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SUMMARY

The present report outlines the results of a landscape survey of National Trust holdings and covenanted land in Buttermere, Cumbria, which comprise an area approximately 52.5km² in extent (centred on NY 170 170). This report incorporates survey work undertaken by The National Trust and the Lake District National Park Authority with teams of volunteer surveyors from the Lorton and Derwent Fells Local History Society during March and April 2008, in addition to landscape survey undertaken by Oxford Archaeology North (OA North) between March and May 2008 and documentary research undertaken by OA North.

The aim of the study was to produce a comprehensive record of the remains of archaeological interest within the valley and to provide analysis of the development of the landscape. The study also included an assessment of the survival and condition of the archaeological resource within the valley and this report provides management recommendations for the long-term preservation of the resource.

The earliest activity in the survey area was of Bronze Age date and is represented by two possible round barrows, three round cairns, two examples of rock art, a bronze spearhead, and a burnt mound. There are several enclosed settlements and areas of clearance activity within the survey area, which could date to the Iron Age or Romano-British period. A fortified promontory known as Loweswater Pele is also likely to represent Iron Age activity, although earlier use is possible.

Early medieval activity within the valley is reflected in the place names, and there are, for example, considerable numbers of local place names that contain the Norse element 'thwaite', possibly indicating an influx of Norse peoples. This is coupled with analyses from the lake sediments from Crummock Water, which have identified a gradual increase in local soil erosion throughout the early medieval period, and a significant increase in deep and intensive erosion from AD 900, which might suggest tree clearance associated with agriculture. Otherwise, there is relatively little physical evidence for activity at this time.

From the medieval period there are documentary references to settlements that have continued through to the modern period in some form, for example a vaccary was documented at Gatesgarth in the thirteenth century. Some settlements that were in use during the medieval period have not continued in use to the present day, such as that at 'Scales', a place name associated with transhumant activity, that is associated with ruined settlement remains. A chapel at Loweswater was in the possession of St Bees priory between 1154 and 1181, and was probably demolished to allow for the construction of the present St Bartholomew's church in 1827. Medieval industrial activity is also reflected in the documentary records with two iron working bloomeries being recorded at Loweswater in 1305.

The fourteenth century was a period of plagues and murrains which had an impact on the whole of the country and Buttermere was not immune from this. At least three settlements, may have been abandoned during this period at Rannerdale, Scales, and a site to the east of Low Hollins. The fifteenth and sixteenth centuries were a period of population recovery and economic growth and the fertile land between Crummock Water and Buttermere was enclosed in the sixteenth century. There was also a significant increase in iron working, with a corresponding impact on local woodlands as

a source of fuel. Documentary sources demonstrate the presence of at least two local coppices during the post-medieval period and it is possible that these were established as a response to the demand for fuel during the fifteenth and sixteenth centuries.

Agricultural development continued during the seventeenth to nineteenth centuries, and there was a significant expansion of enclosed lands in Cumbria as a result of the parliamentary enclosure movement. There was a dramatic increase in the enclosure of the Buttermere uplands during the second half of the nineteenth century, which may have been facilitated by the General Enclosure Acts. Industrial activity also increased during the nineteenth century with the development of slate mining, most notably at Honister, which is still in use. There was also the establishment of lead mines at Whiteoak, Mosedale and Loweswater.

The archaeological resource of Buttermere includes numerous sites of archaeological significance that survive in good condition and the effective management of the resource is, therefore, a matter of considerable importance. Particular emphasis needs to be placed upon the preservation of the prehistoric monuments putative, the Iron Age enclosed settlements, and the deserted medieval settlements in the area. Given the importance and survival of the valley landscape, there is a case for maintaining the distinctive characteristics of the three separate landscape zones across the study area comprising lowland pasture and meadow, fellside intake, and the high fell. Permanent pasture is the ideal habitat for the preservation of both visible and sub-surface remains of archaeological interest. For this reason, the current management of all farmland within the survey area, as either permanent pasture or pasture and meadow, should be perpetuated wherever possible. This includes the preservation of the field boundaries, which in some cases may have considerable antiquity.

Recommendations for future archaeological work include providing popular publications on the sites of archaeological interest within the valley, and more detailed topographic surveys of important sites, such as the enclosed settlements at Rannerdale, High Nook Farm, and Lambling Knott, and the promontory fort at Loweswater Pele. Very little palynological work has been undertaken in order to investigate the vegetational history of the valley, and any accurate interpretations of the long-term changes in land-use within the valley will depend upon the results of such studies.

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Thanks are due to Jamie Lund of The National Trust for commissioning OA North to undertake the project. Thanks are also due to Mark Astley of The National Trust and to the helpful and informative occupants of The National Trust holdings in Buttermere. Thanks are due to Angus Winchester, at the Department of History, University of Lancaster, for help and advise during the project and to Alison Lane and Janet Stanford at The National Trust for the provision of archival sources and data.

Between March and May 2008 a program of archaeological landscape survey was undertaken by Peter Schofield, Alastair Vannan, Will Gardner, Annie Hamilton-Gibney, and David Marron, with documentary research being undertaken by Rebecca Briscoe and Alastair Vannan. Landscape survey work was also undertaken by archaeologists and volunteers working on behalf of The National Trust and the Lake District National Park Authority. This included Jamie Lund at The National Trust, and John Hodgson and Eleanor Kingston at the Lake District National Park Authority. We are grateful to all the volunteers from the Lorton and Derwent Fells Local History Society who undertook this work, and for allowing the use of the Donald Map of High Nook (Plate 8).

The report was written by Alastair Vannan and Peter Schofield and was edited by Jamie Quartermaine. The illustrations were produced by Peter Schofield and Alastair Vannan. The project was managed by Jamie Quartermaine.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 OA North was commissioned by The National Trust to undertake a landscape survey investigating the archaeological, historic, and cultural landscapes of land adjacent to Buttermere, Crummock Water, and Loweswater (Fig 1, centred on NY 170 170). The survey was undertaken during March, April, and May 2008 and comprised the identification and description of sites of archaeological interest encountered during a programme of walkover surveys of all land owned by the National Trust in Buttermere and Loweswater. This report also contains the results of surveys undertaken by the Lorton and Derwent Fells Local History Society of areas of covenanted land in Buttermere (Figs 2 and 3 [Volume 2]).
- 1.1.2 The study area (Fig 1) comprised approximately 52.5km², consisting of 27.75km² of National Trust holdings and 24.75km² of covenanted land. The project was undertaken according to a project design (*Appendix 1*) produced in accordance with a project brief prepared by The National Trust, who funded the work. The survey area included most of the land at the eastern side of the valley, in addition to The National Trust holdings to the south of Loweswater, and part of the covenanted lands at the western side of the valley (Fig 3 in *Volume 2*). Documentary research was undertaken relating to all of the holdings of The National Trust and the covenanted lands.

1.2 THE NATIONAL TRUST LANDHOLDINGS

1.2.1 The National Trust owns 3000 hectares (7413 acres) and possesses covenants on a further 1880 hectares (4645 acres) in the Buttermere area, including land in the vicinities of Buttermere Lake, Crummock Water, and Loweswater (National Trust 2005, 3). This land includes farms, fell, common land, woodland, and lakeshore. The survey area encompasses a varied composition of plantation and semi-natural woodland, crags, long stream gullies, valley bottoms and open fell, much of which is open access and is popular for visits by the general public. The majority of the holdings comprise farmland associated with the four tenanted farms of Rannerdale, Crag House, Wilkinsyke, and High Nook (*ibid*). Following the terminology used in the Archaeological Atlas for this area produced by The National Trust (*ibid*), 'Buttermere', as opposed to Buttermere valley, lake, or village, will be used in this document to refer to the lands adjacent to Crummock Water, Buttermere lake, and Loweswater, which comprise the study area of the survey.

1.3 OBJECTIVES

1.3.1 The primary purpose of the project was to inform future management decisions with regard to conservation matters relating to the archaeological and historical significance of The National Trust holdings. The proposed study was intended as an initial exploration of the archaeological and historical resource, rather than a

definitive and comprehensive study. The aims of this initial project were broadly as follows:

- to undertake a documentary study of the holdings of The National Trust, including all covenanted lands, accessing and collating historic maps and other documentary data;
- to undertake an archaeological survey of the study area to identify and record all visible sites and monuments;
- to analyse all extant and former field boundaries within the valley floors, through a combination of field survey and cartographic analysis, in order to develop a chronology for the development of enclosure;
- to formulate an historic narrative for the study area from the earliest period to the present day;
- to produce a written report presenting the results of the historic landscape survey, and to provide a basis for the preparation of detailed management prescriptions by The National Trust;

1.4 REPORT LAYOUT

- 1.4.1 It should be recognised that this report does not attempt to provide a comprehensive history of Buttermere but is a report on the archaeological landscape. It is therefore concerned principally with tracing and explaining the events that resulted in the landscape that we see today and not with cataloguing and quantifying in detail a series of historical events and documents. The emphasis of approach has been less focused on the details of the history of local land ownership and more on developing an understanding of the activities and processes occurring within the area and their subsequent impact on the land.
- 1.4.2 **Section 1** of the report presents a general **Introduction** to the survey area including information on the circumstances of the project, and the extent and nature of The National Trust landholdings in the study area. It also provides the project objectives and the methodologies used in the collation of the archaeological survey and the documentary work undertaken.
- 1.4.3 **Section 2** deals with the **Topographical, Geological and Historical Background** for the study area. This section presents elements of the natural geography and topography of the valley, and an historical background of information known for the study area by period, within the context of events occurring both regionally and nationally for that period. It also includes a synopsis of the documented history of land ownership for the valley.
- 1.4.4 **Section 3** discusses sites that contribute to **Monumental Landscapes** within the study area. Although all categorisations of sites, imposed for ease of archaeological analysis, are problematic and cross-overs will always occur, this category allows sites, such as burnt mounds, tumuli, and panels of rock art, to be considered separately from sites relating directly to domestic activity and agricultural management.
- 1.4.5 **Section 4** explores the **Development of Enclosure** in Buttermere, as suggested by the historical documentary evidence and information gathered from the landscape surveys.

- 1.4.6 **Sections 5, 6,** and 7 describe and explain past human activity in the study area in light of the archaeological evidence for **Agricultural**, **Industrial**, and **Communication** sites and landscape features.
- 1.4.7 **Section 8** is concerned with the **Settlement Chronology** of the villages, hamlets, and farmsteads nestled within the valley and emphasises both the historic settlement and current settlement in light of the information recorded through The National Trust's program of Vernacular Building Survey.
- 1.4.8 **Section 9** contains a thorough assessment and explanation of the development of the **Trees and Woodland** encountered in the study area, from the post-glacial period through to present-day survival.
- 1.4.9 **Section 10** discusses the archaeological and historical evidence for the use and influence of **The Lakes** of Loweswater, Crummock Water, and Buttermere in relation to human activity in the valleys.
- 1.4.10 *Section 11* provides *General Management Recommendations* for all aspects of the historic environment. The management recommendations are divided into thematic categories including: boundaries; buildings; settlements; monuments; landscape; and woodlands. This section highlights any positive management that will be required to conserve the local historic environment. Priorities for further archaeological research in light of this report are also discussed.
- 1.4.11 The *Bibliography* lists all documents, cartographic sources and published information consulted during the production of the report.

Appendices 1 and 2 contain the *Project Brief* and *Project Design*, which identify the various elements, aims and outputs of the current project, as well as the methods to achieve them.

Appendix 3 contains the **Place-name Evidence** and its significance in identifying areas of historical land use.

Appendix 4 contains all of the relevant Statutory Designations pertinent to the management of the archaeological resource in the study area.

Appendix 5 consists of a full **Event Record** of the history of The National Trust landholdings in the study area and any archaeological works that have been undertaken within them.

Volume 2 contains a full *Gazetteer of Sites* listed on The National Trust Sites and Monuments Record (NTSMR) within the limits of the present study area. To accompany the gazetteer are a series of map sheets covering the entire area that indicate the location of all identified sites, monuments, and historic buildings and their NTSMR number (Figs 21–35). In addition, the maps also show the limits of the Scheduled Monument areas at Scale Beck (NTSMR 20380; SM 27674), the enclosed settlements near Lambling Knott (NTSMR 20381; SM 27670) and at Lanthwaite Green (NTSMR 20389; SM 27659), Loweswater Pele (NTSMR 20464; SM 27674), two round cairns at Carling Knot (NTSMR 29097; SM 27655 and NTSMR 29098; SM 27654), and a round cairn at Grasmoor summit (NTSMR 20393; SM 27656). Figure 3 shows the extent of the study area within Buttermere and differentiates between those areas subject to walkover survey and those investigated by desk-based research only.

2. TOPOGRAPHICAL, GEOLOGICAL AND HISTORICAL BACKGROUND

2.1 THE GEOLOGY AND GEOMORPHOLOGY OF BUTTERMERE

- Buttermere and Loweswater comprise U-shaped glaciated valleys radiating out 2.1.1 from the Cumbrian central massif (Countryside Commission 1998, 31). The physical landscapes within the area vary between upland heather moors, rock outcrops and cliffs, and improved farmland in the valley bottoms, which is interspersed with the three lakes of Loweswater, Crummock Water, and Buttermere. The underlying rock-types consist of the igneous rocks of the Borrowdale Volcanic Series, such as Llanvirn and Arenig, which were formed during the late Ordovician period as the result of volcanic eruptions some 450 million years ago. The hard lava beds are interspersed with bands of volcanic sediment, or tuff, some of which have experienced natural modification and have become tough and flinty and, therefore, more resistant to weathering (British Geological Survey 1987; Countryside Commission 1998, 31–3). Granite, syenite, and granophyre are present at the south-western side of the survey area. The metamorphosis of some of the volcanic rocks has produced the distinctive 'Lakeland Green Slate' (Countryside Commission 1998, 33), and slate quarrying endures at Honister, to the south-east of the survey area.
- 2.1.2 The solid geology of the area is overlain by a variety of soils, such as those of the Skiddaw association, which occurs as acidic shallow peaty soils on steep slopes, and as deeper peats on shallow slopes, and is present on the higher ground in the area. The fells and valley bottoms comprise Manod well-drained loams or silty soils (British Geological Survey 1987).

2.2 PREHISTORIC BACKGROUND

- 2.2.1 The Late Upper Palaeolithic and Mesolithic Periods (c11,000 4000 BC): there is limited evidence for human activity in Cumbria during the Palaeolithic period, with glacial conditions creating an inhospitable environment in the region during much of this period (Hodgson and Brennand 2006, 23; Pearsall and Pennington 1973, 196). Although there were warmer interstadial and interglacial periods during the Devensian glacial period, between around 110,000 BP and 9500 BP, there is no evidence of human activity in Cumbria prior to the Late Upper Palaeolithic, between 11,000 BC and 9500 BC. Caves in the limestone of southern Cumbrian, eg Kirkhead Cave, have provided artefacts that have been dated to this period (Hodgson and Brennand 2006, 24), which may suggest evidence of early groups of hunters attempting to exploit the large mammals present beyond the edge of the ice sheet (Hodgkinson et al 2000, 33), but no sites of this period are known within Buttermere or northern Cumbria (op cit, 106).
- 2.2.2 Following the glacial period, the Cumbrian climate experienced rapid warming and the southern part of the county area was colonised by successive expansions of birch, hazel, pine, oak, elm and alder, with the occurrence of charcoal suggesting human influence in the landscape associated with small-scale woodland clearance from as early as 7531–6646 cal BC at Little Hawes Water, to the south of Morecambe Bay (*op cit*, 23–4). In northern Cumbria, juniper and

willow preceded the colonisations by birch and hazel and a more open landscape developed than that in the south of the county (*ibid*). By 6000 cal BC, however, forest comparable with that in much of lowland England was present in northern Cumbria and palynological and macroscopic charcoal analyses suggest possible woodland clearance by burning from around the beginning of the sixth millennium BC (Hodgkinson *et al* 2000, 107). Such woodland clearances would have allowed the regeneration of plants and encouraged browsing animals (Hodgson and Brennand 2006, 25), therefore, allowing humans to exercise a greater degree of control over the productivity of hunting grounds. Much of the artefactual evidence for the Cumbrian Mesolithic derives from flint scatters at coastal sites, with only one site having been identified in the central Lake District, and comprises a small scatter of microliths found close to the Roman Fort at Ambleside (*op cit*, 25–6). No sites of Mesolithic date demonstrating human activity are known from Buttermere.

- The Neolithic (4000 2500 BC): there appears to have been a great deal of 2.2.3 continuity between the late-Mesolithic and early-Neolithic periods in Cumbria, with typically Mesolithic tool types continuing in use until the end of the fourth millennium BC (Cherry and Cherry 2002, 2-3) and landscape clearance, by burning, being undertaken during both periods (Hodgkinson et al 2000, 155). Indeed, it has been suggested that the exploitation of wild resources may have continued to play a primary role in the subsistence strategies of the populations of north-western England (Hodgson and Brennand 2006, 31). However, as demonstrated by pollen evidence from western Cumbria, the early Neolithic period was also a time of great cultural change, with the adoption of agriculture on a large scale leading to more extensive woodland clearances (Hodgkinson et al 2000, 68). The uplands of the Lake District experienced dramatic changes in vegetation with, for example, reductions in elm and pine, as has been observed in the analysis of pollen from Angle Tarn and Langdale Coomb (Walker 1965a; Pennington 1975). By the Bronze Age the central uplands had become extensively cleared of woodland (Pearsall and Pennington 1973), although some valleys of the central Lake District, such as Borrowdale, may not have experienced widespread clearances until c AD 1000 (OA North 2007, 14).
- 2.2.4 The desire for woodland clearance inevitably instigated a demand for stone axes, and the importance of this essential tool appears to have enabled these functional objects to have become imbued with notions of status and identity (Edmonds 1995, 66, 133). The production of stone axes was undertaken at many locations in the central Lake District fells, the most extensive axe factories being those close to the Pike of Stickle, to the south-east of the survey area. These sites produced more axes than anywhere else in Britain, with Group VI and variant Group XI axes being the most commonly found axes in the country and the products were dispersed widely across the country (Annable 1987; Chappell 1987; Clough and Cummins 1988).
- 2.2.5 Although Neolithic agricultural activity can be inferred from signals in pollen diagrams, and findspots of lithic and ceramic material, Cumbria has produced only limited numbers of settlement sites of this date, the most notable example being Ehenside Tarn, on the west coast, which revealed sandstone rubbers for the polishing of Langdale axes (Hodgson and Brennand 2006, 31–2; Darbishire 1873). The Neolithic period did, however, produce sites that remain conspicuous in the landscape. This period saw the introduction of monumental funerary and

- ritual architecture, with some of the earliest stone circles in Britain being constructed in Cumbria (Burl 2000, 109), although there is no known evidence of Neolithic activity from the Buttermere area.
- 2.2.6 The Bronze Age (2,500 BC - 700 BC): the limited environmental evidence available suggests that the pattern of small clearances evident in the Neolithic continued throughout the Bronze Age (Hodgson and Brennand 2006, 31). There has been speculation that deterioration of the climate during the late Bronze Age, leading to wetter conditions, may have caused retreats of populations from peripheral upland landscapes (Wells 2003, 690), although this does not preclude the possibility of some residual settlement or activity from this period. Recent studies focused on Crummock Water have examined the rate of sediment accumulation and the magnetic mineral composition of the sediments within the lake (Shen et al 2008). The sediments were dated using both optically-stimulated luminescence and radiocarbon dating, in an attempt to refine the accuracy of the age-depth curve of the sediment cores. The results of these analyses suggest that sediments in the lake began to accumulate rapidly from 2000 BC, reflecting an increase in the erosion of the surrounding soils (op cit, 138). In addition to the general increase in the rate of silt accumulation, from 2000 BC until the twentieth century, phases of increased mineral input into the lake were also identified, which could indicate periods of soil instability. There were gradual increases in mineral input between 2000 BC and 1000 BC (ibid) and it is probable that the instability of local soils responsible for this deposition was caused by deforestation and the expansion of land for agriculture during this period. Although climate-related events might be responsible for episodes of erosion, particularly where vegetation coverage has been reduced, human activity is a probable cause of the increased erosion at this time (op cit, 139).
- 2.2.7 Cairnfields and settlements: upland marginal settlement in western Cumbria during the Bronze Age is suggested in many areas by the presence of burial and clearance cairns (Hodgkinson et al 2000, 76; Quartermaine and Leech forthcoming). In particular, there are extensive cairnfields across the western marginal uplands, and numerous clearance cairns have been identified within the survey area (Figs 5 and 6), particularly in the environs of the enclosed settlements at Lanthwaite Green (NTSMR 20389) and Rannerdale (NTSMR 24355). In the absence of excavation, however, it is not possible to closely date these sites. A comparable site at Glencoyne Park in Matterdale, for example, has produced evidence of activity spanning broad periods, with a radiocarbon date of 1105–835 cal BC (Beta 171115 2810±50 bc) from one feature and high-quality finds of Romano-British date from the interior of a roundhouse (Hoaen and Loney 2004, 50).
- 2.2.8 Settlements of potential Bronze Age date are relatively common in Cumbria, particularly on the marginal lands adjacent to the western coastal plain; however, few have been excavated and, consequently, their dating is reliant on typologies which can be open to question. However, the round house at Stephenson Scale, near Broughton Mills, (Hodgson and Brennand 2006, 34) is one example that has been confirmed as having a Bronze Age origin. Invariably the stone-founded round houses are associated with cairnfields and field systems, and these exhibit a degree of complexity that are indicative of a well-established agricultural unit. They appear to have developed from the more basic simple cairnfields, which reflect the initial exploitation of a forest clearing (Quartermaine and Leech

- forthcoming), and there is the possibility that there were more transient settlement structures associated with these small initial cairnfields that have not survived as surface evidence.
- 2.2.9 In Buttermere a group of hut circles was identified in 1936 to the south-west of Knott Rigg and was suggested to have been of Bronze-Age date (NTSMR 20382); however, no sign of these putative buildings was encountered during the present survey, or during a field visit in 1986 (NTSMR 20382). One sub-circular site was encountered to the north-west of Sail Beck (NTSMR 29259), although this appears to have been a collapsed sheepfold. It is possible, however, that this fold overlies an earlier sub-circular structure and that a stone-banked structure without an entrance, such as a ring cairn, might have preceded the fold.
- 2.2.10 *Burnt Mounds:* within the general environs of cairnfields, but often slightly removed, it is not uncommon to find burnt mounds. These reflect the piles of waste fire-cracked stone used for heating of water in an adjacent trough; their purpose has not been reliably established but are typically of Bronze Age date (O'Drisceoil 1988). A single burnt mound (NTSMR 29489) has been identified by the Buttermere survey near Crag House (NY 1726 1715).
- 2.2.11 Sepulchral and Ritual Monuments: funerary and ritual monuments of demonstrable Bronze-Age date that occur in Cumbria include stone circles, round cairns, stone rows, and ring cairns, and also panels of rock art (op cit 37-45). Within the survey area several monuments of probable Bronze Age-date have been identified (Fig 5) comprising a group of five possible funerary cairns (NTSMR 29379), three round cairns (NTSMR 20393 and 29633; Plate 1, NTSMR 29634; Plate 2), and two panels of rock art (NTSMR 29669; Plate 3, NTSMR 29136; Plate 4). A third panel of rock art (NTSMR 29137; Plate 5) lies just outside the survey area, at Low Park, a possible funerary cairn (NTSMR 29103) is situated to the south of the survey area boundary at Whiteoak Moss, and two round cairns (NTSMR 29097 and 29098) are situated to the south-west of Carling Knott. None of these sites have been closely dated, but typographic parallels are strongly suggestive of Bronze Age origins. Although these sites appear to represent elements of monumental landscapes, these need not have been distant from areas of occupation and subsistence. Indeed, as appears to have been the case at Burnmoor and Stockdale Moor (Quartermaine and Leech forthcoming), any divisions between sacred, or symbolic, and profane spaces may have existed largely as intellectual understandings, rather than entirely separate pieces of land being used for these differing functions.
- 2.2.12 In addition to monuments, findspots of material of possible Bronze-Age date have been found in Buttermere. These comprise a stone hammer (NTSMR 29104), a flint flake (NTSMR 29621), and a middle Bronze Age spearhead (NTSMR 24350).
- 2.2.13 *The Iron Age and Romano-British Period (700 BC AD 410):* both the uplands and lowlands of Cumbria have produced evidence of numerous enclosed settlements that may date to the Iron Age, however, a lack of identifiable material culture has made it difficult to assign these sites firmly to the Iron Age (Hodgson and Brennand 2006, 52). Intensive aerial survey has revealed extensive settlement remains across the Solway plain, north of the study area (Bewley 1994) and large field systems and agriculturally improved areas have been identified in the uplands of the Lake District (Quartermaine and Leech

- forthcoming). A series of enclosures on Aughertree Fell to the north-east of the survey area potentially represent a long sequence of occupation throughout the later prehistoric periods (Hodgson and Brennand 2006, 52). In Cumbria 866 enclosures, and up to 332 settlements, have been identified as cropmarks and earthworks but very few of these sites have been investigated by excavation and they have not been closely dated (Philpott 2006, 74). The similarity between indigenous rural settlement sites of the Iron Age and Romano-British periods means that these sites could potentially date to either period, or have been used during both periods (*op cit* 73–4).
- 2.2.14 When excavations have taken place at settlement sites in Cumbria, the presence of Romano-British pottery, in contrast to a lack of Iron Age material culture, may have led to sites being categorised according to their final, Romano-British, phase of occupation with earlier settlement activity being masked and obscured (Hoaen and Loney 2004, 42). Such successive occupation appears to have been represented, for example, at Wolsty Hall, where pottery dating to the 2nd century AD was found in the upper fills of ditches, and at Dobcross Hall where an enclosure was modified during the Romano-British period (Philpott 2006, 74). Excavations at Matterdale, to the west of Ullswater, have revealed occupation of an open settlement site with radiocarbon dates demonstrating activity during the final centuries of the first millennium BC, and between the first and fourth centuries AD (Hoaen and Loney 2004, 49-50). Features associated with an enclosed settlement at Glencoyne Park in Matterdale have produced a radiocarbon date of 1105-835 cal BC (Beta 171115 - 2810±50 bc), while unexpectedly high-quality finds of Romano-British date were recovered from the interior of an associated roundhouse (op cit, 50). This broad date range, and successive stratigraphic phases of the roundhouse, suggest a long sequence of activity and occupation at the site spanning the pre-Roman and Romano-British periods (ibid).
- 2.2.15 In the absence of substantial quantities of data derived from archaeological excavation, attempts to evaluate the potential for evidence of Iron Age activity within Cumbria have often been restricted to the examination of comparative site morphologies based on settlement chronologies established from outside the region (Quartermaine and Leech forthcoming). This links into models of the changing Cumbrian climate, during the later prehistoric period, based on palaeoenvironmental analyses undertaken during the 1970s and 1980s (Barber et al 1993, 226; Pearsall and Pennington 1973, 232-4), which suggests that between 800 BC and 500 BC there was a deterioration in the Cumbrian climate, reflected in wetter and colder weather, and that this decline accelerated after 500 BC. Deterioration of some upland soils meant that expansion onto high ground would have been impossible while much of the lower fells became uninhabitable (Higham 1986, 117). It was not until the last centuries of the first millennium BC, that there was any improvement in climatic conditions with a marked decrease in tree pollen, suggestive of increased clearance activity (Barber et al 1993, 228).
- 2.2.16 Such ideas, in tandem with the poorly understood chronology of settlement sites in Cumbria through archaeological investigations, have contributed to circularities of interpretation that have resulted in the self-perpetuation of the idea of the largely uninhabitable nature of Iron Age Cumbria. For example, a lack of known archaeological sites of prehistoric date in Cumbria has been used

- to support the idea that the environmental conditions in the area were not conducive to settlement (*op cit*, 226). However, as at least 1198 settlement and enclosure sites in the area have not yet been closely dated (Philpott 2006, 74), and many potentially Iron Age sites may have been assigned to the Romano-British period, on the basis of finds representing later phases of use (Hoaen and Loney 2004, 42; Higham 1986, 190), this aspect of the archaeological record is far from reliable.
- 2.2.17 Contrary to established views of the impact of the Cumbrian prehistoric climate, pollen evidence demonstrates that there was clearance and cereal cultivation in the region during the later Iron Age (Hodgson and Brennand 2006, 52), alongside a significant upsurge in forest clearance during the Late Iron Age at numerous locations throughout Cumbria (*op cit*, 67–72). This has been interpreted as evidence of an increase in population or the result of technological developments, such as the iron-tipped ard (*op cit*, 72). Although there has been in the past a reluctance to consider the possibility of upland habitation in the northwest during the Iron Age, because of the climatic deterioration (Higham 1986, 117–8), excavations at Glencoyne Park and Balhowend (Hoaen and Loney 2004, 50) at heights of 230m and 280m (AOD) respectively, have confirmed Iron Age dates as a result of radiocarbon-dated assay.
- 2.2.18 The analyses of lake sediments from Crummock Water (Shen *et al* 2008, 138–9) suggest an increase in local soil erosion as a result of human activity (*ibid*) and is likely to result from the destabilisation of soils caused by the clearance of woodland for agriculture. Specific episodes of intensive erosion are suggested by periods of increased mineral input into the lake and these have been identified at 400 BC and 250 BC, with decreased concentrations of minerals at 800–400 BC and AD 100–250 (*ibid*). This might suggest that there was a decrease in clearance or agricultural activities in Buttermere during the Late Bronze Age and Early Iron Age, but that the impact of human activity on the environment intensified throughout the period between 400 BC and AD 100, during the Late Iron Age and early Romano-British periods. There may then have been a subsequent decrease in activity between AD 100–250 with renewed activity after AD 250. It is important to note that the increases in mineral deposition are small in scale, unlike the dramatic increases observable from AD 900 (*ibid*) and, as such, these may reflect comparatively minor fluctuations in land use.
- 2.2.19 Human agency is inferred as the cause of these erosive episodes (*ibid*), but it is important to consider the potential role of climatic events in these formation processes, particularly where small-scale changes are evident. It should be stressed, however, that these increases in the accumulation of sediments form part of a broader trend of incremental soil erosion, spanning the last four thousand years, and that the erosion of soils in the Iron Age does not, therefore, reflect the idea of climate-based soil deteriorations specific to the Iron Age, which have been argued (Higham 1986, 117) to preclude Iron Age activity in upland areas.
- 2.2.20 The categorisation of sites that have the potential for Iron Age phases of activity as being of Romano-British date is evident in the Buttermere area. Three enclosed settlement sites (NTSMR 20381, 27581, and 20389) are described within The National Trust SMR as being of likely Romano-British date, although none has been subject to archaeological excavation. The dating of the sites at

High Nook Farm (NTSMR 27581), Lanthwaite Green (NTSMR 20389), and Lambling Knott (NTSMR 20381) appears to derive from comparisons of similar site-types within Cumbria, which have not been conclusively dated (NTSMR 20381, 27581, and 20389; Lund 1999, 19). The enclosed settlement at Lanthwaite Green (NTSMR 20389; Plate 6) has been subject to extensive topographic survey and it has been suggested that elements of the site could date to the Bronze Age, Late Iron Age, and Romano-British periods (ibid) (Figs 6 and 7). Any attempt to more closely date the phases of activity represented would, require archaeological excavation however, or the analysis palaeoenvironmental data specific to the immediate vicinity of the sites. The settlement sites are similar in form, with earth and stone, or stone, banks defining sub-circular spaces ranging between approximately 30m and 70m in diameter, and the enclosures at Lanthwaite Green (NTSMR 20389) and High Nook Farm (NTSMR 27581; Plate 7) have both, to some extent, been sunken into the ground, which might suggest that they were used for wintering of stock, and that the repeated removal of manure rich soil for deposition on farmland resulted in the dropping of the level of the interiors. The interiors might also have been subject to scarping, in order to accumulate earth and stone for the construction of the enclosure bank.

- 2.2.21 It should be noted that an estate map of the High Nook estate from 1787 (Donald 1787; Plate 8) and the Loweswater tithe map of 1839 both showed the field in which the High Nook enclosure (NTSMR 27581) is situated as a plot named 'Rye Garth'. Although the boundaries of this field appear to have respected the enclosure bank, and might have overlain part of the bank at the southern side, as the current field wall does, the perimeter of this field did not correspond with the extent of the sub-circular enclosure. The field marked as Rye Garth was larger than the enclosure and of irregular polygonal shape, with the field boundaries closely following the natural topography at the western side of the plot, reinforcing the line of a sharp natural break of slope. It is possible that the Rye Garth field name might represent the survival of an earlier field name associated with a sub-circular enclosure, although the enclosure bank does not contain any conspicuous traces of stone, which might suggest a collapsed wall. It seems likely, therefore, that although the enclosure, or part of the enclosure bank, might have been reused in association with an enclosure of medieval or post-medieval date, it represents the remains of an earlier site comparable with the settlement at Lanthwaite Green (NTSMR 20389).
- 2.2.22 The enclosure at Lambling Knott (NTSMR 20381) is situated on a terrace and does not have as obvious a sunken interior as the sites at High Nook and Lanthwaite Green. It has, however, been constructed around the 'elbow' of a break of the hill slope, which provides a similar sense of containment, at the eastern side, as the sunken sites. This site features sections of drystone banking and incorporated large earthfast stones.
- 2.2.23 Two further sites within the survey area may also represent activity during the Iron Age or Romano-British periods. To the north of Dale How, close to Rannerdale Farm, is a group of earthworks described in The National Trust SMR as the site of a deserted medieval farmstead (NTSMR 24355). There appear to be multiple phases of activity represented by the earthworks, some of which may indeed relate to medieval or post-medieval activity. The main part of the site, however, comprises a large sub-circular enclosure (NTSMR 29273; Plate 9),

measuring 65m by 55m, defined by a wide earth and stone bank with earthfast stones and sections of drystone banking. Similarly to the site at Lambling Knott (NTSMR 20381), the interior of the enclosure is slightly undulating and does not appear to have been extensively hollowed to produce a uniform concave effect. The enclosure bank has, however, been constructed around the 'elbow' of a welldefined break of slope, which contributes to a greater sense of containment than that provided by the banking alone. Hollows within the enclosure are likely to represent building platforms (NTSMR 29274-8) and appear to be subrectangular, sub-ovoid, and D-shaped; these may represent several phases of use and reuse of the enclosure. The general form of the site is very similar to the three enclosures at High Nook Farm (NTSMR 27581), Lanthwaite Green (NTSMR 20389), and Lambling Knott (NTSMR 20381) and lies at a height of 130m (AOD). As the sites at Dale How (NTSMR 29273), High Nook Farm (NTSMR 27581), and, Lanthwaite Green (NTSMR 20389) all appear to represent Iron Age / Romano-British settlements that were succeeded by medieval and post-medieval farmsteads in the near vicinity, it is possible that further settlement sites have been obscured by the construction of post-medieval farm sites.

- 2.2.24 A second site at Loweswater Pele (NTSMR 20464) has previously been suggested to date to the medieval period, but may also have originated in the Iron Age. A promontory of land, at approximately 100m (AOD), protrudes into the north-western side of Crummock Water (Plate 10), and the raised level of this low sub-ovoid hillock, in comparison to a low-level marshy area to the west, almost renders the area an island. The inaccessibility of the promontory is accentuated by a bi-vallate system of earthwork defences (NTSMR 29400; NTSMR 29402, Plate 11), with an additional rampart at the presumed entrance at the southern side (NTSMR 29403). This area has been suggested to have been the site of a twelfth century pele tower (NTSMR 20464) owned by Runulphe de Lindesaye, although these assumptions are based only on the endurance of the 'pele' place-name, which was in use at least as early as 1631, and the fact that de Lindesaye owned land in the area (Fair 1936). There are few indications of the structural remains of a pele tower, although a sunken platform at the eastern side of the promontory (NTSMR 29404) could represent such a building. Even if the site had been occupied by a pele, this does not necessarily place the foundation of the earthwork defences within the medieval period, although they have previously been described as representing the remains of a moated medieval manor house (NTSMR 20464; SM 27660). In contrast to a typical medieval moated site, however, they actually comprise substantial defensive banks that reinforce an area of natural waterlogging, rather than forming a sharply-defined moat as a recognised focal feature (eg Steane 1984, 59). The site is much larger than most Cumbrian ringwork sites, which were earlier medieval fortifications utilising banks, ditches, and waterways (Jackson 1990, 9), and lacks any signs of structural remains that might qualify as a fortified manor house, which were typically associated with moats (op cit, 19).
- 2.2.25 The morphology of the site at Loweswater Pele seems more closely comparable to the promontory forts that have been broadly dated to the Iron Age (Cunliffe 1991, 267–9) than medieval defended sites. Such sites were often multi-vallate and modified existing spurs of land to form defendable areas with a minimum investment of working time. This can be seen at The Knave, Rhossili, and

Caerau Henllan, in Wales (*op cit*, 267), and High Rocks and Hammer Wood, in Wealden (*op cit*, 345), with single-vallate examples at Castle Steads, Bury (Cowell 2005, 74) and Beeston Castle, Cheshire (Ellis 1993). Although most of these sites comprise rises within dry landscapes, some sites, such as The Knave, Rhossili, and St David's Head, in Wales (Cunliffe 1991, 267) are partially surrounded by sea. Archaeological investigation would be required to date the site with certainty, and sites, such as Beeston Castle, have demonstrated long periods of use and reuse of conveniently defendable topographic features during the Bronze Age, Iron Age, Romano-British, medieval, and English civil war periods (Ellis 1993).

- 2.2.26 It should be noted that the raising of the level of Crummock Water by 1m by the water board during the late nineteenth century will have had an impact on the extent of exposed land at Loweswater Pele. Although the promontory may have extended slightly further than the current extent, this is unlikely to have had a dramatic impact on the nature of the waterlogged area in the environs of the earthwork ramparts. This area consists of a hollow between two raised areas and the saturated nature of the ground is, therefore, likely to be a result of the accumulation of ground water from rain and from the adjacent wet land lying to the east of High Park.
- 2.2.27 Other sites tentatively dated to between the Bronze Age and Romano-British periods are five hollows or stone robbing holes (NTSMR 25063, NTSMR 25064, NTSMR 25067, NTSMR 25103, NTSMR 25110) and two rectangular stone-lined pits at Lanthwaite Green (NTSMR 25100, NTSMR 25112); (Fig 6). There have been few finds datable to the Iron Age or Romano-British periods found within the survey area. A lead object (NTSMR 29118), shaped like an acanthus leaf, was found at Scale Beck and may be a lead fitting or belt terminal dating to the Romano-British period (Fig 29). A Hadrianic coin was found in the 1940s (NTSMR 20384) in a hollowed stone on Knott Rigg.

2.3 EARLY MEDIEVAL (AD 410 – 1066)

Due to a lack of archaeological evidence from this period, it is necessary to rely 2.3.1 heavily upon fragmentary historical documents and place-name evidence (Rollinson 1996, 33). During the Post-Roman period, Cumbria was probably part of the British kingdom of Rheged, which was eclipsed by the more powerful northern kingdom of Strathclyde (op cit, 34). The kingdom of Rheged appears to have corresponded with the northern part of Cumbria, in the vicinity of the Solway Plain and Eden valley, with Carlisle representing a possible power base, although the territory may have extended much further south (Higham 1986, 253; 263). Strathclyde occupied what is currently south-western Scotland, with monarchic links to Dumbarton Rock on the River Clyde (op cit, 254; 263). In the seventh century, Strathclyde was subsequently subsumed within the Anglo-Saxon Kingdom of Northumbria (Rollinson 1996, 34) and, from the late eighth century, the decline of Northumbria left a power vacuum in the north-west that was further destabilised by pressure from Scandinavian and Hiberno-Norse groups (RM Newman 2006, 91–3). Cumberland did not come under Norman rule until 1092, when William Rufus took Carlisle (op cit, 93). Although not founded until c 1100, it has been suggested (Winchester 1987, 16) that the unit of baronial

- land tenure occupied by the 'honour of Cockermouth', may have represented a pre-Conquest estate, which includes the eastern part of the study area.
- 2.3.2 The analysis of environmental evidence from the early medieval period in the North-West has been hampered by the removal of peat over the last 1000 years (RM Newman 2006, 93–4). Environmental samples from Ehenside Tarn, in western Cumbria, and from the Coniston lake basin, however, demonstrate that there were intense episodes of clearance following the Romano-British period in topographically diverse areas of Cumbria (*ibid*, Hodgkinson *et al* 2000, 78). Recent studies of lake sediments from Crummock Water have identified a gradual increase in local soil erosion throughout the early medieval period, which is likely to reflect clearance and cultivation in the area (Shen *et al* 2008, 138–9). Analyses of mineral accumulations suggest that there may have been some comparative stabilisation of the local soils between AD 700 and AD 900, with a significant increase in deep and intensive erosion from AD 900 (*ibid*). This could reflect relatively low levels of local occupation, followed by a dramatic increase in population as a result of Norse settlement (*ibid*).
- 2.3.3 Sculpture, in the form of stone crosses and hogback tombs, attests to activity in western Cumbria predating the Norman conquest. Most of the Cumbrian examples, such as the cross and hogback tombs from Gosforth to the south of the study area, represent Scandinavian craftsmanship (RM Newman 2006, 102–3), as does a cross from St Bees (Hodgkinson *et al* 2000, 78). No such sculpture has been recognised within the study area, although the origins of a farm named 'High Cross, lying to the north of the road between Loweswater and Waterend may be indicative of a former boundary marker.
- Place-Name Evidence: the Viking and Anglo-Saxon influence in the north-west is evident from place-name evidence, however, it should be remembered that linguistic continuity, including otherwise incongruous colloquialisms, might be responsible for the introduction of certain place-names in much later periods than the initial arrival of immigrant groups (RM Newman 2006, 95). For example, the use of the word thwaite, denoting areas of clearance, became part of the Cumbrian dialect and continued to be used in reference to new clearings into the thirteenth century (Winchester 1987, 41). Place-names can not, therefore, automatically be equated with the settlement of ethnic groups in the absence of accompanying historical or archaeological evidence. Several place-names in the locale of Buttermere contain the Norse element 'thwaite' (op cit, 494) eg Lanthwaite and Brackenthwaite, within the survey area, and also Thackthwaite, Littlethwaite, and Thornthwaite, which are in Lorton Parish to the immediate north of the survey area, and Graythwaite, which lies within 1km to the northwest of Loweswater. The thwaite element is also present in Gillerthwaite, to the north of Lanthwaite Wood. The word scales derives from the Scandinavian element skali denoting shielings (op cit, 490), which are associated with transhumance agricultural practices, and an area to the south-west of Crummock Water bears this name. The general name of 'Scales', referring to a large part of the fell in this area, has also been applied to several landscape features in this area, such as 'Scale Beck' and 'Scale Island'. The scales element also occurs in 'Scale Hill'.
- 2.3.5 The element *kirk*, found in 'Kirkgill', 'Kirkgate', and 'Kirkhead', suggests an Old Norse root referring to a church site (*op* cit, 481) and all three of these place-

names cluster to the west of the church in Loweswater village. This could relate to an early ecclesiastic antecedent to the current church of St Bartholomew, which dates to 1827 (Richardson and Evans 1996, 36). The deed of consecration demonstrates that the present church replaced an earlier chapel (Richardson and Evans 1996, 36) and that an earlier building was in existence by 1700, when a bell tower was added (*ibid*), although the date of construction of this chapel is not clear. The records of St Bees priory show that at an unspecified date between 1154 and 1181, there was a chapel in Loweswater belonging to the priory (Wilson 1905, 178–183), although it is not known when this was founded, or if this was the same building that was destroyed to facilitate the building of the current church. A local chapel clearly pre-dated the influence of St Bees priory in the area, as the chapel was annexed to St Bees, rather than having been founded by the priory (Wilson 1915, 23). The existence of a chapel in the area at least as early as the twelfth century, and the local occurrence of the 'kirk' element, may suggest that an early ecclesiastic site existed in Loweswater at some time between the eighth century, when Scandinavian incursions into the area began, and the medieval period. It has been suggested that undulations in the vicinity of Kirkhead, in Loweswater, could represent the remains of an earlier chapel (Richardson and Evans 1996, 35), although this has not been subject to archaeological confirmation. The kirk element is also present in 'Kirk Close', which lies to the east of Buttermere lake.

- It has been suggested (Whyte 1985) that, prior to the Scandinavian incursions, 2.3.6 British populations may have utilised the better agricultural land in Cumbria, which might explain a relative lack of British place-names in the more mountainous areas of the central Lake District. Although there appear to be few British place-names in Buttermere, the juxtaposition of possible prehistoric farmsteads and subsequent medieval and post-medieval farmsteads, at Rannerdale (NTSMR 24355; Plate 9), Lanthwaite Green (NTSMR 20389, NTSMR 23020; Plate 6), and High Nook Farm (NTSMR 27581; Plate 7), gives an impression of settlement continuity. This could, however, be an illusion created by discontinuous episodes of exploitation of preferable agricultural land. The River Cocker, which flows northwards from Crummock Water, appears to derive from the P-Celtic British element cucrā, meaning the crooked river (Armstrong et al 1950, 9), although this need not reflect continuous occupation in the survey area during the early medieval period as the river is obviously an extensive feature of the landscape and the name could relate to surviving populations elsewhere. The name could derive from the occupation of the region during the Romano-British, or post-Roman period, or might have prehistoric origins. Crummock Water also derives from a British linguistic root and is named after the upper part of the River Cocker, which was called Crummock Beck, Crummock is derived from the British word *crumbāco*, which also means crooked (op cit, 33; 467).
- 2.3.7 There is little archaeological evidence for early medieval activity in Buttermere. A single iron spearhead (NTSMR 29106) was recovered from Crummock Water, close to Woodhouse Islands, which may be of Scandinavian origin. The remains of a settlement at Scales (NTSMR 20380) was suggested to have been of Scandinavian origin, following a site visit in the 1940s, although subsequent research has suggested that this represents a hamlet dating to no earlier than the medieval period (Winchester 1986, 2). The possibility remains, however, that the

Scales name might derive from earlier use of the area for transhumance, and that this name could then have been applied to the later, permanent settlement.

2.4 MEDIEVAL AND POST-MEDIEVAL HISTORICAL DEVELOPMENT OF BUTTERMERE

- 2.4.1 Although much medieval research in Britain has typically focused on nucleated villages and moated sites, Cumbria has also been the subject of archaeological research into both transitional and permanent dispersed settlement (CN Newman 2006, 115), which is particularly pertinent when investigating areas such as Buttermere, which are removed from large urban centres. Seasonal settlements or shielings, generally associated with summer grazing, permanent dispersed farmsteads, cattle ranches or vaccaries, monasteries, chapels, moated or tower houses, and industrial sites, such as bloomeries associated with iron working, are all sites that might be encountered within rural and upland contexts during the medieval period (CN Newman 2006, 121, 123, 124, 132), and many of these site-types are represented within the survey area.
- 2.4.2 The Twelfth and Thirteenth Centuries: in c 1100 the 'honour of Cockermouth', which consisted of five vills and the fells lying between the Rivers Cocker and Derwent, was separated from the earlier Copeland barony (Winchester 1987, 16). At this time, the eastern part of the study area lay within the honour of Cockermouth, whilst the western part remained part of the Copeland estate. The eastern part of the study area lay within the upland sub-division of the honour of Cockermouth called Derwentfells and was considered private forest, or free chase (op cit, 19–20; Plate 12). This area would have been under the complete control of the overlord of the honour of Cockermouth, whereas the western part of the study area comprised part of the lowland sub-division of Copeland estate and any settlements in this area were freehold and, therefore, unlikely to have been under the direct control of an overlord (ibid).
- 2.4.3 The late eleventh and early twelfth centuries are likely to have been periods of great social stress in northern Cumbria, with the conquest of Carlisle being followed by the large-scale movement of peasantry from the south of the country (op cit, 5, 17). The lowlands and valleys of upland forests were subject to continued clearance and colonisation during the twelfth and thirteenth centuries. This is evident in Buttermere, where studies of the rate of accumulation and mineral composition of Crummock Water sediments suggest significant increases of deep and intensive local soil erosion between AD 1150 and AD 1300 (Shen et al 2008, 138–9). This is suggestive of increased settlement and the intensification of agriculture in Buttermere at this time, and may reflect the introduction of deep ploughing to the area (ibid). Historical records demonstrate the presence of a mill at Buttermere village prior to 1215 and it has been suggested (Winchester 1987, 140) that a nucleus of settlement, from which Buttermere village developed, may have existed on the delta flats between Crummock Water and Buttermere Lake (Plate 13) by 1200, and that the farms on the surrounding fellsides developed from 1215 and throughout the thirteenth and early fourteenth centuries (ibid).
- 2.4.4 Former forest valleys in the uplands were also brought into agricultural use by the establishment of pastures and vaccaries in the preferred dalehead lands by the

manorial lords (op cit, 42). The dalehead at the south-eastern end of the Buttermere valley (Plate 14) was established as the vaccary of Gatesgarth in the thirteenth century (Winchester 2003, 109) and, as these sites were generally founded on upland chase, it is likely that the area was not settled at this time. It is, however, difficult to establish how much of the valley had been occupied prior to the Norman conquest of the region. There are several sites within the survey area that may represent medieval settlement (Scales, NTSMR 20380; Rannerdale, NTSMR 24355; High Nook Farm, NTSMR 27580; Peel Place, NTSMR 23020), but whether these represent the continuation of local populations and earlier sites or the establishment of new sites, potentially by incoming settlers, is not clear in the absence of archaeological excavation. All of these sites lie close to the valley bottoms and, although some of them lie within the area of Derwentfell, it can not be assumed that these lower areas were not populated at the time of the Norman incursions in the area. Many of the Scandinavian place-names cluster at the northern end of the survey area, in the large expanses of fertile lowlands to the north of Crummock Water, and it is possible that local populations established in the early medieval period endured in this area and that new clearances and settlements were established in the southern part of the area during the Norman period. Indeed, it has been suggested that the hamlet of Scales, and other dispersed farmsteads in the wider region, may have been established during the thirteenth and early fourteenth centuries during the medieval expansion of earlier settlement nuclei (Winchester 1986, 2). The Scales place-name also suggests that transhumance occurred within this area prior to the establishment of a permanent settlement. The thwaite element continued to be applied to clearances as late as the thirteenth century (Winchester 1987, 41; Section 2.2.24), however, and many of the settlements in the northern part of the valley could be post-Conquest in date.

In 1247, William de Fortibus III, earl of Albemarle, acquired the Cockermouth estate from his grandfather (William le Gros). This comprised the southern half of the Forest of Derwentfells, including Buttermere, and the castle and demesnes at Cockermouth (Winchester 2003, 111). Surveys from 1260, following the death of the earl, and 1270, after the death of his son, and surviving estate rolls, provide information relating to demesne farming in the area (ibid). These documents relate to the management of the estate while it was in the possession of Isabella de Fortibus, the widow of William (op cit, 112; PRO(L) SC6/824/6-15; PRO(L) E199/7/3; PRO(L) SC11/730, mm.9v, 13v, 14v). Although sheep pastures were maintained on the fells to the east and north of the current survey area, and arable farming was concentrated at Cockermouth, the Gatesgarth pastures at the Buttermere dalehead were utilised as a vaccary, or cattle farm, which sustained up to 60 cows and their calves (ibid). The meadows at Gatesgarth also provided hay for winter feed for stock. The vaccary included the park or wood of Gaschard, which may relate to the large walled enclosure to the north of Gatesgarth Farm, which includes Kirk Close, Lambing Knott, and Robinson Crag, and corresponds with the Forest of Gatesgarth documented in 1489 (op cit, 114). The vaccary lands are also likely to have included the flat meadowland between the lake and Warnscale Bottom and the grazing fells to the north and east of this area (ibid). The vaccary buildings may have been close to the current farm and Gatesgarth cottage (ibid) and remains relating to this period may have been encountered during recent works in the area (M Astley pers comm).

- 2.4.6 Following a vast reduction in the scale of stock rearing throughout the Cockermouth estate in the 1270s, the remaining cattle stocks were divided between the vaccaries at Birkby and Gatesgarth in 1280–1 (*op cit*, 113). Records from the 1280s show that the vaccary maintained a breeding herd at this time, although the rate of breeding appears to have been slow (*op cit*, 115–6). Following the death of Isabella de Fortibus in 1293, the estate was escheated to the crown and demesne farming continued for a short time. By 1310, however, the Gatesgarth pasture had been let to farm and the private management of these lands by the holder of the estate ceased (*op cit*, 116).
- 2.4.7 It is likely that some vills along the margins of the Copeland fells represented a generation of late subinfeudations, or the sub-lease of land holdings by the owner of a larger estate, which in this case was the Barony of Copeland. These subinfeudated vills would have been subject to additional dues to the Baronial seat of Egremont, over those of the freeholds of the wider area (Winchester 1987, 20). Brackenthwaite was subject to subinfeudation during the medieval period, but was returned to the ownership of the lords of Cockermouth and Egremont *c* 1300 (A Winchester pers comm).
- 2.4.8 One of the landowners in this area in the twelfth century was Runulphe de Lindesaye and it has been suggested that he may have constructed a pele tower on a promontory of land extending into the north-western side of Crummock Water, to the east of High Park (NTSMR 20464; Fair 1936), based largely on the 'pele' place-name, which was in use at least as early as 1631. However, there are no indications of such a tower in the area and the earthworks at the site are likely to be prehistoric (NTSMR 20464; Plate 11; Section 2.2.24–6). The earliest historical references that might indicate the presence of a manor house in Loweswater relate to the foundation of the manor of Balnes in 1230 (Section 8.3.9), which was apportioned to Alan de Multon and his wife Alice de Lucy (A Winchester pers comm).
- 2.4.9 The records of St Bees priory show that a chapel in the possession of the priory stood at Loweswater at some point between 1154 and 1181 (Wilson 1905, 178–183). This building, or a successor, was demolished in order to allow the construction of the current church of St Bartholomew in 1827 (Richardson and Evans 1996, 36). In addition to ecclesiastic land holdings, part of the land at this side of the survey area was also subject to enclosure for the creation of a deer park surrounding the current farm of Lowpark in the later thirteenth century (Winchester 1978, 193). This park was enclosed by Alan de Multon, the Lord of the Manor, between 1230 and 1260 (*op cit*, 295). A second park was established by his son, Thomas de Lucy, prior to 1286, although this was removed due to obstructions caused to the passage of the monks of St Bees through the area (*op cit*, 341).
- 2.4.10 Loweswater may have been part of the extensive Copeland forest until 1230 when it was separated from the barony (Winchester 1987, 20). Agricultural expansion was a common phenomenon throughout Cumbria, and most of England, throughout the thirteenth century and during this period the Forests of Copeland and Derwentfells were subject to clearance for new settlements and agricultural lands (*op cit*, 39). The expansion of enclosure by ecclesiastic and lay lords, and piecemeal assarting by peasants, appears to have reduced the limits of the upland forest and chase to the line of the post-medieval head-dyke or fell

- wall by 1300 (Winchester 1978, 210). Indeed, it has been suggested that much of the pattern of enclosed land depicted on post–medieval maps and plans of Cumbria may have been formed by this time (*op cit*, 146).
- 2.4.11 Fishing was also exploited in Buttermere during the thirteenth century, with a fish weir, eel garth, and fishery being documented at Buttermere lake, and an eel garth at Park Beck at Loweswater (Winchester 1987, 108; CRO(C) D/Lec/29/1; CRO(C) D/Lec/29/9; CRO(C) DRC/8/35). In 1270 there were men known as *piscator* recorded in Buttermere and 'Fisher' endured as a common name in the sixteenth century (*ibid*).
- 2.4.12 In addition to the agricultural industries, the metal ores of Cumbria were exploited during the medieval period and 14 possible bloomery sites, associated with the processing of iron ore, have been identified within Buttermere by the discovery of industrial waste, such as slag (Figs 8 and 9) (NTSMR 24354, NTSMR 26856, NTSMR 26857, NTSMR 26859, NTSMR 27596, NTSMR 28891, NTSMR 29120, NTSMR 29122, NTSMR 29502, NTSMR 29546, NTSMR 29549, NTSMR 29672, NTSMR 29691, NTSMR 20380). The exploitation of iron ores has been demonstrated in Cumbria throughout the eleventh to sixteenth centuries (Bowden 2000, 6) and, in the absence of archaeological excavations, the date of the sites within the survey area can not be established with any certainty. The bloomeries within the Lake District National Park that have been dated by radiocarbon analysis have produced a range of dates between cal AD 1170 and cal AD 1650 (Beta Analytic Inc 2002; 2003). In 1305, documentary sources mentioned two bloomeries in Loweswater as forgiae ferri (iron forge) and also woodland bloomeries, or forgiae silvestres (woodland forge), in the Cocker valley (Winchester 1987, 49, 104). It is possible that the forgiae ferri could relate either to the bloomery sites at Scales (NTSMR 20380), or those suggested near to Watergate Farm (NTSMR 27596) and Highpark (NTSMR 29672). The forgiae silvestres might relate to the numerous bloomery sites known to have occupied the land to the east of Crummock Water (NTSMR 24354, NTSMR 26856, NTSMR 26857, NTSMR 26859, NTSMR, 28891, NTSMR 29120, NTSMR 29122, NTSMR 29502, NTSMR 29546, NTSMR 29549, NTSMR 29691), many of which clustered close to the suggestively named 'Cinderdale Beck' and within fields shown as 'Scinderdale Fields' on the Brackenthwaite tithe map of 1844.
- 2.4.13 Woodland was of obvious importance as a source of fuel for bloomeries and charcoal production during the thirteenth century would have exploited dead wood, prior to the growth of coppicing, which is evident from the fourteenth century in Cumbria (Bowden 2000, 6; Winchester 1987, 104) (Fig 11). Charcoal was originally produced by placing uncoppiced fragments of wood within pits (hence the name pitsteads) which were then burnt with a turf cover over the pits to restrict the amount of oxygen. Recent excavations of charcoal pits from Bark House Bank, Rusland, have produced thirteenth / fourteenth century dates (www.lake-district.gov.uk/index/learnming/ archaeology). Unfortunately such monuments rarely show up as surface features and are only ever discovered by chance. There are 56 known pitstead platforms within Buttermere, which represent the remains of prepared platforms used for the production of large quantities of charcoal. This method of production is documented from the sixteenth century (Bowden 2000, 23), although it may have originated earlier (Section 9.5.5). Numerous pitsteads have been identified in the locale of Scales

- (Section 9.5.8), a settlement with evidence for iron processing, which has been suggested to date to the thirteenth or fourteenth centuries (Winchester 1986, 2); however there is no evidence that the pitsteads were contemporary with the medieval settlement. In addition to charcoal production, the personal name of le Turner, documented in Buttermere in the thirteenth century, suggests that wood turning may have been undertaken in the area at this time (Winchester 1987, 105).
- 2.4.14 Routes known as corpse roads existed throughout Cumbria during the medieval period, allowing the transport of the dead to the nearest burial ground (Hindle 1998, 58). One such road ran between Buttermere village and Brigham (*op cit*, 60) and a second track, to the south-west of Loweswater lake, was referred to by several local people during the current survey as 'the corpse road'. It has been suggested that the latter track allowed the transport of the dead from Loweswater to the priory of St Bees (Richardson and Evans 1996, 5–6), although a more direct route to the priory appears to have run along Mosedale and into Ennerdale.
- 2.4.15 *Fourteenth Century:* the fourteenth century experienced a dramatic reversal of the growth associated with the thirteenth century, as a result of the destructive influences of war, disease, and climatic deterioration (Winchester 1987, 44). There were numerous Scottish raids between 1296 and 1346, with three being particularly destructive within Cumbria. These took place in 1316, 1322, and 1345 and, although the direct impact of the raids may not have affected some of the communities within the central Lake District, the loss of manpower as a result of Cumbrian men leaving to fight for the English army, will have affected many communities who had not been subject to the violence of these hostilities (*op cit*, 45).
- 2.4.16 In addition to the effects of war, outbreaks of the plague occurred in Cumbria during the fourteenth century, although it is possible that fells and remote lands to the west of the region, that were not close to major communication routes, may have been less affected. Crop failure, diseases grouped under the general term of 'murrain', which affected cattle and sheep, coupled with a deterioration in the climate, caused a widespread agrarian crisis in northern England between 1315 and 1322 (*ibid*). This crisis had a severe impact on Cumbria, resulting in an impoverished economy of the region and the poverty and ill-health of individuals. The combined affect of these disasters culminated in the reduction of population numbers in the region and the probable abandonment of many farmsteads and field systems (*op cit*, 47).
- 2.4.17 Due to a lack of records relating to the possessions of individual farmers during the medieval period, it is difficult to establish the relative reliances on arable and pastoral farming, and how extensive each of these regimes was prior to the sixteenth century, at which point probate records become available. There are several observable examples of broad ridge and furrow cultivation earthworks distributed throughout the survey area (NTSMR 29686, NTSMR 29722, NTSMR 29419, NTSMR 29462, NTSMR 29503, NTSMR 29709, NTSMR 29675), although most of these sites lie to the north of Crummock Water. There are also several areas within Buttermere where field clearance associated with arable agriculture is attested by the presence of clearance cairns, which might be associated with nearby sites of suggested medieval date, although post-medieval agricultural practices might also be responsible. Such sites (NTSMR 29406,

- NTSMR 29411, NTSMR 29412, NTSMR 29415, NTSMR 29463) are present in the locale of Highpark, close to areas of broad ridge and furrow (NTSMR 29419, NTSMR 29462), and within the grounds of documented medieval tenements. There are also clearance cairns (NTSMR 29269, NTSMR 29539) adjacent to the deserted medieval settlement north of Dale How (NTSMR 24355) and in the environs of a probable medieval farmstead (NTSMR 27580) at High Nook Farm (NTSMR 29206, NTSMR 29208, NTSMR 29230).
- 2.4.18 Six deserted settlements that may feature phases of use dating to the medieval period are known within the survey area (Figs 8-10) (Scales, NTSMR 20380; Rannerdale, NTSMR 24355; High Nook Farm, NTSMR 27580; Peel Place, NTSMR 23020; Stockbridge, NTSMR 29457; a site east of Low Hollins, NTSMR 29513); however, three of these (High Nook Farm, NTSMR 27580; Stockbridge, NTSMR 29457; Peel Place, NTSMR 23020) were deserted during the post-medieval period (Winchester 1986, 4). The medieval settlement at Rannerdale (NTSMR 24355; Plate 15) appears to have gone out of use in the late medieval period (Winchester 1987, 48) and Scales (NTSMR 20380) and the site near Low Hollins (NTSMR 29513) may potentially have been deserted in the fourteenth century. The possibility remains, however, that previously abandoned medieval sites occupying cultivable land were reused in later periods and that subsequent buildings may have masked the presence of these sites (*op cit*, 47–8).
- 2.4.19 *Fifteenth and Sixteenth Centuries:* the recovery of the northern part of Cumbria from the compound disasters of the fourteenth century was slow and lagged behind that of the southern part of the county, where Scottish incursions were less of a threat and the growth of the textile, woollen, and woodland industries bolstered the economy (*op cit*, 51). The development of the region did not, however, remain in stasis during this period of gradual recovery and the widespread phenomenon of the sub-division and leasing of former demesnes at the will of the Lord, and the subsequent creation of planned settlements, which is in evidence throughout England, also occurred in northern Cumbria (*ibid*). Within Buttermere, the deer park at Loweswater had been sub-divided by 1437 into tenements, which may be represented by the current hamlets of Highpark and Lowpark (*ibid*). The farm at Gatesgarth had been let by 1310, prior to the worst of the fourteenth century impacts (Winchester 2003, 116), but by the sixteenth century it had been sub-divided into three holdings (*ibid*), reflecting the continuing trend to create numerous farmsteads from former demesnes.
- 2.4.20 The deserted medieval settlement at Rannerdale (NTSMR 24355) had been divided into seven equal shares by 1547, and does not appear to have functioned as a nucleated farmstead after this time. The medieval chapel of the Blessed Mary Magdalene (NTSMR 29105) was mentioned in 1508, in the Percy muniments at Cockermouth Castle (Millward and Robinson 1974, 171). This chapel is said to have been located at Rannerdale, although no trace of such a building is visible within the field systems in this area. It is possible that the remains of the chapel are represented by one of the building platforms associated with the enclosed settlement (NTSMR 24355), although none of these has been specifically characterised as being such a building. The record of 'Chapel Field' on the Brackenthwaite tithe map of 1844, referring to the area currently occupied by Rannerdale Farm, might record the presence of this early building, or a land holding in the possession of the chapel. In the sixteenth century, Buttermere village comprised a cluster of farms, with individual farms scattered on the

- fellside above the village (Winchester 1987, 138). A medieval chapel has been suggested to have pre dated the current church of St James (NTSMR 29483) at Buttermere village (Millward and Robinson 1974, 171), which was built in 1840, although there is little evidence for such a building.
- 2.4.21 The expansion of agricultural lands continued during the fifteenth century and, although uncommon at this time, wholesale enclosure of moorland occurred at Lorton Head, to the north of the survey area, in 1473 (Winchester 1987, 52). The enclosure of large areas of fellside by groups of tenants was more common in Cumbria and in 1568 part of the fellside to the north-east of Buttermere village, known as Blakerigg or Bleak Rigg, was enclosed (op cit, 143; CRO(C) D/Lec/299). The encroachment of individual holdings into the fells and forests was the most common type of enclosure at this time, with the corresponding construction of intake boundaries. The fertile valley bottom, lying between Buttermere lake and Crummock Water, was enclosed during the sixteenth century, and was divided into four fields, named Nether or Lower Field, Over Field, Scarr Field, and Drigg Garwick (Winchester1987, 141). In addition to the enclosure of land by groups of local people, attempts were also made by the landed gentry to enclose land in attempts to increase their stock-rearing capacities. Holme Wood, at the north-western end of the survey area, was formerly a piece of fellside known as 'the Holme' (op cit, 52) and was the subject of successive attempts of opposed enclosure by Lords of the Manor during the mid and late sixteenth century (ibid). By the end of the sixteenth century, in c 1578 (Winchester 1978, 338), the pattern of much of the enclosed lands in Buttermere (Plate 16) had reached the extent that would later be depicted in the tithe maps of 1844 and the first edition Ordnance Survey mapping of 1861-3.
- 2.4.22 The ownership of rights over the wastes or forests fringing settlements, and therefore the legality of enclosure and the legal basis of assumed common rights to these lands for pasture and turbary, was not a simple and consistent issue. In northern Cumbria, the wastes and grazing land were often not technically manorial wastes, but demesne hunting grounds in the possession of the manorial lord, as was the case with the Copeland and Derwentfells forests associated with Buttermere (Winchester 1987, 83-4). In some places, payments secured local rights to use wastes, and in other areas, such as Copeland, sub-division of the forests led to the creation of separate manors with associated manorial wastes. This 'manorialisation' appears to have been a gradual and almost accidental process, in which the distinctive and exclusive status of the hunting preserves was forgotten and local occupants gradually received assumed rights to common that were not actually based on Anglo-Norman legal rights (op cit, 84-5). A similar phenomenon appears to have occurred in areas, such as the Derwentfells forest, whereby the process of subinfeudation led to the creation of new freeholds within forest areas, in addition to the pre-existing freehold vills in the manorial lowlands (ibid). These freeholds did not, however, necessarily include areas of waste and, therefore, existed as bounded units within forest retained by the overlord. This sub-division of the forests, with the retention of manorial ownership of 'wastes', occurred throughout the thirteenth and fourteenth centuries, although blocks of former forest gradually became to be accepted as being subject to the exclusive rights of local inhabitants. The processes that

- resulted in the identification of these blocks of land with common rights are not clear (*ibid*).
- 2.4.23 The distinction between farmland and wastes was commonly marked by a ring garth, or head-dyke, which would surround the agricultural lands and demarcate the areas of winter grazing; this might be open to use by community stock, rather than individuals (op cit, 60-1). The land within the ring garth was used for growing crops during the summer, whilst grazing occurred on the fells, and would then be returned to communal grazing use in the winter. The presence of such a boundary at the southern end of the Buttermere valley appears to have been preserved within the name of Gatesgarth Farm, and is likely to reflect private land use associated with the management of the vaccary. The lines of two former ring garths may also have been preserved within the extent of the postmedieval head-dyke in the environs of Bowderbeck and the farms at Wood House, Sorescale Bank, and Spout House (op cit, 140-1). Even after the gradual enclosure of open fields the distinctions between seasonal land uses endured. During the fifteenth and sixteenth centuries, however, the 'open' (communal grazing) and 'closed' (private crop growth) field system met with opposition as individuals attempted to retain enclosed fields during the winter for their private use (op cit, 60–1).
- 2.4.24 Sixteenth century probate inventories demonstrate that upland farms are likely to have featured less diverse cultivation than those in the lowlands, with oats and low quantities of barley augmenting a pastoral economy dominated by sheep-rearing with some cattle-rearing. In lowland areas, arable agriculture was often more important than sheep-rearing and broader ranges of crops, including wheat and rye, were grown (Winchester 1987, 60–1). The fishing industries, attested by thirteenth century documents, appear to have continued throughout the medieval period (*op cit*, 108); documents record fisheries at Buttermere lake and an eel fishery at Crummock Water in 1478 (*ibid*). Fishing during the sixteenth century is also demonstrated by the historical occurrence of the place-name *Fyshegarth* in 1570 (Armstrong *et al*, 354).
- 2.4.25 It was in the fifteenth and sixteenth centuries that the demand for charcoal began to lead to the formal management and preservation of woodland resources in Cumbria, rather than their destruction for agricultural purposes (Winchester 1987, 100, 105). Woodlands were used for numerous purposes during the medieval period, including fuel, construction timber, potash production, charcoal production, bark peeling, basketry, and lopping young branches for cattle fodder (Bowden 2000, 6; Winchester 1987, 103). Coppicing may have been in use since at least the fourteenth century, although this was not likely to have included the strict rotational systems of the post-medieval period. Early charcoal production in Buttermere, in the thirteenth century, appears to have made use of dead wood and such practices continued into the sixteenth century (Winchester 1987, 104).
- 2.4.26 Classic coppicing systems were known in Low Furness and the Kent valley by the sixteenth century, and the hag boundaries associated with such rotational systems are evident in Buttermere, with the name of 'Hag Sike' enduring in relation to the beck to the north of Long How, where pitsteads, associated with charcoal production (NTSMR 29494, NTSMR 29495), have been recorded. A series of cairns (NTSMR 29630, NTSMR 29637, NTSMR 29655, NTSMR 29656, NTSMR 29657, NTSMR 29658) and two stretches of banking (NTSMR

- 29661, NTSMR 29658) were recorded in Holme Wood, which appeared to form a curvilinear grouping and could relate to a former boundary within the area, possibly a hag sub-division. A cairn (NTSMR 29628) is also situated immediately to the south of Holme Beck and might reinforce a former role of the beck as a boundary. An apparent boundary stone (NTSMR 29663) is situated centrally within a sub-triangular section of the woods that is defined by the line of cairns, Holme Beck, and the intake wall, and this may have related to the identification and differentiation of this particular section of land. The coppicing of oak trees is evident in the area around Crabtreebeck, where a possible pitstead has also been identified (NTSMR 29123). A series of plantation ridges (NTSMR 29499) are present within a well-defined sub-rectangular area, measuring approximately 40m long and 18m wide, at the southern side of Nether How. Many of the ridges are currently occupied by oak trees and it is likely that they represent arboricultural plantations associated with the woodland industry. Although it is not possible to closely date the ridges, they have been truncated in one area by the construction of a charcoal pitstead (NTSMR 29498), demonstrating that they pre-date that particular phase of the industry.
- 2.4.27 Numerous examples of charcoal pitsteads are dispersed throughout the survey area, particularly around Crummock Water, and have been used for the production of charcoal since at least the sixteenth century (Bowden 2000, 23) (Section 2.3.10). Four examples of possible potash kilns or pits have also been identified within Buttermere. These include one large stone construction (NTSMR 24351) and three sites (NTSMR 29119, NTSMR 29124, NTSMR 29125) that consist of slighter traces, such as the presence of charcoal and burnt stone. It is, however, extremely difficult to identify such sites only from an inspection of the ground surface. The stone structure may date to the later postmedieval period, when large iron pots were used for potash production and solidly-constructed kilns would have been necessary to contain them (Bowden 2000, 25). The potash kilns dating to the sixteenth-century and earlier may have consisted of little other than pits and hearths (ibid), and such sites may be represented by the three slighter sites within Buttermere (NTSMR 29119, NTSMR 29124, NTSMR 29125), although these could substantially pre-date the sixteenth century. There is evidence of copper mining at Burtness woods in 1569-70, and an adit (NTSMR 23036) in this area was reworked in the nineteenth century (Adams 1988).
- 2.4.28 Seventeenth Century: the seventeenth century saw increased conflicts between landlords and tenants in Cumbria, as attempts by lords to replace customary tenure with leaseholds, which had begun in the sixteenth century, were largely defeated by tenant-right legal struggles (Winchester 2000, 16). This allowed a certain stability and a continuity of rural populations in Cumbria that additional levels of control afforded to leasing landlords might have diminished (*ibid*). This period also saw a certain level of increased stability as the union of the Crowns in 1603 led to a decrease in Border conflicts, although the subsequent changes in the military obligations of tenants, which were linked to the security of their customary tenant right tenures, resulted in the exacerbation of tenant-right struggles (*op cit*, 16–17).
- 2.4.29 The seventeenth century saw an increase in the wealth of many yeoman farmers as a result of buoyant livestock prices and opportunities for investment in industries, such as lead mining (*op cit*, 17). The security of customary tenure

facilitated the longevity of wealthy yeoman farmer dynasties and a profusion of stone farmhouses dating to the mid-seventeenth to mid-eighteenth centuries attests to the comparative wealth of this period. Several farmhouses remain standing within Buttermere that are likely to have been built at this time. Woodhouse Farm (NTSMR 20627), Wilkinsyke Farm (NTSMR 20628), High Nook Farm (NTSMR 26222), Watergate Farm (NTSMR 26225), Crag Farm (NTSMR 26362), and Lanthwaite Cottage (NTSMR 26446) all feature buildings that appear to have originated in the seventeenth century and also four farmsteads, that have now been demolished, at Peel Place (NTSMR 23020), Stockbridge (NTSMR 29457), to the south of Wilkinsyke Farm (NTSMR 29478) and at Loweswater Pele (NTSMR 20464), may also include phases dating to this period. There is an indication at Wilkinsyke Farm (NTSMR 20628) that the house had been divided into two units, perhaps as a result of the sub-division of the whole farm holding between siblings, or parents and children. Alternatively, this could represent a domestic division between members of a family who worked communally to farm a single land holding. Conversely, the populations of many Lake District communities declined during the seventeenth and eighteenth centuries, leading to the gradual reduction of the number of farm holdings and an increase in size of the remaining farms (Rollinson 1989, 91).

- 2.4.30 Eighteenth Century: a series of events during the eighteenth century was responsible for gradual change in northern Cumbria, and included the Jacobite risings of 1745, developments in agricultural techniques, parliamentary enclosure, and the beginnings of tourism (OA North 2007, 24). In November 1745 Charles Stuart marched south from Scotland and forced the surrender of Carlisle, before marching to Derby via Penrith, Kendal, and Lancaster (Hindle 1998, 74–5). The need to open up communications following the Jacobite revolt resulted in the establishment of numerous turnpike trusts in Cumbria during the mid-eighteenth century, by groups of private individuals with vested interests in travel and trade (op cit, 150). Between 1739 and 1767 turnpike roads were established that included routes between Cockermouth and Workington, Cockermouth and Keswick, Cockermouth and Penrith, Cockermouth and Windermere, and Cockermouth and Carlisle via Dalston (op cit, 151–2). Although these roads did not penetrate the western uplands and valleys, they did open up access to these areas by allowing greater ease of travel to within a short distance of these previously inaccessible areas. Packhorse trails would have allowed access into the Lake District interior, although most of these routes would have been unsuitable for wheeled vehicles (op cit, 123). Several mountain passes would have provided access to the Buttermere area, from Ennerdale Bridge, Braithwaite, and Wasdale Head (op cit, 127), with metalled routes along some valley bottoms and short upland stretches, such as between Cockermouth and Buttermere village, Keswick and Buttermere village, via Newlands Hause, and the Honister Pass, as depicted on the maps by West (1821) and Crosthwaite (1800).
- 2.4.31 Some of the mountain passes and pack horse routes would have become essential to the transport of material from industrial sites in Buttermere, such as the slate quarries at Honister, Bolt Craigg, Dodds Mealton, and Saynside, and some of the routes may have been established in order to serve these sites. Honister quarry (NTSMR 24421) was in operation from at least 1753 (Marshall and Davis-Shiel 1977, 155) and the three others appear to have dated from 1730 (Davis-Shiel

- 1991). Short stretches of track are likely to have been established between each of the quarries at Dodds Mealton (NTSMR 29250), Bolt Craigg (NTSMR 24414), and Saynside (NTSMR 29451), and the nearest roads. Some of these may have been little more than barrow or sledging tracks, although the quarry at Dodds Mealton appears to have been serviced by a well-constructed terraced trackway (NTSMR 29427).
- 2.4.32 Tourism in Cumbria increased towards the end of the eighteenth century as the improved road networks allowed greater access to the area and the Napoleonic wars precluded European travel (Hindle 1998, 79). Guide books of the area increased in number from 1775 and one of the earliest guides to mention Buttermere was that produced by Thomas West in 1778 (*op cit*, 80–1). West described the small chapel at Buttermere village and a local agricultural community that also engaged in the spinning of wool and provided labour for the slate quarries (West 1821, 136). The flourishing role of this part of the Lake District as a focus for tourism is demonstrated by the maps of the Buttermere area published by Crosthwaite in 1793 and 1800. These maps not only showed the basic topography of the area, but also depicted six 'stations commanding fine prospects', illustrating the search for picturesque beauty that was popular at this time (Hindle 1998, 79).
- 2.4.33 Parliamentary Enclosure began in Cumbria in the 1760s with the division of lowland moors at the edges of the Lake District (Rollinson 1989, 94). This was largely motivated by attempts to develop land for arable agriculture (ibid) and it was noted, during the travels of the agricultural improver Arthur Young in the late eighteenth century, that huge tracts of uncultivated Cumbrian moorland possessed high quality soil with the potential for arable exploitation (Whyte 2003, 5). Enclosure by parliamentary acts occurred concurrently with piecemeal expansions of individual farm holdings, which had been gradually undertaken since the medieval period (op cit, 9). By the eighteenth century, the process of dividing the land, prior to the construction of boundaries, was being undertaken by apparently impartial local men and written agreements were being established (ibid); these processes preceded the formalised processes of Parliamentary Enclosure (*ibid*). The contentious consequence of enclosure was that common rights associated with tracts of land were replaced by the ownership of an area of land by an individual. Whereas privately-agreed enclosures could result in the expansion of holdings by common agreement, appeals to Parliament by majority landowners could result in the unpopular enclosure of commons despite objections (op cit, 11).
- 2.4.34 Some of the land enclosures included high fells that were not suitable for agricultural improvement and, in these cases, represented only the establishment of property units, rather than divisions of land motivated by changes in land use. Some of the eighteenth century land uses in the Loweswater area were described by William Hutchinson in 1797 and included the production of potatoes, oats, barley, wheat, and low quantities of turnips (Richardson and Evans 1996, 41); there were also around 5700 sheep and fourteen horses and black cattle present (*ibid*).
- 2.4.35 The first school in Loweswater was built at Loweswater vicarage in 1784 and was attended by up to 72 children (Richardson and Evans 1996, 17). In 1839 a new school was built to the north-west of the St Bartholomew's church in

- Loweswater, which has been extended to become the present village hall (*ibid*). The school finally closed on the 22nd of December 1948.
- 2.4.36 Nineteenth Century: the nineteenth century saw the continuation of the enthusiasm for land improvement for agriculture and of the enclosure of open land. The desire to utilise more areas of upland for arable agriculture was exemplified by John Curwen, a pioneer of agricultural improvement, from Workington who described a 'disposition to carry the plough much nearer heaven than what was ever dreamed of a few years ago' (Rollinson 1989, 94). This arable expansion was related in part to increasing grain prices during the early nineteenth century, which corresponded with periods of hostility during the Napoleonic Wars (Whyte 2003, 26–7). During the peace that followed Waterloo, in 1815, prices fell sharply and nineteenth century agricultural improvement from the 1820s was then mainly associated with sheep pasture. The early nineteenth century saw a gradual increase in population within the Buttermere township, from 74 in 1801 to 136 in 1821 (Whellan 1860, 311). This had decreased sharply by 1831 to 89, and continued to fall slightly during the midnineteenth century (ibid). It is possible that this may have been associated with a decline in arable agriculture, as a result of diminishing grain prices in the early part of the century. A similar pattern of population change was evident in Loweswater township, with a gradual rise to 454 people in 1831, that had decreased to 391 by 1851 (op cit, 367).
- 2.4.37 At the end of the nineteenth century, between 1890 and 1900, the water level of Crummock Water was raised by approximately 1m (*Section 10.2.7*), as a result of modifications related to the supply of water to Workington from the lake (D Denman pers comm). Although the raising of the water level does not appear to have had an extensive impact on the exposed land around the lake, some sites in the immediate vicinity of the lake margins are likely to have been affected.
- 2.4.38 *Enclosure:* the process of legally enclosing land was simplified during the first half of the century with the introduction of the General Enclosure Acts of 1801, 1836, 1840, and 1845 (*op cit*, 17). The bias of Parliamentary enclosure towards wealthy landowners was apparent with the acts of 1836 onwards, which allowed enclosure to take place without reference to Parliament, if two thirds of the proprietors were in agreement. The two thirds was, however, calculated in terms of property value, rather than per head of population (*op cit*, 17). By the end of the nineteenth century, the pressure to enclose land had diminished and the establishment of new enclosures was gradually replaced by the more efficient management of the remaining commons (*ibid*).
- 2.4.39 The enclosure of uplands in Buttermere appears to have reached its most extensive historical limits by the end of the nineteenth century. The tithe maps of Loweswater from 1839, and Buttermere and Brackenthwaite from 1844, show that most of the agricultural fields that bound the uplands had the same boundary limits as those shown on the first edition mapping of 1861–3 and on current mapping. Indeed, the extent of enclosure at the eastern side of the survey area, with the lakes of Buttermere and Crummock Water acting as a north to south divisional axis, may have changed very little from the boundaries that had been established by 1578 (Winchester 1978, 338). The only areas where enclosure appears to have expanded after this time were the fells around Melbreak, Loweswater Fell, and Hen Comb (Section 4.3.5). The large geometric enclosures

- in this area represent the establishment of topographically oblivious land units that were typical of the late nineteenth century (Rollinson 1989, 95–6) and were not depicted until the production of the second edition Ordnance Survey map of 1900. The establishment of such boundaries often meant the construction of walls on slopes or crags that were difficult to negotiate and some of the enclosures that were established to the west of Crummock Water and Buttermere Lake in 1865 utilised iron fencing, instead of stone walling (*ibid*).
- 2.4.40 Holme Wood was formerly known as 'the Holme' and had been subject to contested attempts at enclosure during the sixteenth century (Winchester 1987, 52). By the time of the production of the first edition Ordnance Survey mapping of 1861–3 the area had been enclosed and was wooded. The discovery of a sheepfold (NTSMR 29652) and sheep shelter (NTSMR 29649) within the woods during the survey, however, attests to the former nature of the area as pasture, although the dates of the planting of the woodland are not clear. A bothy (NTSMR 26226) is present at the eastern side of the woods that has been described as a former shepherd's hut and is thought to have been built in the early- or mid-nineteenth century. A building was shown in this location on the first edition Ordnance Survey map of 1861–3, although the function of this structure is difficult to ascertain, with local understandings suggesting possible early use as a fish hatchery, followed by a stable for snicking ponies (J Lund pers comm).
- 2.4.41 *Industry:* industry diversified within Buttermere during the nineteenth century with the wider exploitation of mineral resources in the area. The quarrying of slate continued, with the Honister quarries (NTSMR 24421), which remained commercially active in this century. Mining was also undertaken at this time, with lead mines being established at Whiteoak (NTSMR 24546), Mosedale, and Loweswater (NTSMR 24425). The mines at Whiteoak were operational between 1864 and 1891, and those at Loweswater between 1819 and 1856. Lead trial mines are also located close to Beckside (NTSMR 24410), High Liza Bridge (NTSMR 24423), Rannerdale (NTSMR 24428), and Blackbeck (NTSMR 24411). Between 1822 and 1825, the mining of copper resumed at an adit (NTSMR 23036) at the western side of Burtness Wood, which had previously been worked during the Elizabethan era. A second post-medieval trial mine (NTSMR 29163), that was probably associated with copper prospection, is located at the eastern end of the woods. A post-medieval copper mine was also present close to the Honister pass (NTSMR 24422), although the date of these workings is not clear. Prospection for ironstone occurred in the area of Scale Force (NTSMR 24429), although this small-scale activity had ceased by 1873. The extraction of iron stone may also be suggested by the place-name of 'Iron Stone' (NTSMR 29113), which was shown on the first and second edition Ordnance Survey mapping. Post-medieval trial mines of uncertain purpose and date are also evident at Tindle Crag (NTSMR 29352, NTSMR 29353), Long Crag (NTSMR 29293), Low Wax Knott (NTSMR 24424), Gascale Gill (NTSMR 24414), and Lanthwaite Wood (NTSMR 29328, NTSMR 29329, NTSMR 29339). The place-name 'Turnerhow', in Brackenthwaite, was recorded in 1821 as Tannerhow (Armstrong et al 1950, 354), which may relate to the tanning and processing of hides in the area, prior to this date.
- 2.4.42 *Tourism:* the continued improvement of the road networks in the Lake District allowed the continued increase of tourism to the area and, by the 1860s, a regular

coach service was operating between Keswick and Buttermere village, via the Honister Pass (OA North 2007). By 1860, the two inns within Buttermere village were recorded as being very popular during the summer months (Whellan 1860, 311). The growth of the rail network encouraged the increase of tourism in Cumbria in the late nineteenth century, as did the bicycle from the mid 1880s (Hindle 1989, 145). The turnpike trusts began to decline during the 1870s and 1880s, however, and the condition of many roads subsequently deteriorated (*ibid*). The poor state of the roads encouraged the foundation of the English Lake District Association in 1876, which was engaged in the maintenance and improvement of the roads (*ibid*).

- 2.4.43 Following the construction of the school in Loweswater in 1839 (*Section 2.4.35*), a school was constructed in Buttermere village in 1871 (Richardson and Evans 1996, 17; Richardson 1998, 64). The school was closed in 1950 and the building is currently in use as a village hall.
- 2.4.44 Numerous sites of archaeological interest throughout the survey area are likely to date to the post-medieval period, although many are not currently able to be closely dated. Most of the sites relate to agriculture, mineral-based industries, or woodland industries. Of the 700 sites of potential post-medieval date within Buttermere, 418 were associated with agricultural activity, 120 with mineral-based industries and agricultural processing, and 70 with woodland industries. In total, 37 sites are associated with communication routes, although some of these may relate directly to industrial developments in the area.
- 2.3.44 Twentieth Century: following the establishment of The National Trust in 1884, the first property within the Lake District to be targeted for purchase by the organisation was Brandelhow, on Derwent Water, in 1902 (National Trust 2008). Prior to the 1920s, small areas of land were purchased by the Trust, which were under threat from proposed development (Chris Blandford Associates 2006). Larger tracts of land were gradually acquired from the 1920s (Appendix 1), which provided the opportunity for the conservation of traditional husbandry techniques (*ibid*) and 52.5km² of the Buttermere area are currently owned by The National Trust or covenanted to The National Trust. On the 15th of August 1951 the Lake District National Park was established, which identified a bounded area of central Cumbria that consists primarily of private landholdings, within which the natural beauty, wildlife, and cultural heritage of the area is protected by statutory legislation, as administered and encouraged by the Lake District National Park Authority (Lake District National Park Authority 2008). As a result of conservation grants, and a visitor presence of approximately 12 million people each year, tourism and conservation now comprise the economic mainstay of the Lake District (OA North 2007).
- 2.3.45 Although remote, Buttermere was affected by the impact of the Second World War. Not only were restrictions, such as rationing and blackouts, enforced in the area but the valley was also used for training exercises and for the establishment of local defences, which were manned by the Home Guard (Richardson and Evans 1996, 74). A small shed-like structure was used as a guard post at Hause Point and machine gun emplacements, built with sandbags, were installed at Lanthwaite Green and Hause Point, following the intensification of concerns that sea planes might land on Crummock Water (*ibid*). A small rectangular platform (NTSMR 29632), comprising concrete-filled sandbag walls that surround an

earth-filled interior, survives on the western shore of Loweswater. Local understanding suggests that this supported a cable that was strung across the lake so as to prevent sea planes from landing (M Astley pers comm). There is no corresponding structure visible on the opposite shore, although this may have been removed or a tree may have been used as an anchor point at that side of the lake. Local people also recall that a pier and ramps were built at the northern end of Buttermere lake, close to Sour Milk Gill, in order to allow amphibious vehicles to access the water during testing or training exercises (op cit, 75). These ramps were apparently substantial structures that were built with slate from Honister Quarry (ibid). The ramps were dismantled and the slate was casually reclaimed and reused in the local area. A concrete slipway (NTSMR 29472) is present at the northern end of the lake, which has been suggested locally to represent one of the amphibious vehicle ramps (M Astley pers comm), although it does not fit with the description of the large slate structures. It is possible that the concrete ramp formed a small component of an overall group of structures, or a foundation level around which the slate levels were built. Alternatively, this may be an unconnected feature that has become falsely associated with the wartime activity.

- 2.3.46 The only slate mine to remain active in Buttermere is that at Honister (NTSMR 24421). This mine continued in use until 1987; it then closed for ten years and was reopened in 1997 (Richardson 1998, 27). The mine now provides a visitor attraction, in addition to extracting and processing slate.
- 2.3.47 Locally, primary education in the Buttermere area was undertaken until the midtwentieth century. Due to decreasing numbers of pupils, the school in Loweswater closed on the 22nd of December 1948 and the school in Buttermere village closed in 1939. The school in Buttermere village re-opened three years later, in 1942, and continued in use until 1950, when declining numbers caused the school to be closed for the final time. The school building is now used as the Buttermere village hall.

3. MONUMENTAL LANDSCAPES

3.1 Introduction

3.1.1 Attempting to group site-types from different periods and with different forms under a single heading can be problematic, as this implies that disparate sites may have had similar functions or have resulted from similar cultural processes. The term 'monumental landscapes' is used here to refer to sites, and their landscape setting, which do not appear to have been located within domestic habitation sites or to have performed primarily practical roles in subsistence practices. These sites were not all necessarily deliberately created as lasting monuments, and may have been the result of physical activities that were more important than these enduring artefactual residues. In addition, although these sites appear to represent elements of monumental landscapes, this does not mean that they were necessarily distant from areas of occupation and subsistence. Indeed, any divisions between sacred, or symbolic, and profane spaces may have existed largely as intellectual understandings, rather than entirely separate pieces of land being used for completely different functions. A single piece of land may, therefore, have supported several layers of different, but interconnected, landscape function. A general awareness of many contrasting sites within an area may have existed, with certain sites, or groups of sites, being brought more sharply into focus depending on the specific activities being practised at a given time.

3.2 ROCK ART

- 3.2.1 Three groupings of rock art are known from Buttermere, all of which consist exclusively of cup and ring marks. One of these groups (NTSMR 29136; Plate 4; Fig 5) lies to the north-east of Mill Beck, to the west of Buttermere village, and comprises a tight cluster of 14 cups and two rings located on an outcropping surface that has been partially subsumed by the surrounding turf. A second site (NTSMR 29669; Plate 3) lies approximately 180m to the north-east of NTSMR 29136, and includes two sets of six cup marks, four of which are arranged in a line. A third group of cup marks is located to the north-west of Crummock Water, to the east of Low Park (NTSMR 29137; Plate 5). This group includes numerous individual markings, some of which form lines of cup marks, and appear to respect the ridge of the host outcrop as a limit of engraving.
- 3.2.2 Dating such sites is problematic, due to a general reliance on comparisons of similar styles of rock art, which are rarely associated with datable structures or deposits. Even the designation of the markings as 'art' is problematic, as it is not possible to determine if the motifs, such as cups and rings, were intended to provide direct representational images, but instead may have been the result of a physical exercise that was considered more important than the observable byproduct of that action (Edmonds and Seaborne 2001, 110). Comparative typographic dating suggests that cup and ring marks may have emerged at a similar time to more complex motifs assigned to the Neolithic, and often associated with passage tombs, and may have continued in use throughout the Bronze Age (*ibid*; Parker Pearson 1993, 74–5).

- 3.2.3 The reasons for the execution of these carvings, and their subsequent meanings to contemporary and subsequent communities, can not be explained with certainty. It has been suggested that such sites might represent territorial markers, landmarks along routes of passage, or signify thresholds between different types of topography (Edmonds and Seaborne 2001, 113). Indeed, in contrast to the current significance of the sites, which is inextricably dominated by the presence of these petroglyphs, it is possible that these points in the landscape had already been considered significant, prior to the production of the art. The significance of these places may subsequently have motivated localised activities, some of which resulted in markings on the stones, therefore allowing the significance of such places to become archaeologically identifiable (Bradley 2000, 79).
- 3.2.4 The explanation for the creation of the groups of cup and ring marks, within Buttermere, may, therefore, be related to the significance of their siting within the broader landscape. The panels to the west of Buttermere village (NTSMR 29136; NTSMR 29669) lie at the western limits of gently sloping land that becomes increasingly steep to the east, where the fells below Whiteless Pike begin. The westernmost of these two groups (NTSMR 29136) lies 8m to the north-east of Mill Beck, with the second group situated 180m to the north-east, overlooking the beck. This beck is the largest water course in the vicinity of Buttermere village and this section provides a stark natural division between the upland grazing to the east and the uncharacteristically level improved fields lying to the west, between Buttermere lake and Crummock Water. Although modern land uses contribute to the contrast between the lush field systems to the east, and rough grazing and heather moorland to the west of Mill Beck, these differences are the direct result of the opposing topographies of the area. The group at the northern end of the study area (NTSMR 29137) lies less than 50m to the south of Park Beck, which constitutes the largest water course between Crummock Water and Loweswater, at a point that once more marks the limit of gently sloping land leading to the steep slopes of Melbreak, to the south, and the extremely level improved fields to the north.
- 3.2.5 All of these groups of rock art lie to the side of the water courses where the land is gently sloping, on the margins of the steep fells, and are physically divided from the level valley-bottoms by the watercourses. The massive and immobile nature of the outcropping bedrock, upon which the carvings have been executed, suggests that this is not a distribution that has been influenced by the destruction of additional sites through field clearance. We might, therefore, suggest that the presence of the rock art in Buttermere enables us to identify some parts of the landscape that were significant in the past and that these were marginal places representing the transition between different zones of subsistence or agriculture, such as the division between farming in the valley bottom and hunting in the fells, or between areas of winter and summer grazing. Indeed, the latter division is conspicuous in the current agricultural practices in the vicinity of both sets of rock art. The art in the vicinity of Buttermere village also lies very close to the principal access route into the upland fells that is provided by the Mill Beck valley, which has been exploited throughout the historical periods for pastoral movement. If this interpretation is correct, the production of the rock art might be related to movement between the two zones, such as leaving for, or returning from, seasonal transhumance sites or hunting trips.

3.2.6 In such contexts, the production of the rock art might relate to renewing connections with land that was visited intermittently, and be the result of successive episodes of activity, by different people, rather than pre-planned compositions of motifs (Edmonds and Seaborne 2001, 114–16). With this in mind it is worth noting that, although much of the outcrop has been destroyed by quarrying, the group of cup marks to the north-east of Crummock water (NTSMR 29137) appears to respect the ridge of the projecting outcrop, with all of the motifs being located on the south-facing side, towards the sloping land that extends up to the Mellbreak fells.

3.3 BURNT MOUNDS

- 3.3.1 Although known from widespread locations in Britain and Ireland, only one example of a burnt mound (NTSMR 29489; Plate 17; Fig 5) is known from Buttermere, with approximately 20 such sites having been identified throughout Cumbria (Hodgson and Brennand 2006, 44). This mound lies to the west of Crag House, just to the north of Buttermere village; it is kidney-shaped, measures 13m long, 10m wide, and 1m high, and partially surrounds a linear depression that is 5m long and 2m wide. The site lies close to a current stream channel and the location provides extensive views over Buttermere lake and the surrounding fells to the south-east, although the view to the north and west is obscured by the outcropping crags and woodland of Long How. There are undulations in the surrounding area, some of which could be associated with the burnt mound; one of these lies just to the north-east of the mound and consists of a sub-ovoid mound measuring 4m long by 3m wide and 0.4m high.
- 3.3.2 The mound appeared to contain fire-cracked stone, which is a common feature of burnt mounds, and depressions, similar to the central hollow at this site, have often been revealed as troughs or lined pits following excavation (Barfield and Hodder 1987, 370; Darvill 1987, 116; Heawood and Huckerby 2002). It is generally accepted that the piles of cracked stones result from the heating of water, by dropping fire-heated stones into water-filled troughs (Heawood and Huckerby 2002, 29; Waddell 1998, 177). Following the cooling of the stones, the cracked debris would be removed from the troughs and piled around the edges of the area. The resident farmer, Mr Temple, said that he had encountered charcoal (NTSMR 29490) when cleaning out an adjacent ditch and, whilst it is possible that this could relate to a charcoal pitstead of historic date, the burning could have been associated with fireplaces used to heat stone.
- 3.3.3 There has been much debate over the function of such sites, with differing interpretations including cooking sites, fulling sites, or places where temporary structures may have been erected as steam rooms (Barfield and Hodder 1987, 370–1; Parker Pearson 1993, 104; Heawood and Huckerby 2002, 47; Waddell 1998, 177). Such practices may have been associated with ritualistic or ceremonial activities (Barfield and Hodder 1987, 373–4) and the consumption of food at burnt mounds may have been related to rituals of disposal, as part of broader practices that may have included the deposition of metalwork and other items (Hodgson and Brennand 2006, 44). Little archaeological evidence exists, however, to conclusively demonstrate that food was cooked at these sites and animal bones have been conspicuously absent from the majority of excavated examples (Heawood and Huckerby 2002, 47; Waddell 1998, 177). Burnt mounds

- are generally accepted as being of Middle- to Late-Bronze Age date, with the majority of sites dating to 1600–1000 BC (Ehrenberg 1990, 41), although one example from Garlands hospital in Carlisle produced radiocarbon dates spanning the Early to Middle Bronze Age (Neighbour and Johnson 2005).
- 3.3.4 It has been suggested (Ehrenberg 1990, 49–55) that the distribution of burnt mounds might be closely related to the location of settlement foci during the Bronze Age. If, however, the presence of burnt mounds might indicate contemporary settlement in the general surrounding area, it does not necessarily follow that the mounds were actually located within habitation sites.
- 3.3.5 A map showing the relative distributions of burnt mounds and Grade 1 agricultural land in Shropshire (op cit, 48) shows that the sites consistently lie close to, but towards the edges of, prime agricultural land. This general distribution suggests that many sites were located on marginal land that may have marked the transition between differing types of land use. This pattern finds parallels in Buttermere where the burnt mound (NTSMR 29489) is located close to High House Crag, at the transition point between the flat cultivable lands between Buttermere lake and Crummock Water and the steep slopes of the fells and crags. The presence of only one such site in Buttermere, however, means that we can not yet suggest any reliable distributional trends for this area. Burnt mounds continue to be enigmatic and it has been recommended that further research should seek to attempt to explore their relationship to settlement sites, and that intrusive and non-intrusive methods should be used to investigate their distribution, the nature of activities practised at the sites, and their dates (Hodgson and Brennand 2007, 46).

3.4 FUNERARY CAIRNS

3.4.1 Earthen mounds, known as tumuli or round barrows, have been demonstrated by excavation to be funerary monuments, often associated with the single-grave tradition of the Early to Mid Bronze Age, although some also became the focus for secondary cremation burials (Hodgson and Brennand 2006, 41). These monuments are numerous in the southern counties of north-west England, such as Cheshire and Wirral (op cit 43-4), although in Cumbria the most frequent form of burial mound appears to have been the stone cairn (Quartermaine and Leech forthcoming). Two possible earthen barrows were identified within Castlerigg stone circle, but it has recently been suggested that these circular earthworks may have been associated with post-medieval ornamental tree planting schemes or the product of unrecorded turf repairs undertaken by the National Trust after a large fire was built during a solstice celebration in the late 1980s (J Lund pers comm). It is almost certain that the higher numbers of cairns, in contrast to tumuli, reflects the ready availability of loose stone, and is therefore a local variant of the funerary mound style, rather than being a culturally distinct class of monument. Indeed, the few cairns from Cumbria that have been dated suggest construction during the Early Bronze Age (Quartermaine and Leech forthcoming), in common with the large proportion of cairns from south-west Scotland (ibid) and the earlier barrows from Cheshire (Hodgson and Brennand 2006, 43-4). We must also be aware that where stone and earth have been used together to construct mounds, there may be differences

- in categorisation depending upon the criteria used by different surveyors when recording such monuments.
- 3.4.2 Two possible round barrows were recorded in Buttermere during the current survey (NTSMR 29633, Plate 1; NTSMR 29634, Plate 2; Fig 5), both of which lie at the eastern edge of Loweswater. Two cairns (NTSMR 29097 and NTSMR 29098) are located less than 1km to the south-east of these round barrows, occupying typically prominent positions at the summit above Carling Knott. The two round barrows are situated on low-lying ground close to the lake shore, in contrast to the elevated positions favoured for the siting of funerary mounds (Quartermaine and Leech forthcoming). This setting would, however, still have provided a commanding aspect over the lake and the nearby locale, prior to the plantation of woodland, and the mounds would have been visible from various points around the lakeside. Both mounds were sub-ovoid and measure 11m long by 7m wide and 1m high. Although stone was visible within eroded areas of the mounds, they appeared to have consisted predominantly of grass- and vegetation-covered earth. The southernmost of the barrows (NTSMR 29634) had a very mature oak tree growing on top that demonstrated that the mound was not the result of any recent landscaping modifications. The mounds are anomalous within the local landscape, with no landforms, such as drumlins, being present within the gently sloping hillside; it would appear, therefore, that the mounds are not of natural origin. Although it is not possible to give an unequivocal date or function for the sites on the present evidence, typographic comparisons suggests that they are likely to be funerary monuments dating to the Early to Mid Bronze Age.
- 3.4.3 Elsewhere in Britain, such as the East Anglian Fens or North York Moors, where numerous round barrows occur in widely distributed groups, it has been suggested that these burial mounds may also have acted as territorial markers within open pastoral land, prior to the formalisation of field systems with banks, ditches, and walls (Pryor 2006, 84–5). Without a better understanding of the original numbers of round barrows that may have existed within the local area, and a subsequent detailed distribution analysis, it is not possible to demonstrate that the mounds at Loweswater represented sub-divisional markers within the landscape.
- 3.4.4 In addition to barrows, the survey revealed a group of five stone cairns (NTSMR 29379) that may relate to funerary activity, rather than being products of stone clearance. This group of cairns is located on Lanthwaite Green, to the south of an enclosed settlement (NTSMR 20389) of possible prehistoric or Romano-British date. There are numerous clearance cairns on Lanthwaite Green, which are spatially associated with the enclosed settlement; however, it is probable that these cairns represent earlier phases of clearance activity during the Bronze Age (Lund 1999, 19). Most of the clearance cairns in this area were low and often irregular in shape, and appeared to have suffered from extensive stone removal. The group of five cairns that might suggest funerary activity (NTSMR 29379) differed from the surrounding clearance cairns in their form and distribution. All of the cairns were clustered in a single area that occupied a slightly raised point with extensive views over the northern end of Buttermere lake and the surrounding fells; this vista was not available to the numerous cairns located further north on Lanthwaite Green. The cairns measured between 3m and 7m in diameter and were generally larger, higher, and more regular in form than the

- other cairns in the vicinity. These cairns were at a distance from the settlement and did not appear to have resulted in the clearance of an extensive piece of land, but occupied a confined and isolated area.
- 3.4.5 In the absence of excavation, attempting to differentiate between funerary cairns and clearance cairns is difficult, particularly as successive phases of land use can modify the form of earlier cairns, and stone brought up by later ploughing can be used to increase the size of earlier cairns (Quartermaine and Leech forthcoming). In Cumbria, putative funerary cairns have been found in variable contexts, with examples that appeared to have been distinct from surrounding agricultural activity, and sites that were incorporated within field systems. At Burnmoor and Stockdale Moor the monuments lay within extensive areas of agricultural clearance, but within the immediate locality of the burial monuments, there were apparent cordons sanitaires, or encircling zones where clearance cairns were not present (*ibid*). It would appear that the differing functions of the cairns may have been recognised without the need for entire portions of the landscape to have been devoted to segregated activities (J Quartermaine pers comm), alternatively all the small cairns around the funerary cairns were robbed to provide stone for the big ones.
- 3.4.6 Given the potential for the close proximity, and similarity in form, of clearance and funerary cairns, it is necessary to consider some recurring criteria before tentatively attempting to differentiate between the differing site-types. A topographic location offering expansive vistas, the presence of a surrounding kerb, some degree of isolation, a prominent and regular form, and relationships with other monuments associated with ritual activity, such as ring cairns and stone circles, have all been suggested as criteria for the identification of funerary cairns (Quartermaine and Leech forthcoming). Many of these criteria are fulfilled by the group at Lanthwaite Green, with expansive views, regular forms and a distinctive grouping from nearby clearance activity all being identifiable. The cairns at Lanthwaite Green (NTSMR 20389) do not appear to have been associated with other monument types and they were not of the kerbed-cairn type. While the cairns might represent funerary activity, this can not be confirmed without the benefit of excavation.
- 3.4.7 In addition to this group of cairns, a summit cairn, measuring 17.5m long by 12.5m wide and 1m high, is situated at the top of Grasmoor (NTSMR 20393, Plate 18). Two further summit cairns are situated on the summit to the southwest of Carling Knott (NTSMR 29097 and NTSMR 29098). While these monuments were evidently ancient and of potential ritual importance, they were not necessarily sepulchral monuments.

3.5 MANAGEMENT RECOMMENDATIONS

3.5.1 With the exception of lake-sediment analyses, these monuments comprise the key evidence for activity and possible occupation within Buttermere during the Bronze Age, and also provide the only specific indicators of Bronze Age activity. As such, they are extremely important and serve as the basis for analyses, such as predictive modelling, that could indicate potential locations of sub-surface remains associated with settlement locations or further monuments (eg OA North forthcoming). Some of the sites may also possess material that can be used to

- provide scientific dating, in addition to further cultural and environmental data, and, therefore, have the potential to refine our understanding of the prehistoric occupation of Buttermere. As such, the preservation of these sites is extremely important.
- 3.5.2 **Rock Art:** the rock art that lies adjacent to Mill Beck (NTSMR 29136) is within the line of a footpath and is, therefore, subject to ongoing erosion (Plate 4); it is likely that there are further motifs on this panel that have become obscured by encroaching turf. The footpath should be redirected to avoid this site and the new course of the path should be subject to archaeological evaluation to ensure that further examples of rock art will not be damaged by future footpath erosion. The current landuse in the vicinity of the rock art, that lies to the south-east of Crag House (NTSMR 29669), does not appear to pose any immediate threats to the site. Any proposals for changes in land use, or intensification of stock holdings in this field, should consider the potential for impact on these sites. Any intrusive works in the vicinity of the site should consider the possibility of further, subsurface, motifs, or associated material, and should be preceded by archaeological evaluation.
- 3.5.3 **Burnt Mound:** the burnt mound (NTSMR 29489), and the undulations in the immediate vicinity, should be protected from any intrusive works and the earthworks should be monitored to ensure that stock erosion does not begin to pose a threat to the site. The potential for sub-surface remains associated with the mound should be considered in the event of any works in the vicinity of the mound and any such works should be preceded by archaeological evaluation. Charcoal (NTSMR 29490) has been encountered during ditch cleaning adjacent to the site and fireplaces or associated features could be present in the surrounding area. The burnt mound and its immediate surroundings should be subject to topographic survey.
- 3.5.4 *Funerary Cairns:* the tumuli within Holme Wood (NTSMR 29633, NTSMR 29634) should be protected from any forestry works in the locale. One of the sites (NTSMR 29633) lies close to the location of recent felling and the removal of timber by heavy machinery and such works could represent considerable threats to these sites. No such works should be undertaken in the locale of the sites without archaeological consultation. The sites should not be subject to storage of timber or other materials that might obscure the extent of the monuments and lead to accidental damage by vehicles or machinery. The current footpath runs over part of the south-eastern tumulus (NTSMR 29634) and has caused clearly evident erosion to part of the mound (Plate 2). The footpath should be clearly consolidated at a slight distance to the mound to discourage cycle or pedestrian traffic over the site.
- 3.5.5 Additional shrub or arboreal vegetation should be discouraged from colonising any of the tumuli or cairn sites and the removal of stone from the areas close to these sites, for maintenance of paths or walls, should be discouraged. Intrusive works should not be undertaken in the vicinity of the sites without archaeological consultation or supervision. Ideally, all cairns should be subject to topographic survey.

4. THE DEVELOPMENT OF ENCLOSURE

4.1 Introduction

4.1.1 The development of the field systems within Buttermere was investigated by a cartographic and documentary research. Documentary research examined the extent of the boundaries as shown on the historic cartographic sources, as well as considering information derived from historic documents. The cartographic sources were predominantly of eighteenth, nineteenth, and twentieth century origin. A programme of analysis was then undertaken to provisionally establish phasing of the boundaries prior to the earliest cartographic source.

4.2 THE MEDIEVAL PERIOD

- 4.2.1 *Ring Garth:* one of the earliest forms of large-scale enclosure was the ring garth, which, during the medieval period, commonly marked the boundary between farmland and wastes, or free chase (Winchester 1987, 60–1). The ring garth surrounded agricultural lands and demarcated areas of winter grazing, which might be open to use by community stock, rather than by individuals (*ibid*). During the summer months, when grazing could occur on the fells, the land within the ring garth was used for crop growth and would then be returned to communal grazing use in the winter.
- 4.2.2 The presence of a ring garth may have been preserved within the name of Gatesgarth Farm, at the southern end of the Buttermere valley (Fig 12). Differing etymological interpretations suggest that this could mean either 'the enclosure by the road' or 'the pass of the goats' (Armstrong et al 1950, 356). If this does relate to an enclosure, then it is likely to have corresponded with the flat meadowlands between Buttermere lake and Warnscale Bottom, which it is suggested may have comprised the lowland element of the medieval vaccary estate of Gatesgarth (Winchester 2003, 114). The south-western extent of this estate corresponded with the boundary between Derwentfells and the barony of Copeland (Plate 12). A large walled enclosure to the north of the vaccary also appears to have been established during the medieval period, and is likely to have demarcated the park or wood of Gaschard, which was part of the vaccary holdings (Winchester 1987, 142; PRO(L) SC6/824/7-14). Unlike some land holdings defined by ring garths, the vaccary estate at Gatesgarth initially comprised a demesne holding (Winchester 2003, 111), which meant that it was under private manorial ownership, and was not subject to the communal status of other such enclosed areas.
- 4.2.3 It has been suggested that the extent of enclosure observable on early post-medieval plans and maps could largely correspond with the degree of enclosure that had been established in the area by 1300 (Winchester 1978, 146; 210). If this is correct, then enclosed lands may have extended along part of the southern side of Buttermere lake during the medieval period. Much of the area now called Burtness Wood may have been enclosed at this time, as suggested by a reconstruction of the enclosure extents as they may have appeared in *c* 1578 when the Percy Survey was undertaken (*ibid*; Fig 12; Plate 19). A plan of this area from 1812, however, did not depict the enclosure of Old Burtness, which

lay to the south of Sourmilk Gill and was shown on an estate plan produced after the purchase of land by John Marshall in 1815–16. This may, however, have been the result of a selected omission related to specific land ownership. The precise extent of this enclosure during the medieval period may, therefore, be difficult to ascertain. By 1310, the Gatesgarth pasture had been let to farm and the private management of these lands by the holder of the estate had ceased (Winchester 2003, 116; Winchester 1987, 142; PRO(L) E199/7/3). Depending upon the number of tenements utilising the holding, a system of communal open field agriculture may have been established in the area at this time, but this is unlikely to have resulted in any significant modification of the boundaries.

- The chronological development of some of the enclosed lands around Buttermere lake can be explored by an assessment of the payment of a due known as 'walking silver', which was associated with the right to full cloth in the lord's fulling mill (Winchester 1987, 140). The Percy Survey of 1578 recorded the payment of this due, which represented the post-medieval continuation of a medieval system of taxation (ibid; CRO(C), D/Lec/301). In 1256 an agreement was made that any extension of the enclosed lands around Buttermere village into the free chase could only be undertaken by the Earl of Aumale, to whom subsequent settlement taxes would be due, whilst Buttermere village was held by the Lucy family. The payment of walking silver to the reeve of Buttermere, associated with the land of the Earl, by Wood House, Sorekill Bank, Spout House, Bowderbeck, and Gatesgarth, in contrast to that paid to the reeve of Braithwaite by the inhabitants of Buttermere village, suggests that the village had formerly been part of the Lucy's share of the forest known as the manor of Braithwaite, and had existed before 1200. By contrast the fellside farms reverted to the reeve of Buttermere following the partitioning of the honour of Cockermouth, after the death of Alice de Rumilly in 1215. This would indicate that the farms had been established between 1215 and the survey of 1256 (Winchester 1987, 140).
- The Percy Survey suggests that during the medieval period Buttermere village 4.2.5 consisted of a nucleus of settlement that utilised the communal open fields of the Buttermere delta flats, with fellside pasture being exploited beyond these enclosed lands. The fringes of the fells were occupied by the farms of Wood House, Sorekill Bank, Spout House, and Bowderbeck, and the vaccary at Gatesgarth (op cit, 140-1). The fellside farms were associated with enclosed land, much of which was wooded during the post-medieval period and, at present, continues to include pockets of woodland. The remains of these postmedieval wooded areas suggest that parts may have been cleared to allow for arable cultivation and winter pasture, with many craggy areas that were less suitable for agriculture, being left as woodland. The extent of the post-medieval head-dyke, the boundary between farmland and waste, as projected for 1578 (*ibid*), may preserve the lines of two ring garths, one of which was associated with Bowderbeck and a second with the farms at Wood House, Sorescale Bank, and Spout House (Plate 20).
- 4.2.6 In addition to the large enclosed areas that surrounded agricultural areas during the medieval period, there may also have been smaller enclosures used to subdivide land within or beyond the ring garths, or head dykes, such as stock pounds or hay meadows to be protected from summer grazing. An example of such an enclosure (NTSMR 29282) may be evident at Rannerdale (Figs 10 and 12), to

the south-east of a deserted medieval settlement (NTSMR 24355). This subovoid enclosure is approximately 300m long and 150m wide and occupies the furthest extent of the Rannerdale dalehead. Such areas were favoured for stock rearing, as they provided access to grazing fells with well-watered hay meadows on the lower ground (Winchester 1987, 42). The topography of the enclosure interior features several streams, including the steep-sided gully of Rowantree Beck, and would have been totally unsuitable for cultivation, but may have been used as a hay meadow for winter feed or in association with stock movement between winter and summer pastures. This enclosure was not featured on any historic maps, and does not appear to have been recorded in the Percy Survey (Winchester 1978, 338), and is, therefore, likely to have gone out of use by the post-medieval period. The enclosure lies to the east of, and appears to pre-date the enclosure of High Rannerdale, which appears to have represented enclosed pasture in the post-medieval period. It is possible that the improved land surrounding the current farm at High Rannerdale represents the original communal open field enclosure associated with the medieval settlement and the sub-ovoid enclosure (NTSMR 29282) was probably associated with this phase of activity (Fig 10). The enclosure of High Rannerdale may have been established following the division of the land into seven holdings by 1547, and apparently superseded the sub-ovoid enclosure (NTSMR 29282).

- 4.2.7 A similar enclosure (NTSMR 25057) is located to the north of the farm at Peel Place (NTSMR 28808) (Fig 35), which may have been occupied during the medieval period with the enclosure representing stock management at the fringes of the open field, close to the fellside pastures (Fig 9). Alternatively, this could have been associated with possible medieval activity to the east of Low Hollins, where a building platform (NTSMR 29513) is located. A small enclosure (NTSMR 23020) is also immediately adjacent to the farm at Peel Place (NTSMR 28808) and might represent a medieval sub-division within the open field system.
- 4.2.8 A deer park was originally established in Loweswater, within the manor of *Balnes* (*Section 8.3.9*), in the early part of the thirteenth century and was later extended (Fig 13), or a second separate park was established, by Thomas de Lucy in the later thirteenth century (Winchester 1978, 341). The extent of the enclosure in this area is likely to have corresponded with the current enclosed lands to the south of Park Beck and the area to the west of this park, as represented by the post-medieval head dyke, is likely to have been enclosed during the late thirteenth and early fourteenth centuries (*op cit*, 210). This would have established the current extents of Loweswater, as a result of the establishment of the manor of *Balnes* in 1230 (*Section 8.3.9*), which would have expanded the areas of lowland enclosure at the northern end of the Buttermere valley, and hence reduced the limits of the forest of Copeland (Winchester 1987, 20). By 1300, the extent of enclosure in this area may have corresponded with the line of the post-medieval head dyke (Winchester 1978, 210).

4.3 POST-MEDIEVAL BOUNDARY DEVELOPMENT

4.3.1 Although the gradual sub-division of open fields occurred during the early postmedieval period, the distinctions between the seasonal land uses of enclosed areas, for either winter pasture or summer arable farming, endured and enclosed arable areas would have been opened for communal grazing during the winter (Winchester 1987, 60–1). During the fifteenth and sixteenth centuries, however, the 'open' (communal grazing) and 'closed' (private crop growth) field system met with opposition as individuals attempted to retain enclosed fields during the winter for their private use (*ibid*). Although much of the valley floor between the lakes of Buttermere and Crummock Water remained as an open field called Nether or Lower Field, during the sixteenth century, with every holding in the village retaining shares, the holdings peripheral to the village consisted of closes with more restricted accessibility (*op cit*, 140–1). The lakeside enclosure of Hassenesse and Grennesse at the northern shore of Buttermere lake (Fig 35 in *Volume 2*), for example, was held exclusively by Bowderbeck and the tenants at Gatesgarth in 1578 (*ibid*).

- 4.3.2 Rather than the continued expansion into upland areas, during the earlier postmedieval period the most marked modifications to the enclosure within Buttermere resulted from the sub-division of the open fields. The deer park at Loweswater had been sub-divided by 1437 into tenements, which may be represented by the current hamlets of Highpark and Lowpark (Winchester 1978, 210) and Gatesgarth had been let to farm by 1310 (Winchester 2003, 116). By the sixteenth century, Gatesgarth had been sub-divided into three holdings (ibid) and the land associated with the deserted medieval settlement at Rannerdale (NTSMR 29282) had been divided into seven portions by 1547. The fertile land of the Buttermere delta flats was sub-divided into three fields during the sixteenth century, with most of this land being shared by all of the holdings in Buttermere village and smaller areas being subject to more exclusive rights of use (Winchester 1987, 140-1). By the time of the production of various estate plans during the late eighteenth century, and the Loweswater, Brackenthwaite, and Buttermere tithe maps of 1844-5, the low-lying agricultural land in the survey area had, to a large extent, been subject to the high degree of field subdivision that characterises the current farmland.
- 4.3.3 In addition to the sub-division of previously enclosed land during the post-medieval period, there were also occurrences of the expansion of enclosure into the margins of the upland forest. In 1568 part of the fellside to the north-east of Buttermere village, known as Blakerigg, or Bleak Rigg, was enclosed (Winchester 1987, 52). Holme Wood, at the north-western end of the survey area, was formerly a piece of fellside known as 'the Holme' and was the subject of successive attempts at enclosure by Lords of the Manor during the mid and late sixteenth century, and which were subject to local opposition (*ibid*). As discussed above, the extent of bounded enclosure that would be observable on the tithe maps of 1844–5, had probably been established by as early as 1578 (Winchester 1978, 338; Fig 16). Indeed, the extent of enclosure differed little between the production of the tithe maps and the first edition Ordnance Survey mapping of 1861–3.
- 4.3.4 During the first half of the nineteenth century the process of legally enclosing land was simplified, with the introduction of the General Enclosure Acts of 1801, 1836, 1840, and 1845 (Whyte 2003, 17). With the Acts of 1836 onwards, parliamentary enclosure was, however, clearly biased towards wealthy landowners. The pressure to enclose land had diminished by the end of the nineteenth century and the establishment of new enclosures was gradually replaced by the more efficient management of the remaining commons (*ibid*).

4.3.5 The only areas where enclosure appears to have expanded after the production of the first edition Ordnance Survey mapping of 1861–3 was within the high fells around Melbreak, Loweswater Fell, Hen Comb, and Darling Fell, all of which comprised the commons of Loweswater. The large geometric enclosures in these areas represent the establishment of land units that were typical of the late nineteenth century (Rollinson 1989, 95-6) and are likely to have represented enclosure as an indication of land ownership, rather than land use. These enclosures parcelled the remaining fells into large blocks, with no apparent consideration of changes in the local topography or utilisation of natural features, such as becks, to define boundaries. The establishment of such boundaries often meant the construction of walls on slopes or crags that were difficult to negotiate and some of the enclosures that were established to the west of Crummock Water and Buttermere lake in 1865 utilised iron fencing, instead of stone walling in order to aid the ease of construction (ibid). None of these boundaries were depicted cartographically until the production of the second edition Ordnance Survey map of 1900. The fells in the parishes of Brackenthwaite and Buttermere were not subject to parliamentary enclosure and remained as unenclosed common land (A Winchester pers comm).

5. AGRICULTURAL SITES

5.1 Introduction

5.1.1 Evidence from historical sources and from archaeological surveys of the landscape attests to the use of both arable and pastoral agriculture in Buttermere. Agricultural activity is demonstrable in the area from as early as the late prehistoric or Romano-British periods, throughout the historical periods, and into the twenty-first century. The preponderance of uplands in Buttermere means that much of the area is better suited to pastoral than arable agriculture, as a result of climatic and topographic restrictions.

5.2 PASTORAL AGRICULTURE

- 5.2.1 Prehistoric and Romano-British Periods: the earliest direct evidence for pastoral agriculture in Buttermere is associated with the enclosed settlement at Lanthwaite Green (NTSMR 20389). The land to the east of the settlement enclosure features numerous clearance cairns and stone banks that suggest improvement of the land and the creation of small plots and enclosures (Lund 1999, 16). In the absence of archaeological excavation, the dating of such sites is problematic, typological comparisons would suggest that the fields were in use during the Bronze Age, Late Iron Age, or Romano-British periods (op cit, 19). The stone banks are likely to reflect the clearance of stone in lines around the edges of farmed plots, but this is not necessarily an indication of cultivation (Quartermaine and Leech forthcoming), as the plots may have been segregated off as meadow land. The primary clearance of stone, forming randomly distributed cairns, is typically associated with the improvement of land immediately following forest clearance and would have enabled a pastoral economy (Walker 1965b; Quartermaine and Leech forthcoming), and certainly much of the unimproved land in the Lanthwaite area has proven to be successful as pasture. One curvilinear bank (NTSMR 25128) appears to form a large enclosure that is annexed to the settlement enclosure and could have been utilised as a stock pound. By holding stock within enclosures on farmed land, manuring would allow nutrients to return to the fields (ibid) and the enclosure walls could be formed with stone that needed to be cleared from the area; this, though, profits meadow land as well as arable land.
- 5.2.2 The suggestion of farming practices dating to the Neolithic or Bronze Age periods may also be posited for Buttermere on the basis of circumstantial evidence. The presence of barrows, cairns, a burnt mound, and rock art (*Section 3*) demonstrates activity in the area during this broad timespan that would have been undertaken by people utilising agricultural subsistence strategies. It is not possible to demonstrate definitevely the use of such agricultural practices in the local area at this time, although the presence of rock art might indicate periodic or seasonal movement in the Buttermere valley associated with pastoral transhumance or territories differentially associated with hunting or agriculture (*Section 3.2.5*).

- 5.2.3 In addition to the enclosed settlement at Lanthwaite Green (NTSMR 20389), there is a second site (NTSMR 29273), close to Dale How, that may represent settlement and agricultural activity during the Late Iron Age or Romano-British periods. This site has been subject to re-use in the medieval period and, therefore, it is difficult to assign associated elements of it to specific phases of use with confidence, in the absence of excavation. There is an enclosure annexed to the eastern side of the site (NTSMR 29281), but, as the northern line of this enclosure is defined by Squat Beck, it may have been unsuitable for stock holding.
- 5.2.4 Other settlements that are likely to date to the Iron Age or Romano-British periods are present at High Nook Farm (NTSMR 27581), Lambling Knott (NTSMR 20381), and a possible promontory fort (NTSMR 20464) located in the area known as Loweswater Pele (Section 2.2.24–6), on the north-western shore of Crummock Water. Although there has been little recovery of plant and animal remains from Iron Age sites in the north-west of England, the limited evidence available suggests that arable agriculture was accompanied by cattle and pig rearing (Hodgson and Brennand 2006, 55), and the occurrence of sheep bones on sites of Roman-British date in the region (Philpott 2006, 69) suggests that sheep may also have played a role in local subsistence practices. The organisation of field systems in Cumbria, that are likely to date to the Iron Age or Romano-British periods, are suggestive of mixed farming practices, with large stock pounds co-existing with smaller arable plots (op cit, 77).
- Early Medieval Period: there is little evidence for farming in the area during the early medieval period beyond the endurance of place-names suggestive of forest clearance (thwaite) and seasonal pastoral dwelling sites (scales). The use of the element thwaite, however, continued as a colloquialism into the thirteenth century (Winchester 1987, 41) and many of the numerous occurrences of this place-name at the northern end of the survey area might relate to medieval clearances. It has been suggested that the hamlet at Scales was established during the thirteenth or fourteenth centuries (Winchester 1986, 2), although it is possible that a seasonal dwelling site existed at the site prior to the medieval period, with the practice of transhumant pastoralism being responsible for the scales placename. The deposition of lake sediments at Crummock water (Shen et al 2008) indicates that there was a steady but not substantial increase of deposition during much of the early medieval period, but there was a dramatic increase in deposition from AD 900, which would suggest that there was a substantial episode of clearance and corresponding agricultural activity during the Norse period.
- 5.2.6 *Medieval Period:* stock husbandry in Buttermere during the medieval period is well attested from documentary sources, with the establishment of a vaccary, or cattle farm, at Gatesgarth in the thirteenth century (Winchester 2003, 112). In 1260, this was a demesne holding, in the possession of Isabella de Fortibus, and sustained up to 60 cows and their calves, in addition to maintaining meadows for the production of hay for winter feed (*ibid*). During the 1270s, there was a reduction in the scale of cattle farming on the Cockermouth estate and the remaining cattle stocks that had been dispersed throughout the estate were consolidated and divided between the vaccaries at Birkby and Gatesgarth in 1280–1 (*op cit*, 113). By 1310 the Gatesgarth pasture had been let to farm and the demesne status of the holding was relinquished (*op cit*, 116).

- Sheep pastures were utilised on the fells to the east and north of the survey area 5.2.7 during the medieval period (op cit, 112), although the lack of records of individual farmers' possessions, prior to the probate records of the sixteenth century, makes it difficult to gauge accurately the scale of different agricultural practices in the area. It has been suggested, however, that the extent of many head dykes recorded on post-medieval plans and maps might reflect the scale of enclosure that had already been imposed upon the landscape by the thirteenth century (Winchester 1978, 146). If this principle is applied to the plan of land tenure in Buttermere in 1578, produced by Winchester (op cit, 338), we might suggest that many large tracts had been enclosed during the medieval period. Very few examples of ridge and furrow of likely medieval date were recorded during the current survey and, although we must consider the impact of the differential survival of such features as a result of differing subsequent land uses, it is likely that many of these enclosed areas were used primarily for winter pasture, and that the cultivated fields were also utilised in this way. The presence of a shieling (NTSMR 20386) of possible medieval date at Warnscale Bottom suggests the use of transhumance agriculture that might pre-date the establishment of the vaccary at Gatesgarth. A second shieling (NTSMR 25060) was discovered during the topographic survey of the enclosed settlement at Lanthwaite Green, as were three (NTSMR 29165) hollows that might represent a shieling group, to the south of Liza Beck, close to Lanthwaite Green.
- 5.2.8 A sub-ovoid enclosure (NTSMR 29282, Plate 21) that appears to date to the medieval period, to the east of High Rannerdale is in an area favoured for stock rearing, as they provided access to grazing fells with well-watered hay meadows on the lower ground (Winchester 1987, 42). It probably relates to the movement of stock between winter and summer pastures, pre-dating the completion of the enclosure of High Rannerdale or the enclosure of land for hay meadows (*Section 4.2.6*).
- 5.2.9 The Loweswater tithe map of 1839 showed part of the fellside lying to the west of the Buttermere delta and the southern end of Crummock Water to have been an area of stinted pasture called Buttermere Scale. This suggests that the area was being used as pasture, with a limit on the number of animals allowed to graze in the area, known as a stint, at least as early as the mid-nineteenth century. It is, however, possible that the use of this pasture had already been established by the thirteenth or fourteenth centuries, when the hamlet at Scales was established (Winchester 1986, 2), and that the medieval settlement was associated with pastoral agriculture in this area.
- 5.2.10 *Post-Medieval Period:* the post-medieval use of Buttermere for pastoral agriculture is abundantly evident in the numbers of sheepfolds, washfolds, bields/sheep shelters, and stock pounds within the survey area (Figs 14-16). Within Buttermere there are 54 sheep shelters, 37 sheepfolds (including washfolds), a pinfold (NTSMR 27579), a shepherd's shelter (NTSMR 29507), three animal feeding platforms, 16 enclosures, that are likely to have functioned as stock pounds, and a bothy (NTSMR 26226) that may have functioned as a shepherd's hut, but which might have had several non-pastoral functions (J Lund pers comm).
- 5.2.11 The sheep shelters, known in the Cumbrian vernacular dialect as bields, tended to comprise single stretches of drystone walling, measuring between 2.5m and

9m long. Some of the shelters were free-standing structures, and some utilised, and incorporated, natural outcrops, crags, and earthfast boulders. The shelters demonstrate a very specific distribution within the survey area, with 45 out of 54 being located in the north-eastern part of the survey area, to the north of Gasgale Gill. This is a very confined area of upland fell and the density of sheep shelters (Plate 22) presumably reflects the long-established density of settlement in the lowlands to the west. The fells around Buttermere village are also close to a dense cluster of settlement that would have utilised the fells for grazing, yet there are very few shelters in this area, despite the presence of numerous stock management sites, such as sheepfolds, and the large enclosure on Bleak Rigg. The reason for this skewed distribution is likely to be a response to specific environmental factors. The fells in the northern part of the area are not afforded natural shelter by the nearby hills to the extent that those in the southern part of the valley are. The land to the north and west of the cluster of shelters is generally open and exposed hence there is here a greater need for stock shelters.

5.2.12 The sheepfolds and washfolds occur as single- and multiple-celled structures and in a variety of shapes, including sub-rectangular, sub-circular, and L-shaped. The washfolds were all located adjacent to current watercourses, in order to enable the sheep to be rinsed as they crossed the streams. A pinfold is present to the north of Loweswater, which would have been used as a pound for the holding of livestock that had strayed, or been put to pasture, on land that the owner of the livestock did not have the right to graze. The owner would then be liable to pay a fine for 'overleap' in order to reclaim the animal (Winchester 2000, 116). A field in the vicinity of Lower Gatesgarth was named as 'Pinfold Close' on the Buttermere tithe map of 1844, although this lay beyond the area of the field survey and the presence of any related remains has not been established. The bothy (NTSMR 26226), which may have originally been a shepherd's hut, might suggest pastoral agriculture within Holme Wood (formerly called The Holme). A sheep shelter (NTSMR 29649) and a sheepfold (NTSMR 29652) now also sit incongruously within the woodland. Three possible shieling sites (NTSMR 20386, 25060 and 29165) suggest transhumance agriculture and could date to the medieval or post-medieval periods. The post-medieval processing of wool into cloth, by matting or felting, is attested by six suggested sites of fulling mills within Buttermere (NTSMR 29126, 29127, 29128, 29129, 29101, and 29687; Davis-Shiel 1991), although the presence of these sites has not been confirmed by site visits.

5.3 ARABLE AGRICULTURE

5.3.1 *Prehistoric and Romano-British Periods:* there is little definitive evidence of prehistoric arable agriculture in Buttermere. Although there are indications of clearance cairns in the vicinity of the enclosed settlement (NTSMR 20389) at Lanthwaite Green, for example, these could, and more typically did, relate to pastoral activity. The best indicator of arable farming are lynchets and none have been confirmed in relation to prehistoric settlements. Although we know that during the Iron Age in the north-west of England bread wheat, emmer, spelt, barley, oats, and possibly rye were being grown, there is little evidence for such plant remains in Cumbria (Hodgson and Brennand 2006, 55). The continued use of the sites at Dale How (NTSMR 29273), High Nook Farm (NTSMR 27581),

and the promontory fort at Crummock Water (NTSMR 20464) means that any evidence of early cultivation, such as lynchets, may have been masked or destroyed by later agriculture. In addition to the enclosed settlements in Buttermere, there is also an unenclosed group of clearance cairns (NTSMR 29757, NTSMR 29759, NTSMR 29760, NTSMR 29761, NTSMR 29764, NTSMR 29765, NTSMR 29775), which lies to the immediate south of the medieval settlement at Scale Beck. A second field system (NTSMR 29785), represented by clearance cairns and banks, is also present to the west of this medieval settlement. Although this clearance might have been associated with the medieval activity at the site, it is possible that these sites might represent an earlier phase of use during the prehistoric periods.

- 5.3.2 *Medieval Period:* medieval cultivation occurred within Buttermere, but the lack of records of individual farmers' possessions, prior to the probate records of the sixteenth century, means that the scale of such cultivation is difficult to assess. Seven examples of broad ridge and furrow cultivation earthworks have been recognised within the survey area (NTSMR 29686, 29722, 29419, 29462, 29503, 29709, and 29675), most of which are located to the north of Crummock Water. Although the width of such earthworks can not give a definitive date for ridge and furrow, it is likely that these wider examples were a product of oxen ploughing which was more prevalent in the medieval period.
- Some of the broad ridge and furrow sites lie close to other areas of probable 5.3.3 medieval activity, such as sites NTSMR 29419 and 29462, which lie to the west of the putative medieval site of Loweswater Pele (NTSMR 20464), and within an area that had been divided into tenements by 1437 (Winchester 1987, 47–8). In this area, there are also five groups of clearance cairns (NTSMR 29411, 29406, 29412, 29415, and 29463) that might potentially have been associated with medieval cultivation practices. One site (NTSMR 29411) in this area appears to have been directly associated with medieval activity; and comprises a stone bank of large boulders. It was probably a product of clearance activity and was associated with the improvement of this area for cultivation, being on marginal land immediately downslope of a site of broad ridge and furrow (NTSMR 29419). The boulders appear to have been brought to the edge of the field and then allowed to roll down the steep slope towards the water-logged area at the base (Plate 23); the size of these stones demonstrates that they must have been removed prior to the production of the early cultivation ridges.
- 5.3.4 Broad ridge and furrow (NTSMR 29462) is also present in the locale of the possible medieval farmstead (NTSMR 27580) to the north-east of High Nook Farm. This has been tentatively suggested by Winchester (1986, 4) to represent the remains of 'High Iredale', which was deserted in *c* 1690. There are also three sites of clearance cairns in this area (NTSMR 29206, 29208, and 29230).
- 5.3.5 Two sites of broad ridge and furrow (NTSMR 29722 and 29709) lie in the broad vicinity of building platform NTSMR 29513 (Plate 24), near to Low Hollins, which might represent the remains of a medieval farmstead. Groups of clearance cairns (NTSMR 29269 and 29539) have been identified adjacent to the deserted medieval settlement at Rannerdale, to the north of Dale How (NTSMR 24355), although broad ridge and furrow has not been identified in this area. The cairns all lie close to the line of the current field wall that encloses the Rannerdale farmland and might reflect that the field wall was the formalisation of an earlier

- boundary line represented by the slightly erratic clearance cairns. Alternatively, the boundary in this area might have been established as a result of activity associated with the abandoned medieval settlement, which lies outside, and to the east of, the Rannerdale field boundary. There are several small strip enclosures associated with the medieval settlement in this area (Plate 15) and the cairns could have resulted from the clearance of these plots.
- 5.3.6 There is also evidence for an extensive field system (NTSMR 29785), consisting of numerous clearance cairns and banks, to the west of the medieval settlement at Scale Beck (NTSMR 20380). Although such remains are notoriously difficult to date, they might be associated with the medieval settlement, which has been suggested to date to the thirteenth or fourteenth centuries (Winchester 1986, 2).
- 5.3.7 *Post-Medieval Period:* probate records show that oats, barley, wheat, and rye were cultivated in Cumbria from at least the sixteenth century (Winchester 1987, 60–1). Although, as the post-medieval period progressed, technological advances and increased motivation, particularly during the early nineteenth century, encouraged the cultivation of more upland areas and marginal lands (Rollinson 1989, 94); as a consequence, arable agriculture experienced phases of growth and decline. Cultivation increased in response to the rise in price and demand for grain during the Napoleonic Wars, and subsequently decreased following the period of peace that began in 1815 (Whyte 2003, 26–7).
- 5.3.8 Within Buttermere, numerous sites associated with arable agriculture from this periods have been identified (Figs 15 and 16). There are 80 occurrences of narrow ridge and furrow, 36 sites associated with field clearance, and one group of mounds (NTSMR 23021) that may have been used as corn stoops, in order to raise the harvested crops above ground level. Many of the sites of ridge and furrow are very faint and difficult to discern and it is possible that many more of the hundreds of enclosed fields within the survey area were also subject to cultivation during the post-medieval period; however, subsequent pastoral use, soil accumulation, and vegetation growth has limited the identification of what may have been fairly subtle earthworks.
- In total, 13 sites comprise, or include, agricultural barns and it is likely that many 5.3.9 of these will have served multiple functions associated with stock shelter and hay storage. The growth of crops in the area in the post-medieval period is also suggested by the former presence of several mills, which would have processed cereals. A click mill, which was driven by a horizontal water wheel, (NTSMR 24349) survived at Mill Beck, close to Buttermere village, until 1735 and Brackenthwaite Corn Mill (NTSMR 29101 and 29726) was located in the northern part of the survey area. Davis-Shiel (1991) has suggested that a mill operated at Gatesgarth (NTSMR 29121), although it is not clear whether this was associated with cereals or fulling. Place-names, such as 'Miller's Tenement', which was the name given to Lanthwaite Cottage on the third edition Ordnance Survey third map of 1898, also attest to the prevalence of mills in the area. A pair of mill stones, discovered buried at Wood House, are likely to have been associated with the nearby click mill (NTSMR 24349), although it is possible that they constitute the only known evidence for a mill powered by a horse-gin in this area.

5.4 Management Recommendations

- 5.4.1 With a total of 418 agricultural sites, out of a total of 893 sites within the survey area, the agricultural sites comprise the largest thematic grouping of sites of archaeological interest within Buttermere. This reflects the continuous status of agriculture as the primary method of subsistence and economy in the local area over at least the last two thousand years. Agriculture, therefore, represents a key element of the former economy and local cultural heritage, and reconstructing the development of the agricultural landscape is essential in understanding that of Buttermere as a whole.
- 5.4.2 *Buildings:* any buildings of archaeological interest should be repaired or consolidated to prevent decay and collapse. Any maintenance works should be informed by an understanding of the potential for sub-surface remains, within the vicinity of the building and subject to appropriate archaeological consultation and supervision. The potential for successive phases of occupation over long periods should inform the decision of archaeological mitigation strategies. The growth of additional vegetation that might damage the structural integrity of the sites should be discouraged and anyone removing stone from the areas close to ruinous sites, for maintenance of paths or walls, should be advised not to disturb them. Stock erosion of ruinous sites should be monitored. The historical character of buildings should be considered when maintenance or modification is undertaken.
- 5.4.3 Sheep Shelters, Shepherds' Shelters, Folds, Enclosures, Walls, Pinfolds, Beeboles, and Smoots: any such structures of archaeological interest should be repaired using appropriate material or consolidated to prevent further decay and collapse. The growth of additional vegetation that might damage the structural integrity of the sites should be discouraged and anyone removing stone from the areas close to these sites, for maintenance of paths or walls, should be advised not to disturb them. Levels of stock erosion should be monitored.
- Ridge and Furrow, Lynchets, Clearance Cairns and Banks, Corn Stoops, and **Ponds:** any sites that exist as earthworks are potentially vulnerable to intrusive farming practices, such as ploughing and heavy stock erosion. Broad ridge and furrow, which could indicate medieval cultivation, should be subject to topographic survey prior to any such changes in land use, and fieldwalking surveys should be employed following cultivation to establish the presence and density of pottery sherd distributions. All of the other site-types should also be subject to topographic survey if they are likely to be disturbed by changes in land use. Some of these sites, such as corn stoops and ponds, might also be associated with sub-surface features or finds and may require additional archaeological works. Any clearance cairns of potential prehistoric or medieval date should be subject to topographic survey and if the disturbance of any such cairns is unavoidable, they should be subject to archaeological excavation in an attempt to identify dating evidence. The potential for sub-surface remains associated with prior settlement of the area within current open fields should be considered when any intrusive works are undertaken.

6. INDUSTRIAL SITES

6.1 Introduction

6.1.1 Although many areas of the Lake District, including Buttermere, are typified by a widespread perception of comprising unspoilt natural landscapes, industrial activity has historically significantly altered the landscape and in the survey area extends at least as far back as the bloomeries of the medieval period. Indeed, the minerals inherent in the geological deposits in Buttermere, such as copper, iron, lead, building stone, and slate have been exploited commercially throughout the historical periods and slate continues to be extracted and processed at the Honister Quarry (Figs 17 and 18). Although agriculture is covered in *Section 5*, processing industries associated with arable and pastoral production were also present in Buttermere. Peat is also likely to have been exploited locally.

6.2 QUARRYING

- 6.2.1 The most conspicuous quarrying activity in Buttermere was undertaken at Honister (NTSMR 24418), and Dodds Mealton (NTSMR 29250) slate quarries, with further slate quarrying occurring at the Bolt Craigg (NTSMR 24414), Saynside (NTSMR 29451), Green Crag (NTSMR 24426), Buttermere (NTSMR 24412), Lanthwaite wood (NTSMR 29333) and Cold Gill (NTSMR 29254) quarries. It has been suggested that Honister slate may have been exploited for roofing materials as early as the Romano-British period, although the first historical reference for quarrying at the site relates to the grant of a 21-year lease to John Walker in 1728 (Cameron 1993, 12). The quarries at Saynside, Dodds Mealton (Plate 25), and Bolt Craigg all appear to have been contemporary with this activity, and it has been suggested by Davis-Shiel (1991) that they were operating in 1730, although none have continued in use for as long as the sites at Honister. The quarry at Honister remained active until 1987, when it closed for ten years (Richardson 1998, 27); the quarry subsequently re-opened in 1997 and continues to extract and process slate, in addition to functioning as a visitor attraction.
- 6.2.2 There are 19 small hollows, pits, and worked faces throughout the study area, many of which appear to have been the result of the extraction of stone for use in local walls and buildings. Such sites have been identified at Turnerhow (NTSMR 24427), Loweswater village (NTSMR 25141), Lanthwaite green (NTSMR 25063 and 29382), Newlands Hause (NTSMR 29146 and 29147), Ghyll Wood (NTSMR 29291), Ladyside Pike (NTSMR 29305), Palacehow (NTSMR 29350), Lanthwaite Wood (NTSMR 29334), Thrushbank (NTSMR 29678), Potter Gill (NTSMR 29697), to the west of Oakbank (NTSMR 29698), close to Lanthwaite Green farmhouse (NTSMR 29385), the Loweswater Pele promontory (NTSMR 29395), north of Wood House (NTSMR 29504), and near to Low Hollins (NTSMR 29704). It is notoriously difficult to date such sites, in the absence of associated archaeological or historical evidence. However, the proximity of some sites, such as the hollows to the north of Wood House (NTSMR 29504) and at the examples Ladyside Pike (NTSMR 29305), to later walls might allow us to

- assign broad post-medieval date ranges on the basis of association, although the earlier use, or subsequent re-use, of such sites should always be considered.
- 6.2.3 In addition to sites associated with the extraction of stone for building and roofing slates, 14 sites in Buttermere appear to have related to the extraction of stone hardcore and gravel, much of which is likely to have been used for the construction and maintenance of roads and tracks. Roadside pits account for 12 of the sites and occur at Pike Rigg (NTSMR 29294), close to Wood House (NTSMR 24415), Holme Wood (NTSMR 29666), Buttermere Hause (NTSMR 24416), near to Woodhouse Islands (NTSMR 29264 and 29265), near to Hause point (NTSMR 29367), east of Fletcher Fields (NTSMR 29372), north-east of The Hope (NTSMR 29424), to the south of High Swinside Farm (NTSMR 29454), and within Holme Wood (NTSMR 29639 and 29641). It is likely that all of these sites date to the post-medieval period.

6.3 MINING

- 6.3.1 *Medieval Period:* there is no documentary evidence recording the extraction of iron ore in Buttermere during the medieval period, but it is known that iron ore was being processed in bloomery sites in the Cocker valley by 1305, when such sites were recorded as *forgiae ferri* and *forgiae silvestres* (Winchester 1987, 49, 104). The presence of ironstone in the local area is attested by the mining of the ore in the nineteenth century at Scale Force (NTSMR 24429) and by the placename of Iron Stone on the fells to the west of Crummock Water and north of Low Ling Crag. Both of these areas lie close to the sites of medieval iron industry at Scales (NTSMR 20380) and the likelihood of such local sources being exploited during the medieval period is very high.
- 6.3.2 There is limited evidence for copper mining in Buttermere, with the presence of post-medieval trial mines (NTSMR 23036 and 29163) at Burtness Woods and at the Honister pass (NTSMR 24422). One of the trials in Burtness Woods (NTSMR 23036) was apparently in use in 1569–70, during the Elizabethan period (Adams 1988, 115), and it is likely that the potential of Buttermere as a source of copper had been recognised during the medieval period. The post-medieval workings in the area do not, however, appear to have been extensive and although it was known in the medieval period that there were local copper sources, these may not have been abundant enough to have motivated any concerted attempts at exploitation at this time. It is also possible that the post-medieval trials at the eastern side of Burtness Woods (NTSMR 29163) and at the Honister pass (NTSMR 24422) may have masked or destroyed evidence of earlier workings of a smaller scale, as occurred at the Elizabethan copper trial in Burtness Woods (NTSMR 23036).
- 6.3.3 **Post–Medieval Period:** there are numerous trial mines throughout Buttermere that demonstrate the exploitation of lead, iron, and copper during the post-medieval period. Between 1822 and 1825, the mining of copper resumed at the adits at the western side of Burtness Wood (NTSMR 23036), which had previously been worked in 1569–70 (*ibid*). Another trial mine at Burtness Wood (NTSMR 29163) and a third site, at the Honister pass (NTSMR 24422), were also established in the post-medieval period, although the exact dates of use of these sites is not evident. The accounts of the distribution of finance of the

Company of Mines Royal show that copper mines were operating in Buttermere from at least 1568 (Donald 1994, 243), although the precise location of these workings is unclear. No such workings, however, were evident in the region, on the part of the Company of Mines Royal, between 1564 and 1568 (*op cit*, 165). The nominal expenditure on the Buttermere mines during 1568 demonstrates that the workings in this area comprised only a very small part of the overall operations of the Company of Mines Royal. Indeed, in that year, more than twice as much money was spent on wine than on the mines in Buttermere.

- 6.3.4 Lead mines were established at Whiteoak (NTSMR 24546) (Fig 19), Mosedale and Loweswater (NTSMR 24425) during the nineteenth century. The remains of the lead mine at Whiteoak comprise the grassed linear hollows and banks of 14 trial levels, one of which was associated with the visible remains of an adit (NTSMR 29177), located on the steep fellside to the west of Whiteoak Beck. A single shaft (NTSMR 29184; Plate 26) lies to the south of the main concentration of trial levels and has been partially backfilled. It is now heavily overgrown, with two birch trees growing within the site. In addition to several working platforms that are located on top of the spoil heaps adjacent to the trial levels, there is evidence for the local processing of lead ore at two large terraced areas at the bottom of the slope, close to Whiteoak Beck. The western terrace (NTSMR 29189) features a retaining wall that provides a revetment for the terrace on which are the remains of up to three demolished buildings, which survive as subrectangular patches of gravel and occasional blocks of quarried stone. The remains of a wheel pit (NTSMR 29190) are situated on an adjacent lower terrace, to the east, although this has been backfilled and is now discernible only as an area of gravel with traces of head and tail races leading to and from the beck. The remains of a wall (NTSMR 29186) run along the eastern side of the main accumulation of trial levels and this appears to have been built in order to prevent stone tumbling down the steep slope into the processing area. Lengths of narrow terraced trackway are visible (NTSMR 29187), which would have provided access between the trials and the processing area for the transport of ore by cart or pack horse. A wider track (NTSMR 29222) was also observed, running northwards from the processing area towards High Nook Farm, which is an obvious route for the transport of processed lead from the mine.
- 6.3.5 The mines at Whiteoak were operational between 1864 and 1891 and extracted lead ore from a poorly mineralised vein with a north-west to south-east alignment (Adams 1988, 113–4) (Fig 19). The mineral rights were first leased by Messrs Steel, Robinson, and Waugh, in 1864, and were held for a year in 1887 by a locally prolific mine operator named Henry Vercoe. The Loweswater Lead Company was formed, specifically to work the mine at Whiteoak, and began a lease on the 30th of April 1888. One of the directors of this company was John Sawrey, who had been one of the founders of the Buttermere Green Slate Company. This venture failed, however, and the company went into liquidation in 1891; some of the mining equipment was sold in 1892 and the rest was taken to Threlkeld Mine (*ibid*).
- 6.3.6 The Loweswater mines comprise several trial levels (*op cit*, 111–12) (Fig 20), the two shafts of Old Wheel Shaft and Flat Rod Shaft, the Loweswater Mine (NTSMR 24425), and the small-scale workings at Scalehill Bridge Mine (NTSMR 24430). The mines were in use between 1819 and 1856, and the last major phase of work was completed in 1841. The Loweswater mines exploited a

vein that had been discovered during drainage work in 1816 and had a generally north-west to south-east alignment, running between Whinny Ridding and Scalehill Bridge (*ibid*). Two shafts were used to access the mines and the vein was first exploited by Messrs Joseph Skelton and Skelton Wood. The mine was subsequently worked by Messrs Mellor, Pratchett, Jones, and Clemence between 1839 and 1841, and was then closed because insufficient quantities of lead ore were being extracted (*ibid*). The mines were subject to inundation and were drained by a pump powered by a watermill that was served by a leat from Crabtreebeck (NTSMR 29689). Lead trial mines are also evident in the environs of Beckside (NTSMR 24410), High Liza Bridge (NTSMR 24423), Rannerdale (NTSMR 24428), and Blackbeck (NTSMR 24411).

Iron-stone was the object of prospection in the area of Scale Force (NTSMR 6.3.7 24429), although it appears that these workings never developed beyond trial levels and there is little evidence of activity after 1873 (ibid). The leases for the iron veins between Floutern Tarn and Crummock Water, including the Scale Force vein, were in the possession of The Loweswater Iron and Lead Ore Company between 1863 and 1877, after which they were given up to allow the company to focus their attentions on their workings in Eskdale (op cit, 114–5). A second site that may represent the extraction of iron stone is suggested by the cartographic references to an area as 'Iron Stone' (NTSMR 29113) at the western side of Crummock Water on the first and second edition Ordnance Survey mapping. This area appears to correspond with a trial mine reported to lie on the eastern side of Melbreak (op cit, 115). Post-medieval trial mines, of uncertain purpose and date, are also evident at Tindle Crag (NTSMR 29352 and 29353), Long Crag (NTSMR 29293), Low Wax Knott (NTSMR 24424), Gascale Gill (NTSMR 24414), and Lanthwaite Wood (NTSMR 29328, 29329 and 29339).

6.4 IRON PROCESSING SITES

- 6.4.1 Although there are few sites within Buttermere that demonstrate the extraction of local iron ores, the processing of iron is evident at 14 bloomery sites, which are dispersed throughout the area. Such sites occur to the west of Crummock Water, at Scales (NTSMR 20380), to the east of Crummock Water, in the locale of Cinderdale Common (NTSMR 24354, 26856, 26857, 26859, 29546 and 29549), to the north of Crummock Water, in Lanthwaite Wood (NTSMR 28891) and Oakbank (NTSMR 29691), at the southern end of Crummock Water (NTSMR 29502), in the Loweswater area, near to High Nook Farm (NTSMR 27596) and High Park (NTSMR 29672), and to the east of Buttermere lake, at Crag Wood (NTSMR 29122) and Beck Bank (NTSMR 29120).
- 6.4.1 The remains of these bloomery sites are generally visible as little more than grass-covered undulations, with accumulations of slag and charcoal sometimes being visible where erosion has allowed sub-surface material to become exposed. The sites result from the smelting of hematite iron ore in small bowl-shaped furnaces, in order to produce blooms of metallic iron (Marshall and Davis-Shiel 1969, 30–1). These furnaces were fed oxygen by hand-operated bellows and reached temperatures of between 1100° C and 1200° C, which was hot enough to reduce the iron ore, but also resulted in discarded waste slag being tapped off from the furnace that had an approximate 40% iron content (*ibid*). Bloomeries

- are often found in close proximity to water, which would have been useful for washing the ore, cooling and tempering tools, and puddling clay for the hearth-pit (Marshall and Davis-Shiel 1969, 31). This association with water is conspicuous within Buttermere, where the sites are all located close to streams, and many are within the vicinity of standing water, such as Crummock Water.
- There are numerous charcoal pitsteads within Buttermere, with broadly similar patterns of distribution to the bloomeries. In addition to pitsteads, smaller sites, comprising patches of charcoal and probably associated with charcoal production, have also been identified within the field systems to the west of Cinderdale common (OA North 2002, 24-5). Some of these may have been contemporary with the bloomeries and, therefore, have provided a local source of charcoal to fuel the ironworking. Although many of the bloomeries and pitsteads may not have been contemporary, the distribution of pitsteads provides an indication of the previous extent of woodlands within the valley, and in Buttermere there is an evident correlation between the availability of woodland, as a source of fuel, and the distribution of the bloomeries. Given estimates that the working of an average bloomery for a year would have required the support of around 30 acres of woodland for fuel (Marshall and Davis-Shiel 1977, 30), the importance of the proximity of these sites to wooded areas is clear. Indeed, the conspicuous absence of woodland in the immediate vicinity of Cinderdale common might be a direct result of the bloomery industry in this area.
- 6.4.3 Geophysical surveys of several of the sites in the study area (Engineering Archaeological Services Ltd 1999; 2001) have been undertaken, and one site was recorded during an archaeological watching brief (OA North 2002, 24), although a lack of full excavation means that the precise dates of the bloomeries can not be established with certainty. The working of iron ores using bloomeries has been demonstrated to have occurred in Cumbria throughout the eleventh to sixteenth centuries (Bowden 2000, 6) and, therefore, a medieval origin for the sites is probable. In Borrowdale, the Blackmoss Pot bloomery was dated by radiocarbon analysis to cal AD 1450-1650 and the other comparable sites within the Lake District National Park, that have been scientifically dated, have produced a range of dates between cal AD 1170 and cal AD 1650 (Beta Analytic Inc 2002; 2003). The prohibition of bloomeries in 1564, due to their impact on woodlands, demonstrated that they continued in use in Cumbria into the later sixteenth century, and may have endured in some areas as late as the eighteenth century (Marshall and Davis-Shiel 1969, 32). Although this early form of smelting did continue into the post-medieval period, it has been suggested that, by the eighteenth century, this method would have preceded further processing of the bloom at a nearby forge (op cit, 33), although none are known from within the study area.
- 6.4.4 Bloomeries within the Loweswater area and the Cocker valley were recorded as early as 1305, with *forgiae ferri* and woodland bloomeries, named *forgiae silvestres*, being mentioned in documentary sources (Winchester 1987, 49; 104). It is possible that the *forgiae ferri* was a reference to the known bloomery sites at Scales (NTSMR 20380), which was clearly part of an extensive complex, or those suggested in the locale of Watergate Farm (NTSMR 27596) and Highpark (NTSMR 29672). The *forgiae silvestres* may have related to some of the numerous sites that occupied the land to the east of Crummock Water, many of

- which cluster around the tellingly named Cinderdale Common, and Beck, and Scinderdale Fields, which was shown on the Brackenthwaite tithe map of 1844.
- One site that appears to have represented the remains of a bloomery was 6.4.5 identified during a watching brief at the eastern side of Crummock Water (OA North 2002, 24). This site consisted of a pit containing metal residues of an iron slag-like nature and was partially excavated as a result of disturbance by a pipeline; the site was not, however, able to be closely dated. Geophysical survey was undertaken at three locations on or near to Cinderdale common in 1999 (Engineering Archaeological Services Ltd 1999). These surveys identified several dipole signals, representative of the presence of a magnetic force associated with both positive and negative poles. The nature of these dipoles suggested that at least four furnaces may have been present in this area, in addition to a linear feature suggestive of intense heating that may represent an ironworking feature, such as an ore roasting trench (op cit, 1–2; NTSMR 26856; NTSMR 26857 and 26859). It is possible that several other bloomery sites might have been present in this area, but their location has been masked, in terms of geophysical recognition, by extensive spreads of slag or destroyed by ploughing (ibid). Three further, probable bloomery, sites were identified by geophysical survey in an enclosed field to the west of Cinderdale Common in 2001 (Engineering Archaeological Services Ltd 2001, 2).

6.5 PEAT CUTTING

- Common rights for turbary, or peat cutting, as a source of fuel are documented in 6.5.1 Cumbria from the medieval period (Winchester 1987, 83-5), and areas of peat growth are evident within the survey area. Although it is clear that the exploitation of peat continued throughout the post-medieval period (Bott 1992; West 1793), there is little observable evidence for peat cutting within Buttermere. The accumulation of peat is abundant, for example, in the Whiteoak and Black Crag areas, to the south of Loweswater, and at Buttermere Moss, to the east of Buttermere Lake, but the sunken strips often indicative of the harvesting of peat have not been identified within Buttermere, though this could reflect that the surfaces of peatlands often recover quite clearly and only the more recent peat cutting scars are evident on the surface (OA North forthcoming). Often the only indicators of peat extraction are the wellconstructed trackways that lead out from peatland sources, such as those evident at Great Langdale (ibid). In Buttermere the exploitation of this resource can be inferred by the presence of trackways forming distinctive zig-zag patterns that run up the steep fellsides. These tracks were created for wooden sledges, which were used to transport the peat and were pulled by horses; accounts of this practice were recorded in Cumbria in 1793 (West 1793) and in Borrowdale in 1821 (Bott 1992).
- 6.5.2 A probable sledge route (NTSMR 29148) has been utilised as a footpath on the fellside to the east of Buttermere village, which provides access to High Snockrigg and the plateau of Buttermere Moss. A second peat sledge route is evident on the fellside to the north of Black Crag, and to the south-east of High Nook Farm; it is currently used as a footpath and provides access to the high plateau lying to the north of Gavel Fell. This trackway also appears to have formed part of a packhorse route (Davis-Shiel 1991), which would have provided

an upland fell route between Loweswater and Kirkland. The form of these zigzag tracks, and the fact that they provided access to upland plateaux where peat has accumulated, suggests that they are likely to have been utilised for the transport of harvested peat. The probability of the track at High Snockrigg being associated with peat cutting is supported by the nearby field name of 'Peathouse Field, which was recorded on the Buttermere tithe map of 1844, within the enclosure to the east of Bowderbeck.

6.6 MILLS

- 6.6.1 Excluding the processing areas associated with the Whiteoak and Loweswater lead mines, which utilised water wheels, all of the mills within Buttermere were associated with the processing of agricultural products. The post-medieval processing of wool into cloth is suggested by six possible sites of fulling mills within Buttermere (NTSMR 29126, 29127, 29128, 29129, 29101, and 29687), although the function of all of these sites as fulling mills has not yet been confirmed and any remains associated with the sites have not been investigated by site visits. The presence of a mill has also been suggested (Davis-Shiel 1991) at Gatesgarth (NTSMR 29121), although the precise nature of this site is not clear. Fulling mills had been established in Cumbria by the thirteenth century and represented the mechanisation of the process of matting or felting wool, which had previously been undertaken by manually 'walking' the wool in a solution of fullers earth (Marshall and Davis-Shiel 1969, 19), which is finegrained, absorbent, earthy material. In the absence of documentary evidence or archaeological excavation, it is difficult to closely date such sites, and in some cases confirm their function.
- The growth of cereal crops in Buttermere in the post-medieval period provided a 6.6.2 demand, and opportunity, for cereal mills. The site of a mill (NTSMR 24349), known as Milldale (Davis-Shiel 1991) that survived at Mill Beck, close to Buttermere village, until 1735 is attested by documentary sources and surviving structural evidence, as is the site of Brackenthwaite Corn Mill (NTSMR 29101 and 29726). It has been suggested (Size 1936) that the mill at Mill Beck was a clickmill, or horizontal mill, which would have utilised water power to turn a vertical shaft with horizontal paddles. The site is represented by the negligible remains of worn circular grooves on stones within the beck (NTSMR 24349), although these do not offer definite evidence to reconstruct the exact nature of the mill. It been suggested (Davis-Shiel 1991) that the site operated as a corn mill. It is also possible that the mill suggested by Davis-Shiel (ibid) to have operated at Gatesgarth (NTSMR 29121), might have been associated with cereals. There are place-names within Buttermere that suggest the prevalence of local milling activity, such as Lanthwaite cottage, which was shown as 'Miller's Tenement' on the Ordnance Survey third edition map of 1898. Miller place and Mill Beck, to the west of Dodd, are both likely to have related to Brackenthwaite Corn Mill, which lay just to the south, and Mill Beck, to the east of Buttermere village, was associated with the local click mill (NTSMR 24349). A pair of buried mill stones was discovered within the grounds of Wood House, one of which was recovered and now serves a decorative function at the western side of the house. It is possible that these stones were originally associated with the click mill (NTSMR 24349) at Mill Beck and were brought to Crag House as

decorative curios following the dismantling of the site in 1735. As there is not a water source of sufficient size to have powered the mill stones in the vicinity of Wood House, it is highly unlikely that they originated from a mill within the grounds of the estate. It is possible, however, that a horse-gin could have been used to power the mill, but no accompanying structures relating to such an industry are evident in the environs of Wood House. A corn mill in Loweswater has been suggested by local occupants to have been located near Mill Hill, to the south-west of Kirkgate Farm (J Lund pers comm).

6.7 Management Recommendations

- 6.7.1 Numerous industrial sites are known from Buttermere and, as most of these sites have not been subject to any intensive archaeological study, our knowledge relating to the dates and length of use of many of them is slight. These sites have played a major role in shaping the current landscape of the valley, from the effect of denuding the local woodlands, and then followed by woodland management that may have sustained such wooded areas, to the establishment and consolidation of trackways to provide access to the sites. The industries provided supplementary incomes to the local area and generated wealth for local landowners. This may potentially have influenced their land management strategies, their ability to retain the agricultural estates, and to construct some of the characteristic stone houses of the area. A thorough understanding of the development of Buttermere must, therefore, be informed by an understanding of the progression of the non-agricultural industries.
- 6.7.2 *Quarries:* roadside quarries or gravel pits are unlikely to provide additional information beyond their locations. Slate and stone extraction quarries and pits should be subject to topographic survey prior to any intrusive disturbance.
- 6.7.3 *Mines:* any proposed disturbance of mines should be preceded by topographic survey and archaeological excavation. It is possible that those mines that were in use during the post-medieval period may have previously been used during the early medieval and medieval periods, or during the later prehistoric periods. Evidence for earlier workings can be destroyed by subsequent mining, but there exists the potential for the discovery of datable artefacts from sites that have yet to be identified as early extractive sites.
- 6.7.4 *Iron Processing Sites:* iron processing may have occurred during the thirteenth and fourteenth centuries at the medieval settlement at Scales (NTSMR 20380), where slag has been recovered, and numerous bloomery sites are known throughout Buttermere. None of these sites has been closely dated and their use could span the medieval and post-medieval periods. Any proposed disturbance of these sites should be preceded by archaeological excavation that enables scientific dating. Where suitable, geophysical survey should be undertaken in areas where possible bloomery sites have been identified by the presence of slag, in order to establish the extents of the sites and the location of the core of activity within areas of metalworking debris that can become widely scattered. The sites should be monitored for erosive threats, particularly as a result of water erosion from adjacent streams and lakes.
- 6.7.5 **Peat Cutting:** only the sledging tracks associated with peat cutting have been identified within the survey area, reflecting the localised recovery of peat

- surfaces. Environmental coring at Buttermere Moss and Whiteoak Moss might identify truncated peat horizons indicative of previous peat harvesting. Such coring should form part of a wider environmental investigation designed to analyse the local palynological record.
- 6.7.6 *Mills:* the presence of several mills in Buttermere is attested by documentary evidence. Brackenthwaite Corn Mill (NTSMR 29101 and 29726) and the Buttermere click mill (NTSMR 24349) are, however, the only sites where documentary and archaeological evidence has established their nature and location with any degree of certainty. All of the sites should be treated as potential sources of valuable archaeological data and proposed intrusive works at the sites should be preceded by topographic survey and archaeological evaluation, as appropriate

7. COMMUNICATION SITES

7.1 Introduction

7.1.1 Communication routes within Buttermere, in common with most of the Lakeland valleys, were restricted to overland roads and tracks, with no railways operating in this area. Pack-horse routes allowed access over the fells into neighbouring valleys and other trackways were established for specific functions, such as providing access to sites of woodland industry and between dispersed elements of mining works. Walled lanes facilitated access to the grazing fells through enclosed land and peat tracks allowed access to upland peat resources. There is little evidence for water-borne transport in the area, although parts of the River Cocker may have been navigable at the northern end of the survey area.

7.2 PREHISTORIC ROUTES

- 7.2.1 The presence of sites of prehistoric origin in Buttermere, such as a burnt mound (NTSMR 29489), panels of rock art (NTSMR 29136, 29669 and 29137), and funerary cairns (NTSMR 20389, 20393, 29097, 29098 29633, and 29634), in addition to settlement sites that could date to the Bronze or Iron Ages (Lanthwaite Green, NTSMR 20389; Rannerdale, NTSMR 24355; High Nook Farm, NTSMR 27581; Lambling Knott, NTSMR 20381; and a possible promontory fort to the east of High Park, NTSMR 20464), demonstrates that people moved through this landscape from at least as early as the Bronze Age.
- 7.2.2 In the absence of constructed trackways that can be closely dated, such as the wooden trackway known as Kate's Pad in Lancashire (Hodgson and Brennand 2006, 49), it is difficult to demonstrate confidently the routes of prehistoric movement through the valley and many of the historic trails that have clearly been defined by the local topography may have early origins. Within the landscape it is not uncommon to find linear alignments of funerary monuments, such as that extending across Askham Fell (Quartermaine and Leech forthcoming), but these may relate to either routeways or territorial boundaries or even both. It has been suggested that some examples of rock art might have functioned as waymarkers during the Neolithic and Bronze Age (op cit, 45). The panels close to Buttermere village (NTSMR 29136 and 29669) lie near the 'beginning' of the upland passage provided by the Mill Beck valley, which has been used to access pastoral land from at least the early post-medieval period, as demonstrated by the enclosure of Blakerigg in 1568 (Winchester 1987, 52). It is possible to infer the existence of established local routeways within the valley, associated with movement between different zones of land use, during the Neolithic or Bronze Age, but until the locations of settlements, or other land-use foci, contemporary with the rock art, can be established, these suggestions must remain tentative.
- 7.2.3 In addition to localised routeways within Buttermere, there must have been longer prehistoric tracks or trails allowing movement in and out of the Buttermere and Loweswater valleys. Once again, although logic dictates the presence of such routes their identification relies on circumstantial evidence.

Three enclosed settlements are known in the Buttermere valley, at Lanthwaite Green (NTSMR 20389), Rannerdale (NTSMR 24355), and Lambling Knott (NTSMR 20381). All of these sites lie close to the main road that runs north / south through the bottom of the valley, and which follows the River Cocker northwards towards Cockermouth. This route was clearly in use by the medieval period, as the chapels at Buttermere village and Rannerdale (NTSMR 29105; Millward and Robinson, 1974, 171), and the vaccary at Gatesgarth (Winchester 2003, 109), all lie along the same line, and it has been described as a medieval corpse road (Richardson and Evans 1996, 5-6). That the route northwards provided the easiest exit from the valley is supported by the suggestion that, prior to 1175, even the inhabitants of neighbouring Borrowdale would have used this route to reach Brigham for funerals, rather than travelling through Borrowdale towards Keswick (Hindle 1998, 60). It is clear, therefore, that the eastern side of the Buttermere valley bottom was used as a main route in and out of the valley long before the establishment of the current metalled road and it is likely that this use extends back at least as far as the establishment of the enclosed settlements during the later prehistoric or Romano-British periods.

7.2.4 The routeway in and out of Loweswater follows a natural topographic line, and may have been use for a considerable period. This route might have followed that of a suggested medieval corpse road, which appears to have led north-westwards from Loweswater, along the western side of the lake (*Section 2.3.13*; Richardson and Evans 1996, 5–6). Later routes into Ennerdale, via Floutern Tarn, or towards Cockermouth, via Brackenthwaite, may also have been in use during these earlier periods. The promontory at Loweswater Pele is also associated with a partially causewayed access track (NTSMR 29407), which was formed by the modification and extension of a natural spur across a waterlogged area and might be associated with some of the earliest activity at the site.

7.3 HISTORIC ROUTES

- 7.3.1 **Roman roads:** the earliest evidence for a constructed road in the vicinity of Buttermere is a section of the Roman road that ran between Old Penrith and Lorton. This road utilised the Whinlatter pass and ran through High Lorton, at the northern end of the valley (Hindle 1998, 27–30). This road appears to have forked at High Lorton, with one branch running westwards towards Moresby and a second following the route of the current B5292 towards Cockermouth (*ibid*). It is possible that the stretch of this road between High Lorton and Cockermouth represented the consolidation of part of an earlier track.
- 7.3.2 Early Medieval and Medieval Routes: early historic routes in Buttermere may be inferred from the presence of chapels and settlements, and from place-name evidence. A chapel in Loweswater was in the possession of the priory of St Bees from some time between 1154 and 1181, when it was confirmed by Archbishop Roger of York (Wilson 1915, 56). This chapel possessed an independent endowment before being annexed to the priory of St Bees (Wilson 1915, 23), which demonstrates that it pre-dated the period of ownership by the priory. The date of the foundation of the earliest chapel is not clear, although the presence of old Norse place-names with ecclesiastic associations, such as Kirkgate and Kirkhead, might suggest an early medieval foundation with an associated road. The earliest historical records for such a road relate to a medieval route between

the priory of St Bees and Loweswater chapel that continued north-eastwards towards Brackenthwaite. The presence of the stretch between Loweswater and Brackenthwaite in the medieval period is confirmed by the Register of St Bees, which records that the road had become blocked by 1286, when Thomas de Lucy established a second deer park in Loweswater (Winchester 1978, 341; Wilson 1915). The route between the chapel and St Bees is likely to have run past Kirkgate Farm, which originates from the old Norse *kirkja gata* meaning church road (Armstrong *et al* 1950, 474, 481). This road would have run past a series of sub-rectangular earthworks, which were depicted as a castle on Hodskinson and Donalds map of 1774 (Plate 27), and would then have followed Mosedale Beck before turning west into Ennerdale, following the route preserved by a later mountain pass (Hindle 1998, 127). Although the place-name evidence suggests that this route might have been in use during the early medieval period, the earliest confirmed use of this road is from the medieval documentary records.

- 7.3.3 The road between Waterend and Loweswater was depicted on Hodskinson and Donald's map of 1774 and could represent an early route. Although there are no known examples of early medieval sculpture within the survey area, this road passes a farm known as 'High Cross', and is potentially significant as crosses were often used to mark major territorial boundaries at the intersection with a road or routeway in the medieval period.
- 7.3.4 Medieval routes known as corpse roads existed throughout Cumbria during the medieval period and were used to transport the dead to the nearest burial ground, which could be at a considerable distance (*op cit*, 58). A corpse road is known to have run between Buttermere village and Brigham, via Lorton, and may also have been utilised by the occupants of Borrowdale, who would have accessed Buttermere village via the Honister Pass (*op cit*, 60). This road is likely to have followed a similar route to the current main road (B5289) that runs along the valley bottom. This route would also have allowed a route in and out of the valley for the inhabitants of the medieval farms in the environs of Rannerdale and Buttermere village, and for the vaccary at Gatesgarth, which also preserves the Old Norse place-name element '*gata*', meaning road.
- 7.3.3 A second corpse road has been suggested to have run between Loweswater and St Bees (Richardson and Evans 1996, 5–6) and during the present survey several local people said that it ran along the western side of Loweswater lake, towards Waterend and the road to Lamplugh. It has also been suggested that the road ran via a crossing on the site of the current Maggie's Bridge (ibid). Precisely which of the observable trackways to the west of Loweswater might correspond with such a route is not, however, clear. One of those suggested locally is the track to the south-east of Holme Wood, which runs along the outer upslope edge of the woods. This did not, however, appear on the first edition Ordnance Survey map of 1861–3 and, as it was present on the second edition map of 1900, is likely to be of late nineteenth-century date. It is possible that a route utilising Maggie's Bridge ran south-westwards and forded Park Beck before following the High Nook farm track to the south-west, joining a disused track (NTSMR 27597) through the farmland to the west of High Nook Farm and then joining with one of the lower trackways (NTSMR 29638) through Holme Wood. If a road ran between Loweswater chapel and the priory at St Bees, via Mosedale and Ennerdale, during the medieval period then it is difficult to understand the need

- for a corpse road that would have taken a less direct route by heading north-west into the Loweswater valley.
- 7.3.5 It is possible that some of the pack horse routes and roads that were present in the area during the post-medieval period, and which allowed access through upland areas into neighbouring valleys, may have originated in earlier periods, although this can not be demonstrated with any certainty. Such routes ran between Gatesgarth and Wasdale Head, Buttermere village and Newlands, and Brathwaite and Buttermere (Hindle 1998, 127). A post-medieval packhorse route between Ennerdale and Buttermere, via Floutern Tarn, is likely to have followed part of a medieval route between St Bees priory and Loweswater.
- 7.3.6 In addition to the main routes that allowed passage through, and between, valleys in the medieval period, localised tracks will, by necessity, have existed, which will have enabled access to summer pastures on the fells from the farmsteads in the valley bottoms (*op cit*, 41–2). Some of these tracks may have been established during the early medieval period, as transhumance agriculture at this time has been suggested by place-names, such as Scales, which is derived from the Old Norse *skali* meaning a shieling, and Rannerdale, which is derived from the Old Norse *hrafn-erg-hals* meaning 'raven shieling pass' (Armstrong *et al*, 1952, 356; 490). Some localised routes associated with industrial areas, such as the tracks close to charcoal production sites at Long How wood (NTSMR 29491), Lanthwaite Wood (NTSMR 29330) and Holme Wood (29638, 29640, NTSMR 29642, 29643, 29644, 29646, 29647, and 29648), and the track close to bloomery and charcoal production sites at Fletcher Fields (NTSMR 29556), may date to the medieval period, although in the absence of close dates associated with the industrial sites this remains speculative.
- 7.3.7 Although some of the early historic routes in the area can be confirmed by historical references, and some can be inferred by the necessity of movement between inhabited places, or between areas of differing land-use, the precise nature and line of these trackways is unknown. Unlike the Roman roads, these routes are not likely to have been engineered roads as part of a planned network, but rights of way that would have developed into visible tracks as a result of the erosion caused by regular use (Hindle 1998, 41–2). These would then have been formalised in subsequent periods, obscuring or removing the evidence for its former existence.
- 7.3.8 *Post-Medieval Routes:* in addition to the consolidation of some of the main routes through Buttermere, by the construction of metalled roads, and the continued use of agricultural tracks in the area, numerous tracks and roads were established in association with industrial activity in the area. Some of the intervalley packhorse routes that were in use during the post-medieval period may, however, have been established during earlier periods and have received renewed use as industrial activity intensified. Such routes ran between Gatesgarth and Wasdale Head, Buttermere village and Newlands, Brathwaite and Buttermere, and Ennerdale and Buttermere village (Hindle 1998, 127) and may have been used for the transport of agricultural produce, iron, copper, lead, and slate. Two different routes have been identified as packhorse tracks running between Buttermere village and Braithwaite. One of these followed the northern side of Mill Beck from Buttermere village and passed below Crag Hill before running northwards to meet the track to the north of Coledale Beck that ran between

- Force Crag and Braithwaite (Davis-Shiel 1991). The second route followed the northern side of Liza Beck, before joining the Coledale Beck track (Hindle 1998, 127).
- 7.3.9 The packhorse routes between Ennerdale and Buttermere village, and Buttermere village and Newlands (NTSMR 29258), formed part of a longer route between Whitehaven and Penrith, which was used during the eighteenth century for transporting tobacco for use in snuff manufacture (*op cit*, 144–5). The packhorse routes are not, however, likely to have been used exclusively by any single industry and the Ennerdale to Newlands snuff route, for example, ran close to several industrial sites including a manganese mine, a zinc and barytes mine, a woollen mill, the Milldale corn mill (NTSMR 24349), a site of uncertain function (NTSMR 29257) and iron mines (Davis-Shiel 1991), all of which are likely to have utilised the track. All of these differing uses are not, however, likely to have been contemporary.
- 7.3.10 Limited stretches of localised trackways were established to serve particular industrial areas, for example constructed tracks have been identified leading to Dodds Mealton slate quarry (NTSMR 29427), and in the vicinity of charcoal production sites at Long How wood (NTSMR 29491), Lanthwaite Wood (NTSMR 29330) and Holme Wood (NTSMR 29638, 29640, 29642, 29643, 29644, and 29646-8), at Whiteoak Mine (NTSMR 29222, 29187, and 29194), and close to bloomery and charcoal production sites at Fletcher Fields (NTSMR 29556). Trackways specifically associated with the transport of peat appear to have been identified between Buttermere village and High Snockrigg (NTSMR 29148) and to the north of Black Crag, which lies to the south-east of High Nook Farm.
- 7.3.11 *Turnpikes:* during the mid-eighteenth century groups of private individuals with vested interests in improving communication systems, in order to facilitate travel and trade, established numerous turnpike trusts in Cumbria (Hindle 1998, 150). Turnpike roads were established in northern Cumbria between 1739 and 1767, that included routes between Cockermouth and Workington, Cockermouth and Keswick, Cockermouth and Penrith, Cockermouth and Windermere, and Cockermouth and Carlisle via Dalston (op cit, 151-2). These roads did not penetrate the interior of the western Lake District, but did allow greater ease of travel to Cockermouth and Windermere, from which the Buttermere and Loweswater valleys could have been accessed. Many of the current secondary roads and farm tracks in the area are likely to have been in use from at least the seventeenth century, as demonstrated by the distribution of some houses of this date. The track that runs between Low House and Miller Place, in Brackenthwaite, for example, is fronted by High Hollins (NTSMR 29792) and Low Hollins (NTSMR 29793), which are houses of sixteenth and seventeenth century date, respectively; however, part of this track has become disused and survives only as an earthwork (NTSMR 29699).
- 7.3.12 Although the local valley routes were not maintained to the same standard as the turnpike roads, some of the valley-bottom routes and upland tracks around Buttermere appear to have been consolidated as metalled roads by the late eighteenth century. These included the main road running between Cockermouth and Buttermere village, the upland road between Keswick and Buttermere village, via Newlands Hause, and the Honister Pass, which were depicted on the

map by Crosthwaite (1800) and on the map originally produced in 1778 by West (1821). The Buttermere village to Cockermouth road and the Honister Pass were shown with dashed lines on a map by Smith of 1751 (Plate 28), which suggests that they were trackways at this time. The road between Loweswater and Waterend may also have been metalled by the late eighteenth century, as it was depicted on a map of 1774 by Hodskinson and Donald (Plate 27). The roads between Buttermere village and Scales and those between Brackenthwaite and Loweswater, and Loweswater and Mosedale were also depicted on the map by Crosthwaite (1800). The old road across the Honister Pass was not, however, passable by vehicles at this time and in the late nineteenth century was replaced by a new road, which followed the line of the original road at the western end, but diverged from it at the eastern end (Hindle 1998, 139-40). By the 1860s, a regular coach service was operating between Keswick and Buttermere village, via the Honister Pass (OA North 2007), although even as late as 1919 the road was described as being unsuitable for motorists (Hindle 1998, 189). The route of the main road through the valley bottom, running between Gatesgarth and Brackenthwaite, appears to have changed little from that depicted on the maps of the late eighteenth and early twentieth century. The section of road adjacent to Wood House, however, was shown on the second edition Ordnance Survey map of 1900 to have run over a low rise to the north-east of the current route. This stretch of road is now preserved as a rough trackway, with the current road following a more level route that skirts around the base of the rise.

- 7.3.13 The condition of roads in the wider Cumbrian network declined between 1870 and 1890 as the turnpike trusts declined and in 1876 the English Lake District Association was founded in 1876, partly in response to the need for improved roads in the area (*op cit*, 145). In addition to an increase in motor transport in the region from 1894, the use of the bicycle from the mid 1880s also encouraged an increase in the use of the roads in the Lake District, although their poor condition received harsh criticism from travel writers into the early twentieth century (*op cit*, 187–8). The application of tarmac began in the early twentieth century and most of the roads in Cumbria had been tarmaced by the 1940s (*ibid*).
- 7.3.13 Railways: during the mid-nineteenth century, a rail network developed that circumnavigated the Lake District, with additional branches running inwards to form an incomplete radial pattern (Millward and Robinson 1974, 243). Such branches were established between Workington and Keswick, via Braithwaite, in 1847 and between Penrith and Keswick in 1863 (ibid). These routes would have allowed rail access to the Whinlatter Pass, which runs to Lorton, and to the Newlands Pass, which runs to Buttermere village. An additional branch was also proposed that would have run from Braithwaite to Buttermere village, through the Newlands valley (*ibid*). The key motivation for the construction of many of these lines was the transport of mineral exports, although use of the railways by visitors to the Lake District often followed swiftly. The additional line to Buttermere village was, however, opposed by Canon Rawnsley, Vicar of Crosthwaite, as a scheme that would benefit the Honister slate operations to the detriment of people who sought rest and quietude in the Lake District (op cit, 246–7). The use of such railways by tourists was also opposed in the nineteenth century, with figures such as John Ruskin suggesting that they would lead to the deterioration of the moral character of local people and the presence of drunken

visitors in the area (*ibid*). The link between Braithwaite and Buttermere village was never constructed.

7.4 Management Recommendations

- 7.4.1 The communication routes within Buttermere are likely to have gradually developed from a core of trackways that had origins as early as the later prehistoric periods. Many of these routes have been largely dictated by the local topography and are, therefore, likely to have reflected continued use and repeated re-use. The location of the access routes has, in turn, influenced, and been influenced by, the setting of settlements within Buttermere.
- 7.4.2 *Main Routes:* the main route between Buttermere village and Cockermouth is likely to date to the later prehistoric period and to have been in almost continual use ever since. Any intrusive maintenance of this road, or of the roads of putative medieval origin, should be accompanied by an archaeological watching brief or evaluation, in an attempt to provide evidence of the earlier origins of the road.
- 7.4.3 **Secondary Routes:** any intrusive works that might disturb disused historic farm tracks or industrial access tracks, or destroy historic tracks that have remained in modern use, should be preceded by topographical survey.

8. SETTLEMENT CHRONOLOGY

8.1 Introduction

8.1.1 There is a long history of settlement within Buttermere, with occupation in the area being likely from as early as the Bronze Age and with intermittent or continuous occupation occurring from the Iron Age or Romano-British periods until the present day. To an extent, the topography of the Buttermere and Loweswater valleys has dictated where settlements could be established and, therefore, these areas have been used and reused over extended periods. The current pattern of settlement reflects the predictable location of preferential land for settlement in the area, with the flat lands in the valley bottoms being dominated by dispersed farms and enclosed field systems (Plate 29). The only real exception to this dispersed settlement pattern is the nucleated settlement of Buttermere village. These optimal agricultural areas are also likely to have been targeted for earlier settlement but this has potentially been over shadowed or overlain by the later occupation in the survey area.

8.2 PREHISTORIC AND ROMANO-BRITISH SETTLEMENT

- 8.2.1 The earliest form of settlement in Buttermere is attested by the presence of monuments of probable Bronze Age date, and comprise, a group of five possible funerary cairns (NTSMR 29379), a round cairn (NTSMR 20393), two possible round barrows (NTSMR 8281 and 8282), a burnt mound (NTSMR 29489), and two panels of rock art (NTSMR 29669 and 29137). A third panel of rock art is situated just outside the survey area, at Low Park, a possible funerary cairn (NTSMR 29103) is present at Whiteoak Moss, and two round cairns (NTSMR 29097 and 29098) are situated to the south-west of Carling Knott. None of these sites provides direct evidence of habitation within the area but may be indicators of local activity.
- 8.2.2 Four of the sites of potential Bronze-Age date in Buttermere comprise hilltop cairns (NTSMR 20393, 29103, 29097 and 29098), which have clearly been sited to exploit prominent positions in the landscape and would not have been within areas of local occupation. The rock art sites (NTSMR 29669, 29137 and 29103) and the burnt mound (NTSMR 29489) appear to have occupied transitional zones between lowland and upland areas and may, therefore, represent the margins of settled land in the area. The possible funerary cairns (NTSMR 29379) that are situated close to the valley bottom, on Lanthwaite Common, and the two possible round barrows (NTSMR 29633 and 29634), to the west of Loweswater, may have been placed in order to take advantage of extensive vistas and increased visibility, although their lowland distribution might indicate that these sites were not as far removed from areas of contemporary occupation as the hilltop cairns. The cairns at Lanthwaite Common lie close to extensive clearance cairn fields in the vicinity of the enclosed settlement at Lanthwaite Green (NTSMR 20389), and it is possible that this clearance activity might date as early as the Bronze Age (Lund 1999, 19), although the enclosed settlement is likely to date to the Late Iron Age or Romano-British periods (Section 2.2.8); however, in the absence of excavation this can not be confirmed.

- 8.2.3 Four further settlement sites of potential Iron Age date might also have been used during the Bronze Age: Rannerdale (NTSMR 24355, Plate 9), High Nook Farm (NTSMR 27581, Plate 7), Lambling Knott (NTSMR 20381, Plate 9), and a possible promontory fort to the east of High Park (NTSMR 20464, Plates 9 and 10). In the absence of excavation, the dates of occupation at these sites remain speculative, but indications of agricultural activity (and by implication settlement activity) in Buttermere during the Bronze Age, is provided by the results of sediment analyses from Crummock Water. These demonstrate that the rate of sedimentation in the lake increased from 2000 BC onwards, suggestive of local soil destabilisation as a result of forest clearance (Shen *et al* 2008, 138–9). In addition, increases in mineral accumulation in the lake between 2000 BC and 1000 BC suggest a period of deeper erosion (*ibid*), which would indicate a period of more intensive agricultural activity in the area at this time.
- 8.2.4 The four enclosed settlement sites within Buttermere (NTSMR 20309, 24355, 27581 and 20381) and the promontory fort (NTSMR 20464) at the north-western end of Crummock Water are all extremely difficult to date in the absence of archaeological excavation, although it is probable that all of these sites may have been occupied to some extent during the Iron Age (Sections 2.2.12–2.2.22). Sites of similar type in Cumbria have previously been assigned to the Romano-British period on the basis of poorly dated excavated parallels in and out of the region, where the only artefactual material recovered has been from the Roman period (Higham 1986, 117; Hoaen and Loney 2004, 42; Collingwood 1908). Subsequent environmental analyses have now demonstrated that episodes of forest clearance occurred throughout Cumbria during the Late Iron Age (Wells 2003, 67–72), demonstrating human activity in the area at this time. This pattern is supported in Buttermere by recent analyses of sediments from Crummock Water, which suggest that woodland continued to be cleared from 2000 BC until the present day (Shen et al 2008, 138-9). Mineral accumulations decreased between 800 BC and 400 BC, which might suggest a decrease in agricultural activity at this time. Increases in mineral accumulations were evident, however, at 400 BC and 250 BC, suggesting that there may have been increased activity during the Late Iron Age (ibid).
- 8.2.5 It has also been demonstrated that Iron Age activity at some sites has been followed by later phases of occupation that have been responsible for the deposition of Romano-British pottery (Philpott 2006, 74; Hoaen and Loney 2004, 49–50; Johnson 2004). It is possible, therefore, that Cumbrian sites previously assigned to the Romano-British period may have featured earlier phases of use that have been masked by the abundance of later material culture.
- 8.2.6 In the absence of excavation it is, therefore, impossible to assess the extent of occupation in Buttermere during the Bronze Age, Iron Age, and Romano-British periods, based on our current understanding of the five putative settlement sites in the area. It is also possible that further comparable settlement sites existed in the area that have not yet been identified. Further unenclosed settlements, for example, might survive only as sub-surface remains. Sites may also have been destroyed, or obscured, by later development in the area. The site at Rannerdale (NTSMR 24355), for example, had been recorded as a deserted medieval settlement, prior to the current survey. Although the medieval phase of settlement is not disputed, this appears to have constituted the re-use of an earlier enclosed settlement. It is conspicuous that the enclosed settlements at Lanthwaite

Green (NTSMR 20389), Rannerdale (NTSMR 24355), and Lambling Knott (NTSMR 20381) all lie within areas that appear to represented more marginal settlement in later periods, in comparison to the higher quality agricultural lands of Loweswater, Brackenthwaite, and the Buttermere delta flats. This distribution could be the result of the survival of settlement remains in areas that were subject to lower levels of continuous field improvement and where habitation foci have shifted slightly so that the nearest current farms do not overlie the early farmsteads. Although there has been intensive field improvement at the enclosed site at High Nook Farm (NTSMR 27581), which has left very slight visible remains of the enclosure, the medieval and post-medieval occupation at the site has shifted gradually further from the early farmstead so that the site has not been damaged by later construction.

8.2.7 In addition to the enclosed settlements, there is also an unenclosed group of clearance cairns (NTSMR 29757, NTSMR 29759, NTSMR 29760, NTSMR 29761, NTSMR 29764, NTSMR 29765, NTSMR 29775), a hut platform (NTSMR 29762), and a second field system (NTSMR 29785) that might represent prehistoric settlement in Buttermere. The group of sites is located in the vicinity of Scale Beck, close to a medieval settlement (NTSMR 20380) that has been suggested to date to the thirteenth or fourteenth centuries (Winchester 1986, 2). It seems likely that this area developed as a result of seasonal occupation at a shieling during the early medieval period and was then established as a settlement associated with iron processing in the medieval period. It is, however, possible that these ambiguous sites could date to an earlier phase of use during the prehistoric period.

8.3 HISTORIC SETTLEMENT

- 8.3.1 *Early Medieval Settlement:* the earliest evidence for historic settlement in Buttermere, with the exception of possible Romano-British occupation at the enclosed settlements, comes from place-name evidence. As discussed in *Section 2.2.27*, Scandinavian and Anglo-Saxon place-names can be the result of linguistic continuity in the medieval and post-medieval periods and should not be assumed to provide unequivocal evidence of the establishment of settlements during the early medieval period. For example, the Old English word *ful* means dirty and occurs in many place-names as 'foul'. However, the word foul retains the same meaning in the modern period and might, therefore, continue to feature in newly established place-names.
- 8.3.2 Although British place-names are not evident within Buttermere, except in relation to the River Cocker (*Section 7.1.6*), we can not assume that there was not any survival of British populations in the area. Indeed, the large baronial territories, such as Copeland, and their tenurial structure, which were inherited by the Anglo-Saxon, Norse, and Anglo-Norman overlords have been suggested to represent earlier British institutions (Winchester 1986, 90). The palaeoenvironmental record from lake sediments from Crummock Water have identified a gradual increase in local soil erosion from the Roman period and throughout the early medieval period, which is likely to reflect clearance and cultivation in the area (Shen *et al* 2008, 138–9), with a significant increase in deep and intensive erosion from AD 900 (*ibid*). This would appear to suggest a degree of continuity from the Roman period, followed by a dramatic increase in

- population as a result of Norse settlement (*ibid*). This post-Roman continuity could be reflected at settlement sites yet to be identified, but perhaps more probably could reflect continuity of the enclosed settlements. The proximity of the enclosed settlements at Rannerdale (NTSMR 24355), Lanthwaite Green (NTSMR 20389 and 23020), and High Nook Farm (NTSMR 27581) to successive farmsteads of possible medieval date, in addition to post-medieval farms, gives an impression of prolonged continuity of settlement. This might, however, attest to the continued suitability of these areas for agriculture during periods of discontinuous occupation.
- 8.3.3 There are several place-names at the northern end of Buttermere that feature the Old Norse element thwaite, meaning a clearing (Armstrong et al, 1950, 494). These include Brackenthwaite, Thackthwaite, Littlethwaite, Gillerthwaite, and Lanthwaite, and it is possible that some of these names may provide evidence of settlement in the area during the early medieval period. Lanthwaite includes the Old English element *lang*, meaning long, and Thackthwaite includes *thac*, which is Old Norse for thatch (op cit, 412; 482). These associated elements both support the possibility of early medieval settlement in the area, associated with Anglo-Saxon and Scandinavian settlers, during this period. Brackenthwaite, however, includes the Middle English braken, meaning bracken (op cit, 462), suggesting that the name was applied as a result of activity during the subsequent medieval period. Brackenthwaite appears to be the only one of the 'thwaite' place-names to feature an element with a demonstrably medieval, or later, derivation. Several other place-names in the northern part of the area also suggest early medieval settlement. The occurrence of names around Loweswater village featuring the element 'kirk' derive from the Old Norse kirkja (op cit, 481) and may attest to a local chapel pre-dating the medieval structure in this area. There are also instances of the element 'how', which may derive from the Old English $h\bar{o}h$ or the Old Norse haugr, meaning projecting ridge or hill respectively (op cit, 477-8).
- These places all cluster on the level and high quality agricultural land at the 8.3.4 northern end of Buttermere (Plate 28), which formed part of the lowland subdivision of the medieval barony of Egremont, within Copeland. During the medieval period, this general area preserved elements of tenurial organisation, such as the presence of freehold settlements paying cornage and seawake, that have been suggested to have originated prior to the Norman Conquest (Winchester 1987, 18–21). The survival of these archaic systems suggests that there was a great deal of continuity of local population and tenurial structure between the early medieval and medieval periods in the area and supports the supposition that this cluster of 'thwaite' names might represent a genuine nucleus of early medieval settlement. Some of this settlement might represent incoming Norse settlers clearing previously marginal land at the edges of the ancient cornage- and seawake-paying freeholds and some may represent the direct continuity of settlements with origins in the Anglo-Saxon, or earlier, periods.
- 8.3.5 None of the settlements in Derwentfells paid the ancient dues of cornage or seawake and any medieval freeholds in Derwentfells were the result of subinfeudation from the twelfth and thirteenth centuries (*op cit*, 20). This process consisted of holdings within larger estates, such as holdings within the honour of Cockermouth, being sub-leased to tenants, or vassals. The differences in tenurial

structure between medieval estates, such as the Copeland and Cockermouth lowlands and the adjacent forest of Derwentfells, suggest that some of these later estate boundaries originated as coherent pre-Conquest land units that possessed contrasting levels and systems of manorial control. The baronial estate of the honour of Cockermouth has been suggested to have represented a pre-Conquest territory (op cit, 19) and the differences between the medieval tenurial obligations in the lowland and upland areas of the Cockermouth and Copeland baronies, might suggest that, in the centuries prior to the Norman Conquest, the lowlands were the most extensively settled areas. By contrast, the areas designated as medieval forest may have been subject to less settlement during the early medieval period, which might explain the medieval inheritance of these areas as large private estates, with little evidence of ancient freeholds. Only two 'thwaite' place-names in the locale lie outside of the lowland area of medieval Copeland. One of these is Brackenthwaite, which lay to the east of the River Cocker within the private manorial forest of Derwentfells, in the honour of Cockermouth, and has an etymology that suggests a medieval origin and is known to have been subinfeudated in the medieval period (op cit, 20). The second is Lanthwaite, which lies close to the western edge of Derwentfells, near to the Copeland lowlands, and might represent one of the few early medieval settlements in this area.

- The upland areas and valley bottoms feature many place-names of apparent early 8.3.6 medieval derivation that support the suggestion that the contrasting land uses between the medieval upland forests and the lowlands originated prior to the Norman Conquest. There are occurrences of the place-name element 'scales' in Buttermere, such as Scales and Warnscale, that derive from the Old Norse skali, meaning a temporary shieling associated with the use of summer pastures (Armstrong et al. 1950, 490). The name Ravenerhals was used in 1170 to refer to Buttermere Hause and derives from the Old Norse phrase hrafn erg hals, meaning raven shieling pass, which also attests to usage of the pass prior to the medieval period. This early name also appears to have been incorporated into the name of the adjacent Rannerdale. The central element of erg is of Irish derivation, which supports the recognition of Hiberno-Norse populations in the region (RM Newman 2006, 91–3). These place-names suggest that the uplands were being used for pasture and were subject to seasonal occupation during the early medieval period, given that there is little place-name evidence for more permanent settlement at this time. Gatesgarth and Grassgarth are both derived from the Old Norse garthr, meaning an enclosure (Armstrong et al 1950, 356; 474). Gatesgarth suggests that there was an enclosure near to the road and Grassgarth is indicative of a grass enclosure (op cit, 151), such as a hay meadow, both of which suggest sustained activity in the area. These terms could, however, represent the survival of linguistic elements that were applied to features of the landscape during the medieval period.
- 8.3.7 *Medieval Settlement*: the northern and western parts of Buttermere fell within the lowland territory of the Barony of Egremont, within the Copeland estate, which comprised an area of mainly freehold settlements, and the eastern parts lay within the manorial forest of Derwentfells (Plate 12). During the medieval period, the extent of agricultural enclosure expanded within the area, and it has been suggested that by 1300 much of the enclosed land depicted on post-medieval maps and plans may have been established (Winchester 1978, 146,

210). This increased demand for agricultural land suggests a corresponding increase of settlement density during this period and it has been suggested that Loweswater village may have been established in 1230, in an area that was formerly part of the forest of Copeland. Loweswater is likely to have represented one of a series of subinfeudations that occurred in the area during the late thirteenth and early fourteenth centuries (Winchester 1986, 2), when additional farmsteads were established along the margins of the fells, beyond the lowland areas where more ancient freeholds were clustered (Winchester 1987, 20). In addition to the establishment of freehold settlements, demesne farms, which were controlled by the manorial lord, were also established, such as the vaccary at Gatesgarth. This cattle farm occupied the Buttermere dalehead and was established in the thirteenth century (Winchester 2003, 109). As an area of private enclosure, the establishment of the vaccary effectively prevented the expansion of settlement into a large part of the valley (Winchester 1987, 42; PRO(L), SC11/730, m.lv; PRO(L), SC6/824/7-14). Although occupation may have intensified during the medieval period, the pattern of settlement appears to have consisted mainly of dispersed farmsteads (Plate 29). It has been suggested, however, that there may have been a nucleus of medieval settlement on the delta flats between Crummock Water and Buttermere lake by 1200 (Winchester 1987, 140). The former medieval settlement at Scales (NTSMR 20380) also represents a small nucleated settlement, and appears to have been specifically associated with industrial iron processing. The presence of an area of stinted pasture in the nineteenth century adjacent to the settlement, as depicted on the Loweswater tithe map of 1839, might, however, suggest a pastoral function for the settlement at Scales. The occurrence of an extensive field system (NTSMR 29785) comprising numerous clearance cairns and banks, to the west of the settlement, might suggest that there was also agricultural activity being undertaken in association with this site during the medieval period.

8.3.8 The remains of several agricultural settlements of medieval date are visible within Buttermere. The remains of a deserted farmstead are present at Rannerdale (NTSMR 24355, Plate 15) and the medieval chapel of the Blessed Mary Magdalene (NTSMR 29105) is thought to have stood nearby. This settlement re-used the area occupied by an earlier enclosed settlement of probable Iron Age or Romano-British date and is represented by several platforms and enclosures. A second farmstead of possible medieval date (NTSMR 20518) lies adjacent to an enclosed settlement at High Nook Farm (NTSMR 27581). There may also have been a medieval precursor to the farm at Peel Place (NTSMR 23020). The remains of a building platform (NTSMR 29478) to the south of Wilkinsyke farm might represent settlement of the Buttermere delta flats during the medieval period. It is also possible that medieval phases are represented at the deserted farmsteads of Stockbridge (NTSMR 29457) and a site east of Low Hollins (NTSMR 29513, Plate 24). The remains of a structure (NTSMR 29514) to the east of Beck House could represent a building associated with medieval occupation near to Low Hollins or Peel Place, or might represent an additional farmstead. It is known that a medieval vaccary was present at Gatesgarth and that the medieval deer park at Loweswater had been divided into tenements by 1437 (Winchester 1987, 51), which might be represented by the farms of High Park and Low Park and the farmstead remains at Loweswater Pele (NTSMR 20464).

- In addition to the post-medieval farmstead remains, it has been suggested that a 8.3.9 medieval pele tower, known as Loweswater Pele (NTSMR 20464; SM 27660), may once have stood on the promontory to the east of High Park (Plate 10), although there is little known archaeological evidence to support this assertion (Section 2.2.24–6). It is possible that a sub-rectangular earthwork to the south of Loweswater, on the road towards Mosedale, may have represented the original site of Loweswater Pele, as this was depicted as a castle on a map by Hodskinson and Donald of 1774 (Plate 27). The possibility of a manor house on the land to the east of High Park is, however, suggested by the historical record of the 'manor of Balnes', which refers to the curved headland of Bowness that defines the promontory at Loweswater Pele (A Winchester pers comm). This manor was established as a result of the partition of the barony of Copeland in 1230, and was apportioned to Alan de Multon and his wife Alice de Lucy. Manors were often named in accordance with the location of the associated manor house, which suggests that the promontory may have represented the administrative centre of the estate, although the nature and location of any corresponding manor house is not known (ibid).
- 8.3.10 The Loweswater Pele area was documented as being within the grounds of a demesne deer park (Winchester 1976, 341), which was originally established in the early part of the thirteenth century and was later extended, or a second separate park established, by Thomas de Lucy in the later thirteenth century. This park would have been attached to the manorial centre of the manor of *Balnes* (A Winchester pers comm). There is no clear evidence for the site of a hunting lodge within the part of the park that falls within the current survey area, although the division of the park to create tenements, which had occurred by 1437 (Winchester 1987, 51), might have caused such a building to have become masked by later farm buildings. It is possible that the post-medieval farm buildings at Loweswater Pele, High Park, or Low Park might also have disguised evidence of the buildings associated with the medieval tenements. One of these holdings was described as being called 'a quarter of the lords park' in 1437 (*ibid*), although it is not clear whether this means that the park had been divided into four tenements by this time.
- 8.3.11 There are likely to have been specific phases during the medieval period when the population in Buttermere did not inexorably increase, and perhaps even periods of local population decline, such as during the late thirteenth and fourteenth centuries when war and disease contributed to social stress in the region (Winchester 1987, 45). The overall view of settlement in Buttermere throughout the medieval period, however, gives an impression of gradual expansion between the twelfth and sixteenth centuries. In addition to the subdivision of Loweswater deer park into tenements by 1437, the vaccary at Gatesgarth had also been sub-divided into three tenements by the sixteenth century. The deserted settlement at Rannerdale (NTSMR 24355) had been divided into seven equal shares by 1547 (op cit, 48) and it has been suggested that by the sixteenth century Buttermere village consisted of a cluster of farms, with dispersed farmsteads occupying the adjacent fellsides (op cit, 138) (Plate 29). This apparent population increase, and sub-division of land to accommodate increasing numbers of farms, not only attests to the intensification of population density in the area, but also to gradual changes in the nature of local land use. The former demesne holdings of Gatesgarth and Loweswater deer park were

both let to tenants, demonstrating that from at least 1310, when Gatesgarth was first let to farm, large portions of the local manorial estates, that were viable for agriculture, were no longer being managed as manorial concerns. It is also possible that the chapels at Loweswater and Rannerdale were owned by St Bees Priory as part of larger land holdings that may have included farms in the area. St Bees Priory was dissolved in 1539 and, if the priory had owned the settlement at Rannerdale in addition to the chapel of the Blessed Mary Magdalene that is reputed to have stood there, this might explain why the settlement had been subdivided by 1547. The lack of any traces of the chapel above ground might suggest that the confiscated chapel had been completely destroyed and that John Alenson, who owned Rannerdale prior to the sub-division of the property, may have acquired the holding following the disposal of the estate by the crown, after 1539. A holding in the possession of the chapel is suggested by the field name of 'Chapel Field', which was recorded on the Brackenthwaite tithe map of 1844.

- 8.3.12 In addition to the farmsteads scattered throughout Buttermere in the medieval period, there would also have been settlement in the valleys by workers engaged in local industry. Although the settlement at Scales (NTSMR 20380) may have originated as an earlier transhumance site, and a field system (NTSMR 29785) to the west might represent medieval agriculture, it has been suggested that many of the visible remains relate to a period of occupation and iron working during the medieval period (Winchester 1986, 2). Numerous charcoal pitsteads, potash kilns, fulling mills, and bloomeries are known throughout the area, although it is difficult to closely date such sites. It is likely that many of these sites represent medieval activity and there was probably related settlement in the local area. No structures indicative of occupation sites were encountered during the survey, with the exception of those at Scales, although seasonal or temporary structures, similar to the charcoal burners' huts observed during the post-medieval period (Bowden 2000, 25-8) would have left little trace above ground. The transitory nature of woodland industries, which required working in different woods each year as a result of coppice rotations, meant that it might not be practicable for workers to travel to work each day (op cit, 25). This meant that woodsmen may have had to live in the woods at times, particularly when making charcoal, which required constant supervision, and they may have been joined by their families during the summer months when supplementary basket and besom making could be undertaken (op cit, 23-6). The seasonal occupation of shielings, in association with summer pastures, is likely to have continued during the medieval period and the structure at Warnscale bottom (NTSMR 20386) and the scoops at Liza Beck (NTSMR 29165) might represent such transhumance activity.
- 8.3.13 *Post-Medieval Settlement:* the general pattern of settlement within Buttermere appears to have retained a similar character during the medieval period and throughout the post-medieval period. This pattern comprises a low degree of nucleated settlement in Buttermere village (Plate 13), with dispersed farmsteads scattered throughout the Buttermere and Loweswater valleys. Although the presence of a village hall at Loweswater suggests that a cluster of houses might be found here, the village actually comprises a central point within the administrative parish of Loweswater, with the church and the Kirkstile Inn forming a local focal point, rather than representing an agglomeration of settlement. Similarly, the settlement of Brackenthwaite relates to a general area of farmland that borders the fells of Whiteside, rather than a centralised cluster of

- settlement. Although the general pattern of settlement does not appear to have undergone any radical changes between the medieval and late post-medieval periods, farmsteads will have been abandoned and others established throughout this period and individual landholdings will have expanded and contracted according to changes in the social and economic climates.
- 8.3.14 The seventeenth century represented a time of prosperity in Cumbria for the yeoman class of farmers, who were freehold land owners (Winchester 2000, 17). High livestock prices and opportunities to invest in industrial ventures, such as lead mining, and the security provided by customary tenure, in contrast to leasehold tenancies, enabled wealthy farming dynasties to develop and encouraged the building of stone farmhouses between the mid-seventeenth to mid-eighteenth centuries (ibid). There are numerous mines, mine trials, and quarries in Buttermere, in addition to evidence of charcoal production and bloomeries. None of these sites has been demonstrated to date to the seventeenth or eighteenth centuries, although many of the sites have not been closely dated. The occurrence of numerous stone houses of this date within the area, however, attests to the relative wealth of the period, whether as a result of industry or agriculture. Houses that appear to date to the seventeenth century or early eighteenth century are present at Miresyke Farm (NTSMR 29789), Crabtreebeck (NTSMR 29791), Watergate Farm (NTSMR 26225), High Nook Farm (NTSMR 26222), Low Hollins House (NTSMR 29793), Picket How (NTSMR 29794), Lanthwaite Cottage (NTSMR 26446), Wood House (NTSMR 20627), Crag House (NTSMR 26362), Wilkinsyke Farm (NTSMR 20628), and Bowderbeck (NTSMR 29788). It is also possible that four complexes of farm buildings that have now been demolished might also have featured phases of use datable to the seventeenth and eighteenth centuries. These demolished farm ranges were located at Peel Place (NTSMR 23020), Stockbridge (NTSMR 29457), Loweswater Pele (NTSMR 20464), and to the south of Wilkinsyke Farm (NTSMR 29478).
- 8.3.15 High Nook Farm (NTSMR 20518) also demonstrates continued occupation from the seventeenth centuries until the present day, with intermittent modifications occurring between the seventeenth and nineteenth centuries. Watergate Farm (NTSMR 26225) was modified at various times between the late seventeenth, or early eighteenth, centuries and the twentieth century, as were Crag House (NTSMR 26362), Lanthwaite Cottage (NTSMR 26446), and Wilkinsyke Farm (NTSMR 26600). As well as the continued occupation of older properties, farm buildings were also established in Buttermere during the nineteenth century, such as Rannerdale (NTSMR 20583) and Cornhow (NTSMR 20614). The nineteenth century farmhouse at Rannerdale, however, replaced an earlier building that was attested by historical documentation from at least as early as the eighteenth century (Martin c 1980). In addition to farm buildings, several inns were established in Buttermere during the post-medieval period that are likely to have provided permanent accommodation for the owners, and possibly some of the employees, of these businesses. By 1860, two inns within Buttermere village were recorded as being very popular during the summer months (Whellan 1860, 311). These inns would have been the Fish Hotel and the Victoria Hotel, which later became the Bridge Hotel. A painting by William Green, from 1790, appears to show the Fish Hotel prior to the construction of the Victoria Hotel. The

- Kirkstile Inn and an inn at Scalehill were established in Loweswater and Brackenthwaite, respectively.
- 8.3.16 As well as the buildings within Buttermere that provided places of long-term occupation, and gave an impression of permanence to the structure of settlement in the area, there were also temporary occupants of the valleys and people who moved around the valleys at intervals. The provision of shelter for these temporary or mobile occupants means that there will have been places of ephemeral occupation in the area and, therefore, shifting foci of habitation that existed beyond the obvious pattern of primary settlement. The numerous industries, such as slate quarrying, lead mining, and charcoal and potash production would have resulted in fluctuating levels of settlement within the area and, as discussed in Section 7.1.12, this may have resulted in the provision of temporary structures that have left few traces above the modern ground surface. Such dwellings are well known in relation to woodland industries (Bowden 2000, 23-8) and it is possible that areas of occupation close to working sites were also established for workers associated with other local industries. The Low Wax Knott trial mine (NTSMR 24424), for example, was worked during the nineteenth century by two men who are said to have been living a rough existence in a hut near the site (Adams 1988, 116). It is likely, therefore, that as woodlands came into rotational use, and as new mines and quarries were established and decommissioned, pockets of temporary habitation would have developed, expanded, and contracted. A bothy (NTSMR 26226), suggested to have originally been used as a shepherd's hut, was built on the western shore of Loweswater during the nineteenth century, demonstrating that seasonal occupation associated with pastoral agriculture may have continued in Buttermere throughout the post-medieval period.
- 8.3.17 Although there was the establishment of new farmsteads and farm buildings during the mid-seventeenth to mid-eighteenth century, there were also many farms that were abandoned during the post-medieval period, reflecting population decreases in many Lake District communities during the seventeenth and eighteenth centuries (Rollinson 1989, 91). This led to a general decrease in the number of individual farms in the region and a corresponding rise in the size of the remaining holdings, which absorbed the unoccupied land (ibid). Farmsteads deserted during the post-medieval period in Buttermere are likely to be represented by the remains at Rannerdale (NTSMR 24355), High Nook Farm (NTSMR 27580), Peel Place (NTSMR 23020), Stockbridge (NTSMR 29457), a site east of Low Hollins (NTSMR 29513), Loweswater Pele (NTSMR 20464), and that to the south of Wilkinsyke Farm (NTSMR 29478). These abandonments occurred over an extended period; the site immediately north-east of High Nook Farm (High Iredale?) was deserted in c 1690, Stockbridge between 1793 and 1840, Peel Place between 1844 and 1861, the farm at Loweswater Pele in c 1900, and the site east of Low Hollins and the farm near Wilkinsyke Farm at unknown dates (Winchester 1986, 4). Of relevance is an estate map of High Nook Farm from 1787 (Donald 1787; Plate 8) that showed that by this date the earlier settlement at High Iredale had been replaced by two holdings with associated buildings, although these holdings were also subsequently abandoned and few physical remains are evident. This means that a single cause can not be attributed to the desertions and, as one or more of them coincide with a period of increased building in the area, a universal affliction can not be held responsible for these

abandonments. The change in agricultural economy following the end of the Napoleonic Wars in 1815, when grain prices fell sharply, might, however, be associated with some of the nineteenth-century abandonment. The midnineteenth century certainly saw a decrease in population in the Buttermere and Loweswater valleys (Whellan 1860, 311, 367), which might have been directly associated with the desertion of some of these properties. It is possible that some farms, that had been occupied during the medieval and early post-medieval periods, might have been subsequently overlain and masked by the construction of later buildings, either as a result of the reuse of an abandoned plot or the deliberate demolition of an older building to allow for a new structure to be erected.

8.3.18 Several buildings within the area were established or modified during the eighteenth, nineteenth and twentieth centuries. Wood House (NTSMR 20627) features modifications datable to the seventeenth, eighteenth, nineteenth, and twentieth centuries. In addition to the farmhouse, which had developed into a large country house by the end of the nineteenth century, and a bank barn of midnineteenth-century date, there is also a small cottage (Plate 30) that has been suggested to have accommodated servants in the nineteenth century. This demonstrates the level of wealth that was possessed by some of the inhabitants of the local area during the nineteenth century and also gives an insight into the nature of accommodation of some of the working people in the area who did not own land.

8.4 CURRENT SETTLEMENTS

The dispersed nature of the settlement in Buttermere that appears to have been a feature of the area throughout the historical period has continued into the modern period, with Buttermere village representing the only real example of nucleation within the survey area (Plate 29). As such, the settlement history of the area appears to have been one of the gradual shifting of the location of farmsteads, with the abandonment of some and the occasional establishment of new farms, rather than the development of increasingly urbanised areas that act as obvious social or habitation centres. A spatial analysis of the juxtaposition of modern and historic buildings in the area, that remain standing, therefore, adds little to any interpretation of the general development of the settlement pattern in the area. The extent of modern enclosure had already been largely established by 1578 (Winchester 1978, 338) and these buildings generally represent different phases of repeated cycles of farm sub-division and subsequent reconsolidation within these long-established boundaries of enclosed agricultural land. The suggestion that local post-medieval farm holdings expanded to absorb obsolete farms is, however, corroborated by the nature of some of the current farms. Rannerdale Farm (NTSMR 20583), for example, is currently in possession of the farremoved holdings of Peel Place (NTSMR 23020), and Wilkinsyke Farm (NTSMR 20628) holds the lands and bank barn previously associated with Bowderbeck (NTSMR 26604). The most obvious difference between the nature of settlement prior to the twentieth century, and modern properties in the area, is that many of the later houses, which are new constructions or have been converted from former barns, sit within confined land holdings, consisting of private garden spaces, rather than being associated with extensive field systems.

8.5 LOWESWATER

- 8.5.1 *Miresyke Farm (NTSMR 29789 and 29790):* this farm comprises a house with an adjoining barn and an adjacent detached barn. The house appears to date to at least as early as the late seventeenth century, with internal inscriptions of 1691 on a fitted panneled cupboard and what appears to read '1710' on a worn lintel associated with the passage between the house and adjoining barn. Modifications are evident in styles suggestive of the early eighteenth, nineteenth and twentieth centuries. The detached barn is of early eighteenth century date with later additions.
- 8.5.2 *Crabtreebeck (NTSMR 29791):* the house has a datestone of 1660 and features nineteenth and twentieth century alterations that appear to include the adjoining stables.
- 8.5.3 *High Nook Farm (NTSMR 20518):* the plan and structure of the building suggest that the core of the range comprising the original farmhouse and barn date to the mid- to late-seventeenth century (Ellerby and Whittaker 1986). Most of the internal and external detail, however, appears to date to the late eighteenth century, suggesting extensive modifications at this time. A bank barn to the north-east of the farmhouse dates to *c* 1820–30 and the range of outbuildings to the north date to the mid and late nineteenth century. Modifications and additions to the buildings also occurred during the twentieth century (*ibid*).
- 8.5.4 Watergate Farm (NTSMR 20519): the main house may represent the rebuilding of a late seventeenth or early eighteenth century structure with gable entry (Whittaker 1986). Documentary records, however, demonstrate that at least as early as 1619 there were two farm holdings at Watergate, including the current Watergate Farm (Martin c 1980). A date of 1735 above the kitchen door is likely to relate to the addition of the kitchen, pantry, and staircase. Further modifications to the main house are likely to have occurred in the late eighteenth and early nineteenth century. The cottage also appears to represent the nineteenth century modification of a seventeenth or eighteenth century building. The barn adjacent to the main house is of early- to mid-eighteenth century date, with nineteenth and twentieth century modifications, and outbuilding complex, to the north-east of the farmhouse, includes eighteenth and nineteenth century elements (Whittaker 1986).

8.6 Brackenthwaite

- 8.6.1 *High Hollins House (NTSMR 29792):* this house appears to date to the late sixteenth or early seventeenth centuries and may have been built by the Fisher family.
- 8.6.2 Low Hollins House (NTSMR 29793): this house dates to the late seventeenth century and features a datestone inscribed 1687 over the door. Some modifications appear to date to the eighteenth and twentieth centuries.
- 8.6.3 *Picket How (NTSMR 29794):* this house dates to the late seventeenth century and contains some features datable to the eighteenth century.

8.6.4 *Cornhow Cottage (NTSMR 20614):* this small house appears to have been built in the seventeenth century, with additions in the nineteenth and twentieth centuries (Green and Whittaker 1985a).

8.7 BUTTERMERE

- 8.7.1 Lanthwaite Cottage (NTSMR 20581): this farmhouse dates to the seventeenth century with a parlour and barn added in the early to mid eighteenth century (Green and Whittaker 1985b). Further modifications to the house occurred in the late eighteenth to early nineteenth century and in the late nineteenth century (*ibid*).
- 8.7.2 *Rannerdale Cottage (NTSMR 29541):* this cottage represents the modern renovation and conversion of a single stone barn into an L-shaped house. The barn was shown on the first edition Ordnance survey mapping of 1861–3 and appears to have been associated with the farmstead at Rannerdale.
- 8.7.3 Rannerdale Farm (NTSMR 20583): the farmhouse range and cottage date to the early to mid nineteenth century, with late nineteenth and early twentieth century modifications (National Trust nd). These buildings appear to have replaced an earlier structure that was recorded as belonging to John Watson in the eighteenth century (Watson c 1980). Outbuildings dating to the mid- to late-nineteenth century are present to the rear of the cottage. Distant from the farm range, but part of the farm holdings, are a nineteenth century boat house on the eastern shore of Crummock Water and a twentieth century loose box, at Peel Place (National Trust nd).
- 8.7.4 **Wood House (NTSMR 20627):** this house developed from a two-celled, two-storey structure of seventeenth century date with a gable entrance. A cross-wing and agricultural building were added to the house prior to the nineteenth century and further alterations were made in the late nineteenth or early twentieth centuries giving the structure the current appearance of a large country house. A detached bank barn and a cottage for servants were added in the nineteenth century.
- 8.7.5 *Cragg Farm (NTSMR 20553):* eight buildings comprise the farm ranges at Crag House (Green and Whittaker 1985c). The farmhouse at the western end of the range appears to date to the late seventeenth or early eighteenth centuries and the associated expansions of the house and additions of barns and storage rooms date to the eighteenth and nineteenth centuries. A Dutch barn and a detached wash house date to the twentieth century and the parlour of the house was used as a post office in the early twentieth century (*ibid*).
- 8.7.6 *Croft Farmhouse (NTSMR 29787):* this farmhouse was constructed in the late eighteenth or early nineteenth century and was subject to slight modifications during the twentieth century. Part of the building is now used as a café.
- 8.7.7 Wilkinsyke Farm (NTSMR 20628): the farmhouse was constructed in the seventeenth century and was subsequently extended and sub-divided, suggesting that the property had been shared between siblings or parents and children. A barn, shippon, and dog kennel of uncertain date also form part of the farm and a breeze block shed was added in the 1980s. The barn was shown on the first

- edition Ordnance survey mapping of 1861–3 but the shippon and dog kennel do not appear to have featured on any mapping prior to the twentieth century.
- 8.7.8 **Bowderbeck** (NTSMR 29788 and 26604): this late seventeenth century cottage features a central doorway set within a facade featuring four symmetrical mullioned windows and has a stone-built rear outshut to the north and a twentieth century clapperboard lean-to at the western side. Opposite the house is a well-preserved bank barn orientated down the hillslope, which has a rebuilt porch at the southern side and is now part of the Wilkinsyke farm holding. The barn was shown on the first edition Ordnance survey mapping of 1861–3.

8.8 FARM LAYOUT

8.8.1 One characteristic feature of farms in the Lake District is their disordered layout. By the mid-eighteenth century, farmsteads elsewhere in Britain were being reorganised around central farmyards. In upland areas, including the Lake District, however, there is little evidence of consistent formal layouts to the farmsteads (National Trust 2002). The farms and barns were not necessarily aligned in accordance with the direction of prevailing winds, but the facades of houses often faced onto adjacent roads. These disordered characteristics are also a feature of the farms in the neighbouring valley of Borrowdale (OA North 2007; National Trust 2002) and can also be observed within Buttermere, where a variety of arrangements of buildings are observable. Many of the farms within Buttermere comprise linear ranges, some of which have been extended to form L-shaped blocks, and additional outbuildings and barns have been added within the yards over extended periods of time to give an impression of gradual and unplanned structural development, and is apparent in the standing farm structures that are currently in use and also in the plans of ruined farmsteads. Examples of these are High Nook Farm (NTSMR 27580), Peel Place (NTSMR 23020), and Stockbridge (NTSMR 29457).

8.9 CONCLUSION

The pattern of settlement that is currently observable within the Buttermere and Loweswater valleys appears to represent the result of the gradual intensification of dispersed farming and the continual improvement of agricultural land in the area throughout the historic period and possibly from as early as the Bronze Age. The general pattern and nature of settlement appears to have seen few dramatic changes, with increases in local population and increases in the quantity of enclosed land appearing to have represented changes in the scale of occupation rather than changes in the nature of occupation and subsistence. The settlement pattern has, to a large extent, been dictated by the local topography, with the high quality lands of the Loweswater and Brackenthwaite areas, and the Buttermere delta flats, representing the most suitable land for settlement and agriculture, and the surrounding fells providing summer pastures and mineral resources. It is likely that there have been many fluctuations of population and, therefore, settlement density within the area according to specific social and environmental conditions. In the absence of appropriate data it is not possible to chart many such discrete episodes, which may have lasted for over a century, or only a few

- decades. The general impression, however, is that the level of population increased gradually from the early historic period until the post-medieval period.
- 8.9.2 The earliest settlement evidence in the locale is provided by the enclosed settlements at Lanthwaite Green (NTSMR 20389), Rannerdale (NTSMR 24355), Lambling Knott (NTSMR 20381), High Nook Farm (NTSMR 27581), and a possible promontory fort to the east of High Park (NTSMR 20464). The first three of these sites occupy the gently sloping land at the base of the fells to the east of the Buttermere valley and the settlement at High Nook Farm lies just to the north-east of the current farm. The location of several of these sites, and their proximity to later farmsteads, appears to offer localised models of settlement development that might be applied more generally to the wider landscape. At Rannerdale (NTSMR 24355), for example, it is possible to identify an Iron Age or Romano-British farmstead, possibly associated with an adjacent enclosure or stock pound, that was reoccupied during the medieval period, when additional enclosures and sub-divisions were established and a remote enclosure at the head of High Rannerdale appears to have been established. During the post-medieval period, the focus of settlement shifted slightly to the west, where the current farmstead stands, and the level of local enclosure and the number of sub-divided fields increased dramatically. Although slight increases and decreases of population, and expansions and contractions of settlement, may have been associated with these events, the general pattern is suggestive of small dispersed farmsteads utilising a mixture of arable and pastoral agriculture, with gradually shifting settlement foci within the same topographically defined area of agricultural suitability. Very similar patterns of gradually shifting settlement are apparent at Lanthwaite Green (NTSMR 20389) and High Nook Farm (NTSMR 27581). This does not necessarily mean that there was continuous occupation throughout the later prehistoric and historic periods, but that when the reoccupation of land did occur, following periods of dereliction or changes in land-use, the same general areas were recognised as being suitable and were subsequently reused.
- 8.9.3 The evidence from place-names associated with possible early medieval activity suggests that the flat lands at the northern end of the valley might have been the most densely occupied areas at the time of Norse settlement, with seasonal occupation in association with pastoralism occurring within the Buttermere valley. This Norse settlement may have represented the encroachment of new occupation into the fringes of the uplands, which had previously been less densely populated. The pattern of contrasting free chase, or manorial forest, and lowland settlements subsequently recorded during the medieval period suggests a similar pattern of local occupation at this time, with little evidence for the growth of any densely populated nucleated settlements in the area. The former medieval settlement at Scales (NTSMR 20380) represents one of the only known nucleated settlements in the area and the evidence for metalworking, in the form of slag, suggests that this may have been a site of industrial iron processing, rather than a clustered agricultural community.
- 8.9.4 A similar pattern of dispersed farmsteads appears to have been dominant throughout the post-medieval period and although there is abundant evidence for industries beyond agriculture, such as fisheries, lead mining, iron mining and working, woodland industries, and slate quarrying in the area, the inevitable increases in population do not appear to have become proportionately manifest as

domestic sites in the archaeological or historical records. This might suggest that, alongside the more conspicuous permanent settlement in the area, there were also periods of ephemeral and transient settlement, with temporary camps accommodating fluctuating numbers of occupants associated with short-term industrial enterprises and seasonal tasks. It is necessary to consider that the present landscape interpretations are based upon the evidence that is currently available and it is possible that evidence for dense, or even nucleated, population may exist in certain areas as sub-surface remains, or may have been destroyed by later developments.

8.10 Management Recommendations

8.10.1 The settlements within the valley are an integral and highly visible component of the landscape and any changes that might affect them should be carefully considered with respect to the preservation of the character of the local cultural heritage and the presence of any known or unknown sub-surface remains. It is, therefore, recommended therefore that:

8.10.2 Bronze Age Settlement

1) The presence of barrows, rock art, a burnt mound, and funerary cairns demonstrate the potential for local Bronze Age settlement, the location of which is currently unknown. The Buttermere delta flats, the Loweswater lowlands, and the vicinity of the enclosed settlement at Lanthwaite Green are possible locations of such settlement and the potential for sub-surface remains in these areas should be considered in the event of any proposed intrusive works.

8.10.3 Iron Age and Romano-British Settlement

- 2) The enclosed settlements at Lanthwaite Green (NTSMR 20389), Rannerdale (NTSMR 24355), Lambling Knott (NTSMR 20381), High Nook Farm (NTSMR 27581), and the possible promontory fort at Loweswater Pele (NTSMR 20464) represent possible Iron Age and Romano-British settlement with significant potential to inform the archaeological record and should be vigorously protected from disturbance. No intrusive works, including planting schemes or any structural erections, should be undertaken within any of these sites. Shrub and tree colonisation should be discouraged and the impact of stock erosion should be monitored within all of the sites. No vehicles should be allowed to drive onto the sites and stone should not be removed from any of them.
- 3) A single public right of way should be established at Rannerdale (NTSMR 24355), to prevent braided paths causing extensive erosion (Plate 9), and archaeological excavation should precede the establishment of this path in order to preserve by record any remains likely to be disturbed.

8.10.4 Medieval Settlement

4) The potential exists for remains of medieval settlement at Rannerdale (NTSMR 24355), High Nook Farm (NTSMR 27580), Peel Place (NTSMR 23020), to the south of Wilkinsyke Farm (NTSMR 29478),

Stockbridge (NTSMR 29457), to the east of Low Hollins (NTSMR 29513), Loweswater Pele (NTSMR 20464), Scales (NTSMR 20380), and Gatesgarth. No intrusive works, including planting schemes, should be undertaken at these sites, and any such works should follow archaeological consultation and be undertaken under archaeological supervision. Stone should not be removed from the sites and shrub and tree colonisation should be discouraged. The impact of stock erosion should be monitored.

5) Sub-surface remains relating to the medieval tenements at Loweswater Park and structures associated with the deer park, such as hunting lodges and a putative pele tower, might be present in the vicinity of Highpark, Lowpark, and Loweswater Pele and any intrusive activity should be subject to archaeological supervision. No such activity should be undertaken at the Loweswater Pele promontory without prior archaeological evaluation.

8.10.5 Post-medieval and General Settlement Recommendations

- 6) The core settlement areas in the valley, at Loweswater, Brackenthwaite, and Buttermere, should be regarded as archaeologically sensitive and development within them should be restricted where possible.
- 7) If any essential construction or maintenance is necessary, prior notice should be given to The National Trust archaeologist and regional curator so that they may assess the potential impact upon any material or structure of archaeological interest and recommend appropriate mitigation.
- 8) Any buildings that are in a ruinous state should be consolidated or repaired to prevent further erosion and collapse.
- 9) The possibility of settlement succession over long periods should be considered when any intrusive works are undertaken. This includes areas in the near vicinity of current settlements and houses, as well as 'greenfield' sites, where prior foci of settlement from the Bronze Age to the medieval period could be represented.

9. TREES AND WOODLAND

9.1 Introduction

9.1.1 There are several small woodlands within Buttermere that represent the remnants of what would once been an extensively forested area. There are, however, few remaining mixed broadleaf woodlands within the area and the numerous conifers that are present attest to the fact that much of the local tree coverage is likely to have resulted from ornamental or industrial plantation schemes, rather than representing the survival of pockets of pristine ancient woodland. Within the survey area there are woodlands at Holme Wood, land to the north of Loweswater, Folder's Wood, Lanthwaite Wood, Tindle Crag, High Wood, Great Wood, Long How, Nether How, Scales, Burtness Wood, Kirk Close, and in the vicinity of Wood House. Out of these woodlands, Holme Wood, Lanthwaite Wood, Tindle Crag, Long How, Nether How, and Scales feature the highest density of broadleaf trees and might represent some of the longest continuity of woodland in the local area.

9.2 POST-GLACIAL DEVELOPMENT OF WOODLANDS

- 9.2.1 Palaeolithic and Mesolithic Periods: woodland is likely to have begun to develop within Cumbria during the first warm phase following the Last Glacial Maximum. This phase is known as the Windermere interstadial and occurred between c 13,000 and 11,000 years ago (Barton 2005, 123). Juniper and dwarf birch, followed by developed birch woodland were able to develop during this period (ibid) and there was a rapid expansion of birch forest within the sheltered valleys of Cumbria (Pennington 1970). This period was, however, followed by a rapid fall in annual temperatures, during the Loch Lomand stadial, between c 11,000 and 10,000 years ago, which would have resulted in the reappearance of typical open tundra plant species (Barton 2005, 123). The present Flandrian period began around 10,000 years ago, marking the beginning of an extended period of temperate climate in Britain (ibid). This would have allowed the recolonisation of tree species into northern Britain, with primary birch colonisations being followed by hazel and pine, then oak and elm, with alder being present after 6000 BC (Pennington 1970). By 5000 BC, the land below 700m is likely to have consisted of 90% tree coverage by such deciduous species (ibid). At the marginal areas of upland woodland, marked by the tree line, pine and birch would have dominated (*ibid*). The earliest recognised impact on the forests of Cumbria as a result of human activity consists of evidence of clearances by burning during the Late Mesolithic period, at c 6000 BC (Hodgkinson et al 2000, 107).
- 9.2.2 **Bronze and Iron Ages:** palynological analyses have not been undertaken within Buttermere that might allow us to chart accurately local changes in the ecology, such as the rise and decline of specific tree species, and of the local forest in general. Studies of the accumulation of lake sediments within Crummock Water, however, suggest that it might be possible to chart a general pattern of woodland decline beginning at c 2000 BC (Shen *et al* 2008). The increase in sediments

from this period suggests that there was an increase in the erosion of the surrounding soils, which is likely to have been a result of the destabilising effects of tree clearance and agriculture during the Bronze Age (*op cit*, 138–9). A general pattern of increased sediment accumulation was identified beginning at 2000 BC and continuing until the twentieth century. Within this period, there appear to have been phases of reduced erosion and also phases of deep and intensive erosion, as suggested by the differing levels of minerals present within the sediment layers. Following the apparent Early Bronze Age clearance activity, there appears to have been a period of relative stabilisation during the Early Iron Age, between 800–400 BC, followed by further deforestation in the Later Iron Age, between 400 BC and AD 100.

- 9.2.3 Romano-British, Early Medieval and Medieval Periods: a period of stabilisation appears to have occurred during the Romano-British period, between AD 100–250, which was followed by apparent renewed clearances (*ibid*). The contrasts in mineral accumulation that indicate these periods of differential erosion rates are quite slight and might, therefore, represent fairly minor changes in the local ecology. A dramatic increase in erosion is, however, evident after AD 900, suggesting that there was deep and intensive erosion associated with periods of Norse settlement and clearances in the area (*ibid*). Increased mineral accumulations between 1150 and 1300 suggest that further clearances, or the introduction of deep ploughing techniques, may have had dramatic impact on the landscape during the medieval period.
- The impression given by the sediment analyses is that the heavily wooded 9.2.4 landscape that had developed locally during the early Flandrian, post-glacial, period was gradually reduced throughout the late prehistoric and historic periods, as a result of human activity. During the medieval period, the uplands to the east of the area was within the manorial forest, or free chase, of Derwentfells, and part of the western side of the study area, in the vicinity of Loweswater, may have been within the forest of Copeland (Winchester 1987, 19–20; 83–4). This does not mean, however, that these areas were wooded, but were utilised as extensive manorial hunting grounds, and for the establishment of demesne farm holdings, such as the Gatesgarth vaccary. The forests were also utilised as grazing lands and were subject to the gradual expansion of enclosure by ecclesiastic and lay lords, and by piecemeal assarting by peasants (Winchester 1978, 210). This meant that by 1300, the limits of the land defined as upland forest might have been reduced as far as the line of the post-medieval head-dyke (ibid). Indeed, many of the local place-names contain the element thwaite, suggestive of episodes of clearance in association with Norse and medieval settlement.
- 9.2.5 Although the limits of the upland forest in Buttermere had been substantially reduced by 1300, stands of woodland continued to occupy the valley bottoms during the medieval and post-medieval periods. The existence of such medieval woodlands is suggested by the bloomeries present in the area, as documented in 1305 as *forgiae ferri* and *forgiae silvestres* (Winchester 1987, 49; 104) and by the presence of the iron processing site at Scales (NTSMR 20380). Bloomeries would have been established close to woodlands, as these provided sources of charcoal for fuel. The term 'forgiae silvestres' also very explicitly records the existence of woodland in close proximity to such industrial sites at this time. There are numerous sites related to woodland industry within Buttermere, such

as bloomeries, potash kilns, and charcoal pitsteads, that might date to the medieval period, although these have not yet been closely dated. The presence of these sites in areas that are no longer wooded can give us an indication of the earlier extents of some woodlands. This is particularly evident in the area between High Wood and Cinderdale Common, where numerous bloomeries and a charcoal pitstead (NTSMR 29557) have been identified. It is, therefore, likely that High Wood extended much further to the south during the medieval or earlier post-medieval periods and was later cleared as agricultural enclosure expanded. Although there is indirect evidence for the presence of medieval woodlands in the valley bottoms of Buttermere, we can not confidently reconstruct the precise extent of these areas or assume that they corresponded exactly with the areas of post-medieval woodland that were recorded on historic maps.

9.3 POST-MEDIEVAL WOODLAND DEVELOPMENT

- 9.3.1 The extent of later post-medieval woodland, from the nineteenth century onwards, can be ascertained from the examination of historic maps. The first edition Ordnance Survey mapping of 1861–3 shows much of the extent of local woodland to have been similar to the present day (Fig 11).
- 9.3.2 *Orchards:* various estate plans from the early nineteenth century and the tithe maps of Buttermere, Brackenthwaite, and Loweswater, which date to between 1844 and 1845, depicted orchards within the survey area. These were located within holdings associated with farms, such as Low House, Beck House, and Picket How (NTSMR 29794), which were shown on Donald's Brackenthwaite plan of 1782, and at Crabtreebeck Farm (NTSMR 29791), as depicted on Donald's plan of 1787. All of these orchards were located at the northern end of the survey area, within the lowlands to the north of Crummock Water, and none appear to have been extensive.
- 9.3.3 **Holme Wood:** this wood was depicted as being quite sparsely wooded on the first edition mapping of 1861-3 and it may be that woodland had not been encouraged in much of this area prior to the nineteenth century. This would correspond with the presence of a sheep shelter (NTSMR 29649) and a sheepfold (NTSMR 29652), in addition to a possible bothy (NTSMR 26226), within the woods, which demonstrate that the land had previously been used as pasture. There are, however, mature trees, such as oak, within the wood that show that trees have been growing in Holme Wood without interruption for at least several hundred years and the Loweswater tithe map of 1839 recorded the area as a woodland. There are also charcoal pitstead sites within the wood, and a thorough network of trackways has been present from at least as early as the first edition mapping. This might suggest that, by the time of the first edition mapping, Holme Wood had become partially deforested, following a long period of woodland exploitation that had succeeded earlier pastoral usage. Alternatively, if Holme Wood had not been a densely wooded area, then pastoral and woodland industries might have been able to co-exist in the area. It is clear from the current distribution of mature deciduous trees and coniferous trees in Holme Wood that an earlier broadleaf phase is represented in the northern part of the wood and that the southern part of the wood has been subject to intensive coniferous plantation. It has also been suggested (M Astley pers comm) that part of the ornamental tree

- planting within Home Wood included a discrete sub-circular patch of coniferous mono-species at the southern end of the wood, which was established in order to create the impression of the head and eye of a pheasant, presumably to reflect the use of the woods for game shooting.
- Loweswater Pinfold, Lanthwaite Woods, and Tindle Crag: the triangular wood 9.3.4 to the north-west of the pinfold at Loweswater was not depicted until the second edition Ordnance Survey map of 1900 and is clearly a result of plantation. Lanthwaite Woods and Tindle Crag were depicted on the Brackenthwaite tithe map of 1844, and the first edition Ordnance Survey mapping of 1861–3, with the same extents that they currently occupy. Both of these woods had been depicted on an estate plan of Scale Hill and Netherclose Farm of 1824 ((WRO) D/WM 1/36/19), with the same extents, and an estate map of Scale Hill from 1804 ((WRO) D/WM/3/9)also showed Lanthwaite Woods with the current extents. A schematic representation of Lanthwaite Woods on a map of 1771 (Hodskinson and Donald 1774; Plate 27) depicted a similarly-sized area to the current woodland. Although the woods at Tindle Crag were shown on the first edition mapping as being sub-divided into Tindle Crag, to the north, and Back Hows, to the south, there was little indication of any functional distinction between the holdings. On the estate plan ((WRO) D/WM 1/36/19), however, widely spaced trees, possibly indicative of an orchard or an intensively managed coppice, occupied the northern holding, whereas the southern holding appeared more densely wooded.
- 9.3.5 *High Wood:* the Brackenthwaite tithe map of 1844 showed an additional piece of woodland to the north-east of High Wood, called 'West Wood'. The first edition Ordnance Survey mapping of 1861–3 showed High Wood continuing slightly further to the south than its current extent, in an area called Fletcher Field Wood on the tithe map. The depiction of two sheepfolds at Fletcher Fields (NTSMR 29553 and 29555) demonstrates that the area served at least a partial function as pasture. The presence of numerous bloomeries and a charcoal pitstead (NTSMR 29557), however, suggests that local woodland played an important role in the use of this area in the past, although the lack of absolute dates for these sites means that it is not currently possible to establish whether they represent medieval or post-medieval activity. It is likely that this area was more densely wooded during the medieval and post-medieval periods and that it was gradually cleared for post-medieval pasture.
- 9.3.6 *Burtness Wood:* this wood was shown on the first edition Ordnance Survey mapping of 1861–3 as occupying the whole area that now named 'Old Burtness' and the north-western part of the area that is now named Burtness Woods. The Old Burtness enclosure was recorded as 'Birkness Plantation' on the Buttermere tithe map of 1844 and the enclosure to the south-east was recorded as 'Birkness intack'. This pattern is similar to that shown on a Gatesgarth estate plan (Plate 31) ((WRO)DWM 1/36/6) that was made following the purchase of the land by John Marshall in 1815–16 and showed only the Old Burtness area as being wooded. The Old Burtness enclosure does not, however, appear to have been established in 1812, when an estate plan was made of the Duke of Norfolk's holdings in the area, suggesting that this may have been a recent plantation when it was first recorded on the estate map that post-dates 1815–16. The Ordnance Survey iconography suggests that Burtness was occupied by conifers, which is demonstrative of plantation, whereas Scales was shown as being a deciduous

woodland. Although we must be cautious about the technical accuracy of artistic interpretations, a painting by William Green from 1790 (Plate 32) showed the Scales area being wooded, with the Burtness area appearing open, as did a second painting from 1790 by an unknown artist. There is a painting by Green of 1810 (Plate 33) that depicts this area and supports the suggestion of a nineteenth-century date for the establishment of the Burtness plantation. Once more, this painting showed the deciduous trees occupying the steep slope of Scales, but does not appear to have shown any trees in Old Burtness. This suggests that the earliest form of Burtness Woods had not been planted until the years between 1812 and the production of the estate map post-dating 1815–16. This later estate plan clearly pre-dates the first edition Ordnance Survey map, as the additional enclosure of the current Burtness Woods had not yet been established. The present extent of the woods had been established by the time of the second edition Ordnance Survey map of 1900.

- 9.3.7 *Kirk Close*, *Wood House*, *Long How*, *and Nether How*: at the time of the first edition Ordnance Survey mapping of 1861–3, Kirk Close was shown as an enclosed area with a small patch of scrub, but without trees. The area to the north-east of Buttermere lake, between the shore and High Bank, was depicted as having numerous densely wooded areas on the first edition mapping, and numerous woods in this area were named on the Buttermere tithe map of 1844, although this is currently a much more open environment. The boundaries of the woods at Nether How and Long How appear to have changed little since the production of the first edition mapping, and the Buttermere tithe map, although the wooded areas to the north and west of Wood House appear to have slightly diminished. The Buttermere tithe map, for example, showed an additional enclosed wood, contiguous with the surviving woodland to the west of Wood House, both of which were named 'Fisher Howe Wood'.
- 9.3.8 The presence of a series of ridges (NTSMR 29499) in Nether How suggest that the wood, which is predominantly oak, was subject to some degree of formal tree planting as part of a scheme of woodland management. The presence of pitsteads at Nether How and Long How, and of a beck called Hag Sike, to the north of Long How, supports the suggestion that the woods in the local area might have been subject to management in association with woodland industries. Further evidence of local woodland management was also evident on the first edition mapping where, in addition to Grassgarth coppice, a 'Middle Coppice' was also depicted in the environs of Great Wood. The Buttermere tithe map of 1844 also showed an area named 'Fell Close Coppice', to the west of Wood House, and 'High and Low Coppice' were named within the enclosure to the east of Bowderbeck, to the south of Buttermere village. Although woodland management is likely in these areas, much of this may have comprised the management of semi-natural woodlands, rather than new plantations. These areas were all depicted as being mixed woodlands on the first edition Ordnance Survey mapping and, with the exception of the plantation ridges (NTSMR 29499) at Nether How, there is little indication of formal planting.
- 9.3.9 The woods at Nether How, Long How, Great Wood, Middle Coppice, and those to the west of Wood House were all depicted on a painting by William Green from 1790. They appear slightly more extensive than their present extents, although this may be reflecting artistic interpretation. Given that these do not appear to be deliberately established plantations, but were evidently managed,

there is the possibility that these were former semi-natural woods that were then coppiced. All of the woodlands occupy steep rises, hillocks, or craggy outcrops, which are clearly less suitable for agriculture than the surrounding level, or gently sloping, fields. The original woodlands would have been gradually cleared for agriculture, with wooded islands remaining where the land was deemed to be of poorer quality.

9.4 MODERN PERIOD

9.4.1 Many of the woodlands in Buttermere are now under the ownership of The National Trust, following the acquisitions of land in Buttermere throughout the twentieth century, and by purchase and bequeath, from 1936. Rather than being managed as productive resources of raw materials, the management strategies are orientated towards ecological conservation and the accessibility of the woodlands as places of recreational amenity. Increased attention is also beginning to be given to the significance of woodlands as sites of cultural heritage in themselves and places where other sites of cultural heritage have been preserved.

9.5 WOODLAND PRACTICES AND INDUSTRIES

- 9.5.1 *Timber Production:* timber is one of the main resources for which the local woodlands would have been valued, particularly prior to the sixteenth and seventeenth centuries when stone houses became more common (Winchester 2000, 17). The requirement for timber, for construction and building repairs, in addition to fuel and fodder, is likely to have put pressure on local woodlands. Small-scale industries, such as wood turning, which is suggested by the thirteenth century record of the personal name le Turner to have occurred in the local area (Winchester 1987, 105), will also have made use of the woodland resource. This pressure is likely to have been particularly severe during the medieval period, as there is little evidence for classic rotational coppicing systems in Cumbria, which allowed the sustained exploitation of woodlands, before the sixteenth century (Bowden 2000, 6). Less intensively managed coppicing is evident, however, in the region from the fourteenth century (Bowden 2000, 6; Winchester 1987, 104).
- 9.5.2 Coppicing allowed long poles, between 100mm and 150mm in diameter to be harvested, at regular intervals of between ten and twenty years (Winchester 2000; Rackham 1990), rather than subjecting areas to unsustainable clear felling. This process was used in order to manage the timber production of numerous broadleaf trees, particularly oak. The tree was cut to a height of approximately 300mm above the ground in order to encourage the growth of young shoots. The new shoots were vulnerable to stock trampling and grazing and the coppices were frequently enclosed in order to protect them. Where such enclosure was not possible, pollarding was often used, which was similar to coppicing but the tree was cut between 2m and 4.5m above ground level, in order to keep the new growth out of the reach of grazing animals. In addition to producing wood for construction and fuel, these practices could also produce winter fodder for cattle, such as the leaves and bark of elm and ash. Fodder for cattle could also be harvested in a less managed way, by simply lopping young branches from trees that were not being managed (Winchester 1987, 103).

- 9.5.3 The names of Grassgarth Coppice and Middle Coppice, recorded on tithe mapping to the north of Buttermere village, demonstrate that coppicing was being practised in the local area during the post-medieval period, although this may have been motivated largely by industrial requirements, rather than by domestic needs. Indeed it was the demand for charcoal during the fifteenth and sixteenth centuries that lead to the formal management and preservation of Cumbrian woodland resources, rather than their gradual destruction to expand agricultural lands (*op cit*, 100; 105). Although the survival of the coppice placename element remains as a signifier of this practice in Buttermere, there was little evidence of coppiced or pollarded trees during the current survey. Oak coppice, observed close to a possible charcoal pitstead (NTSMR 29123) near Crab Tree Beck, comprised the only recognised example of such practices in the area.
- 9.5.4 The presence of hags, or boundaries within woodlands, can indicate the former use of woodland management practices, such as coppicing. There is a beck to the north of Buttermere village called Hag Sike, which lies along the northern boundary of Long How, near to two pitsteads (NTSMR 29494, NTSMR 29495), and is likely to have represented a division associated with woodland management. There are also numerous cairns (NTSMR 29630, 29637, 29655, 29656, 29657, 29658 and 29628), a possible boundary stone (NTSMR 29663) and two banked boundaries (NTSMR 29661 and 29658) within Holme Wood that might be associated with such woodland sub-division. Marker cairns would clearly offer no impediment to stock that might damage developing shoots but could help to define specific areas in a way that would be understood by woodland workers when, for example, recognising rotational divisions in the woodlands. The presence of drystone walls within Long How might represent divisions related to former woodland management.
- 9.5.5 Charcoal Production: the earlier forms of charcoal production in Cumbria, during the thirteenth century, relied on the collection of dead wood from the forest floor, prior to the development of coppicing from around the fourteenth century (Bowden 2000, 6; Winchester 1987, 104). This practice may have continued to provide one of the primary sources of wood for charcoal production until being gradually eclipsed by the introduction of managed coppicing from the fifteenth and sixteenth centuries (Bowden 2000, 6; Winchester 1987, 100; 105– 7). The introduction of managed coppicing may also have influenced the methods used to produce the charcoal. The easily recognisable charcoal pitsteads that remain visible as earthworks comprise sub-circular platforms between 5m and 10m in diameter, which were often terraced into a hillslope (Plate 34). Where platforms were prepared on level ground, they are not likely to have produced enduring above-ground remains. A carefully built stack of wood was constructed on the platform, by piling wood around an upright stake. The pile was then lit by placing burning charcoal within the space created by the removal of the stake and bracken, turf, and soil was used to seal the stack to allow the wood to burn in an oxygen-free environment (Bowden 2000, 23). The name 'pitstead', however, derived from an earlier practice of filling a pit with wood, rather than building a stack. This may have been a more suitable approach for making use of the irregular dead wood than a uniform stack, which would have benefited from the use of regularly-sized 'shanklings', or poles (OA North 2007). A basic form of pitstead may be represented within Buttermere in the

- vicinity of several putative bloomery sites, to the east of Crummock Water. During the excavation of a pipeline, a deposit of charcoal was encountered that was of a much smaller scale than the typical pitstead platforms (OA North 2002, 24–5) and might have represented a simple pitstead associated with localised bloomery activity.
- 9.5.6 Of the 70 sites associated with woodland industries in Buttermere, 54 are pitsteads, nearly all of which were found within currently wooded areas, suggesting that some areas, such as Scales, Lanthwaite Wood, Long How, Nether How, and Holme Wood, have been continuously occupied by woodland since the time that this industry was being practised.
- In the absence of the close dating of these sites, it is not possible to say whether 9.5.7 they represent activity from as early as the thirteenth or fourteenth centuries or as late as the nineteenth or early twentieth centuries, and some might represent activity spanning several hundred years. It is possible that some of the charcoal production was associated with the regional demand for fuel in the seventeenth century, due to the growth of the iron smelting industry in other parts of Cumbria (Bowden 2000, 7), however, the correlation between the location of many of the pitsteads and bloomeries within Buttermere suggests that charcoal was being produced to serve local demand. The intensive localised production and use of charcoal in association with smaller scale bloomeries in Cumbria is attested by the prohibition of bloomeries in 1564, as a result of their impact on woodlands (Marshall and Davis-Shiel 1969, 32). Indeed, it has been suggested that c 30 acres of woodland would have been required to provide the necessary fuel for a bloomery for a single year (Marshall and Davis-Shiel 1977, 30). The requirement for such large quantities of fuel might provide an explanation for the lack of woodland in the vicinity of Cinderdale common and Fletcher fields, where several bloomery sites and a pitstead (NTSMR 29557) have been identified. If the woodland was not carefully managed in an area of such apparently intensive, or long-lasting, iron processing then rapid deforestation could occur.
- 9.5.8 Some of the pitsteads are in the vicinity of the medieval settlement at Scales (NTSMR 20380), which Winchester (1986, 2) has suggested dates from the thirteenth or fourteenth centuries, and where iron processing has been demonstrated. The presence of bloomeries in the area from the medieval period is attested by a documentary reference from 1305 to two bloomeries in Loweswater as *forgiae ferri* and woodland bloomeries, or *forgiae silvestres*, in the Cocker valley (Winchester 1987, 49; 104). On this basis it may be possible that these pitsteads related to the medieval industrial activity from the area; however, for the most part pitsteads of the medieval period were simply pits and are unlikely to survive as surface features. However, it is possible to suggest that a practice of charcoal production initiated in connection with the medieval iron production continued into the post-medieval period some time after Scales was abandoned.
- 9.5.9 Charcoal production required constant supervision, as an oxidising atmosphere could cause the wood to be burnt, rather than the removal of all moisture to produce charcoal. This meant that workers needed to live in the woods, which, as a result of rotational coppicing, were not necessarily close to their homes (Bowden 2000, 23–6). During the summer, the families of the woodsmen sometimes joined them and engaged in additional woodland crafts, such as

besom and basket making (*ibid*). The temporary dwellings associated with these seasonal and transient occupations (*ibid*) leave very little trace in the archaeological record, however, and no such sites have been identified within the study area. Slightly more robust structures associated with bark peeling, which often feature a stone-built fireplace and chimneys, have been found in association with charcoal burners' huts elsewhere in Cumbria, although no such structures have been identified within the study area. Oak bark was used as a source of tannins, which were an essential element in the leather tanning industry (Bowden 2000, 24), and it remains a possibility that the woodlands in Buttermere were exploited for this valuable resource.

- 9.5.10 *Potash Production:* potash kilns were used to reduce green twigs or bracken to an alkali-rich ash by burning, in order to produce potassium hydroxide. This chemical was then used to produce soap, or lye, for use in the bleaching and fulling of cloth (Jones 1996, 282). Some potash kilns were built from stone and it is possible that many of these structures may date to the later post-medieval period. Such robust kilns may have been required to contain the large iron pots that were used at this time, and from which the term 'potash' originates (Bowden 2000, 25). The potash kilns dating to the sixteenth-century and earlier may have consisted of little other than pits and rudimentary hearths (*ibid*), which makes the identification of their remains challenging.
- 9.5.11 The demand for potash production in the local area is suggested by the presence of six possible fulling mill sites, and four examples of potash kilns or pits have been identified within Buttermere. These include one large stone construction (NTSMR 24351), close to Rannerdale Farm, and three sites (NTSMR 29119, 29124, and 29125) that appear to have been identified from much slighter traces, such as the presence of charcoal or burnt stone. None of these sites has been closely dated, but it is likely that the stone kiln is of post-seventeenth century date. The other three sites could date from the medieval or post-medieval periods but can not be confidently dated based solely upon their form. Indeed, any identification of such slight remains as potash kilns purely from the inspection of ground-level remains can be suspect.

9.6 Management Recommendations

9.6.1 The woodlands within Buttermere include woods that are likely to represent a degree of unbroken woodland continuity that has lasted for many hundreds, or even thousands, of years. These include Lanthwaite Wood, High Wood, Tindle Crag, Long How, Nether How, and Scales. This general woodland continuity may have included periods of fluctuating densities of tree cover and many of these areas may also have been manipulated by management schemes, motivated both by economic resource management and ornamental landscape development. Indeed, it seems highly likely that much of Holme Wood existed as an open pastoral area during the post-medieval period, although the antiquity of some of the trees in this area suggests that the tree cover may not have been entirely denuded. Although these woodlands have undoubtedly been subject to changes and management, some of these areas could have been consistently wooded since the development of the earliest tree cover in Buttermere during the early Flandrian period, c 10,000 years ago. In addition to the manipulation of these areas, some of the local woodlands were planted on open land within the last two

- hundred years. Burtness Wood appears to have been planted during the early nineteenth century and Kirk Close was open fellside until the late nineteenth century.
- 9.6.2 General Recommendations: there is always a potential for conflict between archaeological and forestry interests when considering management proposals for sites in woodland. Many sites of archaeological interest will be occupied by trees, which can cause extensive damage to sub-surface and above ground remains as a result of root action. In many cases, the removal of such trees would benefit the preservation of the site, although this might be contrary to current woodland management strategies. Ideally, where the thinning of trees has been proposed as part of the ecological management of the woodlands, the removal of specimens that pose a threat to the archaeological resource should be prioritised. This should, however, be undertaken following archaeological consultation and under archaeological supervision. Beyond such specific removal of trees, forestry operations, such as felling and extraction, should avoid all sites of archaeological interest and planting should be distant enough from any such sites to prevent future damage from root action. Vehicles and machinery should not be allowed to come into contact with any sites of archaeological interest. Sites should not be used as stacking or storage places for timber or brash, as this could disguise the extent and form of the site and lead to accidental damage by vehicles or forestry works. The additional growth of vegetation, as a result of natural regeneration, should be discouraged.
- 9.6.3 *Charcoal-burning Platforms and Potash Kilns:* where these sites are present within current woodland, root action and future woodland management practices may threaten the integrity of their fabric. Where current tree-thinning regimes allow, the sites should be cleared of vegetation. The growth of additional vegetation should be discouraged. The sites should not be used for stockpiling or storage of timber or other materials and vehicles and machinery should keep clear of these sites. Any physical disturbance, such as dragging felled trees over the top of such sites, should be avoided.
- 9.6.4 *Hag boundaries:* potential boundaries marked by a series of cairns and banks within Holme Wood could provide information about previous systems of woodland management in the area. These cairns and banks should be protected from intrusive threats and the growth of vegetation on the cairns should be discouraged. The drystone walls within Long How and Lanthwaite woods should also be preserved. Damage by vegetation should be monitored and the growth of intrusive vegetation should be discouraged.
- 9.6.5 *Trackways:* there are numerous trackways within Holme Wood that have been present from at least as early as the first edition mapping of 1861–3. These trackways are likely to have been associated with industries based within the woodland and, although they do not appear to have been equipped with metalled surfaces, the line, if not the fabric, of the tracks should be preserved, where possible. There has been some modern widening and alteration of these routes as a result of the demands of current machinery and forestry practices. Changes in the line of these trackways could cause damage to currently unknown subsurface remains associated with charcoal production or bloomeries in the wood, as well as to sub-surface prehistoric sites, the presence of which is suggested by the presence of two tumuli of probable Bronze-Age date (NTSMR 29633 and

- 29634). As well as the potential for damage to currently unidentified sites, the rerouting of these tracks could cause the loss of context for known and unknown sites of woodland industry. Within Holme Wood, in particular, the pitsteads are very clearly located along the edges of the trackways. Trackways that are likely to have been associated with sites of woodland industry are also present at Lanthwaite Wood, Long How, and Fletcher Fields.
- 9.6.6 Woodland Management: the current woodlands in Buttermere represent a general pattern that has remained largely unchanged since the plantation of Kirk Close and the south-eastern part of Burtness Wood, in the late nineteenth century. With the exception of these woods, and of Old Burtness, which appears to date to the late eighteenth or early nineteenth centuries, many of the woodlands may have existed as wooded areas of variable type for many hundreds of years. These broadleaf woodlands should be maintained as vital and longstanding elements of the industrial landscapes of Buttermere and as enduring elements of the local natural environment. The ornamental forestry planting scheme of the pheasant's eye, at the southern end of Holme Wood, represents a unique element of the local cultural heritage and, although it comprises a shifting and ephemeral feature, attempts should be made to maintain this appearance.

10. THE LAKES

10.1 Introduction

10.1.1 The lakes of Buttermere, Crummock Water, and Loweswater form a large part of the overall land holdings of The National Trust within the study area, yet the interplay between the lakes and the cultural development of the area is difficult to assess in comparison to the surrounding landscape. The nature of these bodies of water means that an archaeological walkover survey can rarely recognise physical signifiers of human activity within the lakes and map regressions provide little additional information, other than the shifting extents of the lakes in relation to changing water levels. We are, therefore, currently restricted to documentary sources and sites located on the land surrounding the lakes in order to try to understand their roles in the past.

10.2 INDUSTRY AND SUBSISTENCE

- 10.2.1 The lakes in Buttermere have provided a source of food, by fishing, and of water, and it is unlikely that these valuable local resources will not have been recognised by the occupants of the valley throughout the prehistoric and historic periods. It is, however, very difficult to demonstrate such exploitation in the local area, in the past due, to a paucity of archaeological excavation of sites within the area. For those in the possession of vessels, the lakes also provide local transport links and provide a means of accessing fish stocks.
- 10.2.2 Documentary and cartographic sources allow us to identify the use of the lake for fishing from the medieval period. A fish weir, eel garth, and fishery were documented at Buttermere lake during the thirteenth century and in 1270 there were men known as *piscator* recorded in Buttermere (Winchester 1987, 108). Fishing practices can also be demonstrated to have continued in the later part of the medieval period, with documents recording the presence of fisheries at Buttermere lake and an eel fishery at Crummock Water in 1478 (*ibid*).
- 10.2.3 Fishing continued during the post-medieval period, with the place-name *Fyshegarth* being recorded in 1570 (Armstrong *et al*, 354) and the endurance of the personal name of Fisher in the sixteenth century is suggestive of the prominence of this occupation in the preceding centuries (Winchester 1987, 108). The field-name of 'Eelgarth' endured at a small plot at the north-western end of Buttermere lake, adjacent to the mouth of the River Dubs, until at least 1844, when it was recorded on the Buttermere tithe map. It is not clear if this corresponds with the location of the eel garth at the lake recorded in the thirteenth century.
- 10.2.4 The level lands lying between the lakes of Buttermere and Crummock Water feature historic field names associated with fishing. Great Fisher Field, Far Fisher Field, and High Fisher Field were all recorded in this area on the Buttermere tithe map of 1844, and two woods to the east of Woodhouse Islands were recorded as Fisher Howe Wood.
- 10.2.5 The presence of landing areas for boats also appears to have been preserved within field names to the north of Buttermere lake, although whether these

represented the use of the lake for fishing for subsistence, recreation, or recreational fishing, is unclear. Boatsteads Near, Boatsteads Far, and Boat Parrock, were all recorded on the Buttermere tithe map, although no indications of boathouses or mooring points were evident during the current survey. A boathouse (NTSMR 26458) is present at the northern end of Crummock Water, and was depicted as early as 1804 on a plan of Scale Hill. There is also a jetty (NTSMR 29536) at the eastern shore of Crummock Water, which is of wood and stone construction and likely to date to the twentieth century. It is, however, possible that this represents the maintenance of an earlier structure. A second jetty (NTSMR 29796) has been identified at Crummock Water, lying to the north-east of Loweswater Pele. This site lies below the current water level of the lake, and the careful and elaborate construction style of the structure suggest that it might have functioned as a landing stage for tourists during the Victorian period, rather than being used as a jetty for local fishing boats (J Lund pers comm). The use of boats in the areas was depicted as early as 1800, when William Green painted Loweswater with two small clinker-built sailing boats and a rowing boat. A landing area for rowing boats on Loweswater may be represented by a small 'beach' (NTSMR 29626) defined by large boulders at the north-eastern side of the lake.

- 10.2.6 The lakes may have provided sources of water for industrial sites, such as charcoal pitsteads and bloomeries. Water would have been used for washing ore, cooling and tempering tools, and puddling clay for hearth-pits (Marshall and Davis-Shiel 1969, 31) as well as for cooling charcoal stacks. Several bloomery sites and a charcoal pitstead are known from the eastern shore of Crummock Water and the field name of 'Ash Dale', to the west of Nether Close, occurred on an estate plan of land in Buttermere of 1838 and might represent industrial activity on this shore of the lake.
- 10.2.7 Crummock water was utilised as a source of water for Workington and, between 1890 and 1900, works were undertaken at the northern end of the lake in order to facilitate the supply of water (D Denman pers comm). A dam and fish weir were constructed at the northern end of the lake, Park Beck was canalised, and a pump house was built at the north-western side of the lake (A Winchester pers comm). Although all of these modifications occurred beyond the limits of the current study area, the water level of the lake rose by approximately 1m as a result of the works, which will have affected land within the study area. There do not appear to have been extensive inundations of the land around the lake shore as a result of the raising of the water level, although sites close to the lake edge, such as the building platform at Loweswater Pele (NTSMR 29404) and a nearby jetty (NTSMR 29796), will have been affected.

10.3 RECREATION

10.3.1 In addition to the evidence for boathouses, jettys, and landing areas for boats, there is also evidence for the use of the lakes in the Buttermere area for recreation during the post-medieval period. Thomas West produced a guide book in 1778 that described six 'stations commanding fine prospects' around Buttermere (West 1821). These provided viewpoints from which to participate in the fashion for the quest for picturesque beauty (Hindle 1998, 79), with the lakes featuring prominently as features within these vistas. The draw of the lakes as

foci for visitors to the area must have played a key role in the initial foundation of the tourist industry in the local area, and the modern presence of visitors making specific use of the lakeside footpaths attests to the continuing attraction of these bodies.

10.4 DEFENCE

- 10.4.1 The lakes have represented features of defence, possibly from as early as the later prehistoric period and into the twentieth century. The site of Loweswater Pele (NTSMR 20464) is situated on a small projecting promontory of raised land at the north-western side of Crummock Water. This site has been suggested to represent the remains of a medieval pele tower with an associated moat at the western side, cutting the promontory off entirely from the dry land to the west. It is, however, likely that the defensive earthworks, previously equated with a medieval moat, actually date to the Iron Age period and represent the ramparts of a promontory fort. This would have created a highly visible monument within the landscape that would have projected an impression of strength and power, whilst defining a defensive position with limited avenues of approach.
- 10.4.2 During the Second World War, the lakes at Buttermere became foci of training and defence. Following fears that Crummock Water might be used as a landing area for sea planes, a small shed-like structure was used as a guard post at Hause Point and machine gun emplacements, built with sandbags, were installed at Lanthwaite Green and Hause Point (Richardson 1998, 74). It has also been suggested (M Astley pers comm) that similar concerns at Loweswater prompted the establishment of a cable strung across the lake, and one supporting foundation for this may be represented by a rectangular structure (NTSMR 29632) built from concrete sandbags at the western side of the lake. It is possible that this might have supported a winching mechanism for such a cable, with the other end secured around a tree at the opposite side of the lake.
- 10.4.3 Local people also recall the construction of a pier and ramps at the north-western side of Buttermere lake, which was used for the testing or training of amphibious vehicles during the Second World War (Richardson 1998, 75). These ramps were built from Honister slate and were subsequently dismantled and reused in the local area. A concrete slipway (NTSMR 29472) might represent the core of one of these ramps, or might relate to an unconnected phase of lake-use.

11. GENERAL MANAGEMENT RECOMMENDATIONS

11.1 Introduction

11.1.1 Detailed management recommendations have already been addressed for each category of site, within the thematic archaeological resource sections (*Sections 3–8*). The following management recommendations provide a more general overview of the management of the archaeological resource of Buttermere, examines sites with statutory designations, and recommends potential further archaeological research in light of the results of the current landscape survey and the current research agenda for north-west England (Brennand 2007).

11.2 MANAGEMENT RECOMMENDATIONS

- 11.2.1 *Archaeological Site Management Priorities:* the priority for the management of the archaeological resource in Buttermere should focus on the sites that have been subject to statutory legislation as Scheduled Monuments, Listed Buildings, and additional sites that might qualify for such designations.
- 11.2.2 **Scheduled Monuments:** Scheduled Monuments receive statutory protection from any form of disturbance. Any work that may have an impact upon a Scheduled Monument, or the setting or curtilage of the monument, requires written consent from English Heritage prior to the start of work. It is National Trust policy that submitting an application for Scheduled Monument Consent should only be undertaken by The National Trust Archaeologist.
- 11.2.3 There are currently seven Scheduled Monuments within the survey area. These consist of the settlement near Scale Beck (NTSMR 20380; SM 27674), the enclosed settlements near Lambling Knott (NTSMR 20381; SM 27670) and at Lanthwaite Green (NTSMR 20389; SM 27659), Loweswater Pele (NTSMR 20464; SM 27674), two round cairns at Carling Knot (NTSMR 29097; SM 27655 and NTSMR 29098; SM 27654), and a round cairn at Grasmoor summit (NTSMR 20393; SM 27656).
- 11.2.4 The key threats to the round cairns (NTSMR 20393; SM 27656; NTSMR 29097; SM 27655 and NTSMR 29098; SM 27654) are likely to be from natural erosive processes and from possible stone removal by walkers in order to augment marker cairns in the area. There is also a potential risk of stone removal for the repair of walls and shelters. All such stone removal should be prevented and gradual erosion should be monitored.
- 11.2.5 The scheduled area associated with the site of Loweswater Pele (NTSMR 20464; SM 27660) includes the whole promontory as defined by, and including, the earthwork ramparts, to the west, the fenceline to the north, and the shoreline. All of the land within this area is included in the schedule, although the modern fences are not. The scheduling was originally applied in relation to the promontory as the possible site of a pele tower with an associated moat. It appears likely that the moat represents the ramparts of an earlier fortification of possible Iron Age date and the schedule should be updated to consider this. There is also a causewayed trackway (NTSMR 29407) at the north-western side of the site that has been formed by the modification and extension of a natural

spur of land to allow access across the waterlogged area between the promontory and the dry land to the west. This is likely to have been associated with some of the earliest use of the site and should be included within the scheduled area. There has been some tree planting within the scheduled area, including the erection of a protective fence around the young trees, which intrudes upon one of a series of hollows (NTSMR 29395) recorded during the current survey. It is recommended that an application should be made for Scheduled Monument Consent to enable the removal of the trees and fencing and that any such work should be carried out with archaeological consultation and supervision in order to minimise any impact on sub-surface remains. No work should be carried out within the scheduled area without archaeological consultation. There is severe ongoing water-erosion from the lake to a sunken platform (NTSMR 29404) at the eastern edge of the promontory, which could be associated with a former pele or medieval land-use. This erosion is likely to be a result of the raising of the water level of the lake in the late nineteenth century. The earthwork ramparts are also subject to damage from root action as a result of the growth of vegetation, such as gorse.

- The enclosed settlements near Lambling Knott (NTSMR 20381; SM 27670) 11.2.6 and at Lanthwaite Green (NTSMR 20389; SM 27659) lie on fellside pasture and are subject to gradual erosion from natural processes, stock activity, and walkers. The growth of vegetation should be discouraged from the sites and the general levels of erosion should be monitored. There are numerous clearance cairns associated with the settlement at Lanthwaite Green (NTSMR 20389; SM 27659) that are currently outside of the scheduled area and should be brought under the protection of the scheduling. These cairns represent a field system which has enhanced value due to the association with the adjacent settlement, in accordance with the description of group value presented in the Secretary of State's criteria for scheduling ancient monuments, in annexe 4 of PPG16 (Department of Environment 1990). These cairns could relate to some of the earliest use of the site, during the Bronze or Iron Ages, and, therefore, represent evidence of subsistence practices at this time in the local area, which have been subject to only limited archaeological study.
- 11.2.7 The settlement near Scale Beck (NTSMR 20380; SM 27674) lies within an area of fellside pasture and is, therefore, mainly threatened by natural erosive processes. There is bracken at the site, which is likely to cause long-term damage, and trees are growing from a wall (NTSMR 29777) and a longhouse (NTSMR 29776). There is also risk of water-erosion from Scale Beck, which has damaged at least one wall (NTSMR 29777). It is recommended that an application should be made for Scheduled Monument Consent to allow the bracken and trees to be cleared from the site. The site should also be monitored for ongoing stock erosion.
- 11.2.8 *Sites Recommended for Statutory Designations:* in addition to these sites, there are seven sites that might also qualify for statutory protection as Scheduled Monuments, using the Secretary of State's criteria for scheduling ancient monuments, in annexe 4 of PPG 16 (DoE 1990). There is an example of an enclosed settlement (NTSMR 27581) at High Nook Farm, which could be of Iron Age or Romano-British date. There has been very little excavation of Iron Age and Romano-British settlements within Cumbria and this site retains the potential to provide valuable information about the nature, date, and longevity

- of rural settlements during these periods. The condition of the site appears to be good, with no modern encumbrances occupying the area.
- 11.2.9 A second enclosed settlement (NTSMR 24355), without statutory protection, is present, lying to the east of Rannerdale Farm. This site was previously recorded in the NTSMR as a deserted medieval settlement, for which documentary evidence exists. The site has not been intruded upon by development, and represents an extremely rare and potentially informative and diverse site, coupled with the former chapel of the Blessed Mary Magdalene (NTSMR 29105) that is likely to lie within this area, as well as domestic remains and field systems. In addition to the medieval phase of activity, the site appears to represent the re-use of an earlier enclosed settlement of Iron Age or Romano-British date. As such, it has the potential to provide information related to the cycles of extended use, and abandonment and re-use, of settlements in the area and in the wider region from the later prehistoric period to the post-medieval period. The early phases of use have the potential to include domestic sites, as well as field systems, and to provide data relating to enclosed rural settlements. The main threat to this site is from footpath erosion and it is recommended that the footpaths in the vicinity should be consolidated to form a single access route, the line of which should first be evaluated archaeologically.
- 11.2.10 There are three instances of rock art (NTSMR 29669, 29136 and 29137) within Buttermere, all of which comprise cup or ring marks, or a combination of both motifs. These are extremely rare site-types in Cumbria and one of the few current indicators of activity during the Bronze Age, or potentially Neolithic, periods in the area. The distribution of these sites might aid an understanding of these enigmatic monuments and, therefore, the sites have collective value as a group. The condition of the motifs at Mill Beck (NTSMR 29136) and Crag House (NTSMR 29669) are very good, although the site at Mill Beck is under threat of erosion by footpath use. Part of the outcrop that the rock art at Low Park (NTSMR 29137) occupies has been quarried away, although it is not possible to know whether any motifs were destroyed. As there are few indications of Bronze Age activity within Buttermere and the Lake District, monumental sites, such as panels of rock art, are extremely informative. As sites that are currently poorly understood, their preservation in situ, in order to allow further studies to consider their landscape setting, is vital. The main threat is to the site adjacent to Mill Beck (NTSMR 29136), which is subject to footpath erosion.
- 11.2.11 Two round barrows (NTSMR 29633 and 29634) lie at the western shore of Loweswater, and as earthen mounds are an unusual site-type within Cumbria, where stone-built cairns are more common. These sites are likely to represent a lowland equivalent to the hilltop cairns, three of which exist within the current survey areas and have been subject to scheduling (NTSMR 20393; SM 27656; NTSMR 29097; SM 27655 and NTSMR 29098; SM 27654). The rarity of these sites as a pair of lowland earthen barrows, and their potential to provide information relating to Bronze Age funerary practices and the extent of occupation at this time, make them archaeologically significant. The sites are in extremely good condition and, due to their location, provide an accessible site of rare cultural heritage in an aesthetic setting to visitors to the area. The main threats to these sites are from footpath erosion, vegetation growth, and forestry works.

- 11.2.12 Although known from various locations in Britain and Ireland, only one example of a burnt mound (NTSMR 29489) is known from Buttermere, with approximately 20 such sites having been identified throughout Cumbria (Hodgson and Brennand 2006, 44). This site is in extremely good condition and represents one of the few opportunities currently available to attempt to define the extent of activity during the Bronze Age. The relationship between these sites and contemporary settlement is poorly understood, and the functions of these enigmatic monuments are disputed. As such, the site has the potential to provide informative archaeological data. If there are no changes of land use in the area, the main threat to the site will be from stock erosion.
- 11.2.13 The final site that might qualify for scheduled status is a group of cairns to the south of Lanthwaite Common that might represent funerary cairns (NTSMR 20389). As a group that is possibly associated with an early settlement at Lanthwaite Green, the cairns represent a potential opportunity to explore the relationship between settlement, subsistence, and funerary and ritualistic activity in the area during the prehistoric period. The cairns also comprise a discrete grouping that appears to have been specifically placed to exploit an extensive vista to the south and are, therefore, likely to be most fully understood within their landscape context and as a collective grouping. Gradual natural erosion, vegetation growth, and the removal of stone for use in wall repair constitute the main threats to these sites.
- 11.2.14 *Listed Buildings:* any work that might affect a Listed Building (*Appendix 4*) would require consultation with the property Curator. Listed Building Consent could then be obtained through the Local Planning Authority or English Heritage, depending upon the grade of the listing. The settings of the Listed Buildings also be subject to statutory protection, and further advice on this can be given by the Curator. The statutory protection includes the inside and outside of the building and the associated curtilage.
- 11.2.15 *Other Sites of Archaeological Interest:* every effort should be made to afford an appropriate level of care to all other sites of cultural heritage within the survey area. The survey area contains a wide selection of sites that are typical of an upland Lake District setting, with many being associated with agricultural land management, historic settlement, or industry. Every effort should be made to maintain the condition of these sites and to retain them as features in the landscape, irrespective of their legal status. The sites listed on The National Trust Sites and Monuments Record should be regularly monitored to check for potential hazards, impacts, or erosion.
- 11.2.16 Additional archaeological mitigation or research in the form of survey, evaluation, excavation, or building recording would be required in advance of any activities that might involve the disturbance of archaeologically sensitive areas. Sites should not, therefore, be subject to any disturbance in the absence of archaeological consultation and supervision. No materials that constitute part of a site of archaeological interest must be removed, and this should especially be borne in mind when stone picking for footpath renewal takes place within the valley and when walls and shelters are being maintained.
- 11.2.17 *Landscape Conservation:* strategies to conserve and maintain the distinctive characteristics of the three separate landscape zones within the survey area, of lowland pasture and meadow, fellside intake, and high fell, should be sought.

- The term 'distinctive characteristics' is used here to refer to criteria such as boundary type, vegetation type, and agricultural use.
- 11.2.18 The existing stone walls, hedgerows, and other boundaries within the study area are integral parts of the local historic landscape and in some cases are of great archaeological significance. For this reason, long-term management of the farming landscape should aim to avoid further boundary loss and to perpetuate the enclosed character of the local landscape. Walls and hedges that are in stockproof, or near stockproof, condition should be maintained as such, even if they become agriculturally redundant. If such walls are in a partial state of deterioration, they should be considered for repair.
- 11.2.19 Collapsed walls need not be rebuilt but should not be considered as sources of building material for rebuilding elsewhere. Fencing along the same line of a wall, or hedge bank, should be set away from them and not driven through the remains. Fencing should not replace walls and hedges, or sections of walls and hedges, if the material and resources are available to appropriately repair them.
- 11.2.20 *Current Land Use:* permanent pasture is the ideal habitat for the preservation of both visible and sub-surface remains of archaeological interest. For this reason, the current management of all farmland within the survey area as either permanent pasture, or pasture and meadow, should be perpetuated wherever possible. Ploughing or any other intrusive disturbance should avoid all sites of archaeological interest. Earthworks and ridge and furrow cultivation remains are especially vulnerable to such disturbance. In addition, livestock should not be encouraged to damage sites by the inappropriate placement of ring feeders, gates, or fencing. Burrowing animals can also cause damage to sites of archaeological interest, particularly sub-surface remains and earthworks, and animal control should follow nationally proscribed guidelines, but should not involve digging into or disturbing the ground.
- 11.2.21 Opportunities to restrict the growth and spread of bracken and gorse in areas where sites of archaeological interest are present should be sought. In some areas the problem could be addressed through the reintroduction of hardy cattle breeds, although this would be inappropriate where stock erosion could impact upon fragile remains, while in other areas manual clearance might be more appropriate.

11.3 Priorities for Future Archaeological Research

- 11.3.1 *Outreach, Tourism, and Publication:* a popular publication or leaflet highlighting the important historic themes, landscapes, and archaeology of the valley could be produced. In addition, a more in-depth synthetic publication of the archaeology of the valley could also be produced.
- 11.3.2 Careful consideration of the sympathetic and restrained provision of information boards could increase the intellectual accessibility of some of the sites for visitors to the area. Where possible, these could be restricted to car parking areas, where they could be mounted to walls without being overt or intrusive within the landscape, in order to avoid creating any negative impact on the setting of sites. This would be particularly suitable at the enclosed settlement at Lanthwaite Green (NTSMR 20389), where such a board could be established at the adjacent car park.

- 11.3.3 Such boards would also be very suitable at the car park directly south of Rannerdale farm, where information could be provided about the diverse range of well-preserved remains represented by the nearby enclosed Iron Age or Romano-British farmstead (NTSMR 24355), deserted medieval settlement, and an exceptional example of a stone potash kiln (NTSMR 24351).
- 11.3.4 A bench has been mounted within a charcoal pitstead (NTSMR 29557) to the eastern side of Crummock Water. This site is crossed by the main lakeside footpath and is, therefore, already exposed to a degree of gradual erosion. Rather than causing additional disturbance to the site, by the removal of the bench, this point could be used as the setting for an information board explaining about the industrial heritage of the area, as it lies close to numerous bloomery sites, the informatively named Cinderdale Common and Beck, and evidence of woodland industry represented by the pitstead.
- 11.3.5 *Topographic Survey:* numerous sites and complexes within the landscape would benefit from further more intensive survey and interpretation. A priority should be the enclosed settlement at Rannerdale, which has been described in detail but has not been subject to an accurate survey plan (NTSMR 24355). Any attempt to interpret the complex phasing of this multiple phase site would require an accurate and detailed topographic survey. This is also essential in order to establish a current baseline condition from which to assess erosive impacts, particularly of footpath use, on the monument. The ramparts and other earthworks at the Loweswater Pele promontory fort (NTSMR 20464) should also be subject to topographic survey, as should the enclosed settlement at Lambling Knott (NTSMR 20381). The topographic survey of the enclosed settlement at Lanthwaite Green should be extended to include the additional clearance cairns, and the group of possible funerary cairns (NTSMR 29379), identified to the south of the site, on Lanthwaite Common.
- 11.3.6 The settlement as Scales (NTSMR 20380) should also be subject to topographic survey. The pattern of medieval agriculture could also be investigated by the topographic survey of examples of broad ridge and furrow and associated clearance cairns and banks. This should include the extensive field system (NTSMR 29785) to the west of Scale Knott. The larger mining complexes, in particular the remains at Whiteoak lead mine (NTSMR 24546), would be suitable for topographic survey. Diverse elements of the lead processing industry are present at Whiteoak and an accurate plan would contribute to an improved understanding of the activity at the site.
- 11.3.7 *Geophysical Survey:* the environs of putative bloomery sites should be subject to geophysical survey in order to identify the core working areas related to these sites, which can exist within a wide spread of associated industrial waste. Additional sites in close proximity might also be identified, which are not visible at ground level. A survey of the promontory of Loweswater Pele (NTSMR 20464) could reveal the location of the putative pele tower, or subsurface features associated with earlier occupation during the later prehistoric or Romano-British periods. Survey in the environs of the burnt mound (NTSMR 29489) might allow the identification of fireplaces associated with the site.
- 11.3.8 *Palynological Work:* the analysis of environmental cores from areas, such as Buttermere Moss, Whiteoak Moss, and the lake margins might provide

evidence of environmental changes throughout the Holocene. Such evidence might be used in conjunction with the recent studies of lake sediments (Shen et al, 2008) to trace the development of human activity in the area, in relation to woodland clearance and the use of agriculture (Hodgson and Brennand 2007, 33). The impact of putative peat cutting in the area might also be discernible in the truncation of any peat deposits. The waterlogged area that separates the promontory fort at Loweswater Pele (NTSMR 20464) from the dry land to the west could provide environmental data relating to the use of an area that appears to have featured numerous land uses, including occupation during the later prehistoric period, the establishment of a medieval deer park and the subsequent creation of medieval tenements and post-medieval farmsteads. Deposits associated with the burnt mound (NTSMR 29489) and possible funerary cairns could also provide evidence associated with changes of local land-use, as could deposits associated with the panels of rock art and the settlement sites of putative Iron Age, Romano-British, and medieval date (Hodgson and Brennand 2007, 44–6).

- **Excavation:** limited sampling strategies should be applied to varied sites of 11.3.9 archaeological interest. Excavation at the settlement sites, dating to between the later prehistoric and medieval periods, could allow the currently uncertain chronological developments of the sites to be refined and produce material suitable for environmental analyses and scientific dating. The precise nature of such sites and any association with permanent settlement, seasonal occupation, and industrial activities might also be established. The necessity to establish a single footpath within the enclosed farmstead at Rannerdale (NTSMR 24355) would provide an opportunity to excavate along the line of the proposed path, in anticipation of concentrated erosion and subsequent intrusive repair work. This path would cut through a multiple period site that has enormous potential to inform the archaeological record for the prehistoric and historic periods in Buttermere. The putative promontory fort at Loweswater Pele (NTSMR 20464) could feature phases dating from the Bronze Age, Iron Age, Romano-British period, medieval, and post-medieval periods. This potential palimpsest of activity could only be resolved by excavation and the vital question of whether the earthworks represent a medieval moat or a prehistoric fortification could be addressed by targeted trenching.
- 11.3.10 Excavation at some of the abandoned post-medieval farmsteads, such as Peel Place (NTSMR 23020), could provide the opportunity to examine the longevity of these sites and the possibility of successive phases of occupation over an extended duration beginning in the medieval period, or earlier. The targeted excavation of monumental sites could also elucidate the chronological development of activity in the area and provide samples for environmental and scientific dating analyses. The excavation of pitsteads, potash kilns, and bloomeries could confirm the putative uses of these sites, as well as provide insights into their local usage and chronological contexts. Any geophysical surveys to be undertaken should precede and inform, intrusive archaeological investigations.
- 11.3.11 *Scientific Dating:* radiocarbon dating of features associated with the enclosed settlements at Lanthwaite Green (NTSMR 20389), Rannerdale (NTSMR 24355), High Nook Farm (NTSMR 27581), and Lambling Knott (NTSMR 20381), and the promontory fort at Loweswater Pele (NTSMR 20464) could

prove a vital aid in establishing the dates of establishment and subsequent reuse of these sites, and corresponds with the recommendations for future research of prehistoric settlement in the research agenda for the North West (Hodgson and Brennand 2007, 41; 33). Previous understandings of the Iron Age and Romano-British periods in Cumbria are being radically re-evaluated in the light of current, but limited, environmental and archaeological investigations (Hoaen and Loney 2004; Wells 2003) and additional dating evidence is vital to our understanding of human occupation in the area during these periods. Such dating could also provide additional data for interpreting the possible origins of the hundreds of enclosures and settlements that have been identified, but not closely dated, within Cumbria (Philpott 2006, 74).

- 11.3.12 Radiometric dating could be utilised in order to establish chronological sequences relating to the production of rock art and associated palaeoenvironmental evidence (Hodgson and Brennand 2007, 44). Dating should also be undertaken on deposits associated with the burnt mound (NTSMR 29489) in order to help establish the longevity of this monument-type within the region and to gain a better understanding of the associations between the site and contemporary local activity (*op cit*, 46). The archaeological record would also benefit from the dating of material associated with potential prehistoric burial sites (*op cit*, 45).
- 11.3.13 The numerous charcoal pitsteads and bloomery sites within the area could represent activity spanning a wide date range between the medieval and post-medieval periods. Scientific dating could help to refine the broad chronological framework within which these sites are understood, in line with regional research priorities (Newman and Newman 2007, 112). Such dating at the Scales settlement (NTSMR 20380) would allow investigation of medieval industry and associated nucleated settlement.

12. BIBLIOGRAPHY

12.1 **PRIMARY SOURCES**

Cumbria Record Office - Carlisle (CRO(C))

D/Lec/301	Percy Survey of 1578: survey of Earl of Northumberland's estates in Cumberland.
D/Lec/299	Records of enclosure at Blakerigg in 1568
D/Lec/29/1	Records of medieval fisheries at Buttermere
D/Lec/29/9	Records of medieval fisheries at Buttermere
DRC/8/35	Records of medieval fisheries at Buttermere

DRC/0/33	Records of medieval fisheries at Buttermere	
Whitehaven Record Office		
DWM 11/408/1	A plan of the Duke of Norfolk's ancient freehold estate at Gatesgarth in Buttermere, 1812	
DWM 1/36/6	A plan of Gatesgarth estate, the property of John Marshall esq, at Buttermere, after purchase in 1815–16	
D/WM 1/36/19	Plan of Scale Hill and Nether Close farm, c 1824	
D/WM/11/247	Plan of Loweswater lake and Mosser Fell, 1827	
DWM 1/238	Donald, T, 1776 A plan of Godfrid estate in the Parish of Loweswater	
DWM / 1/31	Donald, T, 1779 A plan of Lowhouse, Beckhouse, and Pykthow estates in the Parish of Lorton	
DWM /2/96	Donald, T, 1782 A plan of Foulsike, Godfrahead, Churchstile, and Infield estates in the Parish of Loweswater	
DWM /1/104	Donald, T, 1787 A plan of Crabtreebeck and Thrussbank estates in the Parish of Loweswater	
D/WM/11/253/1	Nicholson, J, 1780 A plan of Mr Gawen Langton's estate at Cornhow in the Parish of Lorton	

$Public\ Record\ Office\ -\ London\ (PRO(L))$

Bragg in 1805

SC11/730 m.lv	Records of stock at Gatesgarth vaccary in 1259
SC11/730, mm.9v, 13v, 14v	Records of stock at Gatesgarth vaccary in 1270
SC6/824/6–15	Records of holdings at Gatesgarth vaccary between
1260	
	and 1318
E199/7/3	Records of tenancy at Gatesgarth vaccary in 1310

Scale Hill in the Parish of Lorton, 1804, from catalogue sale to

Records provided by Lorton and Derwent Fells Local History Society

Stanwix, J, 1838 A plan of an estate situated at Buttermere, the property of John Marshall esq

D/WM/3/9

12.2 Published Cartographic Sources

Crosthwaite, P, 1800, An accurate map of Buttermere, Crummock and Loweswater lakes, London

Donald, T, 1787 A plan of High Nook estate in the Parish of Loweswater

Hodskinson, J, and Donald, T, 1774 Map of Cumberland

Nicholson, J, 1780 A plan of Mr Gawen Langton's estate at Cornhow in the Parish of Lorton, (WRO) D/WM/11/253/1

Ordnance Survey, 1861–3 1:2500 series, 1st edition

Ordnance Survey, 1900 1:2500 series, 2nd edition

Ordnance Survey, 1982 1:10,000

Tithe map of township of Loweswater of 1839

Tithe map of township of Brackenthwaite of 1844

Tithe map of township of Buttermere of 1844

12.3 SECONDARY SOURCES

Adams, J, 1988 Mines of the Lake District Fells, Clapham

Annable, R, 1987 *The Later Prehistory of Northern England*, Brit Archaeol Reps, British Series **160**, Oxford

Armstrong, AM, Mawr, A, Stenton, FM and Dickens, B, 1950 *The place-names of Cumberland*, Eng Place-name Soc, **20-22**, Cambridge

Barber, KE, Dumayne, L, and Stonemand, R, 1993 Climate change and human impact during the late Holocene in northern Britain, in FM Chambers (ed), *Climate change and human impact on the environment*, London

Barfield, LH, and Hodder, MA, 1987 Burnt mounds as saunas, and the prehistory of bathing, *Antiquity*, **61**, 370–9

Barton, N, 2005 Ice Age Britain, London

Beta Analytic Inc, 2002 Radiocarbon Dating Results for Samples TOMGILLA0001, TOMGILLB0002, TROUGHHB0003, HARRISIONC004, ANGLECRA05, COLWITHWOOD6, WATERPARK007, Dating of Bloomery sites within The Lake District National Park, unpubl rep

Beta Analytic Inc, 2003 Radiocarbon Dating Results for Samples BLMOSSPOT001, BLELTARN0001, Dating of Bloomery sites within The Lake District National Park, unpubl rep

Bewley, RH, 1994 Prehistoric and Romano-British settlement in the Solway Plain Cumbria, Oxbow Monograph, **36**, Oxford

Bott, G, 1992, Pioneer fell walker hiked to London in eight days, *The Cumberland and Westmorland Herald*, Saturday 4th July

Bowden, M (ed), 2000 Furness Iron, The physical remains of the iron industry and related woodland industries of Furness and Southern Lakeland, Swindon

Bradley, R, 2000 An archaeology of natural places, Abingdon

Brennand, M (ed), 2007 Research and archaeology in north west England: an archaeological research framework for north west England, volume 2, research agenda and strategy, CBA Archaeol North West, 9, Manchester

Burl, A, 2000 The stone circles of Britain, Ireland and Brittany, London

British Geological Survey, 1987 Glossary of the minerals of the Lake District and adjoining areas, Newcastle Upon Tyne

Cameron, AD, 1993 Slate from Honister: an historical and field guide, Cumbria Amenity Trust Mining History Society

Chappell, S, 1987 Stone Axe Morphology and Distribution in Neolithic Britain, Brit Archaeol Reps, British Series, 177, Oxford

Cherry, J, and Cherry, PJ, 2002 Coastline and upland in Cumbrian prehistory: a retrospective, *Trans Cumberland Westmorland Antiq Archaeol Soc*, ser **3**, **2**, 1-

Chris Blandford Associates, 2006 Lake District World Heritage Site Steering Group - Technical Advisory Group 1: Candidate World Heritage Site, Outline Statement of Outstanding Value, unpubl rep

Clough, THMcK, and Cummins, WA, 1988 Stone Axe Studies Vol 2, The petrology of prehistoric stone implements from the British Isles, CBA Res Rep 67, London

Collingwood, W G, 1908 Report on an exploration of the Romano-British settlement at Ewe Close, Crosby Ravensworth, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **8**, 355-68

Countryside Commission, 1998 Countryside Character, Vol 2: North West, Cheltenham

Cowell, R, 2005 Late prehistoric lowland settlement in north west England, in M Nevell and N Redhead (eds), *Mellor: living on the edge, a regional study of an Iron Age and Romano-British upland settlement*, Manchester, 65–76

Cunliffe, B, 1991 Iron Age communities in Britain, 3rd edn, London

Darbishire, R, 1873 Notes on discoveries at Ehenside Tarn, Cumberland, *Archaeologia*, **44**, 273-92

Darvill, T, 1987 Prehistoric Britain, London

Davis-Shiel, M, 1991 Lorton and District: map of industrial sites, unpubl rep

DoE (Department of the Environment), 1990 Planning Policy Guidance 16: Archaeology and Planning, London

Donald, MB, 1994, Elizabethan Copper, the history of The Company of Mines Royal 1568–1605, Ulverston

Edmonds, M, 1995 Stone tools and society, working stone in Neolithic and Bronze Age Britain, London

Edmonds, M, and Seaborne, T, 2001 Prehistory in the Peak, Stroud

Ehrenberg, MR, 1990 Some aspects of the distribution of burnt mounds, in MA Hodder and LH Barfield (eds) *Burnt mounds and hot stone technology: papers from the second*

international burnt mound conference, Sandwell, $12^{th} - 14^{th}$ October 1990, Sandwell, 41–58

Engineering Archaeological Services Ltd, 1999 Cumbria 1999: geophysical surveys of ironworking sites in the Lake District National Park, unpubl rep

Engineering Archaeological Services Ltd, 2001 Buttermere WTW pipeline geophysical survey, unpubl rep

English Heritage, 1991 Management of Archaeological Projects, 2nd edn, London

Ellerby, A, and Whittaker, T, 1986 High Nook Farm: Vernacular Building Survey, unpubl survey records

Ellis, P (ed), 1993 Beeston Castle, Cheshire, excavations by Laurence Keen and Peter Hough, 1968–85, London

Fair, M, 1936 Loweswater Pele and Parks, *Trans Cumberland Westmorland Antiq Soc*, n ser, **36**, 126–8

Field, J, 1989 English Field names, Gloucester

Green, S, and Whittaker, T, 1985a Cornhow Cottage: Vernacular Building Survey, unpubl survey records

Green, S, and Whittaker, T, 1985b Lanthwaite Cottage: Vernacular Building Survey, unpubl survey records

Green, S, and Whittaker, T, 1985c Crag House Farm: Vernacular Building Survey, unpubl survey records

Heawood, R, and Huckerby, E, 2002 Excavation of a burnt mound at Sparrowmire Farm, Kendal, *Trans Cumberland Westmorland Antiq Soc*, ser 3, **2**, 29–49

Higham, N, 1986 The northern counties to AD 1000, London

Hindle, BP, 1998 Roads and Trackways of the Lake District, 2nd edn, Ashbourne

Hoaen, AW, and Loney, HL, 2004 Bronze and Iron Age connections: memory and persistence in Matterdale, Cumbria, *Trans Cumberland Westmorland Antiq Soc*, ser 3, 4, 39–54

Hodgkinson, D, Huckerby, E, Middleton, R and Wells, CE, 2000, *The Lowland Wetlands of Cumbria*, Lancaster Imprints 8, Lancaster

Hodgson, J, and Brennand, M, 2006 The prehistoric period resource assessment, in M Brennand (ed) *The archaeology of north west England, an archaeological research framework for north west England: volume 1, resource assessment*, CBA Archaeol North West, **9**, Manchester, 23–58

Hodgson, J, and Brennand, M, 2007 The prehistoric period research agenda, in M Brennand (ed) *The archaeology of north west England, an archaeological research framework for north west England: volume 2, research agenda and strategy*, CBA Archaeol North West, **9**, Manchester, 31–54

Jackson, MJ, 1990 Castles of Cumbria, Carlisle

Johnson, M, (ed) 2004 Excavation of Broadwood enclosure, Thornton in Lonsdale, North Yorks, unpubl rep

Jones, W, 1996 Dictionary of industrial archaeology, Stroud

Lake District National Park Authority, 2008 Looking after the national park, www.lake-district.gov.uk/index/looking_after/about_us/nat_parks_history.htm, accessed on 22 September 2008

Lund, J, 1999 An archaeological survey of an enclosed settlement and its environs at Lanthwaite Green, Crummock Water, unpubl rep

Lund, J, 2003 Whole farm plan recommendations for High Nook Farm for the whole farm process, unpubl rep

Marshall, JD, and Davies-Shiel, M, 1977 The Industrial Archaeology of the Lake Counties, Beckermet

Martin, J, c 1980 Family histories: Buttermere, unpubl rep

Millward, R, and Robinson, A, 1974 The Lake District, London

National Trust, nd Bundle of survey records of Rannerdale Farm NTSMR, unpubl records

National Trust, 2002 Farmhouses owned by the National Trust in Borrowdale, Draft unpubl rep

National Trust, 2005 An archaeological atlas for Buttermere and Loweswater, Cumbria, unpubl rep

National Trust 2008, *History of the trust:* 1884–1912, www.nationaltrust.org.uk/main/w-trust/w-thecharity/w-thecharity_our-past/w-history_trust/w-history_trust-1884_1912.htm, accessed on 22 September 2008

Neighbour, T, and Johnson, M, 2005 A Bronze Age burnt mound in lowland Cumbria: excavations at Garlands Hospital, Carlisle, 1997, *Trans Cumberland Westmorland Antiq Archaeol Soc 3 Ser*, 5, 11-24

Newman, RM, 2006 The Early medieval period resource assessment, in M Brenand (ed) The archaeology of north west England, an archaeological research framework for north west England: volume 1, resource assessment, CBA Archaeol North West, 9, Manchester, 91–114

Newman, CN, 2006 The medieval period resource assessment, in M Brenand (ed) *The archaeology of north west England, an archaeological research framework for north west England: volume 1, resource assessment*, CBA Archaeol North West, **9**, Manchester, 115–144

Newman, CN, and Newman, R, 2007 The medieval Period Research Agenda, in M Brenand (ed) Research and archaeology in north west England, an archaeological research framework for north west England: volume 2, Research Agenda and Strategy, CBA Archaeol North West, 9, Manchester, 95-114

OA North, 2002 Buttermere pipeline, Cumbria: archaeological watching brief, unpubl rep

OA North, 2007 Borrowdale, Cumbria, historic landscape survey, volume 1, unpubl rep

OA North, forthcoming *Upland Peats Study Final Report*, unpubl rep

O'Drisceoil, DA, 1988 Burnt mounds: cooking or bathing?, Antiquity, 62, 671-80

Parker Pearson, M, 1993 Bronze Age Britain, London

Pearsall, WH, and Pennington, W, 1973 The Lake District, London

Pennington, W, 1970 Vegetation History in the north west of England: a regional synthesis, in Walker, D, and West, RG, (eds), *Studies in the vegetation history of the British Isles*, Cambridge, 41-79

Pennington, W, 1975, The effect of Neolithic man in the Highland Zone, in JG, Evans, S, Limbrey and H, Cleere (eds) *The effect of man on the landscape: the Highland Zone*, The Council Brit Archaeol, Res Rep **11**, Nottingham

Philpott, R, 2006 The Romano-British period resource assessment, in M Brenand (ed) The archaeology of north west England, an archaeological research framework for north west England: volume 1, resource assessment, CBA Archaeol North West, 9, Manchester, 59–90

Pryor, F, 2006 Farmers in prehistoric Britain, Stroud

Quartermaine, J and Leech, R, forthcoming The later prehistory of the Lake District, the results of recent surveys

Rackham, O, 1990 Trees and Woodland in the British Landscape: The complete history of Britains Trees, Woods and Hedgerows, London

Richardson, S, and Evans, P, 1996 Tales of a Lakeland valley, Loweswater, Workington

Richardson, S, 1998 Tales of a Lakeland valley, Buttermere, Workington

Rollinson, W (ed), 1989 The Lake District Landscape Heritage, Newton Abbot

Rollinson, W, 1996 A History of Cumberland and Westmorland, 2nd edn, Chichester

Shen, Z, Bloemendal, J, Mauz, B, Chiverrell, RC, Dearing, JA, Lang, A, Liu, Q, 2008 Holocene environmental reconstruction of sediment-source linkages at Crummock Water, English Lake District, based on magnetic measurements, *The Holocene*, **18**, 1, 129–40

Size, N, 1936 Click Mill at Buttermere and Buttermere notes, *Trans Cumberland Westmorland Antiq Archaeol Soc*, **36**, 192–5

Steane, JM, 1984 The archaeology of medieval England and Wales, London

Waddell, J, 1998 The prehistoric archaeology of Ireland, Bray

Walker, D, 1965a The Post-Glacial Period in the Langdale Fells, English Lake District, *New Phytol*, **64**, 488-510

Walker, D, 1965b Excavations at Barnscar, 1957-58 Trans Cumberland Westmorland Antiq Archaeol Soc nser, 65, 53-65

Wells, C, 2003 Environmental changes in Roman north-west England: a synoptic overview of events north of the Ribble, *Trans Cumberland Westmorland Antiq Soc*, ser 3, 3, 67–84

West, T, 1793 A Guide to the Lakes in Cumberland, Westmorland and Lancashire (fifth edn), London

West, T, 1821 A guide to the lakes in Cumberland, Westmorland, and Lancashire, 11th ed, Kendal

Whellan, W, 1860 The history and topography of the counties of Cumberland and Westmorland, Pontefract

Whittaker, T, 1986 Watergate Farm: Vernacular Building Survey, unpubl survey records

Whyte, ID, (ed) 1985 Scandinavians in Cumbria, Edinburgh

Whyte, ID, 2003 Transforming Fell and Valley, Landscape and Parliamentary Enclosure in North West England, Lancaster

Wilson, J, (ed) 1905 Victoria county history, a history of the county of Cumberland, volume 2, www.british-history.ac.uk/report.aspx?compid=39959&strquery=loweswater, accessed on 11th September 2008

Wilson, J, (ed) 1915 The register of the priory of St Bees, Durham

Winchester, AJL, 1978 Territorial structure and agrarian organisation in Mediaeval and sixteenth century Copeland, Cumberland, unpubl Phd thesis

Winchester, AJL, 1986 Deserted sites in an area of dispersed rural settlement, unpubl rep

Winchester, AJL, 1987 Landscape and Society in medieval Cumbria, Edinburgh

Winchester, AJL, 2000 The Harvest of the Hills: Rural Life in Northern England and the Scottish Borders, 1400-1700, Edinburgh

Winchester, AJL, 2003 Demesne livestock farming in the Lake District: the vaccary at Gatesgarth, Buttermere, in the later thirteenth century, *Trans Cumberland Westmorland Antiq Archaeol Soc*, ser 3, **3**, 53-68

Winchester, AJL, 2007 Baronial and Manorial Parks in Medieval Cumbria, in Liddiard, R, (ed) 2007 *The Medieval Park: New Perspectives*, Macclesfield

APPENDIX 1 PROJECT BRIEF

The National Trust Archaeology North-West Region

Invitation to Tender: Historic Landscape Survey of land at Buttermere and Loweswater

1 Introduction

The National Trust is inviting tenders to conduct a Historic Landscape Survey of land in Buttermere and Loweswater, two quiet and picturesque Lakeland valleys situated in the north-western fells. The boundaries of the property owned and managed by the National Trust appear in pink on the attached map, land that is owned and managed under restrictive covenant from the National Trust is highlighted in yellow.

Previous investigations by the National Trust and others have established that this landscape preserves many important archaeological and historic features including; a) numerous important vernacular buildings, b) relict landscape features associated with past agriculture and land management and c) a fascinating collection of boundaries including walls and hedgerows that indicate the changing nature of land use in the valley during the medieval and post-medieval periods. None of these aspects have as yet been explored and recorded in detail.

The envisaged Historic Landscape Survey at Buttermere and Loweswater would aim to rectify this situation. The proposed investigations would not only identify and record all features of historic and archaeological interest on the property, undertake a thorough analysis of field boundaries, but also collate all available documentary and cartographic evidence to facilitate a better understanding of the local historic environment and the significance of the National Trust owned property.

The summary aims of the Historic Landscape Survey are as follows:

- Undertake an archaeological survey of the property to identify and record all
 visible sites, features and landscape elements of archaeological or historic
 interest and afterward produce a catalogue of information in the form of a
 gazetteer
- To record and analyse all boundaries within the survey area and develop a chronological framework for the development of the landscape through time
- Access and collate historic maps and other relevant documentary evidence, along with other useful secondary source material, that might assist in the understanding of land-use, enclosure, settlement and industry on the property

- Formulate a historic narrative for the property, from the prehistoric to the present day
- Produce a written and illustrated report that presents the results of the Historic Landscape Survey in a meaningful way and is able to be used as a tool for future property management
- Highlight any apparent threats or risks to the archaeological resource

2 Background

The National Trust's land ownership in the Buttermere and Loweswater valleys totals some 3,000 ha. The majority of this landholding is managed as farmland in the tenancy of four farms, three in the Buttermere valley; Rannerdale, Cragg and Wilkinsyke, together with one farm in Loweswater, High Nook. The National Trust also has ownership of the lakes of Buttermere, Crummock Water and Loweswater, along with some substantial areas of woodland (Holme Wood, Lanthwaite Wood and Burtness Wood). In addition to the land held inalienably the National Trust also possess covenants over a further 1,880 ha of land in the valley.

The earliest evidence of human activity in Buttermere and Loweswater dates from the Neolithic, with evidence in the form of funerary cairns and hut circles. Examples of these types of monument include the round cairn on Grasmoor Summit and the hut circles near Knott Rigg. The remains of settlements occupied during the later prehistoric period, or Iron-Age, and Romano-British periods, are also well represented in Buttermere. Two good examples can be seen in the valley, the first at Lanthwaite Green, while the second is located just above the Buttermere to Honister road in an intake field below Muddock Crags.

Many of the present place names in the area are of Scandinavian origin and are a testimony to the arrival of Norse speakers into the region after the eight century. There has as yet been no discovery of firm archaeological evidence of Early-Medieval settlement in the valley although placename elements such as 'thwaite' meaning 'clearing in a wood', suggests the valley was settled prior to the twelfth century. The only archaeological evidence for this immigration and cultural change is the chance discovery of an iron spearhead of possible Viking along the shore of Crummock Water.

The pattern of landholding in the area of Buttermere and Loweswater during the medieval period was generally complex, illustrating a mixed farming economy with strong ties to the textile industry and woodland economies. By 1300 the oak woodlands of the area would have been impacted on by their continuing exploitation for firewood, building materials, pig foraging and animal grazing. Further denudation would have occurred as the woods were exploited for small scale industry by wood turners, bark peelers and charcoal burners. The demand for charcoal is likely to have been particularly significant given the number of medieval bloomeries identified along the margins of Crummock water.

During the fourteenth century hostile raiding by Scots was at its height and appears to have had a profound effect on areas such as Buttermere. Together, the economic stress placed on these communities by raiding was compounded with the climatic deterioration around the Little Ice Age and a series of stock and

human diseases. As a result the area underwent a period of depopulation with many settlements and farmsteads being abandoned. The remains of two settlements likely to have been abandoned at this time can be seen in Buttermere, the first in a field north of Dale How to the east of Rannerdale Farm, while the second is located close to the south-western edge of Crummock Water alongside Scale Beck (on covenanted land).

By the end of the Medieval period economic conditions were considerably improved and alongside farming, diverse regional industries developed. Textiles in particular became increasingly important with the nearby town of Cockermouth having mills for both wool and flax. The most numerous type of archaeological feature recorded in the valley is the sheepfold which by their very number reflect the development and importance of sheep farming in the Lake District in the Post Medieval period.

Like most valley landscape, the best agricultural land in Buttermere is located on the alluvial flat land between the two lakes of Buttermere and Crummock Water. In the late sixteenth century this area was divided into three common fields: Nether, or Lower Field, in which all of the thirteenth farms in Buttermere village had shares; Over Field, in which all but two had shares; and two smaller fields, in which four had shares.

Gradually, as in other valleys, these common fields came to be sub-divided into larger units or 'dales'. At first, this process merely perpetuated the pattern of patchy landholding, the dales being fenced off 'strips' in the common fields. In most other valleys this process these scattered parcels were amalgamated until each farm became more or less surrounded by its own land. In Buttermere this process was never completed and the three remaining farms in the village still have what appears as a random pattern of landholding in the fields between the two lakes.

The area, like so many in the Lake District, has a long history of mining, with lead, copper and iron all being targeted. Remains associated with copper extraction can be seen in Burtness Wood while traces of the former lead mine can be found on the fell south of High Nook Farm. The valley also contains a large number of trail mines, often visible as black specs on the opposite on the hillside. These trail mines are the result of commercial prospecting and speculators tried to tap into the many mineral veins that pas through the surrounding fells.

3 Methodology

The methodology for this project can be broken down into three components: field survey, boundary recording and documentary research.

3.1 Field Survey

The required level of field survey would involve a complete walkover survey of all land owned and managed by the National Trust to identify and record all features of archaeological and historic interest. This exercise will result in the creation of a comprehensive gazetteer of recorded sites and monuments for Trust owned land in both Buttermere and Loweswater. The recorded information

should be plotted onto a series of digital maps at an appropriate scale for presentation in the survey report.

The field survey should include/ produce:

- accurate survey of all sites, features, buildings and landscape elements identified as being of either archaeological or historic interest
- a gazetteer of recorded sites, features and landscape elements ready for entry on the National Trust Sites and Monuments Record (NTSMR). The gazetteer will include the following mandatory description fields: NTSMR number, survey reference number, site name, NGR, site description, monument type (using the English Heritage site thesaurus or similar), period, condition, threats, management recommendations and photo ref. A block of NTSMR numbers will be allocated by the National Trust archaeologist for use during the survey prior to the start of fieldwork
- sites that are already listed on the NTSMR in both Buttermere and Loweswater should be included in the gazetteer to create a comprehensive list of known sites and monuments (there are at present about 175 known sites, monuments, buildings and find spots for the property).
- features identifiable from documentary sources or aerial photographs but not evident on the ground shall be plotted and described as far as possible in order that these features may be recorded on the NTSMR
- the National Trust already possesses detailed Vernacular Building Surveys for all of the farms and buildings within the study area and so no further building investigation is required. The existing reports will be made freely available on request.

3.2 Boundary Recording

No comprehensive study of the sequence of land development and enclosure in the area of Buttermere and Loweswater has yet been undertaken. Therefore a program of boundary recording for all land owned and managed by the National Trust is required as part of the investigations. Recording will require the examination of boundary types (e.g. wall, hedge, earth bank, fence etc), current condition, information on wall furniture (gateways, stiles, smoots) and any evidence of abutments or relationships between boundaries that might indicate a sequence of phasing or development. Significant vegetation types on boundaries, such as pollards or veteran trees, should also be recorded if it is likely to assist in developing an understanding of past land-use or chronology of certain boundary types.

The recorded information should be appear in the form of a written narrative outlining the history of enclosure on the property within the body of the written report. This explanation should be accompanied by a series of digital maps that present an analysis of the boundaries on the property and wherever possible show the phased development of the landscape through time.

An examination of historic maps should yield information relating to the date, date range, or *terminus ante quem* for the construction of many boundaries within the survey area and inform and compliment field survey.

3.3 Documentary research

The project will need to obtain good copies of all historic map material and other documents considered particularly important to the project and reproduce them within the body of the report or as a separate appendix. Records relating to the property are believed to be held at the public records in the county. It is not known if other records are held at other public record offices, including London, this possibility will need to be investigated as part of the project. It is suggested a modest contingency should be included to cover any additional research outside the county as part of the overall project cost.

Documentary research should be carried out for all land that is currently owned and managed by the National Trust. <u>Documentary research should also be undertaken for land that is held under restrictive convent by from the National Trust.</u>

4 Reporting

On completion of the on-site work, a draft report should be completed. The draft report should include copies of all maps, photographs and other illustrations that will appear in the final report. Two copies of the draft report should be dispatched, one to the North West Regional Office and one to the Countryside Office.

The draft report will then be examined by the National Trust and comments returned to the contractor including any suggested amendments.

5 Survey outputs

At the conclusion of the investigations, the contractor will provide the following to the National Trust:

Seven bound paper copies of the report and an eighth unbound copy. Each copy should be accompanied by a set of paper plans if not included in the bound report.

Seven separate digital copies of the complete report (including all digital mapping information in formats compatible with both MapInfo Version 7 and AutoCAD packages) should also be supplied.

The negatives, prints and digital image files from the photographic recording will be sent to the North West Regional Office in suitable archive storage materials, along with copies of any documentary material not included within the bound report.

The National Trust regional office will act as the repository for all original recording materials for the duration of this project. The National Trust reserve the right to deposit the complete archive, or a copy of the archive in the appropriate public record office at a later date.

6 Site conditions

The majority of land within the study area shaded pink is managed by farm tenants on behalf of the National Trust.

Certain access restrictions will apply to enclosed land as a result of the requirements of the various farm business and an overall agreement for access will be negotiated by the National Trust on behalf of the contractor prior to the start of fieldwork. The remaining land including the open fell is permanently open for public access. Contractors do not require formal permission from the National Trust to enter this area, although a courtesy should be made ahead of fieldwork commencing.

The area shaded yellow is not owned by the National Trust and will not be subject to physical investigation.

7 General terms

The National Trust will retain copyright over the resulting report and all associated archival material (including all digital maps and photographic material), and shall have absolute control over the use and dissemination of that information. The National Trust fully recognises the originator's moral right to suitable accreditation in any publication of the results.

It is the policy of the National Trust to deposit copies of all surveys undertaken on its land with the appropriate regional archives, authorities and organisations. The National Trust will deposit a copy of the updated Sites and Monuments Record with the Archaeological Data Service based in York.

The project will be undertaken by the contractor acting on an independent basis. Staff working on the project will not be deemed employees of the National Trust. Tenders should reflect this fact and more specifically the Contractor will take sole responsibility for the payment of tax, National Insurance contributions, etc. If VAT is payable, this too should be indicated in the bid.

Further information about the National Trust's guidelines for archaeological survey is contained in "Archaeology and the Historic Environment: Historic Landscape Survey Guidelines" (National Trust, 2000) – available to download from the National Trust website.

This application to tender should be used in conjunction with the attached document "General Requirements and Conditions for Countryside and Garden Work". The Contractor must be able to agree to work to the requirements and conditions as set out in this document.

The successful contractor will be required to sign a contact agreement for the provision of archaeological services prior to the commencement of any on-site work. This contact outlines the roles and responsibilities of both the contractor and the National Trust and includes sections on health and safety, insurance, duty of care, confidentiality and copyright etc.

This contract ("Agreement for Provision of Archaeological Services") will be sent to the successful contractor along with notification that their project design and application for to provide services has been successful. This contact should be signed and a copy returned to the National Trust archaeologist immediately.

We request that the Contractor makes preferential use of local National Trust farm B+B accommodation for any overnight stays required during the course of the fieldwork.

8 Timescale

The National Trust would wish to undertake this work in the financial year 2007/8.

We recommend that the archive research along with all other preparation should take place in the summer months of 2007 in order to inform the programme of subsequent fieldwork. Fieldwork should then be undertaken between November 2007 and February 2008 when the conditions are most suitable for upland survey, with a final report produced by the end of March 2008.

It is important that <u>no fieldwork is planned to take place during the lambing period</u> when access to farms can be difficult. From that reason the Trust suggest that the fieldwork element of this project is complete before the end of February 2008.

The Contractor should indicate their availability for carrying out this work within the timescale indicated above as part of their bid.

9 Useful Contacts

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APPENDIX 2 PROJECT DESIGN

Oxford Archaeology North

February 2007

LAND AT BUTTERMERE AND LOWESWATER

HISTORIC LANDSCAPE SURVEY

PROJECT DESIGN

Proposals

The following project design is offered in response to a request from The National Trust and in accordance with a brief from Jamie Lund, The National Trust, to undertake a programme of archaeological survey of land in Buttermere and Loweswater. The purpose of this is to inform the appropriate conservation management of the archaeological resource within their property.

1. INTRODUCTION

1.1 CONTRACT BACKGROUND

- 1.1.1 Jamie Lund of The National Trust has invited Oxford Archaeology North (OA North) to submit a project design for a programme of historic landscape survey of their holdings in Buttermere and Loweswater, and the total study area is 73sqkm in extent comprising National Trust owned land, National Trust Covenanted land and privately owned land. The proposed programme is in accordance with a project brief by The National Trust and is intended to provide for the conservation management of the landscape and archaeological resource.
- 1.1.2 The survey would entail the enhancement of the Lake District and National Trust HER data, as well as the implementation of new identification survey work and boundary survey work.

1.2 OXFORD ARCHAEOLOGY NORTH

- 1.2.1 Oxford Archaeology (OA), which is an educational charity under the guidance of a board of trustees, has over 30 years of experience in professional archaeology, and can provide a professional and cost-effective service. We are the largest independent employer of archaeologists in the country (we currently have more than 200 members of staff), and can thus deploy considerable resources with extensive experience to any archaeological project. We have offices in Lancaster and Oxford, trading as Oxford Archaeology North (OA North), and Oxford Archaeology (OA) respectively, enabling us to provide a truly nationwide service. OA is an Institute of Field Archaeologists Registered Organisation (No 17). All work on the project will be undertaken in accordance with relevant professional standards, including:
 - IFA's Code of Conduct, (1999); Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, (1999); Standard and Guidance for Archaeological Evaluations, (1999); Standard and Guidance for Archaeological Watching Briefs, (1999).
 - English Heritage's Management of Archaeological Projects (MAP2), 1991.
 - The European Association of Archaeologists Principles of Conduct for Archaeologists Involved in Contract Archaeological Work (1998).
- 1.2.2 OA North has considerable experience of the evaluation, survey and excavation of sites of all periods, having undertaken a great number of small and large scale projects during the past 19 years. One of its particular specialisms is in the sphere of landscape recording and assessment. OA North has the professional expertise and resource to undertake the project detailed below to a high level of quality and efficiency. OA North and all its members of staff operate subject to the Institute of Field Archaeologists (IFA) Code of Conduct.
- 1.2.3 OA North has undertaken a large number of upland landscape surveys for a variety of clients (both private and national agencies such as English Heritage and Royal Commission on the Historical Monuments of England (RCHM(E)) and employs a qualified surveyor (James Quartermaine, BA, DipSurv, MIFA) who has many years (since 1984 in the region) experience of the identification and survey of upland landscapes, having worked closely with the RCHM(E) and the Lake District National Park Authority on a large number of projects.
- 1.2.4 Since 1982 OA North has been undertaking extensive upland landscape surveys throughout Northern England. Surveys include the Lake District National Park Survey, the Torver Common surveys (Lake District), Haweswater and Thirlmere estate surveys (Lake District), 200sqkm of the Nidderdale AONB (for NYCC), most of the Forest of Bowland AONB (Lancashire), most of the Arnside / Silverdale AONB, and a multitude of smaller landscape projects which include the Otterburn Range surveys in the Lake District National Park.
- 1.2.5 Recently OA North has undertaken a major programme of upland identification survey across the uplands of North Wales, on behalf of the Royal Commission of the Ancient and Historical Monuments of Wales (RCAHMW). This has entailed the survey of 250 sqkm of unenclosed upland, and has recorded over 3,500 monuments.
- 1.2.6 OA North has undertaken numerous upland survey projects for The National Trust, which includes the survey and excavation of the Langdale Axe Factories, the Lyme Park landscape

- survey (Cheshire), St Catherine's Estate survey (Windermere), Ennerdale Landscape Survey, Addleborough (Wensleydale), Rectory Woods survey (Heysham), a survey around Stickle Tarn, Great Langdale, the Borrowdale Landscape Survey, and the North Yorkshire Coast Survey.
- 1.2.7 To date OA North has undertaken archaeological field surveys of over 850sqkm of upland landscapes and has recorded over 25,000 field monuments. On the Arnside/Silverdale AONB project, in 1992, OA North was the first archaeological organisation in Britain to use GPS (Global Positioning System) survey techniques and since then has considerably advanced its skills in this area. OA North can claim to be one of the foremost specialists in the field of upland landscape recording.

2. OBJECTIVES

- 2.1 The primary purpose of the project is to inform future management decisions with regard to conservation matters relating to the archaeological and historical content of The National Trust holdings. The proposed study is intended as an initial exploration of the archaeological and historical resource, rather than a definitive and comprehensive study. The aims of this initial project are broadly as follows:
 - to undertake a documentary study, accessing and collating historic maps and other documentary data.
 - to undertake an archaeological survey of the property to identify and record all visible sites.
 - to record and analyse all field boundaries within the valley floors, and develop a chronology for the landscape.
 - to formulate an historic narrative for the property.
 - to produce a written report presenting the results of the historic landscape survey, and to provide a basis for the preparation of detailed management prescriptions by The National Trust.

3. METHODS STATEMENT

3.1 The following work programme is submitted in line with the objectives of the archaeological work summarised above. It is divided into three elements, desk based research (including aerial photographs), archaeological field survey, and reporting.

3.2 DESK-BASED RESEARCH

- 3.2.1 **Documentary and cartographic material:** the data generated during the desk-based study will provide the basis for an assessment of the nature and significance of the known surface and subsurface remains. It will examine land owned by The National Trust and also land under restricted covenant from The National Trust. The survey will also serve as a guide to the archaeological potential of the estates, and provide a basis from which historical narratives for the study area can be constructed.
- 3.2.2 The study will entail integrations of the relevant HER data and other data held by Cumbria County Council, Lake District National Park Authority, the National Mapping Record, and the Cumbria Record Office. The Ordnance Survey First Edition 6" Mapping will also be acquired digitally from the Lake District National Park Authority. This will enable interpretation of the features identified from the HER, and any new features identified.
- 3.2.3 It is anticipated that a search will be made of the tithe maps and other primary documentation for the area as is readily available. This will have the potential to inform the post-medieval use occupation and land-use in the area.
- 3.2.4 A study will also be made of the air photographs held by the Lake District National Park, NMR and the Cumbria HER; in particular any oblique coverage, which may be provide enhanced information on the features identified, and potentially identify new features. Appropriate oblique air photos will be scanned to be used in conjunction with the GIS,

although it is unlikely that they will be fully georeferenced and integrated as this can provide unsatisfactory results and hence a false impression of accuracy.

3.3 FIELD SURVEY METHODOLOGY

- 3.3.1 The defined study area is 73sqkm, which comprises National Trust owned land, National Trust Covenanted land and privately owned land. Excluding the privately owned land, the covenanted land and woodland and water, there is a requirement to survey 28sqkm of National Trust owned land. The survey will be undertaken as an enhanced Level 1b type survey (details of OA North's survey levels are contained in *Appendix 1*). The sites already identified from SMR will be checked and recorded at the same level of consistency as other newly discovered monuments. The survey will involve four elements: Reconnaissance, Mapping, Description and Photography.
- 3.3.2 **Reconnaissance:** the reconnaissance will consist of close field walking, varying from 10m to 30m line intervals dependent on visibility and safety considerations. The survey will aim to identify, locate and record archaeological sites and features on the ground and thus all sites noted will be recorded. The extent of any areas where there is no access will be defined on maps and depicted on the CAD mapping. All sites identified from the Sites and Monuments Record and also the OS first edition maps will be investigated.
- 3.3.3 **Survey mapping:** a Satellite Global Positioning System (GPS) will be utilised to satisfy the Level 1 survey requirements. GPS uses electronic distance measurement along radio frequencies to satellites to enable a positional fix in latitude and longitude which can be converted mathematically to Ordnance Survey national grid. The GPS is a Leica (GS20) handheld real time differential survey instrument, which obtains EGNOS corrections from a geostationary satellite. This means that the instrument can provide a locational accuracy of +- 0.5m, and provides for a quick and effective means of recording the position and extent of sites. The disadvantage of the system is that it will not work within woodland; however, there is not much woodland that requires survey. The GPS techniques will be used to record the extent of the site which internally stores the survey data and this is then output as GIS shape files and will be imported directly into a GIS system (ArcMap 9.2).
- 3.3.4 **SMR Site Location:** one considerable advantage of the system is that it is realtime and will provide an accurate location of the GPS unit at the time of the survey. As well as outputting GIS data it will also read GIS data, and will display GIS mapping on its screen. This means that the raw digital data from the SMR / HER will be imported directly into the hand held instrument, and the instrument will show to a high degree of accuracy when the unit is on the location of a reported site. This will considerably help to find documented sites and will assist in determining if a reported site is of natural origin. Where the location of the site varies from that defined in the SMR the location in the dataset will be refined. In practice, given the accuracy of the OA North GPS, this will be appropriate for most of the SMR / HER sites.
- 3.3.6 **Site Description and Assessment:** the key to economy of survey is being able to compile a descriptive record for each site in a fast and accurate manner, which can be implemented in all weather conditions. It is proposed that the data be directly input on site into a Psion palm computer, which is within a weatherproof case. The data will be incorporated into an Access 97 compatible database. The data will be backed up daily onto a portable computer running Access 97. The proposed system has the advantage that it can be input in adverse weather conditions, unlike conventional pro-forma sheets, and saves on the subsequent transcription of the data into the database; however, it is slightly slower to create the entry in the field by comparison with a conventional pro-forma.
- 3.3.7 The database will include the following mandatory fields: NTSMR number, survey reference number, Site Name, NGR, site description, monument type, period, condition, threats management recommendations and photo ref.
- 3.3.8 The input into the system will be guided by a proforma to ensure uniformity and consistency of input. Each category of significance will be given high, medium or low scores in the field. At the post-fieldwork stage a similar score will be placed on amenity potential. This can be calculated against its accessibility, its potential for interpretation, and its importance as a visual feature in the landscape. These values will be averaged to

provide an overall grade for the site at the data analysis stage.

- 3.3.9 **Site Interpretation:** the size and intricacy of the description will reflect the complexity of the site and will not be limited by any formulaic restrictions. The description will incorporate a provisional interpretation of the function and purpose of a site, where possible, and similarly will provide a provisional interpretation of the site's chronology where possible. At the completion of the field survey a field assessment will be made by the Project Manager (Jamie Quartermaine) to review the archaeological resource identified by the survey and to revisit the site interpretation on the basis of the results of the overall survey.
- 3.3.10 **Photographic Survey:** a photographic archive will be generated in the course of the field project, comprising landscape and detailed photography. Detailed photographs will be taken of all sites using a scale bar. All photography will be recorded on photographic proforma sheets which will show the subject, orientation and date. The photography will be primarily undertaken using a digital camera will allow the incorporation of a digital image of specific sites into the Access database form (as required). The use of photography in this way considerably enhances the usability of a database and greatly assists the analysis of the landscape. This digital archive will be backed up using archivally stable black and white 35mm format photography which will be maintained to archival standards.

3.4 BOUNDARY SURVEY

- 3.4.1 In addition to the identification survey it is required that a boundary survey be undertaken for the valley floors, containing the historic field systems. This survey will be undertaken alongside the identification survey and will examine both those boundaries that are still in use and those that have been removed and are evident only as an earthwork or in some instances a cropmark. The recording will examine all boundaries, determining their type, condition, maximum height, and key features within them such as openings, blockings, sheep creeps. It will examine the build type and character and develop a local typology of walling types to enable categorisation of the boundary form. This will define the basic forms of construction, such as orthostatic founded walls and those with multiple rows of through stones. It will identify sections of repair, and the form of the repair. The study will particularly examine the relationship between all sections of walling to establish relative dates of construction/repair. Where the walls are severely decayed then particular attention will be paid to the terminals of the walls.
- 3.4.2 *Site Location and Mapping:* the survey will use a 1:10,000 map base enlarged to 1:2000 for the annotation of the mapping, walls not depicted on these maps will be recorded by means of differential GPS survey.
- 3.4.3 **Photographic Survey:** significant sections of walling, areas of damage and typical constructional styles will be photographically recorded in monochrome and digital formats. All photography will be recorded on photographic *pro-forma* sheets which will show the subject, orientation, date and location of the point from where the photograph is taken. Photography will be undertaken in black and white on 35mm film and in digital formats (6.0 megapixel resolution). The use of a digital camera will allow the incorporation of a digital image of specific sites into the database form, if required.
- 3.4.4 **Descriptive Recording:** the boundary marker will be recorded either on a proforma or within a database on a palmtop computer. The descriptive record will define the principal characteristics of the boundary markers: form, character, height, width, phases of construction, relationship with other boundaries, and relationship with other archaeological features. It will record elements built into the boundary markers such as the numbers of through stones and their arrangement, hog holes, and entrances. It will record if the wall or boundary marker is constructed on an earlier boundary feature such as a lynchet or a collapsed foundation. The data will be collated into an access database linked into the GIS system and digital ground photographs will be incorporated, as required.

3.5 PROJECT ARCHIVE

3.5.1 **Archive:** the results of the fieldwork will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (Management of Archaeological Projects, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. This

- archive will be provided in the English Heritage Centre for Archaeology format, both as a printed document and digitally.
- 3.5.2 **Digital Presentation:** the digital data will be collated in a GIS, using Esri's ArcGIS 9. This powerful system provides full integration with standard database packages, and can output in a variety of formats compatible will all major GIS and CAD software packages. In particular it can output in MapInfo format and in AutoCAD DXF and DWG formats (including compatibility with AutoSketch). The database will be compiled in Access 97 format, as this provides good backwards and forwards compatibility with other versions of the software, and integrates smoothly with ArcGIS 9. Data can easily be imported into Access 97 from a variety of formats, and similarly can be easily exported back into other formats after
- 3.5.3 **Site Gazetteer:** the site descriptions and characterisations input in the field to the site PDA will be processed and combined with the records from the NTSMR. Once the digital gazetteer has been collated and edited, it will be output as an Access Report and then input directly into a Microsoft Word format. This data will then be formatted and topped and tailed within word to produce the gazetteer volume for the survey project.
- 3.5.4 **Photographic Presentation:** the primary access database will have fields defining the photograph number, type and orientation against the individual site. This will then be output as a database report, in order of photograph number, showing the site number, NGR, orientation and photo type. This will then be output as a word file to form the photographic catalogue.
 - 3.5.5 In addition, if required, the digital images will be directly linked into the Access database to facilitate the accessing of the images from within the database. The photographs will be linked to a catalogue proformas showing the details, orientation, negative numbers and date. The negatives will be deposited with The National Trust. The site gazetteer volume will incorporate high quality prints of digital images.

3.6 REPORTING

- 3.6.1 The report will present, summarise, and interpret the results of the programme detailed above, and will include a full index of archaeological features identified in the course of the project. The reports will consist of an acknowledgements statement, lists of contents, summary, introduction summarising the brief and project design and any agreed departures from them. The report will identify the significance of the archaeological and architectural evidence and will include the following:
 - An historical background of the estate, examining its origins and development
 - Results of the documentary study outlining the historical development of the area.
 - Results of the archaeological survey, presented in conjunction with the survey mapping
 - An interpretative account of the development of the designed landscape from its inception to the present.
- 3.6.2 The report will identify areas of archaeological importance, and will examine their level of preservation and fragility. The report will also include a complete bibliography of sources from which the data has been derived, and a list of further sources identified during the programme of work. An appendix gazetteer of sites and designed elements which will be based directly upon the project database.
- 3.6.3 The report will incorporate appropriate illustrations, including copies of the site plans, landscape survey mapping, all reduced to an appropriate scale. The site mapping will be based upon the GIS and CAD base. The report will be accompanied by photographs and historic illustrations illustrating the principal elements of the landscape.
- 3.6.4 *Editing and submission:* the report will be subject to the OA North's stringent editing procedure and then a draft will be submitted to The National Trust for consultation. Following acceptance of the report three bound and one unbound copies of the report will be submitted. In addition to the paper copies of the report two digital copies of the report

and drawings will be submitted. The final drawings will be in ArcView and/or AutoCAD 2004 formats.

- 3.6.5 *Output:* a draft output of all volumes and the report will be supplied to The National Trust for consultation. The final output will comprise three bound and unbound paper copies of the report. Each report will be illustrated by a selection of photographs and maps. Five digital copies of the database, CAD files, digital photographs will also be supplied. The database will be in Access 97, which is compatible with almost all database systems.
- 3.6.6 Primary archival material, such as negatives and historical mapping will be supplied to The National Trust.

3.7 CONFIDENTIALITY

3.7.1 The report is designed as a document for the specific use of the Client, for the particular purpose as defined in the project brief and project design, and should be treated as such; it is not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

4. OTHER MATTERS

4.1 ACCESS

4.1.1 It is assumed that OA North will have unrestricted pedestrian access to the study area for the duration of the survey, and that access will be negotiated on OA North's behalf by The National Trust Property Manager.

4.2 HEALTH AND SAFETY

4.2.1 Full regard will, of course, be given to all constraints (services) during the survey, as well as to all Health and Safety considerations. The OA North Health and Safety Statement conforms to all the provisions of the SCAUM (Standing Conference of Unit Managers) Health and Safety manual, as well as the OA Health and Safety Statement. Risk assessments are undertaken as a matter of course for all projects, and will anticipate the potential hazards arising from the project.

4.3 INSURANCE

4.3.1 The insurance in respect of claims for personal injury to or the death of any person under a contract of service with the Unit and arising in the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made there under. For all other claims to cover the liability of OA North in respect of personal injury or damage to property by negligence of OA North or any of its employees there applies the insurance cover of £10m for any one occurrence or series of occurrences arising out of one event.

4.4 WORKING HOURS

4.4.1 Survey works will be undertaken on the basis of a five day week, within daylight hours only.

4.5 PROJECT MONITORING

- 4.5.1 Monitoring meetings will be established with The National Trust at the outset of the project. It is anticipated that these will involve a preliminary meeting at the commencement of the project and progress meetings during the fieldwork.
- 4.5.2 OA North will inform the client of all significant developments, and any potential departures from the agreed programme will be discussed and agreed with them prior to implementation.

5. WORK TIMETABLE

5.1 The phases of work will comprise:

5.1.1 Desk Top Study

A 13 day period is required to collate all the available data.

5.1.3 Field Survey

29 days will be required for the field survey

5.1.4 Archive and Reporting

10 days would be required to complete this element.

5.1.4 Archive and Reporting

30 days would be required to complete this element.

5.1.5 The project is scheduled to start in April to take advantage of low bracken ground conditions.

6. OUTLINE RESOURCES

6.1 STAFFING

- 6.1.1 The project will be under the management of **Jamie Quartermaine BA DipSurv** (OA North Project Manager) to whom all correspondence should be addressed. He will monitor the progress of the project ensuring adherence to all agreed programmes and timetables. He will also provide technical back-up, advice, and will have editorial control over the compilation of the full report. He has many years experience of surveying upland landscapes, particularly in the Lake District and Yorkshire Dales National Parks. Jamie will provide a post-survey assessment of the results in conjunction with the project director. Jamie is a pilot and flies from Sutton Bank, on the edge of the North York Moors. He has considerable experience of aerial photography and is proposing to produce new aerial photography for the sites in advance of the survey, but the costs for this will not be me t by the project.
- 6.1.2 The field survey will be led by **Peter Schofield** BA who has considerable experience of field survey work, including prehistoric landscapes, and has undertaken considerable survey work throughout Cumbria and was a team leader on the recent major survey of the Northern Welsh Uplands. He undertook the recent surveys for The National Trust at Ennerdale in West Cumbria, and also at St Catherines, Windermere.

APPENDIX 3 PLACE-NAME EVIDENCE

INTRODUCTION

The list of place-names examined during the desk-based phase of this survey is not entirely comprehensive, but does represent a significant sample of the place-names within the survey area. The place-names apply to two broad groupings of features differentiated by whether they relate to individual man-made structures or to topographic features or larger settlements.

The man-made features include field names, bridge names, and names of buildings. Field names are often a good indication of the quality of the land or the use to which it has been put. The major sources of reference have been the tithe schedules from Brackenthwaite (1844), Buttermere (1844), and Loweswater (1839), along with some documentary references. Bridge and building names may be less informative as they often adopt the names of nearby or associated features.

Place-names under the broad 'topographic' heading include mountains, rivers, and also settlements. At this level there is a majority of names with Scandinavian origins, with much fewer names having alternative sources, many of which are Old English. The Old English names may represent the remnant of the older English nomenclature that was in use before the subsequent influx of Norse settlers and their associated terminologies. The Scandinavians may also have given names to features that had not been previously named, as a result of settling in previously unoccupied areas. This means that the incoming Norse terminology may have both superseded existing place-names and increased the overall number of new place-names.

Place-names have played a significant role in aiding the interpretation of the historical landscape. They have given indications of past land use and ownership and are frequently the only remaining evidence for a feature that has subsequently disappeared. The place-name evidence within this appendix is primarily derived from *The Place-names of Cumberland* (Armstrong *et al* 1950) and English Field Names (Field 1989).

PLACE-NAMES FOUND IN BUTTERMERE

Topographical Names:

Brackenslack - Old Norse *slakki* (shallow valley) and Middle English bracken.

Buttermergreynes - Old Norse *grein*, meaning fork of a small valley adjoining a larger one.

Carling Knott - possibly from the Old Norse *kerling*, meaning old woman, and *cnotta*, meaning rocky summit.

Cinderdale - an apparent reference to local iron processing activity.

Dale - Old English meaning valley.

Dodd - Middle English meaning rounded hill.

Dub - Dark or muddy pool.

Garth - Old Norse *garth*, meaning enclosure.

Gatesgarth - could mean 'the pass of the goats', from Old English *gat* (goat) and Old Norse *skard* (mountain pass), or 'the enclosure by the road', from Old English *gate* (road) and Old Norse *garth* (enclosure).

Hause - Old Norse *hals* literally meaning 'neck', hence it is used to signify a narrow path, a narrow connecting ridge, or a narrow entrance to a valley. Buttermere Hause was formerly Ravenerhals, meaning raven shieling pass, from the Old Norse *hrafn* (raven), *erg* (pasture), and *hals* (neck).

Holme - Old Norse meaning an isolated piece of land, for example a piece of land lying between two becks.

How - Old Norse *haugr* or Old English *hoh* meaning hill.

Honister - possible interpretation based on Norwegian place-name Hunastad or 'Hunis place'. The final element could be *saetr*, which is Old Norse for a shieling or Old Norse *stathir*, meaning place.

Knott - Old Norse *cnotta*, meaning rocky hill or summit.

Lanthwaite - Old English *langr* and Old Norse *thveit*, meaning 'long clearing'.

Ling - Heather/Bracken covered.

Mosedale - Old English *mosi*, or Old Norse *mos*, meaning moss or peat bog.

Rigg - Old English *hrycg* and Old Norse *hryggr*, meaning ridge.

Swinside - from the Old English referring to an area of pig grazing.

Scales —Old Norse *skali*, meaning shieling

Settlement:

Brackenthwaite - Middle English bracken and Old Norse *thveit*, meaning 'bracken clearing', probably associated with thatching materials.

Buttermere - Old English *buter* (rich pasture) and *mere* (pool.)

Loweswater - named after the lake, which derives from Old Norse *?laufsaer*, meaning leafy lake.

Water, Bridges, and Buildings:

Black Beck - referring to a dark stream

Buttermere - Old English *buter* (rich pasture) and *mere* (pool.)

Cocker - British *cucrā*, meaning crooked river.

Comb Beck - unknown

Crummock Water - British *crumbaco*, meaning crooked, possibly derived from Cocker river name.

Hag Sike - Old English *sic*, meaning small stream, with 'hag' denoting a woodland division.

High Liza Bridge - see Liza Beck

Kirk - Old Norse *kirkja*, meaning church.

Liza Beck - deriving from a Scandinavian personal name, possibly associated with a mythological character.

Loweswater - Old Norse ?laufsaer, meaning leafy lake.

Maggie's Bridge - possibly associated with a personal name.

Park Bridge - possibly in reference to the medieval deer park at Loweswater Pele.

Red Gill - refering to a red stream.

Ruddy Beck -referring to a red stream.

Scalehill Bridge - from proximity to Scalehill, which is derives from Old Norse *skali*, meaning shieling.

Sourmilk Gill - probably a fairly modern name, referring to the whiteness of the foam.

Stock Bridge - relating to agricultural use.

Field-names:

Ash: occurs to the south-west of Nether How as 'Ash Dale' and could refer to industrial activities, such as charcoal production or metal processing.

Bones, Bonus, Bones's - all found to the east of High Park and possibly referring to the use of bone manure, which was used from the eighteenth century (Field 1989, 24), or from the Old English *boga* and *naes*, or Old Norse *bogi* and *nes*, each meaning 'rounded or bow-shaped headland', which corresponds well with the local topography.

Car - Old Norse *kiarr*, meaning marsh.

Drigraw - possibly from Old Norse *dregi*, meaning portage.

Fletcher - from a personal name or relating to arrow-making trade.

Ing - Old Norse eng, meaning pasture or grassland.

Lamplugh - British *landa*, meaning enclosure.

Leys - Old English *laes*, meaning pasture.

Parrock - Old English *pearroc*, meaning fenced enclosure. Became altered by dialect to produce the word 'paddock'.

Scallow Hill and Howe- Old Norse skalli (bald) and haugr (hill).

Star Field – possibly from Old Norse *storr*, meaning sedge.

APPENDIX 4 STATUTORY DESIGNATIONS

This list only provides information on sites in Buttermere that lie within the study area defined in this report.

SCHEDULED MONUMENTS

Scheduled Monuments receive statutory protection from any form of disturbance. Any work that may have an impact upon a Scheduled Monument, or the setting or curtilage of the monument, requires written consent from English Heritage prior to the start of work. It is National Trust policy that submitting an application for Scheduled Monument Consent should only be undertaken by The National Trust Archaeologist.

Site Name	SM Number	Period	NTSMR Number
Round cairn at Carling Knott	27655	Neolithic to Bronze Age	29097
Round cairn at Carling Knott	27654	Neolithic to Bronze Age	29098
Loweswater Pele	27674	Iron Age to medieval	20464
Enclosed settlement at Lanthwaite Green	20389	Bronze Age to Romano-British	20389
Settlement at Scales	27674	Prehistoric to medieval	20380
Enclosed settlement near Lambling Knott	27670	Iron Age to Romano-British	20381
Round cairn at Grassmoor Summit	27656	Neolithic to Bronze Age	20393

Table 1: summary of information held on the NTSMR relating to all Scheduled Monuments within the present study area.

LISTED BUILDINGS

Any work that might affect a Listed Building would require consultation with the property Curator. Listed Building Consent could then be obtained through the Local Planning Authority or English Heritage, depending upon the grade of the listing. The settings of the Listed Buildings also be subject to statutory protection, and further advice on this can be given by the Curator. The statutory protection includes the inside and outside of the building and the associated curtilage.

Site Name	NGR	Status	Period	NTSMR Number
High Nook Farmhouse	NY12862052	Grade II Listed Building No 72707	Post-medieval - 1540 AD to 1900	26222
Craghouse Farm	NY17381719	Grade II Listed	Post-medieval - 1540 AD to	26362

and Adjoining Barn	Building No	1900	
	72164		

Table 2: summary of Listed Buildings owned by The National Trust, from information held by English Heritage and The National Trust regional office.

Site Name	NGR	Status	Period	NTSMR Number
Miresyke Farmhouse and barn adjoining	NY12222250	Grade II Listed Building No 72696	Post-medieval - 1540 AD to 1900	29789
Miresyke barn	NY12202250	Grade II Listed Building No 72697	Post-medieval - 1540 AD to 1900	29790
Crabtreebeck and stables adjoining	NY13052156	Grade II Listed Building No 72698	Post-medieval - 1540 AD to 1900	29791
Picket How and former byre	NY15542200	Grade II Listed Building No 72160	Post-medieval - 1540 AD to 1900	29794
Low Hollins	NY15852273	Grade II Listed Building No 72158	Post-medieval - 1540 AD to 1900	29793
High Hollins	NY15932273	Grade II Listed Building No 72157	Post-medieval - 1540 AD to 1900	29792
Church of St James, Buttermere	NY17601702	Grade II Listed Building No 72162	Post-medieval - 1540 AD to 1900	29483
Croft Farmhouse	NY17471693	Grade II Listed Building No 72163	Post-medieval - 1540 AD to 1900	29787

Table 3: summary of Listed Buildings standing within land covenanted by The National Trust, from information held by English Heritage and The National Trust regional office.

Site Name	NGR	Status	Period	NTSMR Number
Bowderbeck	NY17861668	Grade II Listed Building No 72696	Post-medieval - 1540 AD to 1900	29788

Table 4: summary of privately-owned Listed Buildings standing within land owned by The National Trust, from information held by English Heritage and The National Trust regional office.

HISTORIC PARKS AND GARDENS

There are no such designations inside the study area.

CONSERVATION AREAS

There are no such designations inside the study area.

APPENDIX 5 EVENT RECORD ASSOCIATED WITH THE LANDHOLDINGS OF THE NATIONAL TRUST

This record of events associated with the landholdings of The National Trust in and around Buttermere has been taken from the *Archaeological Atlas for Buttermere and Loweswater*, *Cumbria*' (National Trust 2005).

- **1936-7** Properties in Buttermere bought by The National Trust by subscription.
- **1943 -** Hobcarton Crag given to The National Trust by Friends of the Lake District.
- **1951 -** Properties in Buttermere bought by The National Trust with Lake District Funds.
- 1960 Properties in Buttermere bought by The National Trust with Lake District Funds.
- **1970 -** Properties in Buttermere bought by The National Trust with Lake District Funds.
- 1977 High Nook Farm given to The National Trust by Lake District Farm Estates Ltd.
- **1980 -** Rannerdale Farm, Crummock, bought by The National Trust with Lake District Funds.
- **1982 -** Land at Peel Place, Crummock, bought by The National Trust with a Countryside Commission grant and Lake District Funds.
- **1985 -** Watergate farm bought by The National Trust with a number of bequests.
- **1985a** Vernacular building surveys of Cornhow Cottage, Crag House Farm, Lanthwaite Cottage and Rannerdale Farm undertaken by The National Trust.
- 1986 Vernacular building survey of High Nook Farm and Watergate Farm undertaken by The National Trust.
- **1987 -** Crag House Farm bought by The National Trust with Regional funds and donations.
- **1990 -** Wilkinsyke Farm bought by The National Trust with a number of bequests.
- **1993 -** Woodhouse bought by The National Trust with bequests and a Countryside Commission grant.
- **1995 -** Brief walkover survey and archaeological assessment of land at Loweswater undertaken by The National Trust.

- **1995a** Folder's wood was bequeathed to The National Trust by Mr. R. Folder.
- 1996 Land at Whiteoak and High Park acquired by The National Trust though a number of bequests, Lake District Funds and a Countryside Commission Grant.
- **1999 -** Historic Landscape survey of the enclosed settlement at Lanthwaite Green, undertaken by The National Trust.
- **2001 -** Watching brief carried out on the excavation of a water pipe trench (OA North 2002)
- **2003** Walkover survey and archaeological assessment of High Nook Farm for the Whole Farm Plan process (Lund 2003).
- **2003a -** Resistivity survey of a circular earthwork feature at High Nook Farm, Loweswater undertaken by volunteers from Matterdale Archaeology Society.

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- Figure 6: Lanthwaite Green Prehistoric Settlement Sites
- Figure 7: Detailed topographic survey of Lanthwaite Green Settlement, Buttermere
- Figure 8: Principal Medieval Sites (South)
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- Figure 10: Rannerdale Medieval Settlement
- Figure 11: Post-medieval Woodland and Possible Associated Sites
- Figure 12: Phasing of Enclosure within Buttermere (South)
- Figure 13: Phasing of Enclosure within Buttermere (North)
- Figure 14: Post-Medieval Sites
- Figure 15: Post-Medieval Agricultural Sites (South)
- Figure 16: Post-Medieval Agricultural Sites (North)
- Figure 17: Post-Medieval Industrial Sites (South)
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- Plate 2: A second round barrow (NTSMR 29634) at the western shore of Loweswater
- Plate 3: One of two groups of cup-mark rock art (NTSMR 29669) found on a crag to the south-east of Crag Houses
- Plate 4: A panel of cup and ring rock art (NTSMR 29136) located close to the northern bank of Mill Beck
- Plate 5: Part of a panel of cup-mark rock art to the east of Low Park (NTSMR 29137)

- Plate 6: An enclosed settlement of possible Iron Age or Romano-British date at Lanthwaite Green (NTSMR 20389)
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- Plate 24: The remains of a probable abandoned medieval farmstead (NTSMR 29513) near to Low Hollins
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- Plate 27: Map of Cumberland of 1774 (Hodskinson and Donald 1774)
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- Plate 30: The nineteenth century cottage at Wood House (NTSMR 20627)
- Plate 31: Plan of the Gatesgarth estate after the purchase of the land by John Marshall in 1815–16
- Plate 32: A painting of Crummock Water and Buttermere by William Green from 1790
- Plate 33: A painting of Crummock Water and Buttermere by William Green from 1810
- Plate 34: A charcoal pitstead (NTSMR 29498) at Nether How

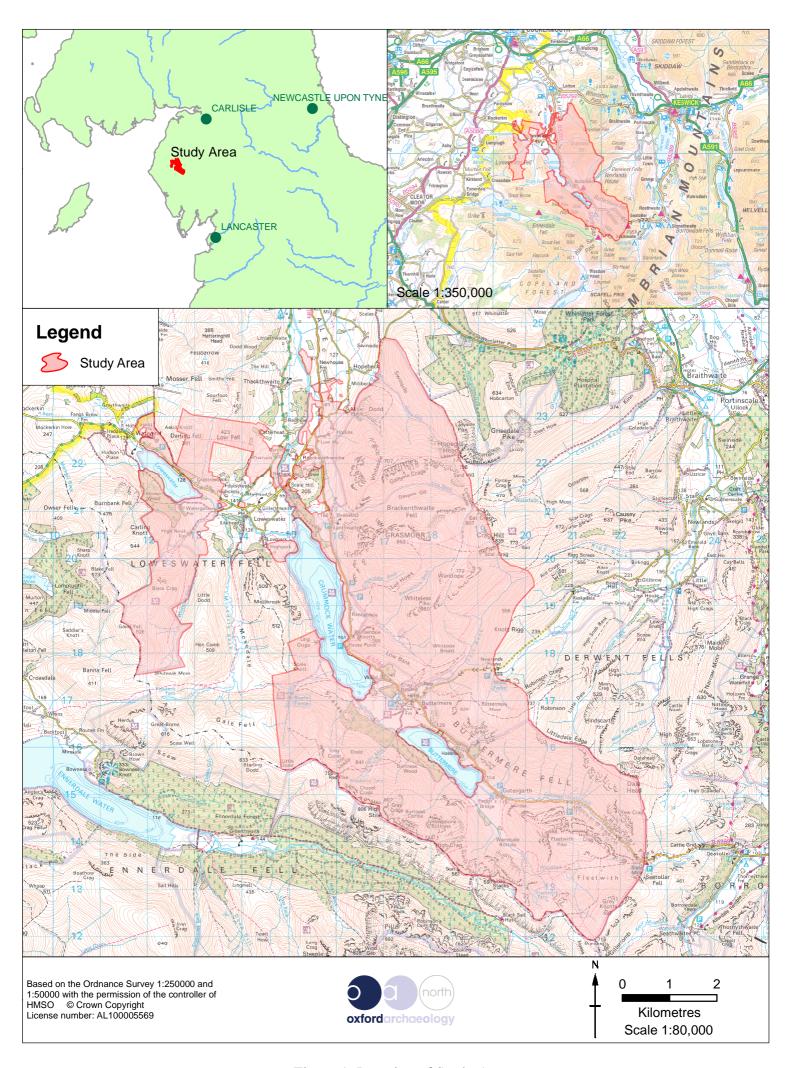


Figure 1: Location of Study Area

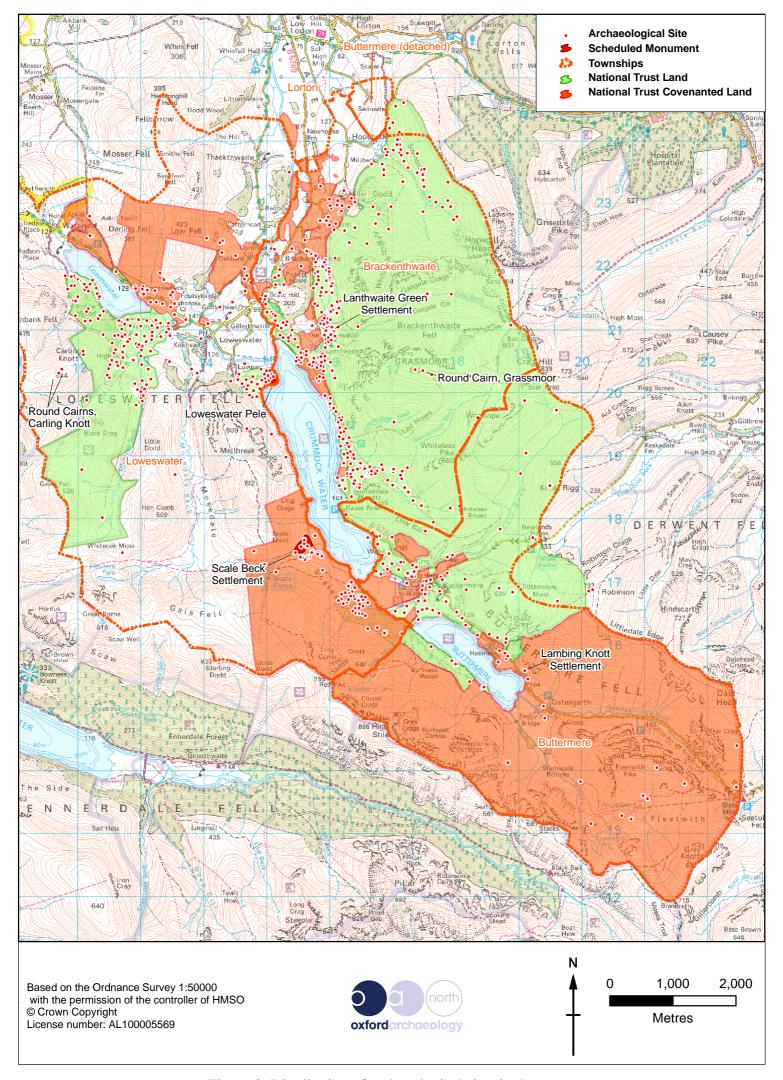


Figure 2: Distribution of archaeological sites in the survey area

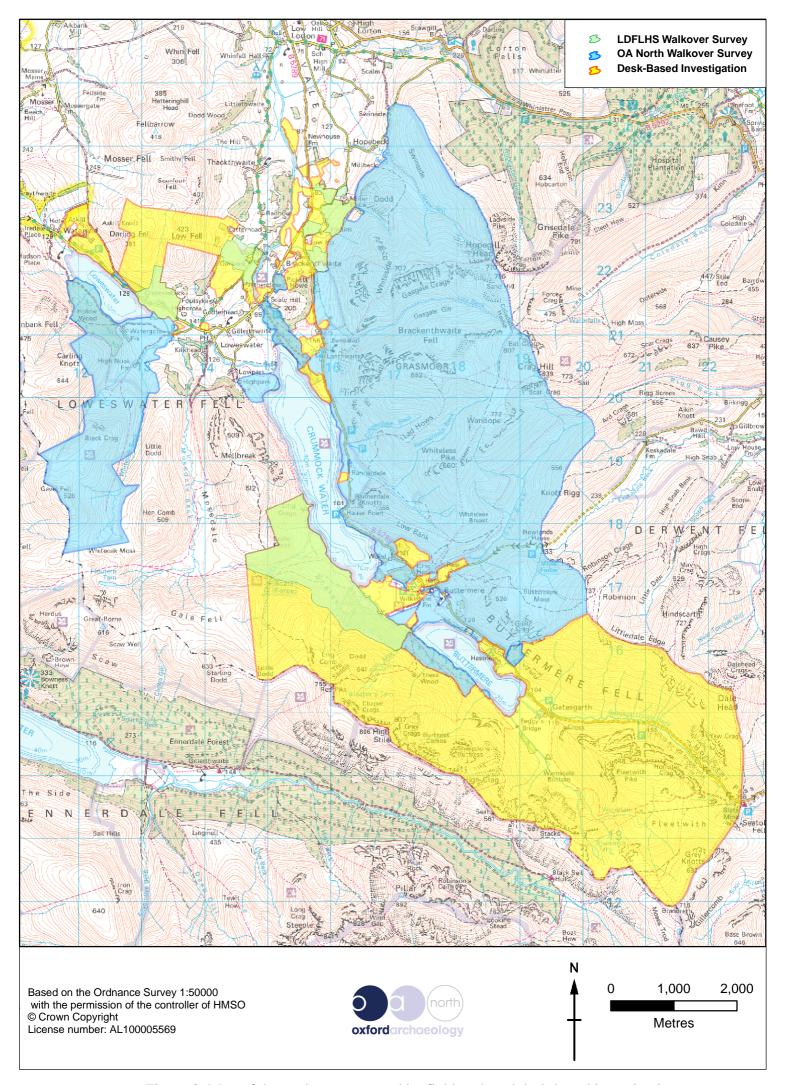


Figure 3: Map of the study area covered by fieldwork and desk-based investigation

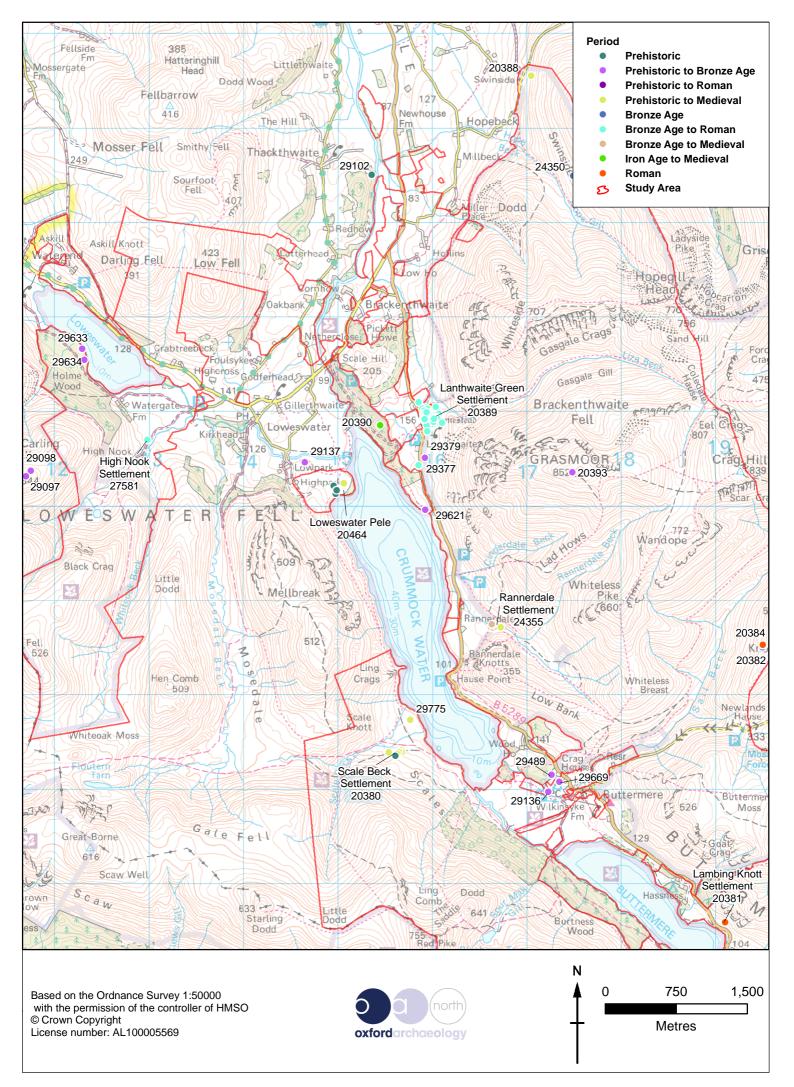


Figure 4: Prehistoric Sites

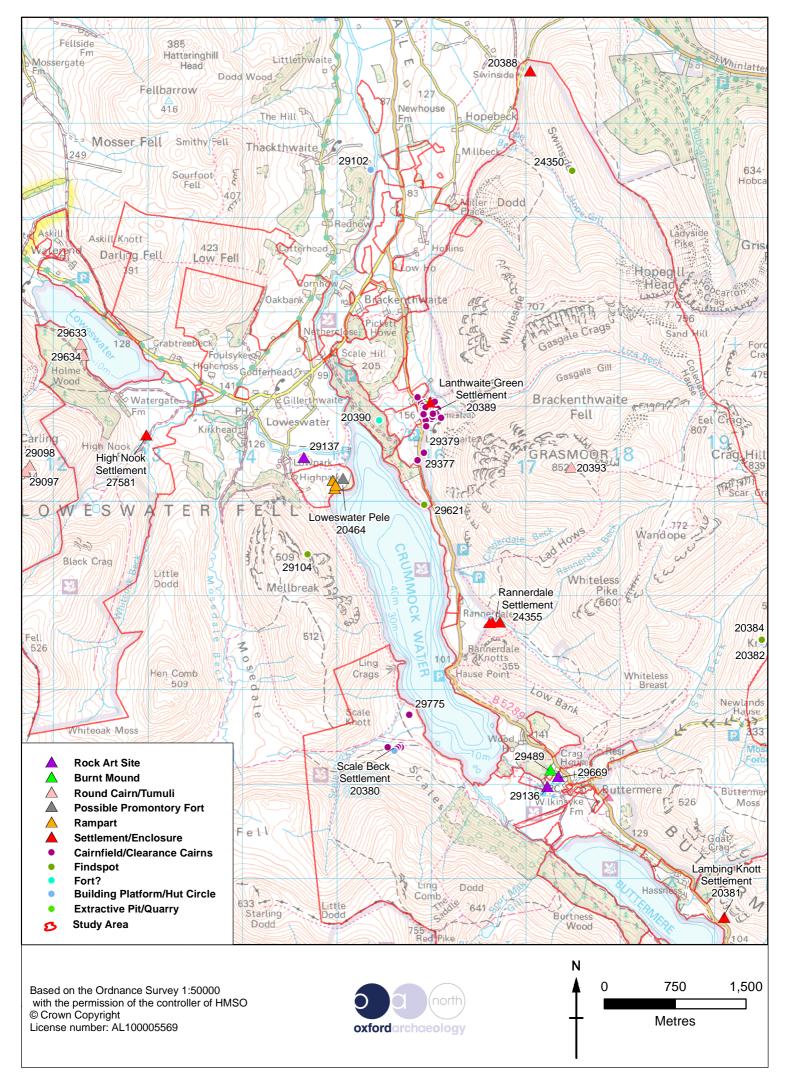


Figure 5: Key Prehistoric Sites

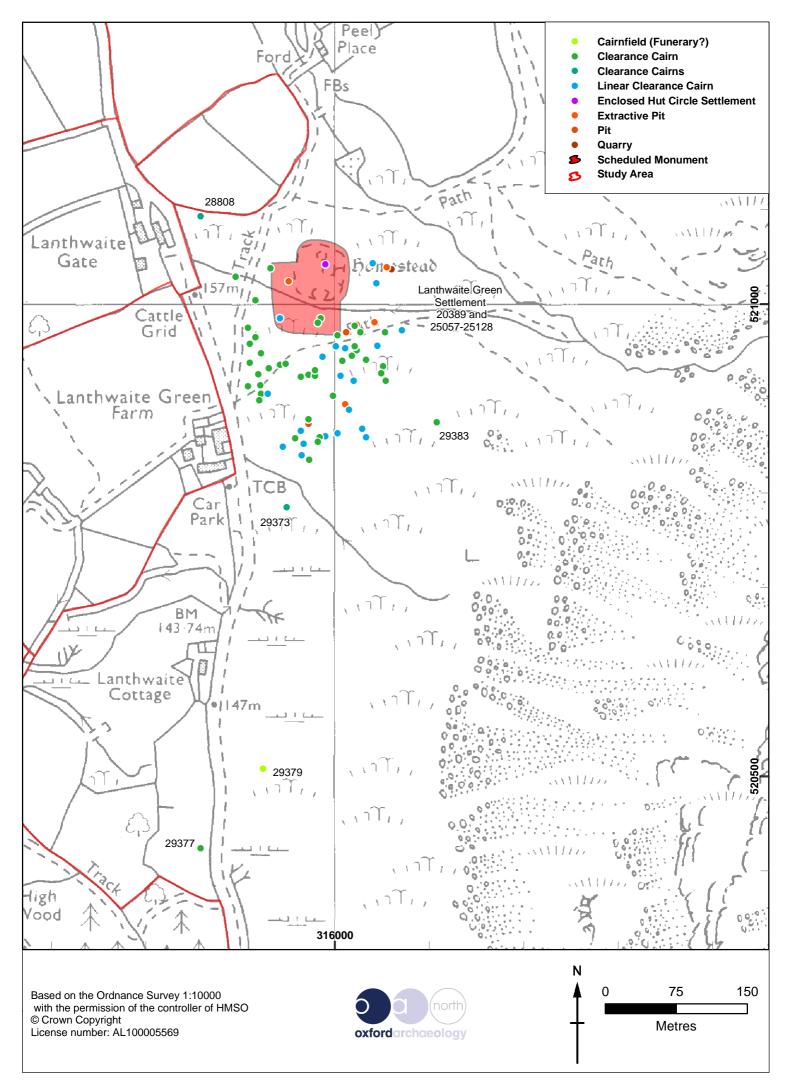


Figure 6: Lanthwaite Green Prehistoric settlement sites

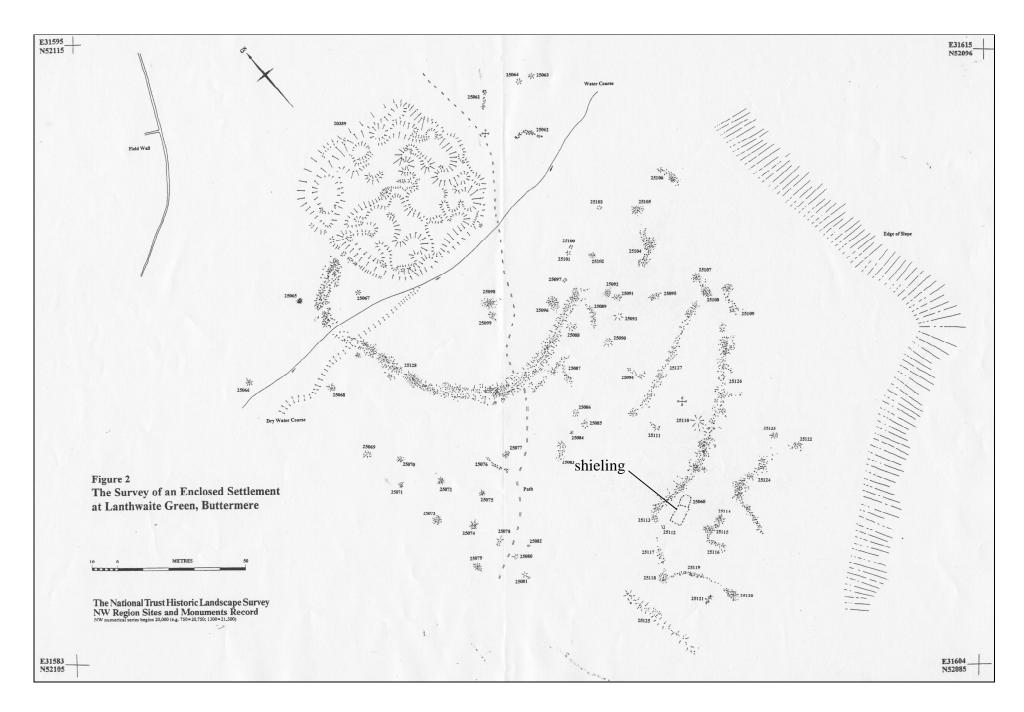


Figure 7: Detailed topographic survey of Lanthwaite Green enclosed settlement, Buttermere

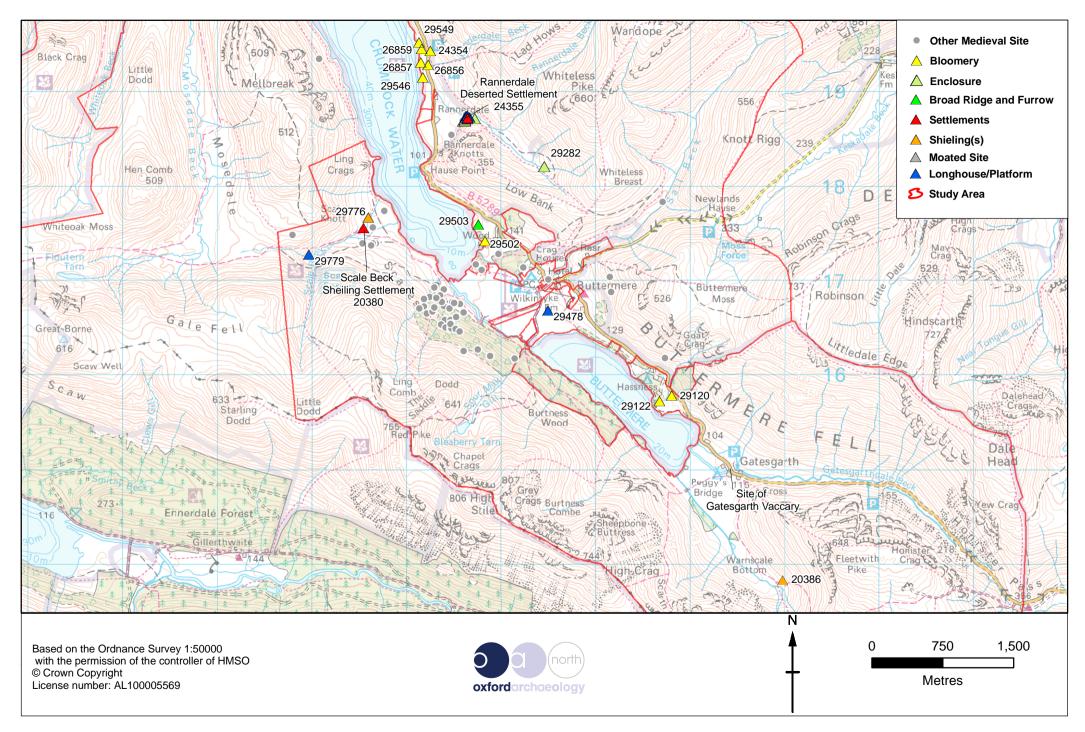


Figure 8: Key Medieval Sites (South)

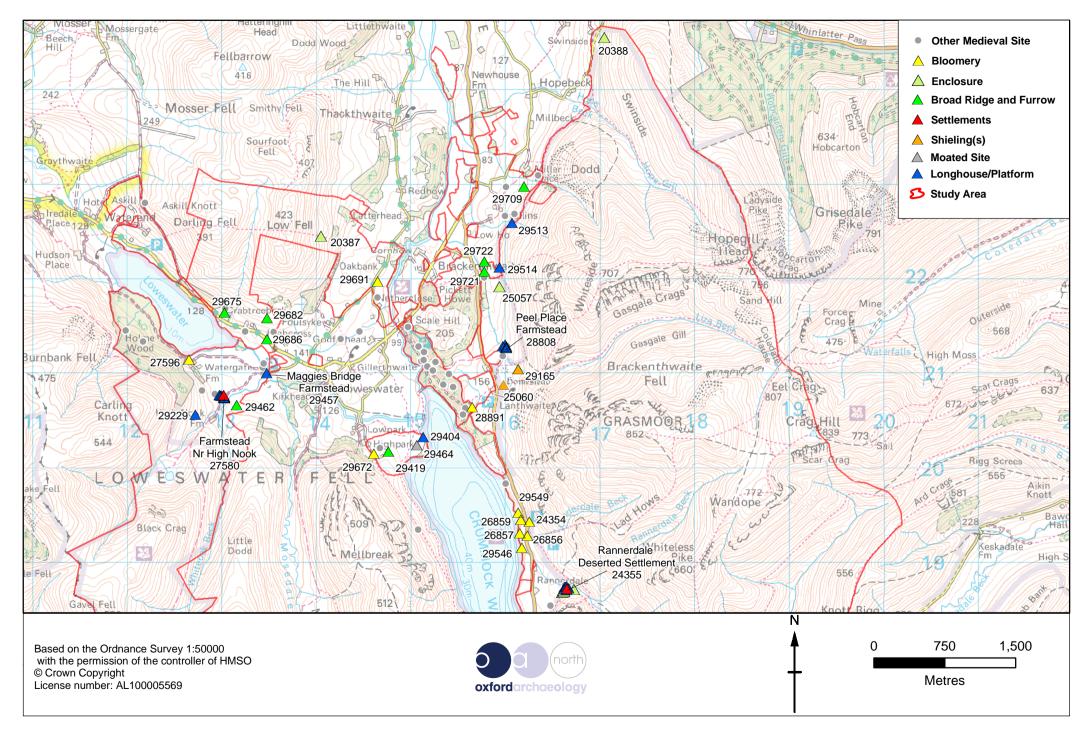


Figure 9: Key Medieval Sites (North)

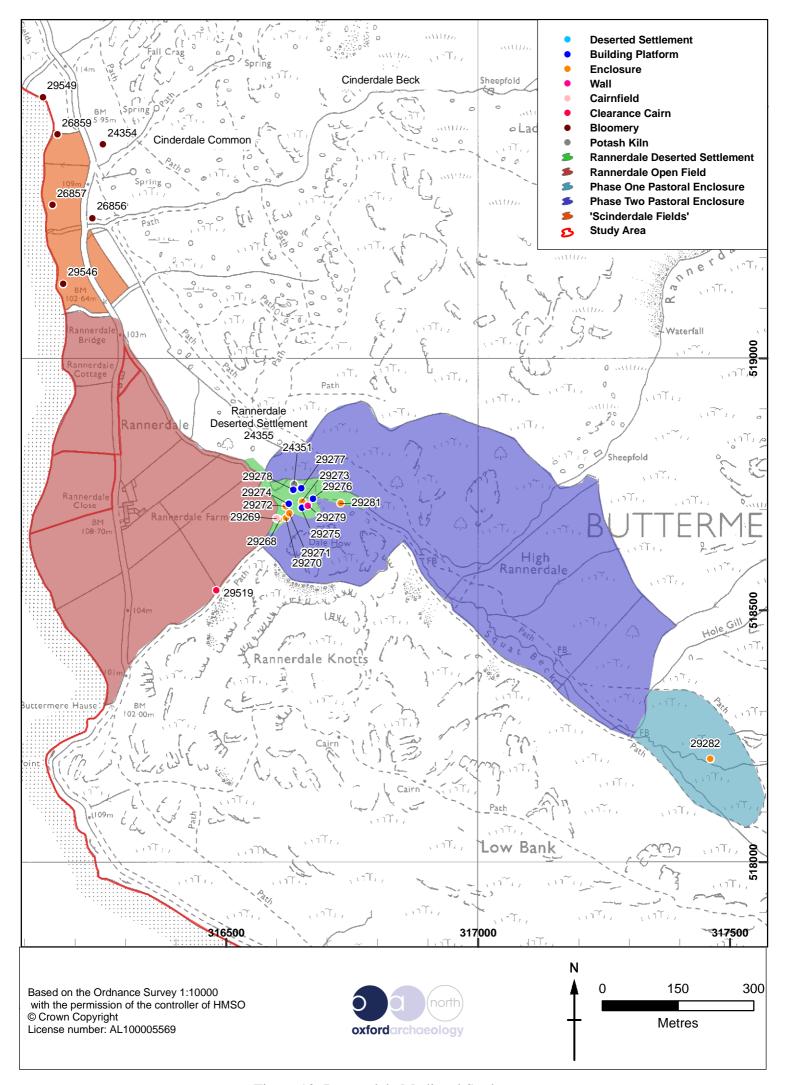


Figure 10: Rannerdale Medieval Settlement

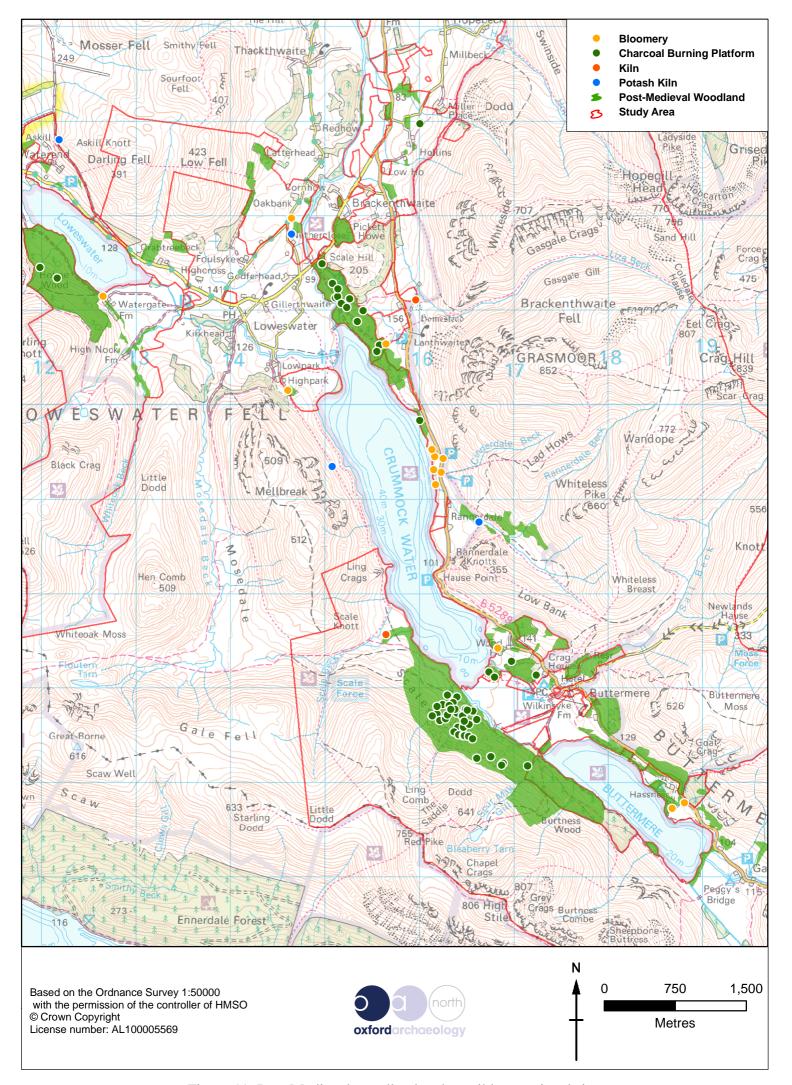


Figure 11: Post-Medieval woodland and possible associated sites

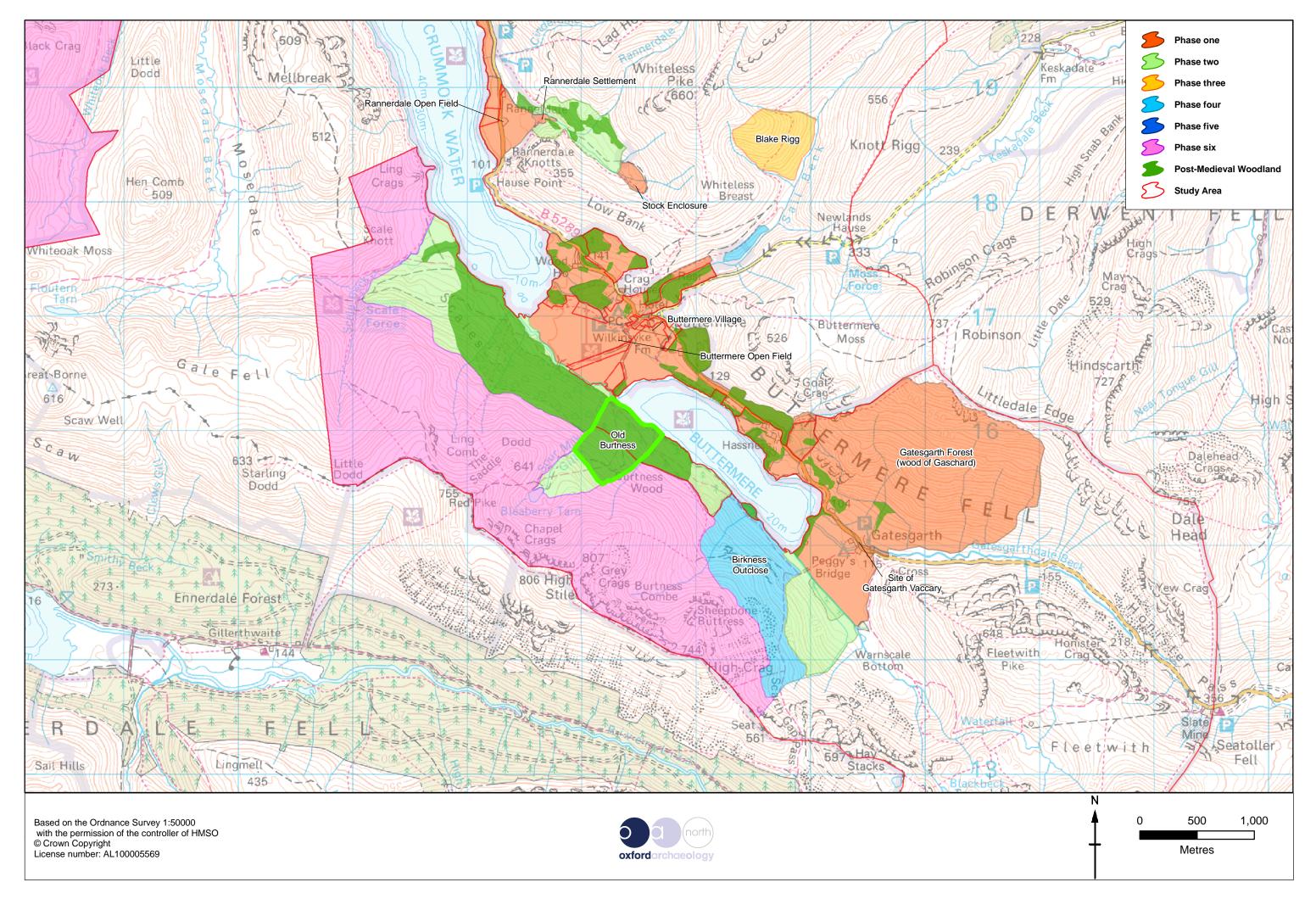


Figure 12: Phasing of enclosure within Buttermere (South)

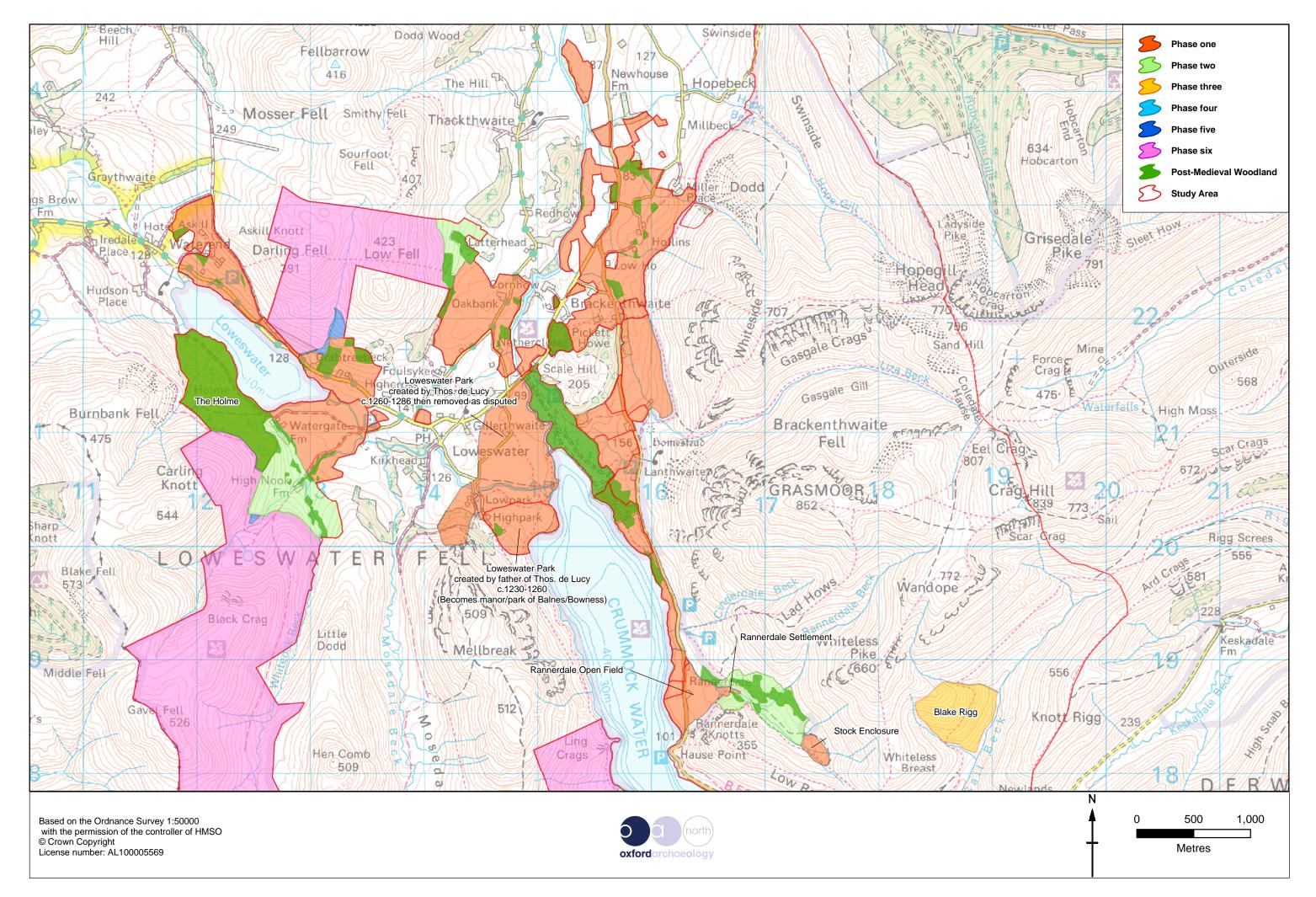


Figure 13: Phasing of enclosure within Buttermere (North)

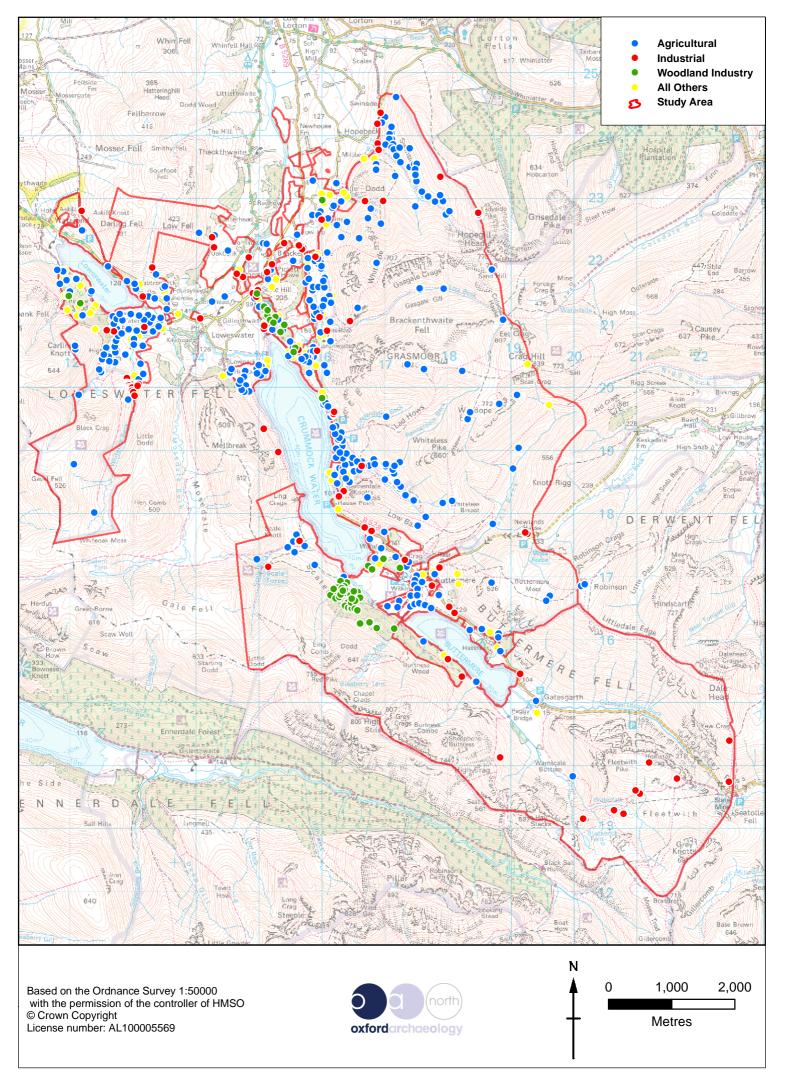


Figure 14: Post-Medieval Sites

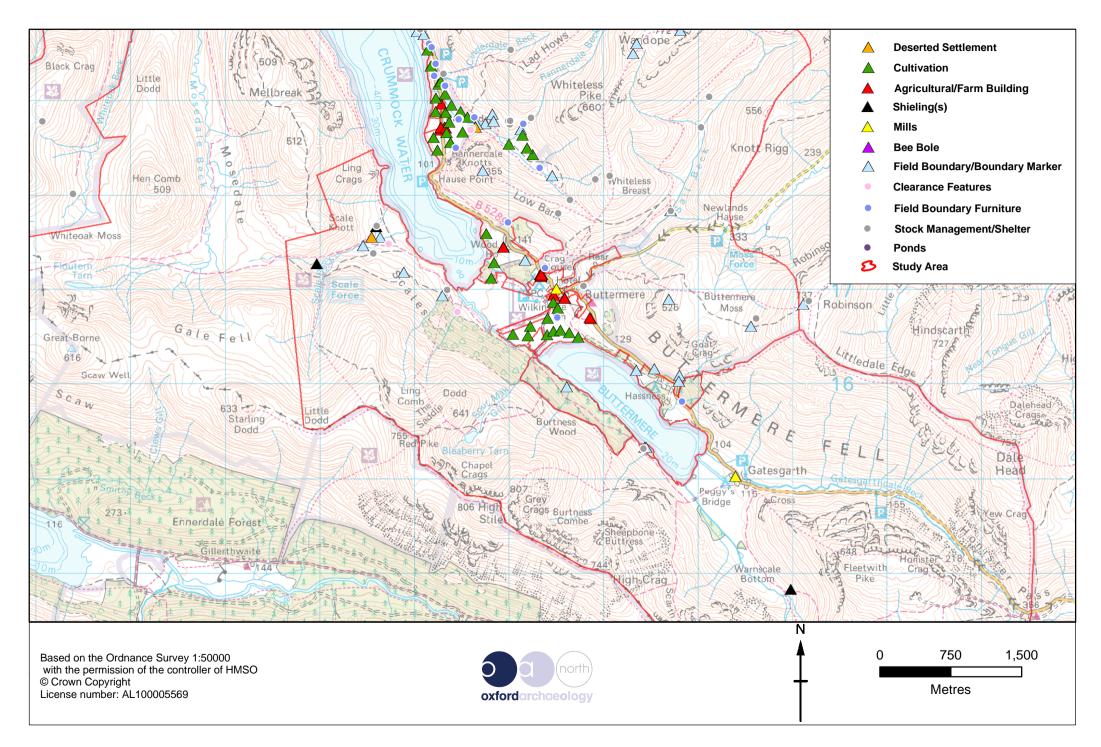


Figure 15: Post-Medieval agricultural sites (South)

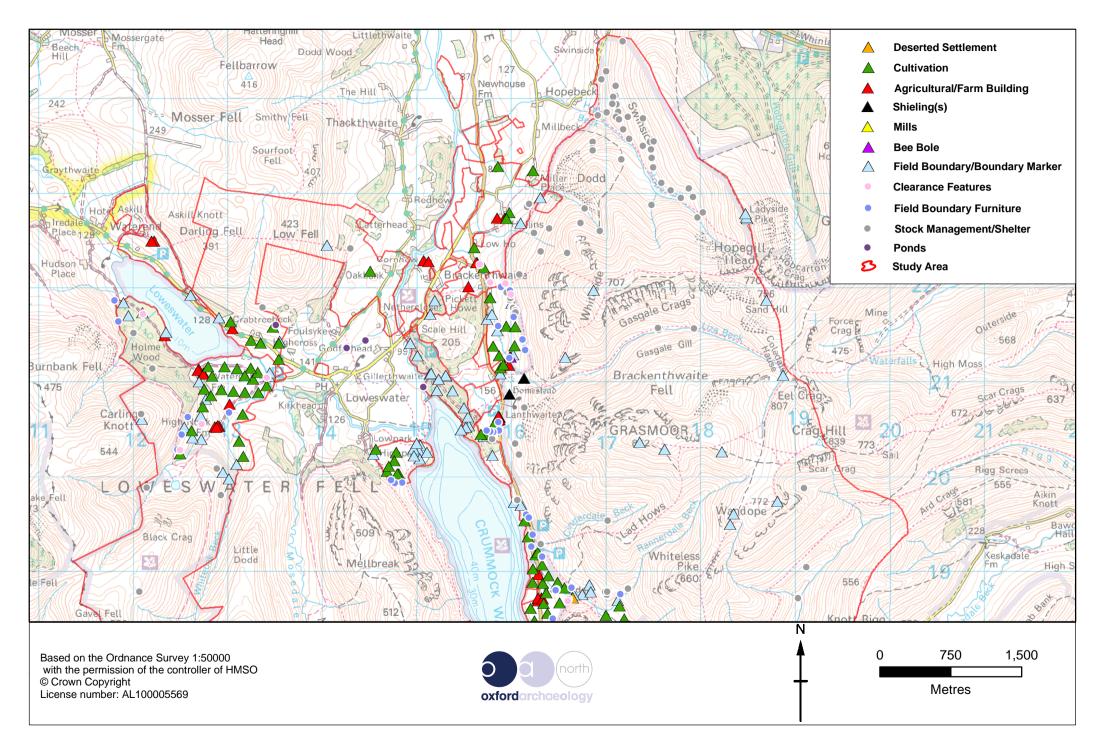


Figure 16: Post-Medieval agricultural sites (North)

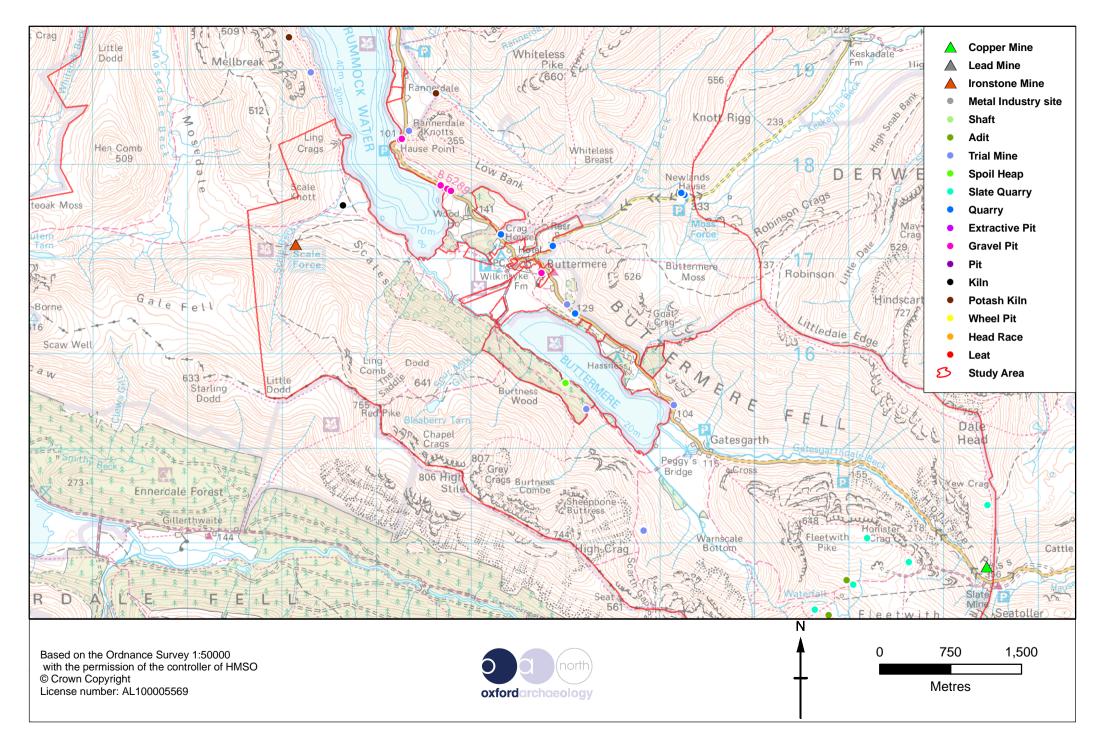


Figure 17: Post-Medieval industrial sites (South)

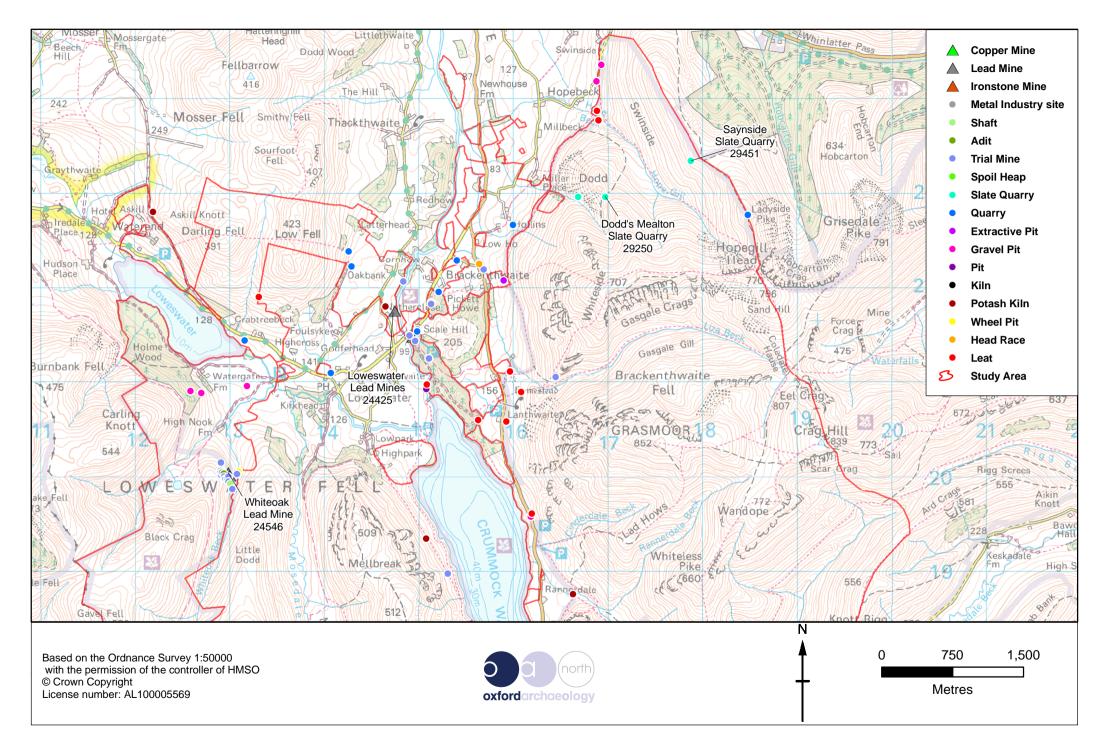


Figure 18: Post-Medieval industrial sites (North)

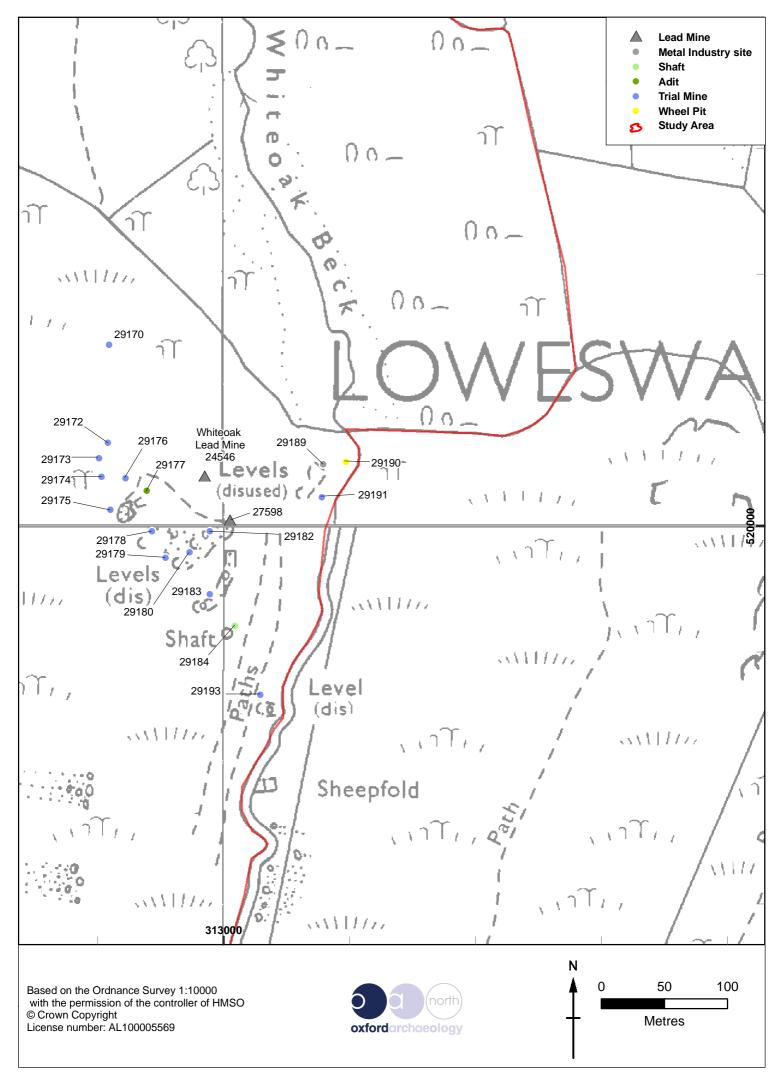


Figure 19: Detail of Whiteoak Lead Mine

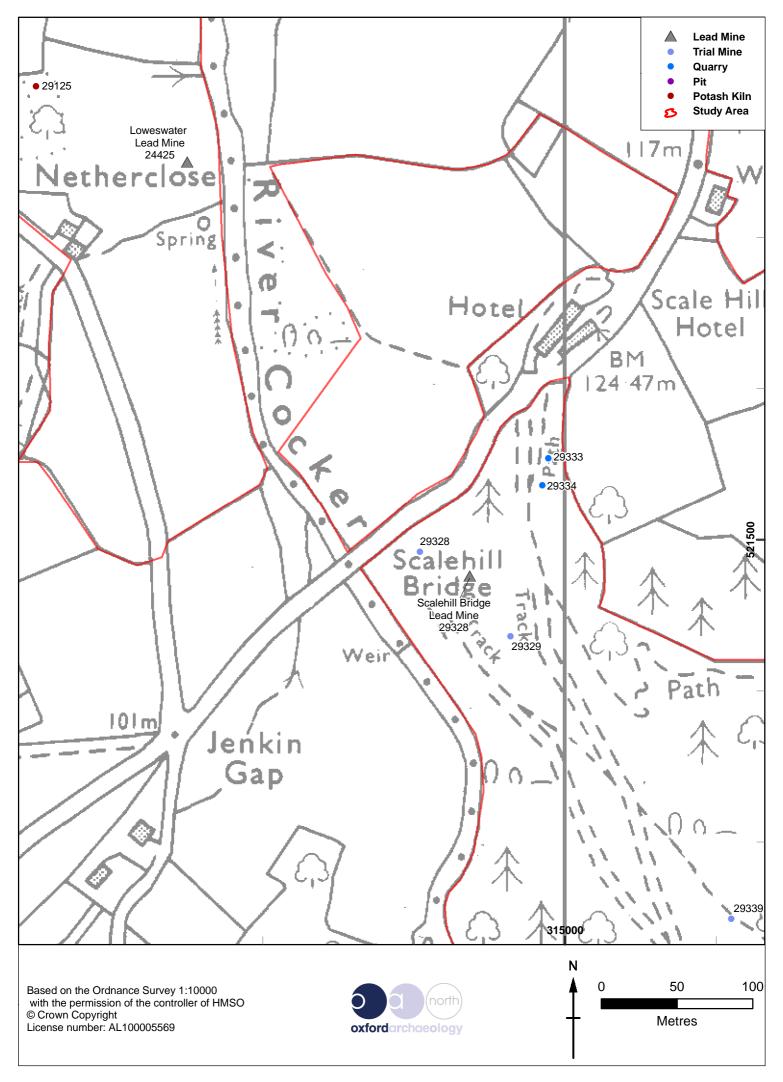


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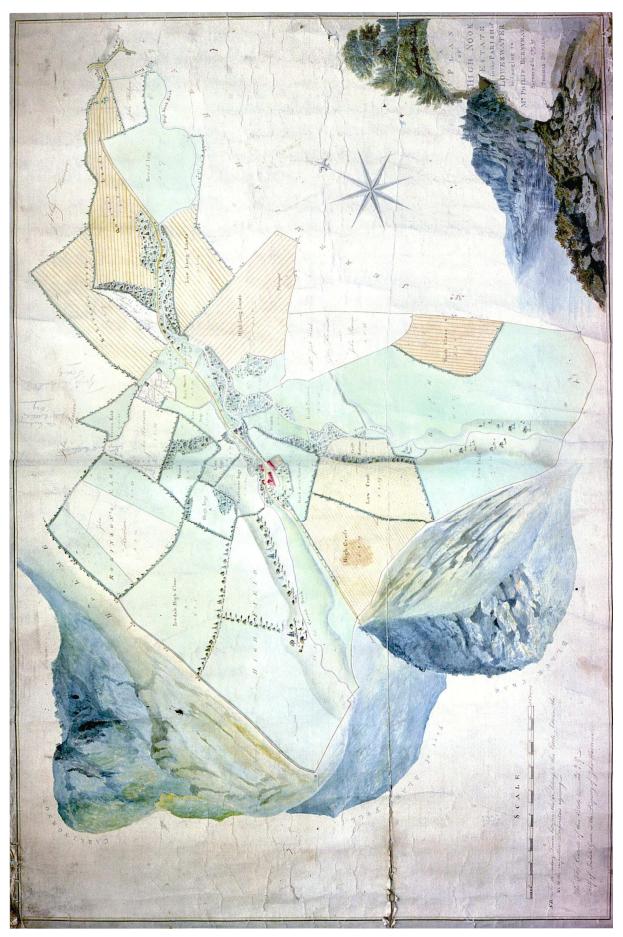


Plate 8: Thomas Donald's estate plan of High Nook Farm, Loweswater, 1787 Reproduced by permission of Lorton and Derwent Fells Local History Society



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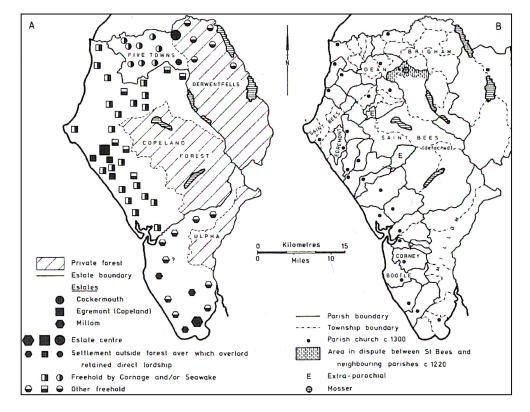


Plate 12:The medieval extents of the Copeland barony (Winchester 1987, 21). (A) – feudal tenure (B) – parish boundaries c 1300



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Plate 14: The Buttermere dalehead, where the medieval vaccary of Gatesgarth was established



Plate 15: Earthworks associated with the deserted medieval settlement at Rannerdale (NTSMR 24355)

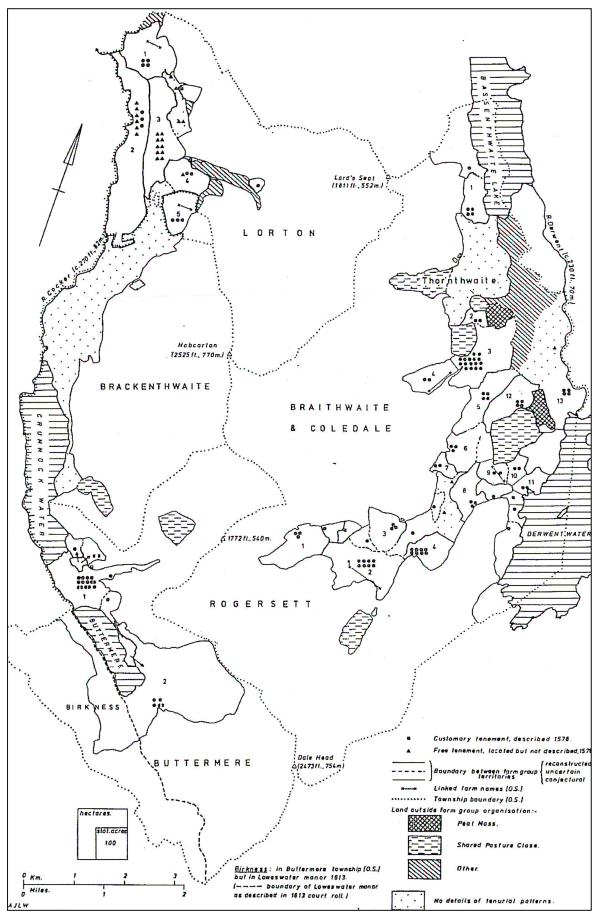


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Plate 17: The burnt mound to the west of Crag House (NTSMR 29489)



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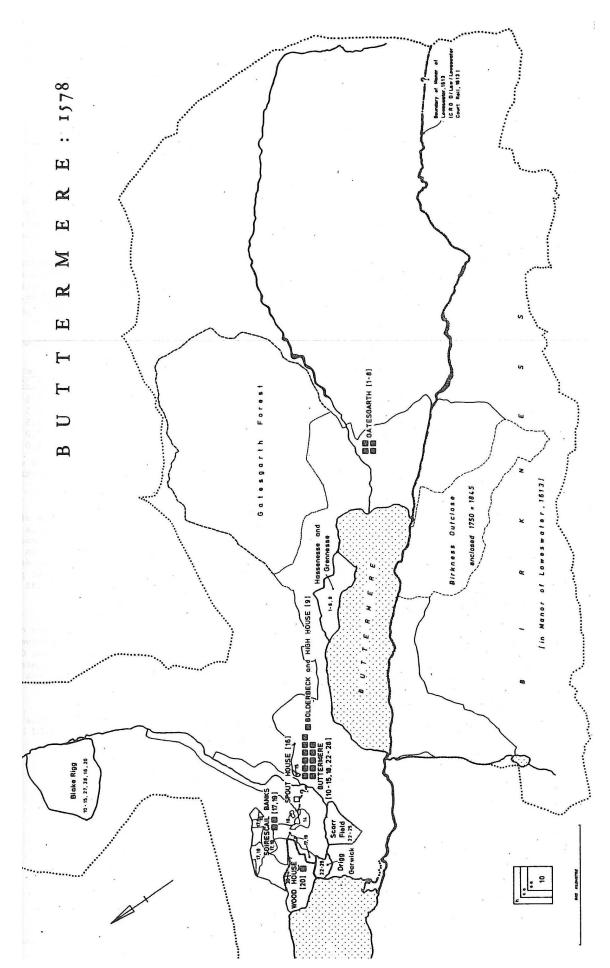


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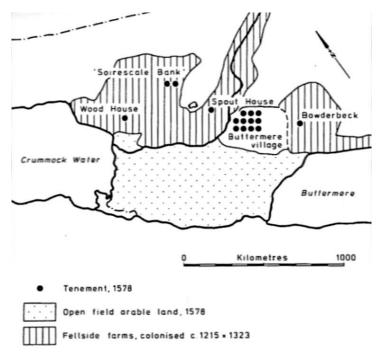


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Plate 26: The infilled shaft (NTSMR 29184) at Whiteoak lead mine

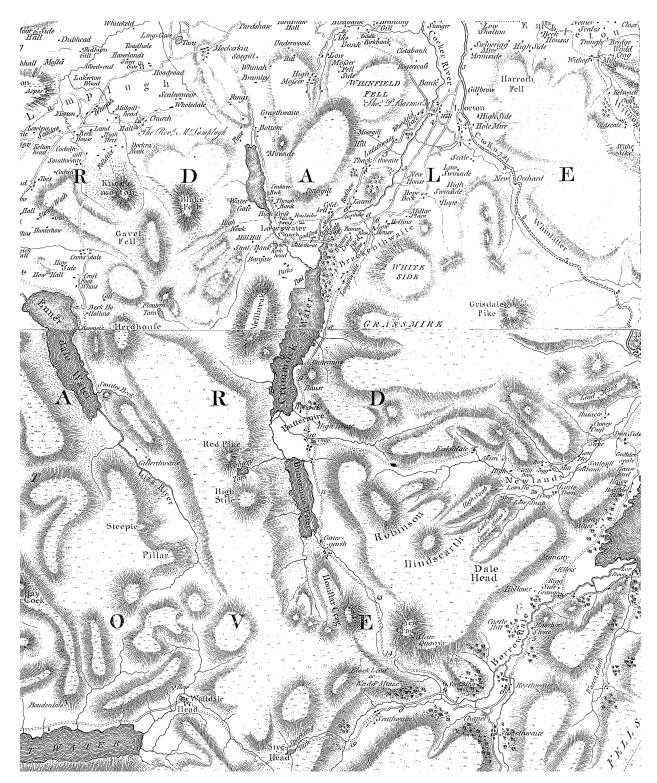


Plate 27: Map of Cumberland of 1774 (Hodskinson and Donald 1774)

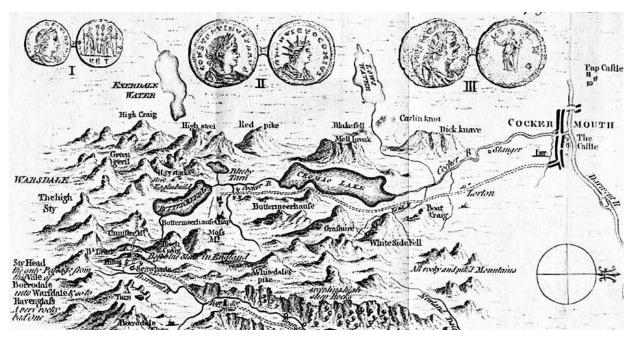


Plate 28: Map of Cumberland of 1751 (Smith 1751)



Plate 29: The level agricultural lands at the northern end of the study area, which appear to have constituted a core of permanent dispersed settlement from the early medieval period



Plate 30: The nineteenth century cottage at Wood House (NTSMR 20627)



Plate 31: Plan of the Gatesgarth estate after the purchase of the land by John Marshall in 1815–16



Plate 32: A painting of Crummock Water and Buttermere by William Green from 1790



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Plate 34: A charcoal pitstead (NTSMR 29498) at Nether How