CHAPTER 3. HISTORICAL BACKGROUND

By R Newman and C Newman

Today the Lake District's landscape is primarily moulded by the interaction of humans with the natural environment, especially through farming. The principal landscape attributes, other than the lakes themselves, are the open fells, enclosed fields and woodland. Even some of the water bodies have been enhanced as reservoirs. The farmed landscape especially has developed over millennia helping to produce a landscape that is distinctive to Cumbria. This distinctiveness has been caused by the relative geographical isolation of the Cumbrian mountains, and at least in more recent times by the district's distance from centres of power, its economic marginality and the relative freedom enjoyed by its medieval and later tenant farmers.[1]

Prehistory

The earliest evidence of a human presence in the Lake District comes at the end of the last Ice Age, when late Palaeolithic and Mesolithic populations were exploiting the coastal margins of Cumbria. Excavations at Lindale Low Cave recovered the earliest potential evidence for occupation in the region in the form of a large angle-backed blade of Creswellian type, sealed beneath a stalagmite floor.[2] There is little evidence for a Mesolithic presence away from the coast, but doubtless the Lake District's woodlands, rivers and lakes were exploited. The only current artefactual evidence for Mesolithic activity from the central Lake District is the find of a small number of microliths from the environs of the Roman fort at Waterhead, at the north end of Windermere.[3]

Plate 3: Neolithic stone axes (© LDNPA)

From the early Neolithic period, the high quality material in the central Lakes was exploited at source to manufacture high quality stone tools, particularly axes, but also axe hammers and perforated implements. These were traded widely across the Pennines, central and southern England, into Scotland and Ireland.[4] A unique assemblage of Neolithic material was recovered during the drainage of Ehenside Tarn, Coniston, in 1869. Finds included roughout and polished stone axe blades (one of which retained its wooden haft), polissoirs, animal bones and wooden objects including a bowl, paddles and 'clubs'.[5] Radiocarbon dates from organic material taken from environmental cores on the site suggest episodes of occupation

[1] Chitty 2002, 34
[2] Salisbury 1988; 1992
[3] Fell 1971; Manning and Dunwell 1995
[4] Hodgson and Brennand 2006, 46
[5] Darbishire 1874

throughout the Neolithic, with woodland clearance possibly associated with agriculture from around 3000 to 2600 cal BC.[6] One of the activities on site certainly appears to have been the polishing of roughout axe blades, quarried from sources in the central fells to the east. The central Lake District around Langdale is well known as a source of stone used for stone axe production. Though 'axe factory' has been used to describe this manufacture, the term is perhaps somewhat misleading.[7] Even so, the extensive debitage and waste evident today ably demonstrate the scale of working. There are other sites scattered throughout the central fells with evidence of variable approaches to working the outcrops and a date range for activity that currently stretches from the early fourth to the mid-third millennium BC.

In the Lake District there is a wealth of evidence for 'clearance cairnfield' construction on the lower fells, which has traditionally been associated with Bronze Age improvement of land for grazing or cultivation. Whilst the initial exploitation of some upland areas probably did occur in the Bronze Age, few modern or large-scale excavations of clearance cairnfields have taken place and there is little direct dating evidence. Cairnfield construction or reuse may in fact have started in the later Neolithic and early Bronze Age and continued for millennia (see below). Excavations of a small cairn at Birrel Sike, in West Cumbria, for example, produced a date of 2290-1741 cal BC.[8]

The simplest cairnfields are small, randomly distributed groups of cairns with no associated boundary banks or structures, and it has been suggested that they represent small clearings for stock grazing on a temporary or seasonal basis.[9] At Bank Moor palaeo-environmental evidence suggests cyclical, small-scale arable production and intermediate stock grazing for much of the Bronze Age.[10] Other cairnfields have stone-banked boundaries and appear to form what may be considered to be the beginnings of long-term field systems. The most complex sites have cairns in discrete areas or enclosures, associated with small areas of cultivation and stone-founded unenclosed round houses or house platforms. At Barnscar on the western coast, the cairns were initially constructed in an area of former woodland.[11] The ground beneath the cairns had been scorched and stripped, with shallow in-filled pits suggesting the excavation of tree roots.

Clearance cairnfields do not appear to be closely associated with ceremonial complexes[12] but are some associations with cairn cemeteries.[13] This perhaps indicates a difference between sites associated with burial and religious practices and those that were more to do with farming. Even so, the environment of the late Neolithic and early Bronze Age was characterised by ceremonial monuments and ritual landscapes, many situated at higher altitudes in a landscape already cleared of woodland. The Lake District National Park has a number of stone circles, some of outstanding importance, the best known of which is Castlerigg, one of the first monuments in the country to be selected for state guardianship, in 1883. Areas such as Askham Fell and Burnmoor demonstrate good preservation and survival of multiple monumental structures.

Upland settlement sites are dominated by simple enclosures, sometimes with a substantial bank or wall, external ditch and a single entrance. Initially

[6] Walker 2001
[7] Claris and Quartermaine 1989
[8] Richardson 1982
[9] Quartermaine and Leech forthcoming
[10] Hodgson and Brennand 2006, 36
[11] Walker 1965
[12] Quartermaine and Leech forthcoming
[13] Evans and Edmonds forthcoming

Plate 4: Castlerigg stone circle, a scheduled ancient monument and one of the earliest guardianship monuments in Cumbria (© LDNPA)

considered to be Iron Age some are now considered to be as early as the Neolithic in origin, such as the enclosure on Carrock Fell,[14] and to have had varied uses. Some may have been habitations, but others may have been multi-functional gathering places and some were probably stock enclosures. Those enclosures thought to have been habitations typically have one or more round houses, usually in the centre of the enclosure away from the outer bank. At Aughertree Fell, a long period of occupation is suggested by three enclosures, supported by the presence of Bronze Age finds from adjacent barrows. It has been argued, however, that a reliance on visible material culture to date rural sites may not reveal the entire duration of occupation.[15] Many enclosures elsewhere in the fells have been dated to the Iron Age on the basis of some carbon-dated parallels from North East England, although finds of Romano-British material suggest a degree of continuity on many sites. More complex enclosed settlements can be found in the National Park. They are characterised by enclosing banks, sometimes with complex entrances, and series of internal enclosures, dividing banks and round houses. The enclosure on Askham Fell, for example, contains a series of central circular houses, with larger enclosures on either side, possibly for stock.[16] These enclosures have often been dated typologically to the Roman period from antiquarian excavations,[17] although the occasional find of Romano-British pottery, often unstratified, is an unreliable basis for dating a site type.

Knowledge of developments in the Lake District during the late Bronze Age and Iron Age are limited. It has been supposed that a climatic deterioration led to depopulation and a consequent withdrawal from the margins of agriculture.[18] Recent work in Matterdale has suggested that the perception of a relatively unpopulated

[14] Pearson 1996
[15] Bewley 1994, 35
[16] Quartermaine 1988
[17] for example Collingwood 1908
[18] Higham 1986, Wells 2003

Plate 5: Aerial view of Hardknott Roman fort, dominating the Eskdale Valley and guarding the Roman road between Ambleside and Ravenglass. Its bath house can be seen below the fort, in the foreground (© LDNPA)

landscape is a consequence of past difficulties encountered in site identification, rather than a genuine scarcity of evidence.[19] In some instances it is suggested that settlement density increased in the Iron Age as in Glencoyne Park.[20] Moreover, it has been shown that, as elsewhere in Britain, there was in the Iron Age, "*a cultural imperative to be linked physically with the past which manifests itself in the conservative re-use of old, established landscapes*".[21] Consequently, Iron Age settlement patterns incorporated and respected earlier ritual monuments and cairnfields as more than simply relict features. One distinction that has been noted between the Lake District's late prehistoric landscape and similar landscapes elsewhere, however, was the lack of high status 'hillfort' sites. It is argued that the relative poverty of local resources may have mitigated against investment in such central places.[22]

Romano-British

By the time the Romans arrived in the Lake District it was a long settled and cultivated landscape, even in areas that would today seem quite marginal. Some sites had been abandoned and were already relict features in the landscape, including the long disused axe workings and some of the upland enclosures. The nature of the impact of the Roman occupation on the Lake District's settlement pattern and agrarian landscape is largely unknown. Elsewhere in Cumbria evidence for field centuriation has been proposed[23] but there is no compelling evidence for this from the Lake District. Some sites, however, such as at Aughertree Fell, appear to show a carefully planned reorganisation of the landscape into

[19] Hoaen and Loney 2004
[20] Hoaen and Loney 2003, 63
[21] Hoaen and Loney 2004, 51
[22] Hoaen and Loney 2004, 52
[23] Richardson 1982; 1986; Ferrar and Richardson 2003

orderly field systems.[24] In general few potential Romano-British settlements, and even fewer field systems, are closely dated. What is clear, however, is that evidence for Romano-British and later settlements and field systems are common in the uplands, with extensive survival of both enclosures and fields. This is a result of the good survival of sites following abandonment. It suggests that the intensity of exploitation of the uplands declined following the desertion of these sites, and for the most part was never re-established.

The presence and direct impact of the Roman army is better attested than the nature of, and changes within, agrarian society. The relatively ephemeral character of campaign-camps has meant that few have survived as visible remains except on land that is agriculturally marginal, as for example at Troutbeck. Even durable stone built forts, identifiable throughout Cumbria, survive most impressively in the now agriculturally marginal uplands as exemplified by the upstanding walls at Hardknott. Even so, it appears that this fort was beyond the limits of sustainable contemporary civilian exploitation as it is the only fort in Cumbria that seems to have lacked a *vicus* (attached civilian settlement).

At Ambleside and Ravenglass, the military presence stimulated the growth of civilian settlements and the appearance of the Lake District's first quasi-urban settlements, with Ravenglass also serving as a port. As with any towns it is likely that they had an impact on their hinterland and would have influenced the local rural economy. Farmstead sites such as Barnscar appear isolated, but it is situated close to the fort and port of Ravenglass. Whether or not the Roman military presence led to an intensification of land use, an extension of agriculture into more marginal areas and a clearance of still extant areas of wildwood, is still an unanswerable question. Evidence from excavations in Carlisle does suggest that there were considerable numbers of very mature timber trees available for use in fort construction at the beginning of the Roman military presence.[25] Did Roman exploitation lead to a reduction in the availability of such timber? It has long been argued that a later shortage of mature timber in Roman Carlisle may have been one of the factors leading to a change to fort construction in stone, however, such shortages may only have been within the environs of the fort.

Early Medieval

The level of continuity in the broad use of field systems from prehistory, through the Roman period and into the early Middle Ages, is unclear. Some

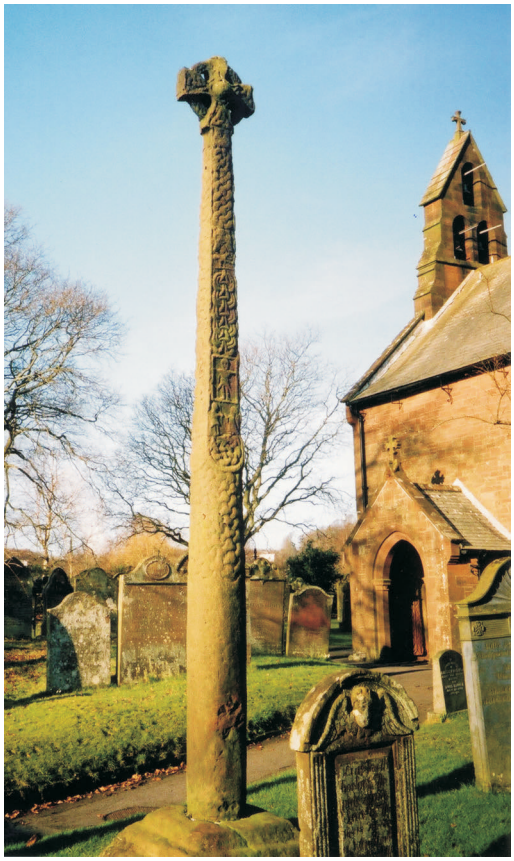

Plate 6: The Gosforth Cross, a tenth century Anglo-Scandinavian cross (© Egerton Lea Consultancy Ltd)

[24] Phillpott 2006, 76 & 77

[25] Rachel Newman pers comm

areas of now-abandoned fields do seem to have continued to experience field clearance into the early medieval period, for example the excavation of a clearance cairn near Devoke Water indicates that stone continued to be added to it in this period.[26] Evidence for two phases of cairn building was revealed, the initial prehistoric cairn of large stones being supplemented by smaller stones, taken from the surrounding area, and which rolled down the cairn, forming a tongue to the north-east, implying that the area being cultivated was also in that direction. Radiocarbon dating of material taken from the buried soil horizon beneath the smaller stones of the cairn provided dates of cal AD 662-979 and cal AD 977-1229.[27] Similarly some upland enclosure sites also appear to have been reused, if not in continued use. A radiocarbon date obtained from the organic, apparently primary, fill of a mire-filled rock ditch of the putative hillfort at Shoulthwaite, above Thirlmere, produced dates of cal AD 598-657 and cal AD 618-664.[28] This raises the possibility, not only of the potential reoccupation of prehistoric sites, but of the origins of some Cumbrian hill top enclosures being early medieval, rather than prehistoric.

It has been traditional to argue that increased landscape clearance for farming was linked to the arrival of the Romans, and that any subsequent woodland regeneration was an artefact of the collapse of Roman rule. Over the last 20 years or so, this has been revealed to be an inaccurate assessment, for where radiocarbon dating of the onset of woodland regeneration has been undertaken, it is shown to have occurred, not in the fourth or fifth century, but in the sixth. Such regeneration is recorded at sites throughout the North West, but there are also several sites in Cumbria where the landscape seems to have remained open. Indeed it has been argued that the period after AD 400 witnessed the first 'permanent' and vigorous clearance of much of the Lake District.[29] Some evidence for clearance activity, as well as agricultural indicators, also exists within the early medieval period as a whole for instance, at Ehenside Tarn,[30] where the episode is dated to between cal AD 660-880[31] and at Littlewater where the date range is cal AD 780-1020.[32] The dated palaeo-environmental evidence for woodland clearance indicates clearance activities in the eighth to tenth centuries and indeed it is possible that such activity did not take place until the arrival of Scandinavian settlers. New settlements, possibly associated with Scandinavian colonists, were established at this time at the upper ends of the Lake District's valleys, and one such has been excavated at Bryant's Gill in upper Kentmere. There, settlement and house forms appeared very different to rural settlements observed from prehistory through to possibly the seventh century AD. The settlement appears to be unenclosed and the building forms included a 10m long, sub-rectangular, stone-founded structure.[33]

Early medieval colonisation of some upland valleys may be indicated by place-name evidence, though whether this is indicative of the first settlement and cultivation of areas, or a recolonisation of areas previously settled and farmed in earlier periods is not clear. The widespread occurrence of the Scandinavian place-name element *thwaite*, meaning 'clearing' may be indicative of the extension of cultivation. The Norse place-name element 'scales', denoting shieling sites, is also of interest as it may

[26] Quartermaine and Leech forthcoming
[27] RM Newman 2006, 101
[28] LUAU 1999
[29] Walker 1966
[30] Walker 2001
[31] Pennington 1997
[32] LUAU 2000
[33] Dickinson 1985

indicate the beginnings of transhumance farming, an important facet of later medieval agrarian society in the Lake District. Although there is a lack of hard archaeological evidence for an early medieval origin for transhumance, there are some indicators that the structure of later medieval Lakeland society was based on Anglo-Scandinavian antecedents (see below).

The continuing use to the present day of a farming dialect including Scandinavian elements, and the similarities between some Lake District and Norwegian folk traditions,[34] may also be indicators of the importance of Anglo-Scandinavian influence on the creation of Lakeland's traditional farming society and landscape. In general, however, though the evidence is not conclusive and somewhat circumstantial, it does seem that the Lake District's farming system and settlement pattern underwent significant and lasting modifications in the eighth to tenth centuries AD. The process of primary upland clearance and colonisation begun in prehistory, may have reached its peak. Moreover, the settlement pattern may have begun to take on many of the characteristics of distribution and location that characterised the later Middle Ages and were still observable in the late eighteenth century.

Medieval

By the eleventh century the landscape units that provided the framework within which the medieval settlement pattern evolved were already in place. It is likely that they were based on an Anglo-Scandinavian system of multiple estates but it is possible that they were, at least in part, based on earlier pre-Roman structures.[35] The broad settlement pattern of dispersed farms and small hamlets along the valley sides also may well have been established. There is limited archaeological evidence for settlement continuity from the early medieval period but some of the best appears to be emerging from Stephenson's Ground, where a number of farmsteads may have existed within a definable enclosure territory, each succeeding the other. Excavations at Stephenson's Scale uncovered an egg-shaped, stone-walled structure which was interpreted as a longhouse. Phosphate analysis suggested that people used the upslope area, whilst animals used the lower part. Its occupation was dated to the twelfth to fourteenth centuries, on the basis of pottery typologies and radiocarbon dating.[36]

The agrarian upland landscape, characterised by inbye, intake, ring garth, outgang and commonable fellside which is typical of many Lake District valleys, was developed by the late thirteenth century and is still recognisable today. One of the most identifiable features is the ring garth or head dyke which defined the edge of the cultivatable land at the valley head and in origins often seems to be datable to the twelfth to thirteenth centuries.[37] Excellent examples of early valley enclosure arrangements for mixed arable and pastoral farming still survive, as at Langdale and Hartsop.[38] As elsewhere in Britain the Lake District experienced population expansion in the thirteenth century, as evidenced by the increase in rents in the Newlands valley between 1266 and 1310.[39] This was reflected in Lakeland's landscape by the establishment of new permanent settlements beyond the previous limits, as in Buttermere township.[40] In addition areas of waste within the inbye were brought into cultivation. The manorial lords, who were looking

[34] Rollinson 1981
[35] Chitty 2002, 37
[36] C Newman 2006, 120
[37] see Maxwell 2002, Lund 2000 and 2001
[38] Lund and Southwell 2002; Chitty 2002, 37
[39] Winchester 1987, 39
[40] Winchester 1987, 40

Plate 7: Borrowdale, with the ancient enclosures of the valley bottom, surrounded by the steeply sloping, unenclosed valley sides (© Egerton Lea Consultancy Ltd)

to make their poor upland manors more profitable, encouraged this intensification of land use. Some shielings became permanent tenanted farms and new peasant farms were allowed within the lord's hunting preserves.[41]

There is little evidence for the widespread settlement replanning seen in areas such as the Eden valley, which has been associated with the extension of Norman feudal control over Cumbria during the twelfth century.[42] For the most part the Lake District National Park lacks the clearly planned nucleated villages surrounded by still-discernable former common arable fields farmed in strips, which characterise the settlement of the Eden valley, the Solway Plain and parts of west Cumbria. Where they do occur, they are largely restricted to the lower-lying lands in the northern part of the National Park, such as Blindcrake. Common arable fields in the Lakeland valleys tended to be small and irregular. This may to an extent simply be an artefact of topography with dispersed farms in the valleys, surrounded by small enclosures and inbye land being a pragmatic approach to local farming circumstances that could not be improved by settlement and estate reorganisation. It may also be a physical reflection of the relative lack of control exerted by the manorial lords over their tenants.

Outside the Lake District valleys on the less topographically constrained lowlands, the later medieval settlement pattern was more mixed. A ring of market towns which originated as medieval boroughs today surrounds the central uplands and their valleys.[43] In addition there are a few nucleated villages which acted as local market

[41] Winchester 2000, 11
[42] Roberts 1993, 1996a and b
[43] Chitty 2002, 38

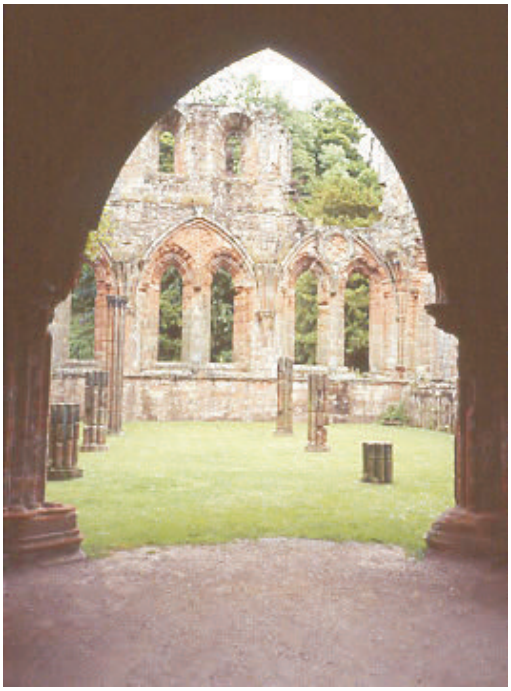

Plate 8: Calder Abbey, founded by the Premonstratensian order in 1134 (© Egerton Lea Consultancy Ltd)

centres such as Hawkshead, Hesket Newmarket and Broughton. These settlements are all likely to have been established by medieval feudal lords to act as central places and encourage trade, and represent deliberate lordly plantations in an existing settlement structure.[44] Other new additions to the landscape from the twelfth century were the hunting preserves of the feudal lords, and the monastic estates.

Following the incorporation of Cumbria into the Norman kingdom most of its upland was legally defined as private forest or chase.[45] This was land over which the great magnates retained direct control, even though for the most part they all resided at considerable distances from their upland holdings. This status did not imply that there was a twelfth century decline in the cultivated land of the Lake District, nor is it indicative of an increase in woodland, but it may be seen as a confirmation of the district's perceived agricultural marginality. The desire to increase returns from their land ensured that by the end of the thirteenth century, new enclosures had reduced the demesne land. The lord's holding tended to be restricted to the head of a valley, perhaps forming a vaccary[46] or, as at Troutbeck, a deer park.

The monasteries of Furness, Calder and Shap, as well as other local and distant religious houses, all had holdings in the Lake District. As the documented holdings of Calder reveal, these could range from individual properties, to fisheries, and rights to pasture and wood.[47] One of their main impacts on the landscape, however, was in the establishment of new farms, especially extensive demesne livestock farms known as vaccaries, generally established at the heads of valleys. Furness had a vaccary at Brotherikeld in Eskdale, and the Fountains Abbey in Yorkshire had one at Stonethwaite in Borrowdale.[48] The best documented Lake District vaccary belonged to a secular estate, the Honour of Cockermouth, and was at Gatesgarth at the head of Buttermere. There, an existing enclosure called Gategarthside may preserve the outlines of land, identified as the wood and park of Gatesgarth in 1268 and 1269.[49] At Gillerthwaite in Ennerdale are the stone foundations of several buildings of a now-deserted medieval vaccary.[50] Documented as belonging to the Lords of Egremont, it is rare because most vaccaries were not abandoned following the fourteenth century decline in the vaccary system but became tenanted sheep farms.

The development of sheep farming and the consequent landscape changes are often attributed to the monasteries but in truth it was a change in land management that was embraced by both secular and ecclesiastical lords. The fourteenth

[44] Winchester 1987
[45] Winchester 2003a, 109
[46] Winchester 2000, 13
[47] Thorley 2004
[48] Winchester 1987, 42-3
[49] Winchester 2003a, 114
[50] LUAU 1995

century is seen as a period of dislocation throughout medieval Europe. In England animal epidemics and poor harvests leading to famine, followed later by the Black Death, are thought to have brought an end to population expansion, followed by a catastrophic collapse in the population in the later fourteenth century. In the northern uplands the principal catalyst of change seems to have been the commencement of the climatic deterioration known as the Little Ice Age. In the Lake District the wetter conditions may have contributed to major episodes of erosion at Seathwaite, Borrowdale[51] as noted elsewhere in Cumbria for example in the Howgill Hills.[52] There is clear documented evidence for a retreat from the margins of cultivation in response to a poorer climate in various parts of northern Britain. The evidence of abandoned cultivation terraces and probable medieval ridge and furrow, surviving as earthworks because they were never again ploughed, at Wythop and Wet Sleddale is suggestive of a contraction of arable farming.[53]

In Borrowdale archaeological evidence has revealed the environmental impacts caused by changes in a monastic farming regime. The move to sheep farming in the fourteenth to fifteenth centuries appears to have resulted in the removal of managed woodland from the valley sides. This, combined with a deteriorating climate, led to increased erosion on the fellsides and colluviation in the valley bottom.[54] Further contemporary evidence for hillslope instability in the Lake District comes from a minerogenic layer within peat at Mosedale Beck, which has been carbon dated to cal AD 1270-1410.[55] Consequently, it has been argued that as late as the fifteenth century species-rich woodland still formed part of the upper valley sides in the central Lake District fells. More specifically it may have been as recent as the fifteenth century that the Seathwaite valley was transformed "*from a wooded, geomorphologically stable, environment, to a valley with bare, unstable slopes within a dynamic landscape, typical of the contemporary north-western Lakeland fells*".[56]

The quality and accessibility of haematite ores in Cumbria may suggest their exploitation during the early Middle Ages,[57] but archaeological and documentary evidence only demonstrates production from the twelfth century. Iron production is documented at Egremont before 1179[58] and radiocarbon dates for bloomeries, from a current Lake District research programme, have a range from the twelfth to the sixteenth centuries cal AD.[59] Fourteenth century copper mining in the Keswick area is documented, but field evidence has not yet been located.[60] The small-scale and frequently temporary, if widespread, nature of these activities prevented them from having a major influence on the contemporary landscape beyond a very local level, though discrete relict features survive within today's landscape.

Post-medieval and modern

By the end of the Middle Ages it can be justifiably argued that the basic structure of today's Lake District rural landscape was in existence. There were evolutionary changes within farming that reflected wider national trends, but the primary pattern of rural settlement and farming practice in the uplands especially remained broadly constant. Consequently, it is

[51] Wild *et al* 2001
[52] Hodgkinson *et al* 2000, 323-24
[53] Winchester 2000, 6
[54] Wild *et al* 2001, 66-7
[55] Anderson and Parker 1997
[56] Wild *et al* 2001, 67
[57] Instone 1995
[58] Bowden 2000; Hewer and McFadzean 2000
[59] Hodgson pers comm
[60] Shaw 1983, 7-8, Smith *et al* 2001, 101

reasonable to assume that the fundamentals of the rural landscape, as depicted on late eighteenth century county maps, are representative of a late medieval pattern.

One clear change within the landscape, but not visible from maps, was in the nature of housing. Houses were replaced, though the property forming their context may have remained relatively unchanged. At Stephenson Scale the most recent rectangular farmhouse was occupied during the fifteenth to sixteenth centuries, with a semi-circular animal enclosure on one side.[61] During the seventeenth century an increasingly independent and wealthy yeomanry invested in new buildings throughout the Lake District, often providing date stones for major phases of rebuilding.[62] Other evidence of the expression of a more powerful and acquisitive farming class is shown in the sixteenth to eighteenth centuries when individual farmers or small groups of farmers made fellside intakes throughout the Lake District.[63] In the Lake District from the seventeenth century farms amalgamated into fewer, larger units[64] and this is a process that is continuing through to the present day.

There were four processes that produced mappable landscape characteristics which overlie locally the essentially medieval nature of the Lake District's rural landscape. These were industrialisation, enclosure, tourism and forestry. Industrial activity only began to have a significant impact on the Lake District's landscape in the post-medieval period. It was only then that its scale was sufficient to have anything other than a localised impact. This increase in scale came through an intensification of mining and quarrying, and the application of water power to traditional mineral processing.

The area experienced a late flowering of bloomery production with the application of water power at bloomery forges in the sixteenth and seventeenth centuries. Excavation at sites such as Stoney Hazel forge[65] and more recently Cunsey forge[66] are helping to elucidate the complex technological relationship between late water-powered bloomeries and the finery forges of the blast furnace industry. The most significant landscape impact of the intensification of iron manufacturing in the area, however, was the increased exploitation of coppiced woodland. In some instances, the greater value this conferred on woodland led to new areas of woodland replacing former enclosed farmland, as at Haverthwaite Heights near Backbarrow.[67]

The Lake District is a nationally important centre for post-medieval metal ore mining. The sixteenth century copper mines opened by the Mines Royal Company in the Caldbeck Fells are especially significant as the

Plate 9: Rydal Park, looking towards the ornamental woodland planting on the slopes of Loughrigg Fell (© Egerton Lea Consultancy Ltd)

[61] McNeil and Newman 2006, 150
[62] Brunskill 2002
[63] Winchester 2000; Denyer 1991
[64] Winchester 2000, 17
[65] Winchester 2000, 17
[66] Miller 2005
[67] Dunn and Lax 1998

first well-documented large-scale copper mining operation in the UK and the first to employ the advanced technological expertise of German miners. The landscape impacts of mining and quarrying intensification include larger extraction complexes, and widespread spoilheaps, with one of the most dramatic spoil-affected landscapes being the Copper Mines Valley, near Coniston.

The greatest post-medieval change in the rural landscape came with the enclosure of large areas of upland common in the nineteenth century as a result primarily of the general enclosure acts.[68] Associated with the contemporary processes of wetland reclamation and enclosure, these upland enclosures were responsible for the considerable difference in the mapped landscape of the fells as shown on the late eighteenth century county maps and the first edition Ordnance Survey coverage.

In the eighteenth century the combination of powerful natural landscape elements, picturesque scenery, a seemingly ancient rural farming pattern and the local, but often dramatic, visual impact of industries was regarded as inspiring and moving. With the unavailability of southern Europe to most travellers, the Lake District became the destination of choice for tourists and aesthetes seeking landscapes suitable for Picturesque and Romantic appreciation. The attraction of the environment encouraged its appreciators to attempt to enhance it with ornamental plantings and landscaping. The advent of the railway in the mid-nineteenth century brought increasing numbers of visitors and led to the development of new urban centres, with the development of settlements like Keswick, Ambleside and Bowness, and the creation of the resort of Windermere.

During the post medieval period woodland cover within the Lake District National Park increased as a result of its value to industry, as a provider of fuel, and its ornamental value, for enhancing Picturesque landscapes. In the nineteenth and twentieth centuries, this increase continued with the development of commercial forestry. The advocates of landscape protection and appreciation, such as Wordsworth, opposed afforestation.[69] Landscape conservation, appreciation, and woodland expansion continue to be contested aspects of landscape development and management in the Lake District National Park, with proposals for the area to become a World Heritage Site and for rewilding its more isolated parts, as at Ennerdale.[70] Throughout its history, environmental and socio-economic factors have influenced the development of the landscape, and will continue to do so.

[68] Whyte 2003

[69] de Sélincourt 1977, 82-9

[70] R Newman 2006