Gardom's Edge, which would have brought different communities into the area for ceremonial gatherings. The complete absence of the range of ceremonial and funerary monuments implies an important feature of the nature of settlement in the Upper Derwent. If the monuments were important, even essential, elements of the pattern of landscape occupation for communities in the region, the people dwelling in the Upper Derwent would have had to visit the limestone plateau and Eastern Moors to participate in ceremonies at the monumental centres.

As they came into contact with domesticates, they may have adopted them into their existing routines. Cattle could have been pastured in clearings and amongst lighter scrub on the higher ground, while clearings may have also been suitable for small areas of crops. The large lithics scatters are found at locations where the soils are a mix of light sands and clays which contain many stones. Cultivation of the ground with wooden and stone tools to improve pasture or grow crops would have been possible on the sandy areas at these places.

Contact with domesticates was not the only change occurring at this time. The ongoing spread of peat at the expense of woodland and mixed vegetation during the early neolithic was slowly reducing the potential of the upland areas to sustain food-bearing plants and game. Opportunities to gather and hunt would have become limited, groups would have needed to range over greater distances to find food and over-wintering would have been harder due to reduced stores. If the Upper Derwent was one part of a much larger area, incorporating both the gritstone moors and valleys and the limestone plateau, which was ranged over by a group or groups, they may have slowly come to visit it less often or in smaller numbers.

### 2.5 Discussion

The evidence for the Upper Derwent indicates that the area has an archaeologically visible history of land-use and occupation from the end of the last glaciation into the early neolithic, which bears comparison with evidence from the Peak District. Lithic scatters indicate the locations of settlements and, in the range of tools and size of assemblages, also suggest something of the nature of the settlements.

Assemblages of lithics are found across all the landscape zones of the Upper Derwent: in the valley bottom, on the valley sides and on the moorland shelves and ridges. The early mesolithic is represented by only six findspots of small scatters of implements and tool-production waste with no evidence for the repeated occupation of specific places. The wider environmental evidence from the region does not indicate any significant manipulation of the landscape. This is indicative of infrequent visits by small numbers of people staying temporarily at different locations, possibly in the autumn to intercept deer, as Myers suggests for the Peak District as a whole (Myers 1986).

During the later mesolithic and early neolithic assemblages become more common and some much bigger. There are more moorland findspots, though they tend still to be small. These are comparable with those found by fieldwalking on the Eastern Moors to the south (Hind 2000), but much smaller to some assemblages found on similar moorland locations to the east and north of the Upper Derwent (Garton [n.d.]; Radley and Mellars 1964; Simmons 1996; Spikins 1999). We can say that the Upper Derwent evidence indicates that inhabitation of the moorlands included passing activity and short-term occupation, but cannot limit the potential of all settlement to be limited to brief visits because finds in neighbouring regions demonstrate the possibility for larger upland sites.

There are similar scatters to those on the moorlands in the valley bottom. In addition, we find four large assemblages comprising 50 to 291 artefacts, with a wide range of implements and waste flakes mainly from secondary and tertiary working. These are the largest assemblages discovered by fieldwalking below 350m in the southern Pennines but significantly smaller than the Deepcar site, situated to the east of the gritstone moors (Hind 2000; Radley and Mellars 1964). The location of each is significant in being on approximately level ground lying adjacent to the confluence of the River Derwent with one of its tributaries. Each comprises a wide range of tools and waste flakes typical of balanced settlement assemblages. Flint and chert are present, with black chert from the limestone plateau being the most common. These were favoured locations, situated in the valley forest adjacent to watercourses, where a range of resources and shelter from the elements were provided. It is likely that occupation was made within clearings which would have required management and maintenance. There is evidence across the region

which is interpreted as indicating significant vegetation management through fire-setting (Jacobi, Tallis and Mellars 1976; Simmons 1996; Wiltshire and Edwards 1993). The same areas were repeatedly visited, possibly over long periods, though whether settlement was short-lived or more continued at any one time is unclear. They do indicate that specific places in the landscape were gaining meaning in relation to settlement, locales which specific communities and families may have perceived as being theirs to occupy by right. This suggests that during the later mesolithic different ideas of tenure and perceptions of landscape were being formed over time which incorporated more sustained occupation of more clearly bounded areas.

It is impossible to differentiate between later mesolithic and early neolithic artefacts, because the raw materials and forms of tool working involving the systematic production of cores and blades remains similar. The only new diagnostic forms present are leaf-shaped arrowheads, which are stray finds rather than indicators of settlement locations. Otherwise, the transition from mesolithic to neolithic in terms of stone-working is hazy and not a clear-cut distinction. This fuzziness between the periods is also evident in other artefacts and in the environmental evidence. Cereals and livestock were present from the early 5$^{th}$ millennium BC, but they supplemented foraging and hunting rather than replacing them. Chambered tombs and long barrows most likely to date to the 4$^{th}$ millennium BC. The impression is that none of the traditional indicators of the neolithic arrived in the Peak District at the same time.

The absence of large ceremonial enclosures and monumental tombs from the Upper Derwent draws the area into comparison with the current interpretations of the early neolithic in the Peak District (Barnatt 1996c; Edmonds and Seaborne 2001; Hind 2000). These models invoke kin-groups practising some level of settlement mobility, involving parts or the whole of communities, related to the locations of resources and traditions of land-use. Clearings were being made in the extensive woodland creating grasslands, and the more extensive open areas on the uplands of the limestone plateau were associated with chambered tombs. The presence of chambered tombs on the limestone uplands, but nowhere else in the region, suggests that they were built on shared upland pastures, where different kin-groups regularly brought their herds and mingled with different communities. The people meeting on the pastures were from communities that also occupied the surrounding valleys and gritstone, such as the Upper Derwent – where the

absence of tombs implies it was occupied by one kin group or open to many without a similar intensity of social interaction to the limestone uplands. The absence of tombs and of large ceremonial enclosures, such as that at Gardom's Edge, is significant for interpreting the involvement of the Upper Derwent in regional trends. If the monuments were socially important locales where members of different communities from extensive tracts of the surrounding region met, either for large gatherings or when pasturing livestock, as part of traditional patterns of landscape inhabitation, then it is likely that people dwelling in the Upper Derwent would have participated in this social interaction. At least part of the community may have taken livestock to pasture and identified with a specific and regularly visited locale, so implying that people moved between the Upper Derwent and neighbouring landscapes as part of their routines. They may have also visited monumental enclosures on the Eastern Moors to participate in ceremonial gatherings. This involves the individual holding knowledge of 'imagined communities' beyond those people dwelling with each other on a daily basis, people who are only met irregularly and after long time periods. These forms of social contact facilitate, and may be constructed around, exchanges of gifts, ideas or marriage partners, times when social identity and world views are reworked in relation to others.

Within the Upper Derwent, the mesolithic – neolithic transition is really a history of continuity in the pattern of land-use, with activity focusing on the same valley locations at the confluences of watercourses. This should not come as a great surprise, if the introduction of domesticates was a long process, whereby the transition from hunter-gathering to farming as the primary basis for subsistence may have occurred throughout the neolithic rather than at its beginning. There was change evident in the High Peak environment, as the repeated clearing of woodland opened more land and peat formed across the higher ground. This again took place over a long time frame, and though the peat was not as extensive as it is today, it was a change which led to the peat and heather landscapes which define the present moorlands.