

WINDERMERE REFLECTIONS SURVEY OF WOODLANDS AROUND WINDERMERE

Community Archaeology Survey Report



Oxford Archaeology North

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Jane Abram; Bob Abram; Roger David Benham; Barbara Baker: Blatchford; Anne Catterson; Helen Cauldwell; Mervyn Cooper; Hilary Corton; Henry Coward; Kathy Cross; Rae Cross; Kath Duncan; Alan Dunthorne; Helen Eastham; Jennifer Gallagher; Bridget Gerry; Barbara Green: John Greenwood; Mark Horsley; Judith Horsley; Alan Jackson; Jenny Kelly; Betty King; Frank Leaver; Sue Lydon; Peter Matthiessen; Helen O'Brien; Helen Pugh; Charles Rowntree; Rick Sanderson; Sue Sanderson; Doug Stables: Nicholas Stainforth; Tony Stuart-Smith: Liz Wallis: Alan Westall.

Plate 1: Volunteers surveying in the woodlands

The primary documentary research was undertaken by Vicky Bullock and Alastair Vannan. The volunteers were aided in the topographic survey by Peter Schofield, Alastair Vannan, Jamie Lund, John Hodgson, David Maron, Jamie Quartermaine, Holly Beavitt-Pike and Eleanor Kingston. The report was written by Alastair Vannan and Peter Schofield, and the illustrations were produced by Anne Stewardson and Anna Hodgkinson. The report was edited by Jamie Quartermaine, who also managed the project.

SUMMARY

Oxford Archaeology North (OA North) was invited by the Lake District National Park Authority (LDNPA) and The National Trust to facilitate and provide supervision for a community archaeology project to undertake archaeological surveys of woodland around Windermere. This project was undertaken on behalf of the Lake District National Park Authority and financed by the Heritage Lottery Fund.

This is one of three community survey projects being undertaken as part of the Reflections on History project, which is part of the larger Windermere Catchment Restoration Program. The present study was intended to develop the woodland theme that was outlined in the archaeological resource assessment of the Windermere Reflections study area prepared by OA North in 2010, as Stage 1 of the Reflections on History project. It looked at areas of broad-leaf, semi-natural woodlands that have not been previously surveyed.

Following the resource assessment, OA North undertook a desk-top historical survey of information pertinent to a selection of woodlands from the Windermere catchment. Seven woodlands with potential for surviving visible remains relating to woodland industry were selected to be subject to Level 1 identification survey. In total 456 sites were identified within the woodlands, with four of these having been previously identified within the HER and one (Pennington Tower Folly; SMK 2009, LB 1225215) designated as a listed building.

Most of the areas that were subject to survey comprise long-established managed and coppiced woodland that were used for the provision of charcoal for fuel, in addition to other woodland industries, such as timber production and bark peeling. Charcoal burning platforms were the most ubiquitous of the sites identified during the survey, with 261 examples being recorded. There were also nine bark peeler's huts found, which mainly consisted of the remains of stone fireplaces, and at least one barn that was likely to have been used for the storage of bark. Other small shelters and huts were found that might have been associated with woodland industry, although it is possible that some of these may have served a variety of functions over time. Evidence for potash production was relatively limited, with eight kilns being identified. There was also limited evidence for stone and gravel extraction, in the form of hollows and quarried rock faces.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- Oxford Archaeology North (OA North) was invited by the Lake District National 1.1.1 Park Authority and The National Trust to provide supervision and support to facilitate and enable a community archaeology project examining a series of woodlands within the Windermere lake catchment (Fig 1). The project was financed by the Heritage Lottery Fund and was one of three community surveys being undertaken as part of Reflections on History, one of nineteen projects taking place under the umbrella of Windermere Reflections. Windermere Reflections is part of a wider range of conservation and heritage-themed projects in the Windermere Catchment Restoration Programme (www.windermerereflections.org.uk). The aim of the wider project is to improve water quality and to bring environmental and economic benefits to the area.
- 1.1.2 The first step towards planning the Reflections on History project was taken in 2010, with the commissioning of a GIS-based study examining the woodland, water and mineral-based heritage of the Windermere lake catchment (OA North 2010a). This study and report made recommendations for a series of community projects based around each of the three themes of woodland, water and minerals/ mining. The present study was intended to develop the woodland theme that was outlined in the archaeological resource assessment (*ibid*) and looked at areas of broad-leaf, semi-natural woodlands that have not been previously surveyed.
- 1.1.3 A project design was issued by OA North (*Appendix 2*) in response to a written brief from Lake District National Park Authority (*Appendix 1*) which proposed the investigation of a range of woodlands. The woodlands were selected as having potential for surviving visible remains that related to woodland industry:

Woodland	Area	NGR
	Sqkm	
Low Sweden Coppice and Nook Lane	0.027	NY 3779 0576
Colwith Bridge East	0.023	NY 3327 0320
Esthwaite Coppice	0.057	SD 3554 9598
Ridding Wood/Devil's Gallop/Eel House Intake/Lon	0.79	SD 3614 9466
Slack		
Rigg Wood	0.36	SD 3709 9455
Three Birks/Holme Well Wood/Bark House	0.95	SD 3754 9242
Wood/Briar Shot/Moss End/Baswicks/Middle How		
Rawlinson's Intake (south end)	0.033	SD 3727 9011
Great Oaks Wood (south end)	0.023	SD 3748 8998
Summer House Knott/Water Side Knott	0.24	SD 3702 8689
Blake Holme Plantation	1.31	SD 3914 8982
Great Tower Plantation	0.98	SD 3941 9167
Total	4.793	

1.1.4 OA North undertook a desk-top historical survey of information pertinent to the woodlands and this formed the basis of a flexible shortlist of the survey areas (Table 1). The woodlands within this shortlist would be subject to Level 1-type

survey, according to time constraints, suitability of terrain, and logistic ease in relation to parking and suitability for volunteer rendezvous.

1.1.5 Following the instigation of the survey, it became apparent that the woodlands lying to the west of Windermere, and, particularly, those within or close to the Graythwaite estate, provided the were the most suitable for survey, in terms of organisational logistics. Accordingly, the woods on the shortlist that fell within this category were targeted for survey, and two additional woodlands (Little Ore Gate and Bishop Wood) were added to the list. In total, seven woodlands were subject to survey (Table 2), primarily on the Greythwaite Estate in the southwestern part of the Windermere lake catchment, and these took place during March and April 2012 (Fig 1).

Woodland	Area	NGR
	Sqkm	
Esthwaite Coppice	0.057	NY 3554 9598
Ridding Wood/Devil's Gallop/Eel House Intake/Long	0.79	NY 3614 9466
Slack		
Rigg Wood/Dumbarton Wood	0.36	SD 3709 9455
Bishop Wood	0.60	SD 3774 9424
Three Birks/Holme Well Wood/Bark House	0.95	NY 3754 9242
Wood/Briar Shot/Moss End/Baswicks/Middle How		
Little Ore Gate	0.11	SD 3691 9311
Summer House Knott/Water Side Knott	0.24	SD 3702 8689
Total	3.10	

Table 2: Woodlands subject to Level 1 identification survey

1.1.6 The results of the survey have enabled the identification of areas that would be suitable for more detailed survey and recommendations of areas and sites that would be appropriate for a programme of Level 2 survey have been compiled for the use of the LDNPA Senior Archaeology and Heritage Advisor.

1.2 AIMS

- 1.2.1 The principal aim of the project was to involve people from the local community with an interest in archaeology and their own local historic environment in archaeological investigation and survey that would provide new information on the wealth of archaeological remains in the Windermere lake catchment. The aim was to provide training for volunteers in surveying that they would be able to continue to use beyond the life of the project. As well as educational it was important that the participants were provided with an experience that was both meaningful, in terms of learning, but was also social and enjoyable.
- 1.2.2 This training entailed providing a general introduction to the woodlands and archaeological survey techniques, which took place at St Annes Parish Hall, Haverthwaite, and supplemented by a guided tour of nearby Roudsea Wood on the 18th February 2012 in advance of the start of fieldwork.
- 1.2.3 The objectives of the recording programme, undertaken by the volunteers with professional supervision, were to undertake walk-over surveys of a series of woodlands in the southern part of the Windermere catchment. Ultimately, the information gathered through this process was to be disseminated in reports, together with updating records for the Lake District Historic Environment Record.

The information collated will serve to protect and manage the archaeological resource and in due course will be used for interpretation purposes in all the Windermere Reflections projects, and to inform local communities and visitors to the catchment area.

2. METHODOLOGY

2.1 INTRODUCTION

2.1.1 The work programme was divided into three elements: desk-based research; identification field survey; and reporting. The seven survey areas (Table 2; Fig 1) comprised woodlands lying to the west of Windermere and occupied a combined area of approximately 3.1 km².

2.2 DESK-BASED ASSESSMENT

- 2.2.1 The desk-based assessment followed on from the archaeological resource assessment of the Windermere Reflections study area prepared by OA North (2010a) as Stage 1 of the Reflections on History Project. Whereas the archaeological resource assessment provided a broad overview of the whole of the Windermere catchment, the desk-based assessment targeted those areas that were defined as potential survey areas (Table 1) in order to provide detailed information relating to their historic development.
- 2.2.2 *Historic Environment Record (HER):* an assessment was undertaken of data held in the Lake District Historic Environment Record (HER); this database of archaeological sites within the National Park is maintained by the Lake District National Park Authority in Kendal. A full record of the sites within the study area, including grid references and descriptions, was obtained.
- 2.2.3 *Cumbria County Record Office (Kendal):* the Cumbria Record Office was visited to consult documents specific to the study area. These included cartographic sources, including enclosure awards, tithe maps, and estate maps, and documents, such as sale particulars. Several secondary sources and archaeological or historical journals were also consulted.
- 2.2.4 *Lancashire County Record Office (Preston):* as part of the Windermere catchment area lies within the historic county of Lancashire, the Lancashire Record Office in Preston holds documents and secondary sources that are relevant to the study area.
- 2.2.5 *GIS Setup:* a GIS dataset was established, incorporating modern 1:10,000 mapping and historic mapping, including the Ordnance Survey (OS) First Edition 6" Mapping. All existing HER data were incorporated into the GIS.

2.3 IDENTIFICATION SURVEY METHODOLOGY

- 2.3.1 The identification survey was undertaken as an enhanced Level 1b-type survey. For consistency, the sites already identified from the Lake District National Park HER were checked and recorded at the same level of detail as other newly discovered monuments. The survey involved four elements: Reconnaissance; Mapping; Description and Photography.
- 2.3.2 **Reconnaissance:** the reconnaissance consisted of close field walking, varying from 10m to 30m line intervals dependent on visibility and safety considerations. The survey identified, located and recorded all visible archaeological sites and features on the ground. The extent of any areas where access was not possible was

depicted on the mapping. All sites identified by the National Park HER, and the OS First and Second Edition maps, were investigated.

- 2.3.3 **Survey mapping:** a satellite Global Positioning System (GPS) was utilised to satisfy the Level 1b survey requirements, and for the most part handheld GPS equipment was used which can achieve accuracies of +- 2m; however, in woodland this can degrade to +- 4m. The survey data captured by the GPS was incorporated onto site proforma and was manually input into the GIS creating shape files (ArcMap 9.3) and which was then incorporated with modern OS mapping.
- 2.3.4 *Site Description and Assessment:* the descriptive record was maintained using *pro forma* sheets that included the following mandatory fields: survey reference number; site name; NGR; site description; monument type; period; condition; and photo reference. The guidance notes for completing the form is presented as *Appendix 4* and an example of a proforma is presented as *Appendix 5*.
- 2.3.5 *Site Interpretation:* the size and level of detail of the description reflects the complexity of the site. The description incorporates a provisional interpretation of the function and purpose of a site, where possible and, similarly, provides a provisional interpretation of the chronology of the site, where possible.
- 2.3.6 **Photographic Survey:** a photographic archive was generated in the course of the field project, comprising landscape and detailed photography. Detailed photographs were taken of all sites using a scale bar. The photography was undertaken using a digital camera which allows for the incorporation of digital images 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.

2.4 DETAILED SURVEY

- 2.4.1 Detailed topographic surveys were undertaken of two of sites: a putative fulling mill (LOG 1007) in Little Ore Gate wood, and an area of woodland industry to the east of Dub How Farm in Rigg Wood (Figs 14-16). The putative fulling mill was further recorded as part of the fulling mill survey and has been described in detail in that report (OA North 2012); the Dub How Farms survey is presented in *Section 4.4.5*. The methodology equates to the level of survey detail defined as English Heritage Level 3 (Ainsworth *et al* 2007). The surveys were intended to serve primarily as a training exercise for the volunteers, so the survey techniques were devised to be easy to understand, to allow for plotting in the field, and to use equipment that can be acquired at low cost by the volunteers for follow on work. Initially, the following survey techniques were demonstrated to the volunteers as part of an introductory survey day:
 - *Plane Table:* the technique produces drawings in the field and typically uses stadia tacheometry on the alidade to measure distances. However, the project alidade was modified to use a Disto, mounted onto the telescope. A Leica Disto is a hand held laser distance measuring device which can measure distances up to 120m when a reflection is obtained from a white surface. The accuracy of the device is +- 10mm and is far greater than can be achieved by stadia tacheometry and is also quick and easy to use. A Disto was mounted onto the top of the alidade (Plate 2) and provided an

effective means of measuring distances. The Disto also measured vertical angle and output corrected horizontal distances.



Plate 2: A Disto mounted on the telescope of a theodolite

- **Theodolite and Disto:** the project used a theodolite with a Disto distance measurement device mounted on top. The range of the Disto is 120m and was suitable for detailed recording. The survey data was plotted onto draughting film using a large protractor, allowing for the production of survey drawings in the field;
- 2.4.2 *Survey Control:* survey control was introduced to selected sites by means of a high-accuracy survey-type differential GPS, ensuring the internal accuracy of the survey and also its location with respect to the Ordnance Survey National Grid.
- 2.4.3 **Detail Survey:** the detail survey was primarily undertaken using the theodolite and Disto and also the plane table (Plate 3). The plotting of the theodolite data was graphical onto field survey drawings using a large A3-sized paper protractor. The topographic survey recorded all structural and earthwork components, which were drawn by hachure survey. Survey points were marked on the ground using spray paint and the survey drawing was manually drawn up with respect to them. On completion of
- 2.4.4 **Description:** the final stage was the production of a descriptive record of all features, incorporating a provisional interpretation of the function of the features where possible. A provisional interpretation of the site's chronology was also provided where possible. The digital gazetteer was collated and edited, output as an Access Report and input directly into a Microsoft Word format. the survey, the field drawings were digitised into a CAD system.



Plate 3: Surveying using a plane table and a theodolite and Disto

2.4.5 *Photographic Record:* a digital photographic archive was generated in the course of the field project using a digital SLR camera with 10 megapixel resolution. The photographic record comprises landscape and detailed photography; the detailed photographs of archaeological features incorporated a scale bar. All photography was recorded on *pro-forma* sheets showing the subject, orientation and date.

2.5 **REPORT AND GAZETTEER OF SITES**

- 2.5.1 **Reporting:** the present report identifies areas of defined archaeology, and an assessment and statement of the actual and potential archaeological significance of the material within the broader context of regional and national archaeological priorities.
- 2.5.2 Information concerning the sites of archaeological interest within the study area has been collated from the proformas (*Appendix 5*) into a gazetteer (*Appendix 3*). The gazetteer output from the Access 97 database is compatible with The Lake District National Park Authority Historic Environment Record, and was formatted within Word. Site locations are given as ten-figure National Grid References where possible and the position of each site is indicated on maps of the study area (Figs 2-12). The *National Monuments Record Thesauri* (English Heritage 1999) was used as part of the site descriptions.

2.6 **PROJECT ARCHIVE**

2.6.1 A full archive has been produced to a professional standard in accordance with current English Heritage guidelines (1991) and the *Guidelines for the Preparation*

of Excavation Archives for Long Term Storage (UKIC 1990). The project archive represents the collation and indexing of all of the data gathered during the course of the project. The archive is provided in the English Heritage Centre for Archaeology format, both as a printed document and in digital format

3. BACKGROUND

3.1 LOCATION, TOPOGRAPHY AND GEOLOGY

- 3.1.1 *Location and topography:* the Windermere catchment covers an approximate area of 23,000 hectares (Fig 1) in the Lake District National Park, with the originally proposed eleven woodland survey areas being scattered around the lake and combining to comprise an overall area of 479.3 hectares (*Section 1.1.3*). The catchment area contains several other significant still waters. To the north of Windermere lie Grasmere and Rydal Water, with Loughrigg Tarn and Elterwater to the north-west, and Blelham Tarn and Esthwaite Water located to the west; several other smaller tarns occur within the catchment. The main inflows to Windermere are the rivers Brathay and Rothay, at the head of the Lake, Trout Beck, draining the north-east side of the catchment, and Cunsey Beck, which drains Esthwaite Water. The outflow from Windermere is the River Leven, which discharges into Morecambe Bay via an estuary shared with the River Crake, which is the outflow from Coniston Water (Pickering 2001, 19).
- 3.1.2 The topographic character of the Windermere area is diverse and includes high mountains, lower hills, lakes, and woodlands. It is also a cultural landscape, influenced by human use of the land and lakes. The landscapes of the area contrast between the wide open spaces of the lake, the intricate patterns of woodland, pasture, designed landscapes, settlements, and views of the distant fells (LDNPA 2010).
- 3.1.3 There is a distinct difference in character between the eastern and western shores of the lake and between the north and south basin. The northern section of the Windermere catchment is characterised by upland terrain and rough grassland and is part of the Cumbrian massif. This area includes the woodlands at Low Sweden and Nook Lane and Colwith Bridge East. In the southern basin, the hills are more gently sloping and often wooded. The eastern shore reflects Victorian prosperity and design, with fine houses set within designed landscapes; Blake Holme Plantation and Great Tower Plantation lie to the south-east of the lake. The western shore is influenced by farming and forestry, and has a less-developed, more natural, appearance (*ibid*). This part of the catchment includes Summer House Knott, Rawlinson's Intake and Great Oaks Wood, Three Birks, Ridding Wood, Rigg Wood and Esthwaite Coppice.
- 3.1.4 *Geology:* the Lake District consists of a mass of ancient rocks, in three major bands running east-north-east to west-south-west, surrounded by a rim of appreciably newer rocks (Pickering 2001, 9). The northern end of the Windermere catchment falls within the Borrowdale Volcanic Series, formed in the late Ordovician, some 450 to 410 million years ago (*ibid*); these provide much of the mineral wealth in the area, and also include some layers of slate (*op cit*, 10).
- 3.1.5 At the south-eastern limit of the Borrowdale Volcanic Series of rocks is a narrow band of Coniston Limestone formed in the late Ordovician Period at a time when the area was inundated by warm, shallow seas. Outcrops of these rocks occur on either side of the North Basin of Windermere, often associated with small limekilns (Pickering 2001).

- 3.1.6 The southern part of the catchment area is composed of sedimentary rocks laid down in the Silurian Period (approximately 400 million years ago). Covered by a warm, shallow ocean, sediments of sand and mud accumulated to a depth of over 5km and eventually formed the rocks now called the Windermere supergroup of shales, slates, grits and flags. The countryside in this area is much less rugged than that to the north, with few hills over one thousand feet (300m) in height (*ibid*).
- 3.1.7 The erosion of glaciers moving slowly southwards created long, straight, Ushaped valleys with craggy knoll-like outcrops. Lakes, notably Windermere and Coniston, now occupy the ice-scoured valleys. Glacial drift deposits held back the waters of Windermere which now drain out through an overflow channel to the south-west rather than directly south (Countryside Commission 1998, 66).
- 3.1.8 The drift geology around the lake is largely a product of glacial activity, being mostly till (boulder clay) deposited in the post-glacial period, over 10,000 years ago. The overlying soils consist of typical brown earths of Denbigh 1-Type (OA North 2005a, 14). On the higher areas of the catchment to the north, the soils are mostly poorly drained, brown podsols, characterised by a brown mineral upper layer and a pale, acidic lower part from which nutrients have been leached away by water. There are also some thinner, immature, ranker soils with impeded drainage and a top peaty layer. On the higher ground, the soils are characteristically gleyed, with impeded drainage and a peaty top layer; some deeper accumulations of peat occur locally (OA North 2010b).

3.2 WOODLAND INDUSTRIES

- 3.2.1 Presented below is a summary of the principal woodland industries that were prevalent within the woodlands; however, these are discussed in more detail in *Section 5.1*.
- 3.2.2 *Coppicing:* within the Windermere catchment area are some long-established coppiced woodlands that in the past have provided wood for fuel and as raw materials for a variety of industries for a considerable period. Woodland was of obvious importance as a source of fuel for bloomeries and, prior to the growth of coppicing, charcoal production would have exploited dead wood. Coppicing was first recorded from the fourteenth century in Cumbria (Bowden 2000, 6; Winchester 1987, 104) and is a way of ensuring a good, steady sustainable supply of usable wood from an area of deciduous woodland. It relies on the fact that cut trees do not necessarily die when cut but can be encouraged to produce new shoots from the stumps, or stools, which then grow into straight poles (Bowden 2000, 22). These when cut will produce a further growth of poles and this expanse of poles provides the raw material for charcoal burning. Alongside the stools some trees were also grown to maturity to provide wood for construction and also to ensure the longevity of the woodland (*ibid*).
- 3.2.3 Charcoal was originally produced by burning uncoppiced fragments of mature wood within pits and post-medieval charcoal burning platforms are often referred to as pitsteads even when pits werent used in the production process (*Section* 5.1.11). There are numerous known charcoal burning platforms located within the current study area, which represent the remains of prepared platforms that were used to produce large quantities of charcoal, and was a method of production documented from the sixteenth century (Bowden 2000, 23), although it may have

originated earlier. The process of charcoal burning in the post-medieval period involved the construction of a mound of coppice rods or shanklings to form a flattened dome. The mound would be sealed with turf to keep out the air, and then there would ensue a process of controlled burning, under constant observation, for a period of three days (*ibid*). The resultant charcoal was in considerable demand for the iron industry which continued right up until the early part of the twentieth century when the Backbarrow blast furnace was eventually converted from using charcoal to the more abundant coke (OA North 2005b).

- 3.2.4 Other significant woodland industries included timber production (*Section* 5.1.10), as either logs or planks for use in construction, but during the nineteenth century. There was also a considerable demand for bobbins in the textile industry and the coppiced woods were supplying the raw material for the Lake District bobbin mills. Bark peeling was a significant woodland industry providing an essential raw material for the tanning industry (*Section* 5.1.15). Potash production was prevalent in many woods and entailed the burning of green twigs or bracken to an alkali-rich ash, producing potassium hydroxide, which was used to produce soap, or lye, for use in bleaching and the fulling of cloth (Mike Davies Shiel 1972) (*Section* 5.1.16).
- 3.2.5 However, there were also related industries such as iron working (*Section 5.2.1*) and lime working within areas of woodland. This reflects that large amounts of wood / charcoal were consumed within most industrial processes and it was easier to transport ore and other minerals to the wood / charcoal supply rather than the other way round. As a consequence it is common to find bloomeries and lime kilns in areas of woodland. Quarrying is also common within woodlands, however, these do not necessarily relate to the supply of wood (*Section 5.2.2*).
- 3.2.6 **Place Names:** the names of woods, areas, villages and dwellings are often significant as they can suggest related woodland industries and activities. The element 'thwaite', is the most common throughout Cumbria, and comes from the Old Norse *thveit*, meaning clearing, though these are more often for settlement and agriculture than for woodland industries (Lee 1998). Less common elements include 'brant', and 'brun', as in Brantwood and Brunstock, meaning burnt wood, or land cleared by burning, which may refer to charcoal production (*ibid*). Other places are more definite in their meaning, such as Colwith, where the element *kola*, comes from the Old Norse 'charcoal burner', and *viðr*, 'wood'; and Hags, meaning 'broken moss ground', and often refers to areas where timber was hewn (*ibid*), and latterly has come to refer to areas of coppice boundaries.
- 3.2.7 Some place names refer directly to coppicing, such as Staveley, form the Old English *staef leah*, the 'wood where thick sticks grew'. The elements 'storrs' and 'storth' derive from the Old Nore *storð*, or 'wood', while 'stock' may refer to tree stumps and clearance, for example Stockdale (*ibid*). Other significant place names include Tirril, which comes from the Old English and Old Norse, meaning 'sheiling for dry wood', and may relate to woodland management and storage; while Skirwith comes from the Old Norse *skir viðr*, and describes woodland for general use, and was probably the equivalent of common grazings (*ibid*).
- 3.2.8 The only place names in this survey that directly relate to woodland management, are Esthwaite Coppice, which means 'clearing by the lake for coppicing' (*ibid*) and Hagg wood which will refer to coppicing and potentially the definition of its boundaries.

3.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

3.3.1 The following section presents a summary of the historical and archaeological background of the general area. This is presented by historical period, and has been compiled in order to place the study area into a wider archaeological context.

Period	Date Range
Palaeolithic	30,000 – <i>c</i> 10,000 BC
Mesolithic	10,000 – 4000 BC
Neolithic	4000 – 2,400 BC
Bronze Age	2,400 – 700 BC
Iron Age	700 BC – AD 43
Romano-British	AD 43 – AD 410
Early Medieval	AD 410 –1066
Late Medieval	1066 -1540
Post-medieval/Industrial	1540 – <i>c</i> 1750
Industrial Period	<i>c</i> 1750 – 1901
Modern	Post-1901

Table 1: Summary of British archaeological periods and date ranges

- 3.3.2 *Late Palaeolithic and Mesolithic periods:* around 11,000 BC there was a rapid amelioration in climate; the ice-sheets which had covered the Lake District started to withdraw, and typical tundra vegetation developed (Hodgkinson *et al* 2000, 32). The landscape was covered with hardy plant species, such as lichen, mosses, and grasses, and small shrubs, such as juniper and dwarf willow. Pine and birch became gradually more dominant and, after 9000-8000 cal BC, hazel, oak and elm also began to encroach (Pennington 1997). Dense woodland developed to an altitude of approximately 700m in the Lake District and, by *c* 6000BP, most native trees are thought to have been present in Cumbria (*op cit*, 45) with extensive areas of alder in valley and uplands hollows where the drainage was impeded. Throughout most of Cumbria, oak was the dominant tree in the drier parts of the valleys extending up into the uplands, with elm to be found growing at intermediate altitudes (*ibid*).
- 3.3.3 The first part of the Mesolithic period probably enjoyed a more continental climate, being warmer and drier than today. A shift to wetter conditions followed, which would have encouraged a rise in water tables. This may be reflected in the vegetational record for, as the post-glacial period progressed, the nature of the woodland cover changed subtly. Although oak and elm still dominated the drier soils on hillsides, alder began to occupy large areas of the less well-drained valley floors.
- 3.3.4 The effects of human activity on the vegetation become noticeable in the palaeoecological record of the time, particularly in the fringe areas of the region. There is good evidence from lowland Lonsdale, on the southern limestone fringe of the Lake District, which shows that small-scale anthropogenic clearance of woodland cover was taking place towards the latter part of the period (Taylor 1987; Middleton *et al* 1995, 188-9). Charcoal is also common in the Mesolithic

period stratigraphy of the lowland raised mires surrounding the uplands, although it is not known for sure whether this burning was directly associated with human activity (Huckerby and Wells 1993).

- 3.3.5 Some of the earliest suggestions of clearance come from the uplands, where recent evidence for burning (charred Empetrum seeds radiocarbon dated to 5968-5732 cal BC (6965±BP; KIA23485) has been recorded close to the Langdale axe factories (OA North 2004b). There is also some evidence for disturbance in the valleys from a pollen assessment of stratified deposits on the Calvert Trust Land, Bassenthwaite (NY 2360 2720), close to Borrowdale, where mineral inwash was recorded, suggesting some anthropogenic activity in the late Mesolithic/Early Neolithic (Hodgkinson *et al* 2000, 296-7). Similarly, at White Moss, near Grasmere, a further pollen assessment demonstrated some possible Mesolithic clearance activity (*op cit*, 316-7).
- 3.3.6 The first significant signs of human modification of the natural vegetation cover occurred at around 4000-4500 cal BC in north, west and south Cumbria, where pollen evidence indicates small reductions in the cover of tree species, particularly elm, along with the presence of weeds associated with human activity, such as plantains (Pennington 1970). However, this activity (which may represent small-scale clearances) was soon to be totally eclipsed by the first large-scale deforestation in the region, which began c 4000 cal BC in the west Cumbrian coastal areas.
- 3.3.7 The archaeological evidence for contemporary settlement is patchy, partly reflecting the areas within which fieldwork has been concentrated. Scatters of Mesolithic flint assemblages are concentrated along the coastal plain and have been found from Walney Island (Barnes and Hobbs 1950), via Eskmeals (Bonsall *et al* 1986; Cherry and Cherry 1986) and as far north as St Bees (Cherry and Cherry 1973). However, a few scatters of late Mesolithic artefacts have also been identified from the limestone uplands of east Cumbria (Cherry and Cherry 1987: Wickers Gill, Howes Plantation, Tarn Moor 1/5, Rayseat 1/2).
- 3.3.8 There is also a certain amount of evidence that the caves around Morecambe Bay witnessed continued occupation during the Mesolithic period, such as the Whitbarrow Bone Cave (SD 450 860) which revealed faunal remains; there is some uncertainty, however, as to the date of this material (*op cit*, 35).
- 3.3.9 *Neolithic:* in the Neolithic period, settlement was mainly concentrated around the edges of the Lake District, particularly on the West Coastal plain and in the Eden Valley. The latter holds some of the most noted prehistoric funerary and ritual monuments, including the stone circles of Long Meg and her Daughters, and the henge monuments of King Arthur's Round Table and Mayburgh (Higham 1986). However, the central Lake District has numerous significant sites, including the remains of the major axe factory sites of Great Langdale and Scafell Pike, whose products were ultimately distributed throughout the country (Claris and Quartermaine 1989). Radiocarbon dates from these sites indicate a date range from about 3800 cal BC to 3300 cal BC (Bradley and Edmonds 1993). The products of the Langdale axe workings are also found across the Windermere area.
- 3.3.10 Approximately commensurate with the adoption of farming, from c 4000 BC, the Neolithic period saw an increase in more permanent settlement, and the beginnings of the widespread construction of monumental architecture. Woodland

clearance took place, evidenced by a fall in tree pollen, replaced by grass and, in some cases, cereal pollen (Quartermaine and Leech 2012; Pennington 1970). Evidence for Neolithic deforestation, to create clearances for stock grazing and crops, has been discovered in lowland Cumbria, at sites such as Ehenside Tarn and Barfield Tarn (Pennington 1970). The only evidence for woodland clearance in the Lake District fells during this period is in Great Langdale (Higham 1986, 35), which was almost certainly associated with the initial workings of the Langdale axe factory sites (Hedges et al 1994, 360). Soil disturbance, signs of fire and clearance of trees, notably elm, at Langdale Combe have been radiocarbon dated to the Neolithic (Walker 1965, 500). Pollen analysis at five other sites within a 2km radius of the Langdale Pikes has provided further evidence for widespread deforestation, as indicated by an Elm decline, from c 3200 BC. Evidence from Stake Beck, Langdale Combe and Dungeon Ghyll suggest that these upland areas were cleared for grazing by the firing of lighter vegetation above the tree-line (Bradley and Edmonds 1993, 204). Research on the valley floor at Mickleden, below these sites, has shown the disturbance to have been more limited (*ibid*).

- 3.3.11 Around the summits of the central massif (Scafell and Langdale Pikes) are the remains of very large-scale axe production, which was at its most intensive around the end of the Neolithic period. The forest clearance in the vicinity of the sites, however, is not necessarily an indication of agricultural activity. There is no evidence of any settlements apart from very small, temporary camp sites on the main communication routes (Claris and Quartermaine 1989, 12) and the clearance was more likely to be a result of the industrial processes.
- 3.3.12 At approximately 2700 BC, however, there was sufficient clearance of woodland at Blea Tarn, Little Langdale, to allow areas of grassland to develop, which 'included the characteristic plant of human settlement the ribwort plantain' (Pennington 1973, 43). This clearance was temporary, lasting to approximately 2300 BC when the forest regenerated. However, at Angle Tarn and Thunacar Knott, which were cleared at the same time, changes were more permanent, with blanket bog probably forming soon after the forest's destruction (*ibid*).
- 3.3.13 **Bronze Age:** the beginning of the Bronze Age in Britain developed gradually from the preceding Neolithic during the mid-third millennium BC. Lithic technology changed and a wider range of flint tools were used, including knives and scrapers. Perforated stone objects, such as axe-hammers, and bronze implements, also began to be used, pottery styles changed, single burials increase in occurrence in the archaeological record and monumental building changed (Hodgson and Brennand 2006, 29).
- 3.3.14 In the Bronze Age the greatest concentration of extant remains was again around the peripheral parts of the Lake District, typically on the marginal lands facing the West Coastal plain or on those above the Eden Valley (Quartermaine and Leech 2012; Cherry and Cherry 1987). These remains took the form of cairnfields, which were the result of the clearing of former forested lands to enable agriculture. Very few comparable remains have been found within the Windermere area, which may potentially reflect a lack of contemporary activity, although there is a cairnfield in the bottom of Mickleden valley, spatially associated with a kerbed cairn, that could be the result of Bronze Age farming activity (Quartermaine and Leech 2012). The best evidence of Bronze Age

activity is represented by the funerary round cairns that adorn the summits of many of the surrounding hills (Mendus 2001).

- 3.3.15 The Central Lake District is, however, thought to have been subjected to a number of small scale temporary clearances of the oak and alder woodland during the Bronze Age, followed by regeneration (Chiverrell 2006). Temporary episodes of forest clearance have been recorded in pollen diagrams from Coniston Water (Pennington 1997, 49), Blelham Tarn, Loughrigg Tarn, and Red Tarn (Helvellyn) (*ibid*; Pennington 1981; Haworth *et al* 2003). This is in contrast to the lowlands (Chiverrell 2006; Wimble *et al* 2000) and sites at intermediate altitudes, such as Burnmoor Tarn and Devoke Water, where major and more permanent clearance episodes took place (*ibid*; Pennington 1997, 49).
- 3.3.16 *Iron Age:* the very end of the Bronze Age saw a return to a more densely forested landscape across much of the Cumbrian uplands as the clearances were recolonised by secondary woodland (Hodgkinson *et al* 2000; Quartermaine and Leech 2012). The nature of the evidence also demonstrates a marked change from that which preceded it, with a decline in the relative abundance of archaeological material which typified the Middle Bronze Age, such as axes and other weapons, as well as ceramic material, and evidence for the settlement of formerly marginal land. The period is instead characterised by the introduction of defended sites and hillforts, such as that of Castlesteads at Natland, near Kendal, or Shoulthwaite in Thirlmere (LUAU 1998a). Excavations at Matterdale, to the west of Ullswater, have also revealed occupation of open and enclosed settlement sites spanning the Iron Age and Romano-British periods (Hoaen and Loney 2004, 49–50) and hundreds of enclosures and settlement sites in Cumbria remain undated (Philpott 2006, 74) and could potentially have had their origins in the Iron Age.
- 3.3.17 Established views suggest that a deterioration of the Cumbrian prehistoric climate led to a decline, or even hiatus, in settlement during the Iron Age, particularly on higher ground (*eg* Higham 1986, 117). However, 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; Wells 2003). Pollen data from the Central Lake District suggest almost total deafforestation during the Iron Age and Romano-British Period at Devoke Water and Blea Tarn (Chiverrell 2006). 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). 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 the clearance of woodland for agriculture, with specific episodes suggested at 400 BC and 250 BC.
- 3.3.18 Overall, the period is not well represented within the archaeological record of the Windermere catchment and there is a paucity of sites definitely attributed to the Iron Age. A small enclosed settlement, adjacent to High House Farm and to the north of Ings, may date to this period (Crookenden and Crookenden 1993) and some native settlement is likely to have existed in the local area prior to the establishment of the Roman fort at Ambleside. The pollen record from Blelham Bog shows an increase in deforestation around 300 BC, suggesting that the local region was being actively settled (Wells 1991).

- 3.3.19 **Romano-British:** in the years following the Roman invasion of AD 43, the Roman army advanced as far as a line between Chester and York, but the frontier of the empire was not extended beyond this until the reign of Vespasian (AD 69-79). In AD 71 the Romans, led by Petillius Cerialis, crushed the *Brigantes* and by AD 79, a main road was established north from Chester, with forts at Low Borrow Bridge and Brougham. In *c* AD 90, a fort was built at Watercrook, Kendal, in the loop of the river Kent (Potter 1979). A road was driven north-westwards to the head of Lake Windermere, then on through the hills to Ravenglass; forts were established at Ambleside (Leech 1993; Shotter 2004) and Hardknott, with the former occupied in the Trajanic period and the latter between AD 120 and AD 138 (Bidwell *et al* 1999).
- 3.3.20 Evidence from elsewhere in the region (Quartermaine and Leech 2012) indicates that rural settlement was dispersed and of a native, non-Romanised character. Pollen evidence suggests a continuing deforestation of the valley slopes in the wider region, but the earliest evidence for clearance in the valley is from the later first millennium AD (Birks 1993). Environmental evidence suggests that the gradual deforestation of the higher slopes in the Windermere basin appears to have slowed after the end of the fourth century AD, although not before the majority of woodland above 1000 feet had been felled (Kipling 1974, 65).
- 3.3.21 *Early Medieval:* as is the case throughout Cumbria, evidence for early medieval activity is extremely limited. Following the withdrawal of Roman governance in the early fifth century, it seems that the region fragmented into a number of small kingdoms. The seventh century saw the expansion of the kingdom of Northumbria, which had incorporated the area of modern day Cumbria by the middle of the century (Kirkby 1962). Anglian crosses have been found at Kendal and Heversham, but few settlements have been located to date, presumably because those on the fertile lowlands would have been destroyed by later ploughing (though considerable place-name evidence exists; Rollinson 1996). Great Langdale contains none of the common Anglo-Saxon place-name endings such as -tun or -ham which are distributed evenly in the surrounding lowlands (Lund and Southwell 2000). It is generally believed that the Angles had little desire to push into the valleys because they either operated an arable-orientated farming system, which would have been more productive in the lowlands, and/or there was already enough land in the lowlands for settlers (Whyte, cited in Rollinson 1989, 56).
- 3.3.22 The native Cumbrians were probably not displaced, and lived alongside their new lords. In AD 685 Ecgfrith of Northumbria made grants of land to St Cuthbert, offering territory in Cartmel and Carlisle *'et omnes Britannos cum eo'*, 'including all the British inhabitants' (Crowe 1984), suggesting that there was a substantial native population. A hillfort at Shoulthwaite, in the Thirlmere valley provided two radiocarbon dates of early medieval date (cal AD 538-676, (AA-33591, Gu-8251, 1435±50 BP) and AD 560-690, (AA-33592, Gu-8250, 1400±50 BP) (LUAU 1999). The implication is that either the hillfort was constructed at that date, or more likely was reoccupied at that date, and this was a period of tension.
- 3.3.23 During and after this time, land use within the Windermere and wider area seems to have been largely pastoral; Bryant's Gill, Kentmere, dating to the eighth century consisted of a rectangular, stone-footed structure, and is perhaps typical of contemporaneous farmsteads encountered in the uplands of the region (Dickinson 1985). However, a timber hall-type structure of possible early medieval date has

been excavated at Shap, Cumbria by OA North (Heawood and Howard Davis 2002).

- 3.3.24 The eviction of Norse settlers from Ireland in AD 902 seems to have created the impetus for Scandinavian activity in Cumbria (Higham 1986). Whilst the extent of actual settlement has not been established, their effect was considerable: many place-names in Cumbria are derived from the Old Norse, with many dialect words to the present day coming from the same source. In the uplands, many place names contain derivatives of Old Norse and examples include Langdale -the long valley, Kirk How- the meeting place on the hill, and thrang – narrow road (Smith 1967, 203-4). There are many place names derived from a combination of Old Norse and Old English, such as Oxendale - valley of the ox, Walthwaite contains the common Norse place name ending for clearing, 'thwaite' but the derivation of 'wall' is most likely Anglian. Other local place names that derive from Norse include Wray meaning 'nook', Claife meaning 'cliff', and Latterbarrow meaning 'hill where the animals lie' (Ekwall 1922, 218). Other place names appear to combine Norse toponyms with personal names, such as Harrowslack meaning 'the slopes belonging to Harrald'. Other examples include Tock How, which combines the hill or 'how' belonging to 'Toki' or 'Tocca' and Hawkshead or 'Hawkesete' combining the Norse for farm with the name Houkr (Ekwall 1922, 218).
- 3.3.25 The disappearance of the tree cover around this time is also recorded throughout High Furness by the Scandinavian suffix '*thwaite*', which suggests a clearing in the woods. Local examples of the *-thwaite* suffix include Esthwaite meaning 'clearing in the ash trees', Loanthwaite, and Cowperthwaite. However, not all examples are representative of Norse activity, as the use of the *-thwaite* suffix continued until at least the thirteenth century (Winchester 1987, 41). Woodland clearance in the Central Lake District during the early medieval period has also been recorded in pollen diagrams, with such indicators at Coniston Water from 1270 BP to1110 BP, after 1370 BP at Devoke Water and to after 950 BP at Blelham Tarn (Pennington 1981; 1991; Chiverrell 2006).
- 3.3.26 A moot mound or *law ting* at Thingmount, Fell Foot Farm, Little Langdale (Quartermaine and Krupa 1994) may have been used for open-air assembly for matters of local government. Communications would have been an essential requirement for such a meeting place, and the location of the site is well suited for communications within the Lake District (*ibid*).
- 3.3.27 *Medieval:* during the medieval period, the northern and eastern sections of the Windermere catchment formed part of the Barony of Kendal, the west shore and land as far as Coniston was held by the Abbey of Furness, and the south-eastern portion was in the parish of Cartmel (Kipling 1974, 67). The areas occupied by woodlands at Low Sweden and Nook Lane fell within the Barony of Kendal, and the areas occupied by Blake Holme Plantation and Great Tower Plantation lay within the parish of Cartmel. The Furness fells, to the west of Windermere, became disputed territory between the monks of Furness and William de Lancaster, first Baron of Kendal during the mid-twelfth century and this was resolved by division between the parties in 1163 (Wood 1998, 27). Colwith Bridge East, Esthwaite Coppice, Ridding Wood, Rigg Wood (Area), Three Birks, Little Ore Gate, Bishop Wood, Rawlinson's Intake and Great Oaks Wood, and Summer House Knott all fell within the overall area of Hawkshead, with the intrinsic chapelry of Colton, and were apportioned to Furness Abbey (Farrer and Brownbill 1914, 370; 376-80). The documents of the medieval and post-medieval

period provide convincing evidence of the widespread occurrence, and importance in the economy, of woodlands (Kipling 1974, 67). Court rolls of 1442 and 1443 record that tenants of areas including Ambleside, Grasmere, and Langdale paid 'green-hew', which was an acknowledgement of the right of the lord to the forest (*op cit*, 70). Trees that could not be cut down without the consent of the lord were known as 'woods of warrant' and were defined as oak, ash, holly, and crabtree, and 'underwood' included hazel, ash, elm, rowan, yew, and alder (*ibid*).

- 3.3.28 Prior to 1127 a handful of farms founded by Norse settlers are likely to have existed in pockets of cleared woodland between Windermere and Hawkshead village. The late twelfth and thirteenth centuries appear to have seen a dramatic rise in the number of farms on the Furness Abbey's lands, as well as the amount of enclosed land (Lund 2000, 14). The exploitation of the woodlands by the Abbey was documented in 1246, when William de Lancaster, fourth Baron of Kendal, made a grant to the Abbey of Furness of two 'suitable boats, namely one on Windermere....to carry their wood and timber and whatever else they need' and an almost identical grant was also made between 1247 and 1297 (Brownbill 1919, 159).
- 3.3.29 The Cistercian economy was based on the development of previously uncultivated lands together with sheep farming, and from it a trade in wool. The geography and climate of the land was more suited to sheep than to the rearing of cattle or arable farmlands and the monastic estates of Furness Abbey and Conishead Priory exploited this, holding extensive 'parks' for sheep farming and leasing land for sheep farming. By the end of the twelfth century, Furness Abbey held as many as 60,000 sheep, with most of the raw wool exported outside the region (Elliot 1961, 112-9). The Abbey received royal licence in 1338 to create new enclosures or 'parks' throughout Furness Fell generally (Atkinson 1886-8, 173). Many of the remote upland farms established at this time can be identified by their 'park' name, with numerous examples situated between Lake Windermere and Grizedale, such as Low Park Dale, High Park Dale, Low Park, Park Farm and High Park.
- *Post-medieval/Industrial:* the woodlands that were the subject of the current 3.3.30 survey fell within several townships and manors that had been established by at least as early as the post-medieval period, with some continuing from the medieval period. The areas currently occupied by woodlands at Low Sweden and Nook Lane fell within Ambleside above Stock and the areas occupied by Blake Holme Plantation and Great Tower Plantation lay within Cartmel Fell, in the parish of Cartmel. Colwith Bridge East, lay within Skelwith, which originally formed part of the composite township of Hawkshead and Monk Coniston with Skelwith (Farrer and Brownbill 1914, 376-80). Esthwaite Coppice, Ridding Wood, Three Birks, Little Ore Gate, Rawlinson's Intake and Great Oaks Wood, all lay within the manor of Greythwaite, which formed part of the township of Satterthwaite (op cit, 380-2). Rigg Wood and Bishop Wood fell within the southern portion of Claife township, and Summer House Knott lay within Finisthwaite, which was within Colton (op cit, 380; 383-7). Colton was a chapelry of Hawkshead until 1676, after which it became a parish (op cit, 383-7).
- 3.3.31 In 1537, at the time of the Dissolution of the Monasteries, two lists of property and rents were compiled, one by the Abbott, the other by the King's Commissioners. The abbott's list (Kipling 1974, 71) includes the following: 'farmers of three 'smythes' in Furneys Fells employed for making iron, for licence

to enter, cut down and use wood and water sufficient to maintain and keep the said 'smythes'. The tenants of Furness Fells who 'keeps a fire' were to pay yearly rent and similar charges for a licence to workmen to cut down 'various trees within the woods there as well for the 'bastying, coolying and blekyng' as for the making of 'carte-sadles, cartwheles, carde-bourdes, cupps, hoopes for cowpers' and other necessaries payable at Easter as appears in the court-rolls (*ibid*).

- 3.3.32 From court rolls of the sixteenth century it is clear that the woods were being heavily exploited. The demands of the bloom-smithies led to a complaint about the destruction of the woods by the tenants of Hawkshead to the Duchy of Lancaster. As a result, the bloom-smithies were abolished in 1546 by a decree of Queen Elizabeth (Kipling 1974, 72). The woods were, for a yearly rent, given over to the tenants who then had a vested interest in conserving them and in 1564 a decree allowed tenants to use wood in order to produce iron for their own use, which could not be sold. In 1567 the Surveyor of the Woods of the Duchy of Lancaster made a report which included a list of woods of Furness. In the whole of High Furness there were 1,280 timber trees and 8,260 saplings. Those listed comprised: Conyson, Waterhead and Ternclose; Elterwater Park and Skelthwaite; Brathowe and Hawkshead Field; Wraa and Colthouse, Sawraye and Elehouse; Grathwait; Consaye Close; Haverthwait, Fynsknot Stot Park and Brendwood (Kipling 1974, 74). Eighty years later in 1649 a Parliamentary Survey recorded that there were 'growing upon the lands of Customnary Tenants in high furness between three and four thousand Timber Trees (most of them but of small growth) which we estimate worth be sold [£713. 10s]' (Kipling 1974, 73).
- 3.3.33 Natural resources, of which iron ore and woodlands were the most important, were exploited by the Abbey (Wood 1998). Several iron forges owned by the Abbey in the Furness Fells are documented, although it is unclear where these early smelting sites were located, although charcoal fuel is likely to have been produced throughout High Furness.
- 3.3.34 Lists of property were completed on the death of each holder of the Barony of Kendal, and these contain many references to woodlands. In 1340, for example, a grant was made to William de Coucy and his heirs of free warren (hunting rights) in Windermere, Grasmere, Troutebeck, Langdale, Ambleside and Applethwaite and 'licence to impark his wood of *Troutebek* and to hold it so imparked withoute impediment from the King or ministers' (Kipling 1974, 68). In 1560 fines were imposed for cutting down trees at Windermere. The existence of 'parks' in Troutebeck resulted in more clearance of woodlands than in other districts and, excluding common land (which was not wooded), it is unlikely that more than a quarter of remaining land was wooded at the end of the medieval period (*op cit*, 70).
- 3.3.35 During the seventeenth century, the making of charcoal became increasingly important with the growth of the iron industry, and in the eighteenth century coppice woods used for charcoal burning were a valuable source of income to landowners (Kipling 1974, 75). In 1663, a census of trees growing on crown lands was undertaken. For some parts of the Barony of Kendal a list has been preserved which gives the details of the numbers and value of individual trees, which ranged from four pence to at least two shillings. Kipling states that timber trees formed only a small proportion of woodlands, as the value of non-timber trees is almost seven times higher (*op cit*, 76).

- *Industrial:* the agricultural revolution which swept through the country in the 3.3.36 eighteenth century made only limited inroads into Westmorland, as much of the land was too poor to produce a reasonable crop; in 1794 it was reported that no peas, beans, clover, or rye were grown in Westmorland (Rollinson 1996). Farm implements were primitive and made entirely of wood, and mechanisation was virtually unknown – even wheeled vehicles were a rarity, with preference given to pack-horses (*ibid*). By the nineteenth century all this had changed, with the introduction of lightweight ploughs, and mechanised processes. The greatest impact, however, was caused by the enclosure of much of the common land; land was thus given over to single ownership and only small areas of woodland still remained. Between 1763 and 1800 over 10,000 acres of former common land in Westmorland had been enclosed and improved whilst, after the General Enclosure Act of 1801, the process increased in scale. Most of the enclosure awards for the area are part of this later process, dating from 1813 onwards. Many of the field boundaries visible today conform to those on the First Edition OS map of 1851 and were probably enclosed during this period of reform.
- 3.3.37 The woodland history around Coniston Water records that the woods were extensively managed by coppicing (Pennington 1997, 50). Between 1600 and 1800 the amount of oak present in the Coniston area was probably at its lowest but after that there was extensive planting of trees such as pine. The pollen diagram from Coniston Water suggests that hazel pollen, which had previously been abundant, declined after 1900 when the woodland was no longer coppiced for charcoal production and trees were allowed to grow shading out the light demanding hazel (*ibid*).
- 3.3.38 Other woodland industries included the manufacture of bobbins for the Lancashire cotton industry. The first bobbin mills of Lakeland arose at around the end of the eighteenth century in response to the demands of the cotton industry. Bobbin production multiplied as they formed an integral part of the new spinning machinery introduced by Hargreaves, Arkwright and Crompton. (Marshall and Davies-Shiel 1977).
- 3.3.39 The ubiquitous presence of green bracken, which when burned provided a ready supply of crude potash, was a important element of the local fulling and cloth industries. Occasionally, twigs of birch were also burnt and potash kilns became a fixture of the local area; local sixteenth-century documents refer to the 'elyeing of ashes' (Rollinson 1996; Marshall and Davies-Shiel 1977). Woodland was also used for potash production; alders were cut down and used in the same way. It is perhaps unsurprising, therefore, that the workers making potash also began producing charcoal in great quantities during the medieval period for smelting iron, often from scavenged wood (Winchester 1987). A potash kiln at Baneriggs, Grasmere, has been found, which at some time in its history was converted into a charcoal-burner's hut, with an adjacent charcoal-burning platform (HER 30648).
- 3.3.40 In the nineteenth century, the eighteenth-century plantings produced valuable material, as shown by account book entries showing the income gained from the sale of wood (Kipling 1974, 85). To the south-west of Lake Windermere the woodlands were mainly devoted to coppice, and in some parts this continued into the twentieth century. In the Graythwaite estates the policy differed, as no plantations of soft woods were made until 1850, and even then were of small extent. Before the eighteenth century the main species were oak, ash, alder, hazel, holly and thorn. During the eighteenth to nineteenth centuries many different

species were planted, including birch, poplar, sycamore, Scots fir, larch and conifers (Kipling 1974, 87). The demand for charcoal was fed by the Elterwater gunpowder works and Backbarrow blast furnace up until the 1920s when the blast furnace was converted to a coke operation (OA North 2005b). Despite this demand, the woodlands had been carefully managed and woodland had steadily increased through the nineteenth century. In the First World War, however, the woods were felled extensively as expediency overrode the needs of conservation.

3.3.41 Various industries that would have required the use of wood products were recorded in the vicinity of the current survey areas, although it can be difficult to ascertain whether these industries were supplied directly from the woodlands within the survey areas. A bobbin mill was still in use in Ambleside during the mid-eighteenth century (Lewis 1848), which is close to the woodland at Low Sweden and Nook Lane. The Elterwater Gunpowder Mill was established in 1824 and the manufacturing process utilised charcoal in conjunction with saltpetre and sulphur (Marshall and Davis-Shiel 1977, 75). The charcoal was produced primarily from silver-birch, juniper and alder trees (*ibid*) and the factory closed in 1930. This works lay in the general vicinity of Colwith Bridge East.

4. LANDSCAPE SURVEY - THE WOODLANDS

4.1 SURVEY INTRODUCTION

4.1.1 The landscape survey was conducted across the study areas in order to check the survival of features and structures highlighted by the documentary analysis, to provide further detailed description, provide management recommendations for them, and to identify new, previously unrecorded, monuments. Data from the Lake District National Park HER were collated, reconciled, and then combined to provide a total of four previously recorded sites within the present survey areas. One listed building (Pennington Tower Folly; **SMK 2009**, LB 1225215) had also been previously recorded. The landscape survey recorded a further 451 new sites and monuments, making a total of 456 sites. The sites are discussed within the context of the woodlands below and thematically in Chapter 5.

4.2 ESTHWAITE COPPICE - 5.7 HECTARES

- 4.2.1 *Introduction:* this is a small area of deciduous woodland on the western valley side of Esthwaite and which is near to Esthwaite Water in the bottom of the valley and also Esthwaite Hall (Fig 1). There is a moderate slope dropping to the east, and two streams extend through the area, but there is little in the way of gullies associated with these. The woodland has an open deciduous character, with a lot of mature trees, and has not been subject to recent plantation or forestry operations.
- 4.2.2 *Map Regression:* the First and Second edition maps of 1851 and 1890 (Figs 2 and 3) show no change in the shape and bounds of the Esthwaite Coppice indicating that there had been no expansion of the fields bordering the coppice and no additional inroads into it. The Third edition map of 1913 (Fig 4) shows that the triangular piece to the south of the coppice, unwooded in the nineteenth century, had been developed as woodland, still apparent at the time of the survey. The southern boundary of the coppice was straightened, to continue south-west from the triangular piece to expand the coppice by an additional triangle of land at the south-west corner, and a boundary is shown on the Third edition map of 1913.
- 4.2.3 To the west of the coppice a large irregular oval field remained unwooded throughout the nineteenth and first half of the twentieth centuries. A sub-circular unenclosed area to the south of this shown on the First edition map, appears to have gained formal boundaries on the Second edition map. The road to the east of the coppice forms the north/south road past Esthwaite Hall, although access to the coppice as a track here is clearly delineated on both the First and Second edition maps. A boundaries shown leading to the mid-point of the coppice seem to have been a field ditch which led directly to Esthwaite water.
- 4.2.4 *Survey:* the woods reflect the survival of an historic coppice, characterised by low density mature trees, but, in particular, there are two extant coppice stools; one to the west comprising mature alder trees (EC 2007) in an area of boggy ground and a further one of hazel trees to the north (EC 2006).

4.2.5 This small area of woodland lives up to its name, as almost all of the monuments identified within the woodland related to woodland management (Fig 5). Of the sixteen sites identified, eight (50%) were charcoal-burning platforms, and the rest were woodland-related, either directly or indirectly. The survey identified two boundary stones (**EC 1004**; Plate 4), which were adjacent to a charcoal-burning platform and, as such, were probably coupe stones, demarcating boundaries within the coppice. There were also three trackways, a dry-stone wall (probably a woodland compartment wall), and the two previously mentioned coppice stools. The woodland reflects a small localised survival of post-medieval coppiced woods, which has not been disturbed by subsequent activity.



Plate 4: A pair of possible coupe stones identified in Esthwaite Coppice (EC 1004)

4.3 **RIDDING WOOD - 79 HECTARES**

- 4.3.1 The survey area is an area of moderately sloping land on the western side of the Esthwaite valley (Fig 9), and has substantial areas of outcrop and crag scattered across the landscape. It is part of a more extensive expanse of similar deciduous woodland that has been compartmented into a series of smaller woods. The study area includes four of these, Ridding Wood in the north, Eel House Intake in the west, Devil's Gallop in the east and Long Slack in the north, although for convenience the wider area has been named Ridding Wood for the purposes of the present survey.
- 4.3.2 *Map regression:* Ridding Wood comprises an area of woodland to the west of cleared enclosures straddling Out Dubs Tarn and the northern section of Cunsey Beck. On the First edition map of 1851 (Fig 6) the northern section of Cunsey Beck was known as Eel House Pool. Adjacent to the north-east part of Ridding Wood is the wooded outcrop of Eel Hows. The surveyed area of Ridding Wood also included the compartments of the Eel House Intake clearly delineated by an unnamed north/south beck from another compartment labelled Devil's Gallop. On the First and Second edition maps (Figs 6 and 7) this separation between Eel

House Intake and Devil's Gallop was very evident, as Eel House Intake was unwooded moorland and Devil's Gallop was woodland. By the time of the Third edition map of 1913 (Fig 8) Eel House Intake was wooded throughout with a small area to the north of the survey area marked as *Pheasantry*, thus indicating a change of use at the turn of the century. This is also evident in the southern part of Ridding Wood, close to the *Pheasantry*, where a small grid of tracks seems to have developed after the turn of the century, perhaps as part of pheasant-shooting operations.

- 4.3.3 Evidently the eastern boundary of Ridding Wood and Devil's Gallop was well established in the nineteenth century and this joined to the south, the road or track alongside Long Slack. By 1913, on the Third edition map, there was a clearly marked road or track alongside the length of the boundary. There was also an east/west track separating Ridding Wood from Long Slack, which was perhaps an access route or an older boundary.
- 4.3.4 In addition, the First edition map showed a strongly delineated boundary and track leading west from Eel House and Eel House Bridge, in part coinciding with a stream marking the southern bounds of Long Slack. This might have been the original boundary of a holding containing Ridding Wood, Devil's Gallop and Long Slack, suggesting that, in the nineteenth century the southernmost part of the surveyed area was part of a separate land-holding that was perhaps part of Dale Park to the west. This boundary and track was also on the Second edition map of 1890, but by 1913 was no longer marked. It is probable that this track had been superseded by a new track further to the south leading east/west across the middle of this additional area, and indeed continuing west through Dale Park. Dale Park, to the west of Ridding Wood, was an area of clearance and woodland, that was known to have been owned and managed by Furness Abbey as late as the sixteenth century (Farrer and Brownbill 1914, 370). Thus the area to the south of Long Slack Wood, was perhaps previously owned by Furness Abbey, and may have had a different history of land management.
- 4.3.5 *Survey Results:* the woodland is predominantly coniferous plantation, although there is localised survival of some deciduous woodland particularly on the western margins of the area (Fig 9). The western part of the area, Eel House Intake, is characterised by very dense, impenetrable plantation, and there are also extensive areas of precipitous crag, and therefore, for health and safety reasons, it was decided that this area would be inappropriate for survey as part of a community project. The area to the south, Long Slack, also had very dense and very recent plantation growth and was similarly impenetrable, and was also not surveyed.
- 4.3.6 Because so much of the area is now plantation, the woodland character does not portray its historic coppiced origins, but the identified heritage resource does definitively indicate that the land has had a history of coppicing. Of the 53 monuments identified during the survey, 52 related to woodland management (98%), and comprised 34 charcoal-burning platforms, 14 woodland trackways, and four bark peeler's huts, potash kilns and boundary marker stones. The substantial number of woodland tracks reflects the need to provide sufficient access for the charcoal-burning in a generally difficult terrain.

4.4 **RIGG WOOD - 36 HECTARES**

- 4.4.1 *Introduction:* the survey area comprises an area of deciduous woodland on the east side of the Esthwaite Valley, and its western edge is defined by the low to moderately sloping valley side (Fig 13). It is part of a more extensive expanse of similar deciduous woodland that has been compartmented into a series of smaller woods. The study area includes two of these, Rigg Wood in the north and Dumbarton Wood in the south, although for convenience the wider area has been named Rigg Wood for the purposes of the present survey. To the east, the study area is edged by Castle Wood Hill, Castle Wood, Garnett Wood, Bishop Wood and Hecate Scar Wood. The woods comprise relatively mature deciduous trees, although those in the adjacent Castle Wood and Garnett Woods are larger and more mature, and it would appear that the trees in this wood have been harvested more recently than those in the adjacent compartments.
- 4.4.2*Map regression:* Rigg Wood is on the east side of the cleared enclosures adjacent to the northern part of Cunsey Beck and Out Dubs Tarn. The First edition map of 1851 (Fig 10) shows Rigg Wood bounded to the south by a stream extending north-eastwards to the south-west corner of the cleared enclosure by Hagg Wood (Section 3.2.6). On its western edge are areas of clearance adjacent to the north south Cunsey Beck (which is marked as Eel House Pool on the First edition map) and the road from Eel House to Near Sawrey. In places, Rigg Wood is close to this road, where there are two prominences, an unnamed rocky outcrop and, to the north, Dubs Howe. The north edge of Rigg Wood coincides with the northern boundary of Castle Wood, and Castle Wood Hill lies to the east of Rigg Wood. There was one internal trackway in Rigg Wood shown in the First edition map going from Eel House Bridge and eastwards up the slope. East of Castle Wood Hill was a track in a loop, but by the time of the Third edition map in 1913 (Fig 12) this track had been extended northwards through Rigg Wood, so that it reached the road at the northern end of the wood; and there were also many additional tracks off from the main track to access the eastern and western edges of Rigg Wood.
- 4.4.3 In the Second edition map of 1890 (Fig 11) is a new name; that of Dumbarton Wood which seems to cover the southern part of the woodland. There seems to have been little change to this area of woodland over the nineteenth and twentieth centuries save for the development of internal tracks and paths.
- 4.4.4 *Survey Results:* the character of the woodland is consistent with regenerated coppiced woods, and there are sizeable areas of better surviving coppiced stools (**RGW 1014, 2011, 2026** and **2035**) comprising mainly hazel and alder trees, with the latter species occupying the wetter, poorly drained ground (Plate 5). The heritage remains are very much in keeping with the historic coppiced character of the woods. Of the 87 monuments identified within the study area, 82 (94%) relate to woodland management, and include 56 charcoal-burning platforms (Plate 6), 14 woodland tracks, five areas of extant coppice, as well as a potash kiln, bark peelers hut and compartment walls (Fig 13).
- 4.4.5 *Detailed Survey Results:* two areas within Rigg Wood were selected for more detailed survey, on the basis that these were archetype areas of managed woodland comprising extensive remains relating mainly to charcoal production.



Plate 5: An example of a large coppice stool identified within Rigg Wood (**RGW** 2013)



Plate 6: A well-defined charcoal-burning platform on sloping ground in Rigg Wood (RGW 2030)

4.4.6 *Southern Area:* the southern area was to the south-east of Dub How Farm (Figs 14 and 15), and comprised two charcoal-burning platforms and ancillary woodland features. The two charcoal-burning platforms (**RGW 1016** and **2046**) were relatively large, the former being 11m in diameter and the latter 12m x 7.7m. The larger platform to the north (**RGW 1016**) is set into the south-facing slope and has a very flat, well-defined circular platform for stacking wood for burning. Adjacent to it is a 4.5m diameter sub-circular pit, and this is likely to have been a sammel

pit, that is a small extraction pit to provide soil to seal up the stack prior to the firing. The other platform is one of the rare examples that have not been set into a slope but instead is on an approximately level area of ground; there is a slight, levelled internal hollow, and terraced banks supporting the levelled, platform to the north and south. Both platforms are closely associated with woodland tracks **RGW 2047** and **2048**, and highlight the close association between platforms and the tracks which brought the wood in from other parts of the woodland and took the charcoal product out.

- 4.4.7 Extending for 26m north from charcoal-burning platform **RGW 1016** is a decayed dry-stone wall with an earthwork revetment on its western side (**RGW 1017**), this then turns into a scarp sloped bank, which turns to the west, and includes a number of large orthostatic stones. In the middle of the wall / bank is a small rectilinear structure (**RGW 1018**) measuring 3m by 2.25, with double-thickness dry-stone walls surviving up to 0.75m high. The foundations of this structure lie contiguous with the western side of dry-stone wall **RGW 1017** and there is no obvious indication of an entrance. It is of unknown function, but the lack of an entrance might suggest that it did not serve as a hut, but was perhaps used for storage or as an animal trap.
- 4.4.8 The wall (**RGW 1017**) is relatively short and does not appear to be a large woodland compartment boundary, but may be a part of a small enclosure. The fact that it terminates at the large charcoal-burning platform, would suggest that it related to woodland management.
- 4.4.9 Northern Area: the northern area of survey (Figs 14 and 16) was very small and was a localised group of monuments comprising a potash kiln (RGW 1025), a charcoal-burning platform (RGW 1024) and an associated woodland track (RGW 2049). The charcoal-burning platform is 10m x 12m in extent and is set into a westerly-facing slope, and has a prominent forward apron and a flat platformed surface. The relationship with the track is unorthodox, as instead of being located adjacent to the track, the platform is in the middle of it. The shape of the track sections is revealing, as the northern and southern sections of the track do not converge with other, and instead have slightly different orientations, and the terminals of each section turn in towards the centre of the platform at a distance of only 7m away. The implication is that this is not a platform constructed on top of an existing track, and the platform undoubtedly predated the track. The track sections were evidently intended to provide access for the platform, and may have been constructed shortly after it, as their functions seem to be closely linked into that of the platform. Through traffic would not have been possible whilst the platform was in use, as there is no indication of a bypass line, so it must be presumed that the tracks were constructed only to serve this platform.
- 4.4.10 The potash kiln (**RGW 1025**) is circular, and has dry-stone revetted internal walls, which form an inverted cone, although this is partially filled with soil and leaf litter (Plate 7). It has a curvilinear bank made up of stone and earth around the northern side, which forms the body of the outer bank of the kiln, but this is less evident around the southern and eastern sides. There was an obvious entrance from the western side. The kiln was constructed over the eastern revetted slope of the charcoal-burning platform, indicating that it post-dated the platform.



Plate 7: Exposed walling within a potash kiln in Rigg Wood (RGW 1025)

4.5 BISHOP WOODS - 60.72 HECTARES

- 4.5.1 The survey area consisted of a large block of woodland measuring some 60.72 hectares located immediately to the west of the hamlet of High Cunsey near the western shore of Windermere (Fig 20). The block named Bishop Woods was divided into at least six smaller compartments on both the current and First Edition OS mapping. These compartments consisted of Argent Close, Hecate Scar Wood, Dam Close, Long Parrock, Pert Wood and Sparrow How Wood. The area was defined to the north by Wilfin Beck (Willow Beck on First Edition map), which had been modified with a mill dam and a well-defined head-race to service the fulling mill (latterly a saw mill) at High Cunsey. To the south, the woodland was delimited by Cunsey Beck, which was a focal point for medieval iron production. In the west, the block adjoined to Rigg Wood has also been surveyed (*Section 4.4*).
- 4.5.2 *Map regression:* the external and internal boundaries remained unchanged between the dates of the First edition (1851) and Second edition (1890) maps, as was the area of clearance between Sparrow How Wood and Argent Close (Figs 17-18). The First edition map shows that this large area of woodland had a series of internal trackways. One long track extended along the north side of Cunsey Beck, and from here was a looped path going into Hecate Scar Wood. Another track went west of High Cunsey and north of Argent Close but with no return loop. A third track went from Foot Bridge and then south into Sparrow How Wood, splitting into two to extend to two corners of the cleared enclosure. No new trackways or access points were apparent on the Second edition maps and the internal pathways seemed unchanged. By the time of the Third edition maps of 1913, although the boundaries seems unchanged and the use of the woodland seems undeveloped, there were internal tracks reaching across the wood from the south to the north and from the west to the east (Fig 19). There was one name

change at the end of the nineteenth century when Hagg Wood was renamed Garnett Wood, but this area is on the edge of the survey. By the time of the 1919 map the area of clearance north of Argent Close had been expanded to the north and east.

- 4.5.3 *Survey Results:* roughly 2/3rd of the survey area, consisting of all of Argent Close and various smaller parts of the other smaller woodland compartments except Sparrow How Wood could not be investigated as they were covered in dense coniferous plantation (Fig 20). Several assorted fields had been inserted in the woodland between Sparrow How Wood and Pert Wood, and these were depicted on the First Edition OS mapping and remain extant.
- 4.5.4 The range of identified archaeological features varied from the other woods in that there was a greater variety of monument types, which indicated that the lands had not been used solely for woodland management. There were nevertheless a substantial number of charcoal-burning platforms, which were the most numerous monument type, with 28 identified in total; there were also 19 other woodland management features, including tracks, but also four potash kilns (Plate 8). This, however, makes a total of 47 monuments and is 70% of the total of 67 monuments which is a significantly lower proportion by comparison with other coppiced woods. The other classes of monuments comprised agricultural features, such as clearance banks, and boundary banks and an irregular enclosure (**BW1032**). There were also a number of monuments that can be loosely defined as industrial, and includes small-scale quarries, lime kilns, a retting pond (**BW2000**), a dam for a mill pond (**BW1013**) and a leat (**BW 1014**) that led to the High Cunsey saw mill (Plate 9).



Plate 8: Multiple courses of dry-stone walling within a potash kiln in Bishop Wood (**BW 2031**)



Plate 9: An obsolete dam (**BW 1013**) that contained the mill pond for the saw mill at Bishop Wood

4.6 THREE BIRKS WOOD – 97.8 HECTARES

- 4.6.1 *Introduction:* a very large woodland block measuring 97.8 hectares was located on the western side of the road running along the western shore of Windermere (Figs 24, 25 and 26). The block was divided into at least seven named smaller compartments on both the current and First edition OS maps. These compartments consisted of Three Birks Wood, Holme Well Wood, Briar Shot, Bark House Wood, Moss End Wood, Middle How and Baswicks. The local topography consisted of a ridge of relatively steep knolls in the centre of the survey area and running roughly parallel with Lake Windermere. The ground sloped away to the west in the south-west of the area at Middle How with the rest of the survey area, excepting the very southern tip, generally trending downslope to the east. Vegetation cover was variable with some evidence for grown-out coppicing but rarely any very old stools. More modern coniferous plantation occurred in parts of Moss End Wood, Middle How and more densely in Briar Shot.
- 4.6.2 *Map regression:* on the First edition map of 1851 (Fig 21) the boundaries of the Three Birks wood are clearly delineated to the north by an unnamed stream, to the north-east by cleared enclosures and to the east by the road or track leading north to Holme Well (but not immediately adjacent to the shores of Lake Windermere). There appears to have been very little development of the land between the dates of the First edition map (1851) and the Third edition map of 1913 (Fig 23). There is clearly a well delineated boundary separating Three Birks wood and Briar Shot to the west, which then extended to the south-west and then south-east around Back House Wood and was in existence at the time of the First edition map in 1851 (Fig 21). By the time of the Second edition map (Fig 22), the main boundary continued between Mossland Wood and Middle Howe and was also apparent on the Third edition map of 1913. The less wooded areas to the south of the survey
4.6.3 *Survey Results:* the range of sites within the study area was broadly consistent with its use as a coppice (Figs 24 and 25). Of the 147 sites identified, 99 were charcoal-burning platforms, 27 were woodland tracks, six were bark peelers huts, nine were boundary banks, walls or coupe stones, and one was apotash kiln. This total of 142 woodland management features makes up 96% of the overall total. In particular, the eastern end of Baswicks contained several very large charcoal-burning platforms. The other features included a bark barn from Bark House Wood (**TB1040**). The south end of the survey area was not actually woodland but consisted of undulating rough grazing with two retting ponds, and associated stream channels, as well as three large quarries interspersed between the rocky outcrops. The retting ponds fed a stream running north-east and downslope to outflow into Windermere.

4.7 LITTLE ORE GATE - 11 HECTARES

- 4.7.1 *Introduction:* Little Ore Gate is a small area of woodland (11ha) and is an off shoot of the much larger Black Brows plantation to the west (Fig 30). It is predominantly coniferous plantation, although there are localised stands of coppiced woodland scattered through the area. The topography is undulating and largely characterised by the drainage that extends through the area. Two unnamed streams extend from the west and south and merge in the north-eastern part of the area from where it then extends north to feed into Cunsey Beck. The southern stream is set within a moderately steep-sided valley, which opens out in the north-eastern part, where it is flat bottomed and has a mire at its base. The wood has been subject to recent forest working and there are two substantial, metalled tracks through the area relating to modern forestry operations.
- 4.7.2 *Map regression:* the stream extending from the west was bridged by the north/south road aligned along the western side of Little Ore Gate woodland; this was clearly shown as a bridge on the First edition (1851) map (Fig 27), but not as a bridge on the Second and Third edition maps. There was a field boundary aligned to the stream extending north-east from the south edge of the woodland shown on the First edition map; by the date (1890) of the second edition map (Fig 28) there was also a well-marked track on the western edge of the field boundary. On the Third edition map (Fig 29) the boundary was no longer marked, but only the stream and track were shown. The track led to a squared area of cleared woodland which may potentially have been associated with a fulling mill, LOG 1007, (fulfilling the need for clear tracts of land for drying the cloth). The boundaries of both Little Ore Gate and the cleared squared area have, according to the maps, remained unchanged throughout the nineteenth and twentieth centuries.
- 4.7.3 *Survey Results:* the character of the heritage resource is distinctive in that there is a generally low density of monuments (only 18) and of these there are relatively few charcoal-burning platforms, which characterise the other coppiced woodlands in the area (Fig 30). Only three platforms were identified, and two of these (LOG 2005 and 2009) were in the lower part of the area associated with track / leat LOG 1006. There are, however, two possible potash kilns that are both set into stream banks; the larger of the two (LOG 2006) has a slight bank around the outside and includes substantial amounts of stone material. It has a lot of the

characteristics of a typical potash kiln, and is spatially associated with a putative fulling mill (LOG 1007). The other putative potash kiln (LOG 1004) is simply a scoop into a stream bank, and may have an alternative interpretation, such as a quarry scoop.

4.7.4 The fulling mill (**LOG 1007**) is potentially the most significant monument within the group and was subject to a detailed survey; it has been reported in greater detail as part of the Windermere Reflections Fulling Mills report (OA North 2012). The mill comprises a three-celled rectangular structure, formed of banks which have no stone component, and is fed by a long probable leat that follows the contours for 123m from the west. There are two parallel ditches within the 6m wide feature, and it has been conjectured that these reflect wheel ruts, from a very large forestry vehicle (the ditches are 2.3m apart), or, alternatively, a double leat has been disturbed by wheeled vehicles. While it remains uncertain if this is a leat and fulling mill, at present it is perhaps more likely that it is not.

4.8 SUMMER HOUSE KNOTT - 24 HECTARES

- 4.8.1 The area of Summer House Knott woodland is in the southern part of the Windermere Catchment, just to the north of Newby Bridge (Fig 1 and 34). It includes two compartments of woodland, comprising Waterside Knott to the south and Summer House Knott to the north, divided by a woodland compartment drystone wall. For convenience, the study area has been called Summer House Knott, which is the slightly larger of the two. Both areas comprise areas of deciduous woodland set over a rounded and slightly undulating hill, which is craggy, and steep-sided to the south, which was carved by glacial action to form the U-shaped valley of River Leven. On top of the hill is Pennington Lodge Tower, which is a monument to Napoleonic naval victories, constructed in 1799. The woodland is erratic in density and comprises predominantly mature deciduous trees, which reflect that it is a survival of historic coppiced woodland. Adjacent to these woodlands are broadly similar compartments of former coppiced woodland (eg Parting Tree Wood, Sour Butts Wood, Parrock Fold Wood, High Parrock Wood) that are arbitrarily divided by further compartment boundaries. These other woods have not been examined as part of the present study.
- 4.8.2 *Map regression:* on the First and Second edition maps, Summer House Knott Wood comprised a land holding with distinct boundaries separating it from surrounding woodlands and one area of enclosed clearance (Figs 31 and 32). To the south-west and south the boundaries are formed by a track circumnavigating the contours of Water Side Knott and then the road leading past Newland Head. Just north of Newland Head, the boundaries have a rectilinear arrangement orientated along the line of the contours west of Landing Knott Wood. To the north and west of Back Knott Wood the boundaries again follow a straight rectilinear division. Within the woodland are three higher outcrops or knotts, all of which are wooded. On Summer House Knott is marked the Summer House or Tower, which by the time of the Third edition map of 1913 (Fig 33) was known as Pennington Lodge Tower. The boundaries remained the same and there was some development of the internal tracks, notably one north of the road by Newland Head, which extended up the east slope of Water Side Knott, and another track to the south of Pennington Lodge. Other tracks marked on the First edition map in Back Knott Ward were not depicted on the Third edition map.

4.8.3 **Survey Results:** the heritage resource within these two wood compartments predominantly relates to woodland management; of the 53 monuments identified by survey, 39 (73%), were charcoal-burning platforms, and a further nine were tracks or a bark peelers hut (Plate 10, **SMK 2025**) and also related to woodland management (Fig 34). Only five monuments (9%) were unrelated to woodland management and comprised small-scale quarries, as well as the Pennington Lodge Tower (**SMK 2009**). The heritage resource coupled with the woodland character reflects an area of woodland that has been managed as a coppice for an extended period of time and seemingly has not been subject to any other intensive land use. The woodland is near to Backbarrow iron works, which had a considerable demand for charcoal up until its conversion to coke in the 1920s (OA North 2005b), and was consuming charcoal from woodlands all around Furness peninsula; it is therefore not, perhaps, surprising that these woodlands should have been so dominated by woodland management features.



Plate 10: Low stone foundations to support a timber superstructure associated with a bark peeler's hut at Summer House Knott (SMK 2025)

5.1 WOODLAND INDUSTRIES

- 5.1.1 *Woodland Management*: the key characteristic of the woodlands that were subject to survey is evidence for long-lived woodland management and exploitation and the vast majority of sites and monuments that were identified were associated with woodland industry. The surveyed woodlands all lay within the Furness fells, to the west of the southern part of Windermere, within Hawkshead, which was apportioned to Furness Abbey in 1163 (Farrer and Brownbill 1914, 370; 376-80). Esthwaite Coppice, Ridding Wood, Three Birks, and Little Ore Gate all lay within the manor of Greythwaite, which was part of Satterthwaite township (*op cit*, 380-2). Rigg Wood and Bishop Wood fell within the southern portion of Claife township, and Summer House Knott lay within Finisthwaite, in Colton (*op cit*, 380; 383-7).
- 5.1.2 The exploitation of the woodlands by Furness Abbey was documented as early as 1246, 1247, and 1297 (Brownbill 1919, cited in Kipling 1974, 159) and, in 1537, the presence of three smithies held by the Abbey was recorded in the Furness Fells (Kipling 1974, 71). The tenants of the Furness Fells were also licensed to cut trees for 'bastying, coolying and blekyng' and for the making of 'carte-sadles, cartwheles, carde-bourdes, cupps, hoopes for cowpers' (*ibid*). The greatest pressure on the woodland resource came from the demand for charcoal, which was required to process iron ore. The impact upon the poorly-managed woodlands resulted in the abolition of bloom-smithies in 1546, which was modified by decree to allow non-commercial smithing in 1564 (Kipling 1974, 72).
- 5.1.3 The importance of the woodlands as managed resources, places of industry, and their association with other sites of industry, is suggested by the some of the names of the woods. Esthwaite Coppice reflects the practice of the sustainable growth and harvesting of poles and Little Ore Gate appears to record a route used to transport ore, and lies approximately 500m to the south-west of Cunsey Forge.
- 5.1.4 The woodlands that were surveyed lie within an area of the Furness Fells that is characterised by almost continuous woodland cover, which is broken occasionally by pastoral fields associated with dispersed farms and, in the southern part of the area, by some expanses of upland pasture. Although many of the survey woodlands were well-defined and bounded land parcels, most comprised portions of larger expanses of woodland, rather than being discrete wooded units surrounded by open land. By the time of the production of the First Edition Ordnance Survey (OS) maps, in 1851, most of the survey areas had been defined as enclosed woods, many of which formed constituent parts of larger enclosed blocks of woodland. Indeed, by 1851 many of the survey woodlands had been sub-divided into smaller units with individual names. For example, the surveyed portion of Bishop Wood contained the smaller units of Hecate Scar Wood, Argent Close, Long Parrock, Dam Close, Pert Wood, Sparrow Wood, and High Cunsey.
- 5.1.5 Many of the larger sub-divisions of the woodlands presumably differentiated between holdings owned by different speculators, farmers and landowners. The woodlands were further sub-divided into smaller coppice hags or coupes, to differentiate where blocks of coppiced trees were being managed on a rolling

cycle of growth and harvest. In the absence of detailed documentary information, it can be difficult to differentiate between the smaller sub-divisions that defined different holdings, and those that defined hags. Indeed, it is likely that some larger sub-divisions used to define hags were eventually sold or let as individual holdings.

5.1.6 Many parts of the study area contained trees that had been coppiced relatively recently, or contained more disparate evidence of grown-out or singled-up coppice stools. Some woodlands, however, contained extensive remnants of coppicing, with extremely large stool bowls from which numerous overgrown poles had matured. The most conspicuous example of such preserved coppicing was within Rigg Wood, where five large areas of overgrown stools were identified (**RGW 2013**; Fig 13). Most of the coppiced trees were alder or hazel, with some oak, and most lay within saturated areas (Plate 11). Although alder thrives within wet conditions, this may have been partly an artefact of differential harvesting, with the trees in some of the drier areas having been clear-felled in the past.



Plate 11: A concentration of coppice stools within Rig Wood (RGW 2013)

5.1.7 Sub-divisions formed by dry-stone walls might represent either different ownership or woodland management divisions. However, hag boundaries were also often marked by cairns, upright stones, or natural features, such as streams. Several examples of ruined boundary walls and low earth and stone banks were identified within the survey areas, many of which reflected the sub-division of the woodland into quite small compartments that are likely to have represented hags, such as those within the northern part of the Bishop Wood survey area (Fig 20) and Esthwaite Coppice (Fig 5). Upright stones, sometimes referred to as coupe stones, which are hag markers, were found within Ridding Wood (RW 2024) and Three Birks (TB 1126; Plate 12, TB 3012). Two possible coupe stones (EC 1004) were also found forming a closely-placed pair, adjacent to a charcoal-burning platform, within Esthwaite Coppice. Two very large upright stones (RGW 2044; Plate 13) were encountered within Rigg Wood, and represent the remains of a boundary that had been almost entirely denuded of stonework and was visible as a low bank in some areas and as a dry-stone wall in others (RGW 1017).



Plate 12: A probable coupe stone found in Three Birks (TB 1126)



Plate 13: Two large orthostats that appear to have been incorporated into a boundary wall in Rigg Wood (**RGW 2044**)

5.1.8 The stones lay close to a possible storage structure (**RGW 1018**; Plate 14; Fig 13) and within an area where several charcoal-burning platforms and a potash kiln (**RGW 1025**) were found. As this area contained several features indicative of a range of woodland practices, it was subject to detailed Level 2 survey (Figs 14-16) (*Section 4.4.5*).



Plate 14: A possible storage structure incorporated into a wall in Rigg Wood (**RGW 1018**)

5.1.9 The management, and associated industrial processes, within the woodlands were labour intensive and have left evidence of a series of possible domestic and working structures. Nine bark peeler's huts (RGW 2031, RW 1005, RW 2002, TB 1009, TB 1035, TB 1041, TB 1044, TB 1120, SMK 2025) and a bark storage barn (TB 1040; Plate 15) were found within Rigg Wood, Ridding Wood, Three Birks Wood, and Summer House Knott. As the barn within Bishop Wood (BW 1000) had been maintained recently, it is unlikely that it has been associated continuously with woodland industry. However, the structure was located within an extensive expanse of woodland and it is likely that it had been used in association with woodland industry. The barn also lay close to three fields that have been clear of woodland since at least as early as the production of the OS mapping of 1851 and it is possible that it performed a dual role. It has been recognised, for example, that agricultural barns were sometimes used for the storage of bark (Bowden 2000, 24).



Plate 15: The remains of a bark barn within Three Birks (TB 1040)

5.1.10 *Timber Production:* the processing of felled timber into logs or planks for use in construction is evident at Bishop Wood, where the OS mapping of 1851 showed a mill pond at the eastern side of the survey area, which was represented by an extant dam (**BW 1013**; Plate 7) and was partially defined by remaining field walls. The pond fed into a tail race (**BW 1014**; Plate 16), which may have utilised a wooden launder in addition to a stone-lined channel, to be used as the power source for a water wheel at the saw mill, which was located close to the eastern edge of the area at Over Beck.



Plate 16: Part of the tail race (**BW 1014**) leading from the mill pond to the saw mill at Over Beck

- 5.1.11 *Charcoal Production*: the production of charcoal from coppiced woodland has left the most ubiquitous archaeological evidence for woodland industries, in the form of charcoal-burning platforms, often referred to as pitsteads. The platforms were essential in providing cleared level bases for the construction of charcoal stacks in the hilly terrain of the Lake District. As a result, those platforms that were terraced into hill slopes are the most conspicuous and easy to identify of the sites, as they appear as anomalous earthworks in comparison to the surrounding sloping ground. Charcoal production sites on level ground may, however, have required little or no modification to the natural ground and can be difficult to identify.
- 5.1.12 There were 261 examples of charcoal-burning platforms recorded during the present survey, and examples were found within all of the woodlands that were surveyed (Figs 5, 9, 13, 20, 24, 25, 30 and 34). Most of the examples were situated on medium to steep slopes (**RGW 2030**), although some of the platforms on the higher ground at Summer House Knott were located on relatively flat ground and were distinguished by slightly sunken sub-ovoid areas with level bases (**SMK 2011**; Plate 17). Summer House Knott also featured some of the steepest slopes that had evidence of charcoal-burning platforms within any of the current survey areas. The construction of the platforms on such steep slopes

One of the platforms at Summer House Knott displayed a particularly high, and well-constructed, retaining wall (SMK 1003; Plates 18-19). The presence of charcoal-burning platforms within open areas can provide an indicator of the former extents of woodlands, but as all of the survey areas comprised woodland this type of data could not be generated.



Plate 17: A slight hollow indicating a charcoal-burning platform on level ground at Summer House Knott (SMK 2011)



Plate 18: A charcoal-burning platform terraced into an extremely steep slope at Summer House Knott (SMK 1003)



Plate 19: Detail of the large-scale stone revetment that retained a charcoal-burning platform at Summer House Knott (**SMK 1003**)

5.1.13 The process of charcoal-burning in the post-medieval period involved the construction of a mound on a charcoal-burning platform (Plates 20 and 21). First, a stake was driven into the centre of the platform and around this were placed upright lengths of coppice rods or shanklings which were stacked concentrically to form a flattened dome. The stack would have been sealed with a layer of bracken, dead leaves and turf and was finally covered with sieved soil to keep out the air (Bowden 2000, 23). Wicker hurdles were placed around the stack to control air flow around it and the central stake was then removed to form a flue. Once lit, the flue was plugged and the burning stack would have been constantly observed and maintained during the firing process of up to two days (*ibid*).



Plate 20: A schematic view of a charcoal burning mound and an historic photograph of one prior to firing



Plate 21: Sketch of the preparation of a charcoal burning stack by William Heaton Cooper

- Due to the bulky nature of the felled coppice rods the process of charcoal 5.1.14 production would have required clusters of platforms in each of the coppice hags/woodland enclosures, and, during the production process, adjacent platforms would have been in different stages of construction, firing and disassembly. Many of the platforms are located adjacent to sinuous access trackways which were required to transport both raw coppiced wood and then finished charcoal to and from the platforms. Many of the platforms, such as some of those within Rigg Wood, were located along similar contour lines, suggesting that routeways ran along the easiest path across the slope, even if conspicuous trackways were not visible. They were also often placed adjacent to streams, as water was an integral part of the maintenance and quenching processes. The crossing points between trackways and streams within Rigg Wood and Esthwaite Coppice, for example, were seen to be an extremely common location for charcoal-burning platforms. Natural springs might also have been a focal point for platforms, such as that adjacent to RGW 2019 in Rigg Wood. Slight features were also discovered associated with the platforms, usually consisting of shallow sub-circular scoops, and might have been the remains of sammel pits, which were hollows formed by the extraction of earth for use in sealing the charcoal stacks. There is a possibility that temporary charcoal burners' huts formerly lay in the environs of the platforms, although few of these sites have been identified through landscape survey as they were invariably temporary in nature. These were wigwam-like constructions which, when dismantled after the charcoal-burning season, would have left little permanent physical trace when compared with the permanent stone foundations of bark peelers' huts.
- 5.1.15 Bark Peeling: evidence for the peeling of bark, a primary process in the tanning industry, is moderately-well represented throughout the study areas. Nine bark peeler's huts (RGW 2031, RW 1005, RW 2002, TB 1009, TB 1035, TB 1041, TB 1044, TB 1120, SMK 2025), which feature distinctive stone hearths and occasionally low stone foundations, were found within Rigg Wood (RGW 2031; Plate 22), Ridding Wood (RW 1005), Three Birks Wood, and Summer House

Knott. The nature of this process required more semi-permanent occupation of particular parts of the woodland in the spring, in contrast to the more transient nature of charcoal-burning. Consequently, the huts often have more substantial stone-founded dwarf-walls in order to take a turf and sod superstructure and have a well-built chimney at one end (SMK 2025). Three of the huts within Three Birks Wood (TB 1035, TB 1041, TB 1044), in addition to a bark storage barn (TB 1040), lay within an area that is tellingly named Bark House Wood. A well-maintained barn (BW 1000) within Bishop Wood might also have been formerly used for bark storage.



Plate 22: The fireplace of a bark peeler's hut identified within Rigg Wood (**RGW** 2031)

5.1.16 **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 bleaching and also was for fulling cloth (Davies Shiel 1972). 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 were 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 more than pits and rudimentary hearths (*ibid*), which makes the identification of their remains challenging.



Plate 23: A hollow likely to represent a potash kiln in Ridding Wood (RW 1008)

5.1.17 Evidence for limited potash production within the surveyed woodlands survives in the form of eight large circular potash kilns (RW 1008, RGW 1025, BW 1026, BW 2031, BW 2033, BW 2034, TB 2002, LOG 20063). Some of these sites were identifiable as little more than sub-ovoid hollows, which are difficult to confirm as potash kilns in the absence of further investigations, such as examples in Ridding Wood (RW 1008; Plate 23), Little Ore Gate (LOG 2006), and Esthwaite Coppice (EC 1001), whilst others featured visible characteristic stone walling that lined the interior faces of the hollows and narrowed towards the base to form inverted cones, such as those at Rigg Wood (RGW 1025; Fig 13), Three Birks Wood (TB 2002) and Bishop Wood (BW 2031). A conspicuous and uniform hollow that represented a potash kiln was identified at Bishop Wood (BW 1026; Plate 24).



Plate 24: A conspicuous and uniform hollow representing a potash kiln in Bishop Wood (BW 1026)

5.1.18 *Trackways:* the woodlands enclosures are criss-crossed by networks of numerous sinuous trackways that either provided direct routes in or out of the woodland to larger road networks, or provided the means of moving through the woods in

order to access the dispersed charcoal platforms, various coppice hags, and other sites of industry. Many of these trackways afforded the movement of carts and sleds to charcoal-burning platforms, to facilitate the movement of people, tools, wood to be transformed into charcoal, and, finally, the removal of the charcoal. Many of these trackways followed the general line of contours around the hill slopes, or very gradually ascended along the slopes, and would obviously have afforded the easiest route of movement through the woodlands. Examples of such tracks are **TB 1061** and **TB 1104**, in Three Birks Wood, **RGW 2021**, in Rigg Wood, **RW 1001**, in Ridding Wood, and **BW 1010**, in Bishop Wood.

- 5.1.19 Where crags and steep areas were negotiated, the tracks negotiated the least challenging routes, and avoided rocky obstacles or difficult ground, even when ascending steep slopes by direct routes. Examples of such direct routes up steep slopes are RGW 2002 and RGW 2025, in Rigg Wood, TB 3007, in Three Birks Wood, BW 2007, in Bishop Wood, and several trackway within Ridding Wood (RW 2006, RW 2007, RW 2013, RW 2017, RW 1004, RW 1024). Although some of the trackways crossing steep slopes were terraced, and therefore relatively easily identifiable, portions where flat ground was crossed were not necessarily purposefully modified and were, therefore, only visible where cumulative wear had led to the formation of hollow ways. Numerous trackways were associated with multiple charcoal-burning platforms, and there were particularly conspicuous examples within Rigg Wood (Fig 13), Three Birks Wood, and Bishop Wood. This demonstrates that, in addition to any other uses, these tracks were certainly established or utilised in association with charcoal production and probably with associated activity, such as coppice management and bark peeling.
- 5.1.20 Trackways also provided access through the woodlands between farms, and wider communications networks, with one such track (TB 1104, TB 3007) running directly through Three Birks Wood, between Cunsey House and Field Head farm. A substantial trackway within Summer House Knott (SMK 2008) occurred as a route that climbed the steep south-facing slope, before running northwards across the hilltop plateau and then forking to the east and west. This may have been established initially in association with charcoal production, as there are numerous charcoal-burning platforms adjacent to it. However, the track also provided a route between Newby Bridge (Listed Building no 1225523), and The Swan Hotel (Listed Building no1225183), and Finsthwaite House, to the west of Summer House Knott. Although the road between Town End and Newby Bridge provided a better road, along a slightly longer route, the trackway ran directly past Pennington Lodge Tower (SMK 2009), which was a folly built by James King of Finsthwaite House. This track would, therefore, have enabled visitors to Finsthwaite House to travel through a scenic portion of the estate and to visit the tower.
- 5.1.21 The name of Little Ore Gate clearly suggests that a road or track ran through this area and that it was associated with iron working in the locality. However, the road did not run through the survey area of this woodland, but followed the course of the current main road that runs between Newby Bridge and Hawkshead, which follows the western boundary of the woodland (Fig 30). Having past around the western side of Little Ore Gate, the road then followed the northern boundary of Great Ore Gate Wood, to Cunsey Forge. The significance of the place names of Great Ore Gate and Little Ore Gate is, therefore, apparent, as the road in this area

formed the beginning of one of the main southwards communication route from the forge.

5.2 INDUSTRIAL PROCESSES/EXTRACTION

- 5.2.1 *Iron Bloomeries*: two conditions favoured the development of the iron industry in the Lake District; firstly the amount of woodland providing a charcoal fuel supply and, secondly, the deposits of ore which were usually quite close to the fuel supply. During the medieval period the iron that was smelted at bloomeries was typically sourced from mined iron ore, which was usually haematite. It has been speculated (Winchester 1987) that during the medieval period iron ore mining was only undertaken on a small-scale which was carried out principally for domestic purposes. The principal feature of bloomeries was a dome-shaped hearth about four feet in height, where the iron ore was heated, and was constructed of baked clay reinforced with stone at the base. These furnaces were fed oxygen by handoperated 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 (Marshall and Davis-Shiel 1977, 30-1). It is these distinctive lumps of slag, with the appearance of flowing liquid, along with layers of charcoal, that make up the principal diagnostic features associated with these sites (ibid).
- 5.2.2 Although historical evidence demonstrates that medieval monastic iron production was undertaken in High Furness, and the considerable concentrations of charcoalburning platforms within the survey areas attest to the requirement for large quantities of charcoal for use in bloomeries and furnaces, no iron smelting sites were identified. Large post-medieval bloomsmithies and bloomforges, such as Cunsey Forge lie close to the surveyed woodlands (Miller 2005), and these became the prevalent means of iron manufacture in the seventeenth century. Bloomsmithies and Bloomforges used well constructed hearths, with water powered bellows, for the primary stage of iron production, which is the direct reduction from the iron ore, forming a mass of bloom. This bloom was then reheated on the same hearth and hammered to remove impurities. Previously these two processes had been undertaken at different sites, with the earlier at an open air bloomery site. Cunsey Forge (op cit, 173) was symptomatic of the process and was one of the earlier bloomforges to be constructed in Furness, having a foundation date of 1618. With most iron production being undertaken through these large water powered complexes the smaller bloomeries ceased to be economical and were for the most part no longer worked in the post-medieval period except for small domestic use.
- 5.2.3 While it is possible that the smaller medieval bloomeries, associated with commercial and personal production, were also located in the vicinity of the survey areas. However, such sites can be difficult to locate and are often only identifiable by sight if conspicuous spoil mounds of slag are present.
- 5.2.4 *Quarrying:* relatively small-scale quarrying and gravel extraction sites were identified within several of the woodlands. Some of these sites represented the extraction of stone for construction, such as sites **TB 1000** and **TB 1001**, which consisted of quarried outcrops. The quarry at **TB 1001** was accessed directly by a track (**TB 1003**) and was sufficiently conspicuous to have been marked on the current mapping as a disused quarry, although it was not shown on the First

Edition OS map. Small grade stone was present within spoil heaps at the site, which suggests that some dressing of stone had occurred on-site. Conspicuous quarried faces were also evident at the south-eastern side of Summer House Knott (SMK 2004; Plate 25). These lay adjacent to a trackway (SMK 2003) and the main road between Newby Bridge and Hawkshead and were, therefore, well placed to facilitate transport either within the Finsthwaite estate or into outlying areas. A quarry pit within Ridding Wood (RW 1014) was similarly served by a trackway leading directly to the main road. Much more restricted quarrying was evident within Bishop Wood (BW 1006 and BW 1008) and comprised scooped hollows and quarried faces of outcropping bedrock.

5.2.5 Sites indicative of gravel extraction were also encountered during the survey and many of these will have produced material for use in the construction of roads and the surfacing of trackways. Large gravel pits were present beside the road adjacent to Three Birks Wood (**TB 1017**). These pits were marked on the First Edition OS mapping and are likely to have been used during the construction and maintenance of the main road between Newby Bridge and Hawkshead, to which they were adjacent. A large D-shaped quarry (**LOG 2004**) at the western side of Little Ore Gate may also have provided material for this road and a pit in Three Birks Wood (**TB 1017**) appears also to have been associated with the lakeside road in this area. Pits for use in the maintenance of more localised tracks were identified in Summer House Knott (**SMK 2006**; Plate 26).



Plate 25: A quarried face close to the main road within Summer House Knott (SMK 2004)



Plate 26: A trackside gravel pit used to obtain surfacing material for the track in Summer House Knott (SMK 2006)

5.2.6 *Lime Kilns:* quick lime was used as a way of adding nutrients to, and moderating the acidity of, agricultural fields, as well as in the production of cement and whitewash. Draw kilns would have been filled with alternating layers of fuel and crushed limestone, and were fired from a furnace aperture at the base in order to roast the stone to produce quick lime. One possible lime kiln (**BW 1015**; Plate 27) was identified within Bishop Wood, although the structure survived only at foundation level and may have been subject to modifications, having been incorporated into a boundary wall and was adjacent to a possible potash kiln.



Plate 27: A possible lime kiln within Bishop Wood (BW 1015)

5.2.7 *Fulling:* a possible fulling mill, comprising rectangular building foundations and an associated water-management system, was identified within Little Ore Gate (LOG 1007). Fulling mills were used in the preparation of woollen cloth and used a mechanical process to beat the cloth, which caused the loose fibres to bind and form a stronger and denser fabric. This site was subject to intensive Level 2 survey as part of the Windermere Reflections fulling mills project (OA North 2012). While it remains uncertain if this is a leat and fulling mill, at present it is perhaps more likely that it is not.

5.3 FARMING

5.3.1 There was little evidence for activity associated with agriculture within the surveyed woodlands, although agricultural fields lay in close proximity to all of the study areas. It is possible that some of the huts and barns might have had dual purposes and been used in association with woodland industrial and agricultural functions. Retting is a process whereby plant materials, such as hemp or flax, are soaked to facilitate the separation of the fibre from the stem of the plant. An area that had previously been used for retting was identified within the southern portion of Three Birks Wood and consisted of ponds formed by low banks surrounding shallow depressions and associated drainage channels (**TB 1004**; Plate 28, **TB 1005**, **TB 1006**). A possible retting pond comprising several low banks was also identified within Bishop Wood (**BW 2000**), although the site was ill-defined.

5.4 GAME SHOOTING

5.4.1 A possible shooting butt was identified within Rigg Wood (**RGW 2000**; Plate 29). This small dry-stone shelter had been built into a boundary wall on a steep slope at the southern side of a crag. The ground had not been levelled and, therefore, the interior of the structure sloped steeply meaning that it would have been of limited use other than as temporary shelter or a hide. Although this was the only such structure identified within the wood, numerous modern bird feeders were present along the western edge of the wood, demonstrating that Rigg Wood has been associated with game keeping during the modern era.



Plate 28: A low bank and saturated depressions associated with former retting ponds at Three Birks (**TB 1004**)



Plate 29: A possible shooting butt built into a wall within Rigg Wood (RGW 2000)

6. DISCUSSION

6.1 INTRODUCTION

6.1.1 The landscape survey has recorded 451 new sites and monuments within the woodlands, which is a substantial number when it is considered that prior to the survey only four sites were documented within the study areas and can be demonastrated dramatically in site distribution plans of the area (Plate 30). The reason for this dramatic increase is simply that no archaeological investigations have been undertaken in these areas previously and highlights the urgent need for new landscape surveys to provide data for the management of the woodland heritage.



Plate 30: The distribution of woodland features in the area prior to the survey (left) and after the survey (right)

6.2 WOODLANDS – A WELL MANAGED RESOURCE

6.1.2 The abbots of Furness Abbey were granted almost all of the land in High and Low Furness in 1127, and by 1196 were undisputed landholders in the area (Brydson 1908). The monks had numerous interests but the most pertinent for the study area are those related to iron mining in Furness, which was documented by at least 1292 (Collingwood 1902). The process of smelting their raw mined ore required a ready source of charcoal fuel, and in 1339 they were granted entitlement to empark and enclose woodland in High and Low Furness (Brydson 1908).

Following the dissolution, the woodland management and iron processing continued in secular hands, and the destruction of woodland in Furness for fuel was so severe that it led to a temporary ban on the use of bloomsmithies in 1567 (Brydson 1908).

- 6.1.3 The most intensive use of the woods in the Furness fells for charcoal production, including the planting of new woodland, occurred after the introduction of large industrialised blast furnaces in the region, such as that at Backbarrow, just to the south of the Windermere Catchment. These furnaces required very large amounts of charcoal and the initial prosperity of the practice led to many new woodlands being created as they yielded more revenue than traditional farming products.
- 6.1.4 Cunsey Forge is the most conspicuous iron processing site within the immediate vicinity of the surveyed woodlands, with Three Birks Wood and Little Ore Gate lying to the south of Cunsey Beck, and Bishop Wood and Rigg Wood lying to the north. Cunsey Beck formed the boundary between Satterthwaite and Claife townships (Farrer and Brownbill 1914, 380-2) and, therefore, it can not be assumed that ownership and access to the resources from the woodlands to the north and south sides of the beck were available to the operators of Cunsey Forge during its use. However, a document of 1567 records the ownership of 70 acres of underwood and 500 saplings, and a newly-built barn, at *Consay Close*, by members of the Sandy family, who were closely associated with iron making in Furness (*ibid*). The name of this holding does not survive in the modern woodlands and it is not, therefore, possible to assert if it included any of the surveyed woodlands.
- 6.1.5 The forge site had a long history of iron working, with slag found during excavations at the site being indicative of early direct or bloomery iron smelting, which could date to the medieval period (Miller 2005; OA North 2004a). The subsequent bloomsmithy and forge were established at Cunsey in 1618 and a blast furnace was erected 1km downstream, close to the outflow into Windermere, in 1711 (*ibid*), the same year that one was also established at Backbarrow (LUAU 1998b). The forge was in use as a refinery by 1715 and both this and the furnace were closed in the mid-1750s (*ibid*). However, Backbarrow continued to consume large amounts of charcoal until the 1920s when it was converted to coke.
- 6.1.6 Woodland industries became increasingly important as industrialisation took hold; as well as charcoal there was a demand for wood products such as pit props, bobbins and constructional timbers. The woodlands were divided into coppice compartments, each on a different cycle of growth, and these were defined by hag boundaries, which were formed of sections of drystone walling, marker cairns and stones, and sometimes holly hedges. The compartments would contain charcoal-burning platforms accessed by long sinuous trackways that could be used to transport the charcoal away at first to the bloomeries in the area, then in later periods to the wider market to be used at blast furnaces. Scoops surrounding the platforms may have formed the bases of charcoal burners' huts or the footings for water barrels or may simply be the scoops left behind after earth has been extracted for use in sealing the charcoal stack.
- 6.1.7 Potash was produced in kilns for bleaching and fulling in the woollen industry, and bark peeling provided tannins for the leather industry. Remains of this industry are not as numerous as those of charcoal making, and for the most part only comprise the foundations of the semi-permanent bark peeler's huts, which

survive particularly well. Itinerant workers would have provided all of the manpower for these various labour-intensive activities in the woodland, and typically lived in the woods, often with their families, at a distance from their permanent homes. They lived in various styles of temporary accommodation. Woodsmen's huts, used over the winter, were the most permanent structures inhabited in the woods and were constructed like miniature stone houses with slate roofs. Other surviving structures included barns, which were possibly used for both woodland and agricultural storage.

- 6.1.8 In the absence of scientific dating, or definite stratigraphic sequences that demonstrate relative chronology, it is difficult to ascertain which of the woodsmen's huts, bark peeler's huts, and charcoal platforms were in contemporaneous use. Bark peeler's huts were found in the general vicinity of charcoal-burning platforms within Rigg Wood, Ridding Wood, Three Birks, and Summer House Knott (RGW 2031, RW 1005, RW 2002, TB 1009, TB 1035, TB 1041, TB 1044, TB 1120, SMK 2025). However, we can not state categorically how many of these sites were in use during the same period. Each practice is seasonal, with bark peeling occurring during the spring, traditionally in the Lake District between May and July, and charcoal-burning between April and November (Oaks 2008, 110; Kelley 2002, 8). The potential exists, therefore, for seasonal overlap between the practices, within each woodland, and for interaction between the practitioners. Indeed, it might be considered that, following the close of the bark-peeling season, redundant huts close to charcoal-burning platforms might have been utilised by the colliers. However, the vast quantities of smoke and steam produced during charcoal production will have made it unlikely that bark peelers would deliberately site their huts in close proximity to working charcoal platforms. A bark peeler's hut found partially occupying a charcoalburning platform within Ridding Wood (RGW 2002, RGW 2004), and two similar examples within Three Birks (TB 1009, TB 1010 and TB 1034, TB 1035), would not, therefore, have been in use whilst charcoal was being produced.
- 6.1.9 Traditional woodland industries began to decline in the latter half of the nineteenth century and by 1920 the furnace at Backbarrow had turned to using coke, thus removing the last major market for charcoal in the region. The continuity of charcoal-burning within the Furness Fells until at least 1908, is demonstrated by a painting by Heaton-Cooper, which shows charcoal burners at work on the edge of Coniston Water (Plate 31).



Plate 31: Coniston Lake Charcoal Burners by William Heaton-Cooper

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APPENDIX 1: PROJECT BRIEF

Invitation to Tender: Community based survey of the archaeology of woodlands around Windermere, Cumbria

1 Introduction

The Lake District National Park Authority (LDNPA) is inviting tenders for various archaeological services that will facilitate the survey, investigation and recording of archaeological remains in selected areas of woodland in the Windermere area. A number of the target woodlands are marked on Map 1 attached to this brief, to give an indication of the general area of the survey.

The target survey sites are largely semi-natural woodlands containing the remains of past woodland industries such as charcoal production, bark peeling and potash making. The types of sites likely to be encountered include charcoal pitsteads (burning platforms), woodsmens' huts, potash kilns and trackways. There is also a possibility that early iron smelting sites (bloomeries) may be located.

The majority of the survey will be 'Level 1' – identification of sites and basic recording at 1:10,000 scale. The work will also include some 'Level 2' recording of individual features, to include the production of plans drawn to scale..

The contractor will be required to approach and undertake the specified program of archaeological services as a 'community engagement' focused event, providing support and training in archaeological skills to groups of volunteers. The initial recruitment of volunteers falls outside the contractors brief, although the management and supervision of volunteers, along with a responsibility for their safety and welfare while on-site, is the responsibility of the contractor.

2 Project background

This campaign of survey forms the first of three stages of the 'Reflections on History' project, which will deliver community focused archaeological events on the themes of woodland, water and minerals between 2011 and 2013. 'Reflections on History' is part of the larger 'Windermere Catchment Restoration Program' which has secured a grant from the Heritage Lottery Fund to run 'Windermere Reflections', a catchment wide project that will improve water quality and bring environmental and economic benefits to the area. 'Reflections on History' is one of seventeen conservation and community projects to be delivered under the banner of 'Windermere Reflections'.

The stated aims of this project as stated in the application to the Heritage Lottery Fund are twofold:

• The aim of the project is to encourage local volunteers to gain an understanding of the history of the catchment through surveying and researching their local history. The volunteers will learn techniques of surveying that they will be able to continue to use beyond the life of the project.

• The information collated will be able to be used for interpretation purposes, in all the Windermere Reflections projects, to inform local communities and visitors in the catchment.

The final project bid accepted by the Heritage Lottery Fund included a target that the project would utilise a minimum of 120 volunteer days in each of the three survey stages. The means by which this figure is reached is flexible, however this brief has been based on using a team of six volunteers on-site each day for a total of 20 days in order to complete the woodland survey. Any additional volunteer days collected during this first phase would take the project above and beyond the minimum target set down in the final project brief accepted by the Heritage Lottery Fund.

3 Target survey areas

3.1 A number of woodlands have been selected within the Windermere catchment for Level 1 survey. These are generally broadleaf, semi-natural woodlands which have not been surveyed previously. Some of the target woods are known to contain features such as charcoal pitsteads, but others are completely unknown. The following woods have been identified:

Woodland	NGR	Area (Ha - approx.)
Low Sweden Coppice and Nook Lane	NY 3779 0576	2.7
Colwith Bridge East	NY 3327 0320	2.3
Esthwaite Coppice	SD 3554 9598	5.7
Ridding Wood/Devil's Gallop/Eel Hou Intake/Long Slack	sSD 3614 9466	79
Three Birks/Holme Well Wood/Bark Hou Wood/Briar Shot/Moss End/Baswicks/Middle Ho		95
Rawlinson's Intake (south end)	SD 3727 9011	3.3
Great Oaks Wood (south end)	SD 3748 8998	2.3
Summer House Knott/Water Side Knott	SD 3702 8689	24
Blake Holme Plantation	SD 3914 8982	131
Great Tower Plantation	SD 3941 9167	98

3.2 It is not anticipated that all the above woodland will be investigated. It will be the responsibility of the contractor to develop a realistic programme of survey of a selection of these woods in discussion with the Lake District National Park Senior Archaeology and Heritage Adviser.

4 Project methodology

4.1 Level 1 Survey

A programme of 15 days of Level 1 survey for a selection of woods as described above. This will be arranged over a period of 4 to 6 weeks from February 27, 2012 and should include 3 weekend days. The survey will include the following:

• Close field walking of selected areas in order to identify archaeological features;

• Recording of individual features or groups of features as appropriate using a pro forma (can be supplied by LDNPA). This data will be used to compile a written gazetteer for entry on the National Trust Sites and Monuments Record (NTSMR)/ Lake District National Park Authority Historic Environment Record (HER). The gazetteer should include the following mandatory description fields: site number, site name, NGR, site description, monument type (using the English Heritage site thesaurus or similar), period, condition, threats, management recommendations and photo ref.

- Recording of the location of archaeological features using hand-held GPS sets;
- A standard digital photographic record of all sites and features identified during the survey.

4.2 Level 2 Survey

A programme of 5 days of Level 2 survey of selected archaeological features in the target woodland areas. This should include 1 weekend day. The features will be selected for their archaeological interest and suitability for teaching survey techniques and must be agreed with the LDNPA Senior Archaeology and Heritage Adviser. They are likely to include charcoal pitsteads, woodsmen's' huts and potash kilns. The Level 2 survey will include:

• Survey using the off-set tape method, plane table and alidade and any other techniques or equipment that are affordable by amateur groups and that are relatively easy to implement;

• Creation of a site grid using a combination of EDM and GPS technologies if necessary;

- Creation of a written gazetteer based on the collection of information in the field using a standard site record form (as previous);
- A standard digital photographic record of all sites and features identified during the survey;
- Accurate survey plans depicting archaeological features at appropriate scales.

4.2 Archive and documentary research

While there is no scope within the current project for detailed investigation of primary source material, some assessment of the readily available secondary source material should be undertaken.

The contractor should anticipate visiting the following local archives.

- Kendal Records Office 1 days.
- Armitt Library 1 days.

In each case the contractor should seek to obtain good copies (or photographs of relevant parts) of all historic maps and other documents considered particularly important to the project and reproduce them within the final report.

4.3 Report writing

After the completion of the fieldwork and documentary research, the contractor should use the information generated to produce a comprehensive and well illustrated report that brings together and presents the results of the investigations. The report should include the following:

a description of the project and its methodology;

• an outline of the landscape history of the Windermere area, including the woodlands examined through the survey. Some work has already been completed for this as part of the scoping for the overall project (OAN 2010);

• maps at 1: 10,000 scale showing the locations of all features identified during the Level 1 survey;

- a complete photographic record of all sites recorded through the survey;
- a complete gazetteer of all sites recording during the Level 1 survey;

• detailed written descriptions and plans of the individual features recorded through Level 2 survey.

4.4 Presentation of results

In addition to the work described above, the contractor will be required to provide an introduction to survey techniques to volunteers as part of an initial launch day for the survey. He/she will also prepare and deliver a presentation on the results of the site survey and documentary research to an audience of project volunteers shortly after the completion of the report. The responsibility for booking venues and advertising the events will fall to the LDNPA Senior Archaeology and Heritage Adviser.

5 Survey outputs

On completion of the program of archaeological works listed above a draft report containing the results of the Level 1 and 2 surveys should be completed and passed to the LDNPA Senior Archaeology and Heritage Adviser for comment and review. The draft report should include copies of all maps, photographs and other illustrations that will appear in the final report.

The draft report will then be examined and any comments returned to the contractor along with any suggested amendments within seven days.

After reviewing comments on the draft report the contractor will provide the following to the Windermere Reflections partnership.

Three separate digital copies of the complete report (including all digital mapping information in formats compatible with both MapInfo Version 7 and AutoCAD packages). The digital media should also include complete and 'ready to print' copies of the project report in both Word and PDF formats. Please note that the PDF version should be suitable for sharing via e-mail (i.e. less than 10MB in size).

A series of files that contain hard copies (or digital folders containing digital copies) of all archive and documentary information examined as part of the project.

6 Site conditions

The target woodlands are in different ownerships and access has been arranged by the LDNPA. Parking of vehicles may be restricted at certain locations and will need to be arranged with land owners through the LDNPA.

The LDNPA will try to ensure that the contractor is aware of any site operations or other factors that will need to be taken into account in planning the survey work.

7 General terms

The Windermere Reflections partner organisations 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 Windermere Reflections partnership fully recognises the originator's moral right to suitable accreditation in any publication of the results.

The survey results will be incorporated in the Lake District National Park Historic Environment Record.

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 LDNPA. 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.

8 Timescale

Given the 'community engagement' focus of this project it is critical that the professional contractor can commit to delivering this project to a fixed timetable. A proposed timetable (to be discussed with the contractor as part of the tendering process) appears below.

We recommend that a welcome and training day for volunteers be held in the Windermere area on Saturday 18 February 2012 (venue to be confirmed).

The programme of Level 1 and 2 survey will take place over a period of 4 to 6 weeks from Monday 27 February 2012. The exact timetable will be agreed with the LDNPA Senior Archaeology and Heritage Adviser.

The contractor should then produce a draft report by the start of May 2012 and a final report by the start of June 2012.

The contractor should then allow time for the production of an attractive and thoroughly prepared presentation on the results of the survey by the end of June.

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

9 Personnel

The contractor will provide:

• one suitably qualified member of staff to lead the Level 1 and Level 2 survey (20 days), to give presentations at events at start and end of the project (2 days), to undertake basic documentary research (2 days) and to compile the final report;

a qualified archaeological assistant for half of the survey project (10 days).

LDNPA and NT staff will assist with 10 days of survey and with the events at start and end of the project.

10 Costing

We ask that contractors provide the client with a detailed break down of costs as part of the tender including travel, accommodation, report writing and production etc. Specific costs will be needed for all elements of the work program (on-site staffing, materials, documentary research, report writing, preparation for presentation etc).

The contractor should feel free to add in costs for any other task that they believe might be useful or add value to the project in order to create a 'shopping list' of items that can then be incorporated into the project if the required.

11 References

OAN, 2010. Windermere Reflections. Archaeological and Historical Land Use Resource Assessment for the Windermere Catchment.

12 Contacts

Please send tenders to:

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APPENDIX 2: PROJECT DESIGN

1.1 INTRODUCTION TO THE PROJECT

- 1.1.1 Oxford Archaeology North (OA North) has been invited to provide supervision and enablement for a community archaeology project to record areas of woodland around Windermere which is to be undertaken on behalf of the Lake District National Park Authority and financed by Heritage Lottery Fund, and is a part of the wider Windermere Reflections project.
- 1.1.2 This is one of three community survey projects being undertaken as part of the Reflections on History, project which is part of the larger Windermere Catchment Restoration Program. The aim of the project is to improve water quality and to bring environmental and economic benefits to the area. The first stage of the project was a GIS based study examining the woodland, water and mineral based heritage of the catchment of Lake Windermere undertaken by OA North (2010). This made recommendations for a series of community projects based around each of the three themes, and the present study is intended to develop the woodland theme. It will look at areas of broad-leaf, semi-natural woodlands that have not been previously surveyed.
- 1.1.3 OA North is required to provide training and supervision to undertake a desk top historical survey of information pertinent to the woodlands, and will include historical maps, the database compiled as part of Stage 1, records held in the Armitt Library and Kendal Record Office. Field surveys will entail Level 1 identification surveys for as many of the following areas of woodland as can be achieved within the specified timetable:

Woodland	Area Sqkm	NGR
Colwith Bridge East	0.023	NY 3327 0320
Esthwaite Coppice	0.057	NY 3554 9598
Ridding Wood/Devil's Gallop/Eel House Intake/Log	0.79	NY 3614 9466
Slack		
Three Birks/Holme Well Wood/Bark Hou	0.95	NY 3754 9242
Wood/Briar Shot/Moss End/Baswicks/Middle How		
Rawlinson's Intake (south end)	0.033	SD 3727 9011
Great Oaks Wood (south end)	0.023	SD 3748 8998
Summer House Knott/Water Side Knott	0.24	SD 3702 8689
Blake Holme Plantation	1.31	SD 3914 8982
Great Tower Plantation	0.98	SD 3941 9167
Total	4.433	

- 1.1.5 Subject to the results of the identification survey, areas for more detailed survey will be selected and a programme of Level 2 survey will be agreed with the LDNPA Senior Archaeology and Heritage Advisor.
- 1.1.6 A principle aim of the project is to involve the local community as widely as possible, and to provide new information on the wealth of archaeological remains in the area. This will entail providing a presentation of the results and guided walks to the volunteers to make them aware of the rich heritage in the region. It will entail getting them directly involved in the identification of historical records, undertake field surveys and to ultimately disseminate that information in reports, and updated records for the Lake District Historic Environment Record.

2. BACKGROUND

2.1 *Woodland:* the natural woodlands of the Windermere Catchment were cleared, initially to enable the working of the Langdale axe factories (Claris and Quartermaine 1989; OA North 2010) and, subsequently, to allow for agriculture, but, ultimately the biggest impact was the demands of the burgeoning iron industry, which required large amounts of charcoal to feed the bloomeries and blast furnaces. The impact of charcoal-burning was varied across the Lake District, but in select

areas clear felling had taken place by the late sixteenth century, notably in Borrowdale and on the Caldbeck Fells as a result of the Company of Mines Royal, and there were considerable concerns about the ability of these areas to regenerate woodland. The woodlands of the Windermere catchment may have survived the medieval period better than most, with many being subject to coppiced management allowing for their long term survival, despite the heavy demands for charcoal.

- 2.2 One of the interesting results of the Stage One study (*ibid*) is that the vast majority of the woodland within the catchment is relatively old deciduous woodland, which was depicted on the OS First Edition map. Of the 40.8sqkm of presently extant woodland within the catchment, 36.8sqkm of this was depicted on the earlier mid-nineteenth century mapping. This reflects that there has been only a small increase of the woodland, often by expansion out from existing plantations, or from small isolated plantings of individual fields. At the same time, however, there have been substantial areas (6.8sqkm) of woodland that have reverted to pasture land.
- 2.3 The main areas of woodland proposed for survey are:
 - *Great Tower Plantation and associated environs:* this is an area of known charcoal-burning, which has been preserved by the Scout Association but minimal surveying has been carried out in this area;
 - *Blake Holme Plantation:* this is an area that can be traced back to OS First Edition mapping. Limited charcoal-burning platforms have been identified in the area south of this plantation, but there is considerable potential for them within this area;
 - *Holme Well Wood*: an area of old woodland that was depicted on the OS first edition map. It is an area of woodland to the south of Cunsey Forge, and it is to be expected that it would have a considerable number of charcoal-burning platforms to supply the adjacent iron industry. The desk based Stage 1 study found none. This reflects that no survey has been undertaken of the woodland, but the present survey will rectify this situation.

1.3 OXFORD ARCHAEOLOGY NORTH

- 1.3.1 Outreach: OA North is committed to outreach. As an educational charity, OA seeks to promote an active public relations policy in relation to archaeology, and has a publications department that is experienced and fully equipped to provide general interest text and graphics for release to the press and general public in a wide variety of forms including display boards, leaflets and popular books. In certain circumstances it is possible to hold open days or install public viewing galleries on major sites. OA has considerable experience in the establishment of community based projects, and includes numerous training surveys and excavations. OA North has been providing the professional support for a programme of archaeological investigation into Lathom Park, nr Ormskirk, funded by Local Heritage Initiative. This involved the provision of expertise, training, and resources for surveys, excavations and documentary studies into the landscape associated with the major fourteenth century palace Lathom House. OA North has also been involved providing the consultancy and supervision for the excavation and survey of a complex enclosed settlement at Ingleton in conjunction with the Ingleborough Archaeology Group, and the supervision and of a survey of a nineteenth century designed landscape at St Catherine's Park, Windermere, on behalf of the National Trust, and the local community. OA North is presently undertaking a community excavation of a nineteenth century church, that was demolished when Stocks Reservoir was constructed in the early part of the twentieth century, and is being undertaken on behalf of United Utilities and the Forest of Bowland AONB.
- 1.3.2 *Holwick:* more recently OA North has undertaken a major survey of Holwick village and valley landscape in the North Pennines on behalf of the AONB and also Natural England. This entailed a broad range of survey techniques from specially flown oblique aerial photography, LiDAR, Documentary Studies, Identification Surveys, detailed surveys using a theodolite and Disto. The latter technique was designed to allow cheap, but efficient survey techniques that would be within the pocket of amateur groups (the maximum budget for equipment was £300.00) and which would result in the plotting / draughting of the survey drawings on site.
- 1.3.3 OA North employs an experienced and qualified archaeological land surveyor, Jamie Quartermaine, who has considerable experiencing in training survey techniques. He has the

expertise to train local teams in a broad and diverse range of low tech survey techniques that will be appropriate for the volunteers who do not have access to modern equipment.

- 1.3.4 *Landscape Archaeology:* OA North has considerable experience in the field of landscape survey work, particularly in the uplands of Northern England and Wales. Numerous surveys have been undertaken across the region and North Wales, and has taken the form of rapid identification surveys of large areas of unimproved land as well as detailed surveys of specific landscapes.
- 1.3.5 In particular OA North undertook an identification survey of 2.5sqkm of long established coppiced woodland on the east side of Coniston Water for the National Trust (OA North 2010b). The area had been used for a broad range of woodland industries, represented by 164 charcoal-burning platforms, six bark peelers huts and three large potash kilns. This area of woodland is closely comparable to some of the woodlands on the western side of Windermere.

2.1 AIMS OF THE PROGRAMME

- 2.1.1 The primary aims of the project are as defined within the project brief and are as follows:
 - To encourage local volunteers to gain an understanding of the history of catchment through surveying and researching their local history. The volunteers will learn techniques of surveying that they will be able to continue beyond the life of the project.
 - The information collated will be able to be used for interpretation purposes, in all the Windermere Reflections projects to inform local communities and visitors in the catchment.
 - The objectives of the project are as follows:
 - To undertake outline documentary research into the woodlands
 - To undertake identification survey of the selected woodlands
 - To undertake detailed survey recording of selected areas of woodland
 - To provide training for community volunteers in archaeological survey techniques
- 2.1.2 *Community Aims:* the project aims to seek a wide community involvement in the research and investigation of areas within the Lake District National Park, and to foster a wider community awareness of the rich cultural heritage in the local landscapes. It is intended to use the present project as a means of training volunteers, and others in the wider community, in archaeological recording techniques. Great emphasis will be placed on the virtue of survey techniques and to encourage a legacy of skills within the community. The project will therefore provide a capacity for further archaeological and historical research in the area.

3. METHODOLOGY

3.1 PROJECT PREPARATION

3.1.1 At the outset there will be a process of liaison between OA North, the Lake District National Park Authority staff. This will entail defining the output formats for incorporation into the HER. OA North will liase with the LDNPA to enable a close co-operation with all the land owners to minimise impact on any woodland activities. A revised programme and detailed scheme will be developed in conjunction with LDNPA Senior Archaeology and Heritage Advisor.

3.2 SURVEY TRAINING / OUTREACH

3.2.1 It is proposed to undertake a programme of survey training for members of the public in the course of the woodland surveys. This would entail undertaking a desk-based study, followed by initially an identification survey, and then followed up by detailed surveys of areas highlighted by the Level 1 surveys. In the course of the documentary and survey work the volunteers would work closely with professional archaeologists, who would provide training and on-the-job experience. The volunteers would undertake survey work under close supervision from the OA North project officer, and learn how to identify documentary sources, and how to use the survey instruments and the general principles of survey. The character and significance of the archaeological landscape will be explained.

3.2.2 The first stage of the project will be a general, widely publicised, launch in one of the woodland areas to be agreed. This would provide a general introduction, and would include a localised walk around the more visible archaeological remains. It would also introduce a broad range of survey and recording techniques, which would range from basic techniques to the more advanced. It would include tapes, theodolites, plane tables, a total station with pen computer (to display the results), and survey grade GPS. The aim would be to introduce the volunteers to the proposed programme but also to raise interest. Experience of previous launch events (eg at Holwick) was that these attract lots of people, lots of interest and set the project off to a good start. On completion of the project a final presentation will be established for all the volunteers, and dissemination to the community will be through an evening talk.

3.3 DESK-BASED STUDY

- 3.3.1 A desk-based study will be undertaken by staff of OA North. The documentary study will seek archaeological information pertinent to the study area, such as earlier investigations of the site that may provide a valuable insight into the character of the study area. It will seek to reconstruct, primarily through mapping sources, how the landscape has developed within the last two or three hundred years, and will draw upon the GIS based Stage One data (OAN North 2010a) to demonstrate the development of woodland since the OS first edition mapping. 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 also serve as a guide to the archaeological potential of the study area. This work will obtain background information pertinent to the present study, and will draw upon historical mapping and database sources. It will include an appraisal of County histories, early maps, and such primary documentation (tithe and estate plans etc.) as may be reasonably available. Published documentary sources will also be examined and assessed and any potential transcribed early documents will be examined This work will access the following repositories: Cumbria Record Office (Kendal), Armitt library (Ambleside), Lancaster University Library and the OA North library. It is anticipated that the study will entail two days spent in the record office and Armitt library. Good scanned and photographic copies will be obtained of maps and illustrations where possible.
- 3.3.2 *LiDAR plotting:* LiDAR at 1m resolution is available for much of the area, and is of sufficient resolution to be able to inform the survey as the LiDAR is able to penetrate through the tree canopy, with only partial loss of resolution. An example of a JPG LiDAR tile for the Holme Well Wood is included (Fig 1) and shows the topography, but also has sufficient resolution to depict a number of circular platforms (presumably charcoal-burning platforms). The ASCii version of LiDAR allows manipulation in GIS and allows the user to change the light source and to exaggerate the vertical axis and enhance the visibility of the archaeological resource. The use of such techniques does not replace field walking but certainly aids its. It is proposed to purchase a selection of four 1 sqkm ASCII tiles of data as part of the project. The LiDAR will be used during the survey by the volunteers as they field walk the woodlands to get a wider perspective of the topographic context.

3.4 IDENTIFICATION SURVEY

- 3.4.1 It is proposed that a survey of the woodland area be undertaken as a general GPS identification survey extending across the study area, which is up to 4.3 sqkm in extent. The results would be superimposed onto a 1:10,000 base OS map. The survey will be combined and superimposed with the historic mapping within a CAD system (AutoCAD). The local group will be involved in the undertaking of the survey and the report drawings will be produced by OA North. Members of the group will be involved in the production of the gazetteer but the report will be prepared by OA North staff
- 3.4.2 The survey will examine the study area, where access is available, and will be undertaken in four stages: reconnaissance, mapping, photography and description. The survey would be intended to examine and record all designed elements and any archaeological monuments within the landscape, a GPS will be used to map features identified.
- 3.4.3 *Reconnaissance:* the reconnaissance will consist of close field walking, varying from 20m 30m line intervals dependant on visibility (as affected by tree density and general vegetation cover), terrain and safety considerations. The survey will identify, locate and record all surface archaeological features and sites. Those sites already identified by the documentary study will be checked against their entry and this will be enhanced, if appropriate. Training in site recognition and interpretation will be provided by an experienced landscape surveyor from OA North.
- 3.4.4 *GPS Survey:* the locations of archaeological sites will be recorded by hand held GPS survey and the data will be digitally superimposed with the OS 1:2,500 mapping. The method will record the location, and extent of the identified monuments. The accuracy of the GPS will be reduced by the woodland canopy cover, but experience has shown that it is usually possible to get a locational fix better than +- 10m even under dense cover. The survey in any case will be undertaken in winter when there is reduced canopy cover. In addition a location can be established using the LiDAR, if available, which is accurate to +-1m and in this instance will be more accurate than the GPS.
- 3.4.5 *Photography:* in conjunction with the archaeological survey a photographic archive will be generated, which will record significant features as well as aspects of the general landscapes. This photographic archive will be maintained using a digital camera with at least 8.0mega pixel resolution. The majority of the photography will be undertaken by the group and archiving of the results will be the responsibility of OA North staff.
- 3.4.6 Description: the site descriptions will be written into a proforma format and will incorporate all pertinent details. The recording of the archaeological sites will incorporate a written description, including an accurate ten figure National Grid Reference. The description will assess and interpret the monument and will include the following fields: LDNP HER number Site Number Form Site Name NGR Site Description Monument Type Period Interpretation Dimensions Threats Management Photo reference Condition Surveyor Date of survey
- 3.4.7 The description will incorporate a provisional interpretation of the function and chronology of the individual sites. The descriptions will be linked to the historical records for individual features obtained through the documentary review.

3.5 DETAILED SURVEY

- 3.5.1 It is proposed that a detailed topographic survey be undertaken of a selected number of woodland sites in accordance with English Heritage Level 2 (Ainsworth *et al* 2007). The sites will be selected in the light of the earlier identification survey and will be agreed with the LDNPA Senior Archaeology and Heritage Advisor. It is proposed that the survey work be undertaken over the course of five days.
- 3.5.2 *Survey Methods:* it is intended that this primarily serve as a training exercise for the volunteers, so the survey techniques will be devised so as to be easy to understand, and will allow for plotting in the field, and is easily affordable by volunteers. This will inevitably mean the use of more outdated technologies, and will have a significant impact on productivity. There is a broad range of survey options that can be achieved by volunteers with access to non-expensive equipment, and it is proposed to introduce the volunteers to a range of techniques and then concentrate the survey using the plane table and tape offset. Similarly a gazetteer and photographic record will be compiled. Details of these techniques are outlined below.
- 3.5.3 *Chain / Tape survey:* traditionally this is done with survey chains, however, survey chains are difficult to come by now and so surveys would typically be undertaken using fibron tapes. The technique has the advantage that it can be drawn up on site and is easy to understand, but is error prone on sloping sites and is time consuming. The technique will be applied at those sites which have a relatively flat ground surface without too much undulations or surface vegetation.

- 3.5.4 *Plane Table / Alidade:* the technique has the advantage that it produces the drawing in the field and can cope well with sloping sites. The use of a plane table is effective in allowing volunteers to understand the principles of surveying. Using stadia tacheometry an alidade has an effective distance measurement capability of 150m (assuming moderate accuracy), but it is difficult to train volunteers in this technique. The alternative is to bring the technique up to date by mounting a cheap Leica Disto on top of the telescope of the alidade. This provides accurate distance measurement up to a distance of 120m and significantly eases the use of the equipment, and therefore makes it more productive. The application of a disto on both a theodolite and an alidade on the recent Holwick project was found to be a very successful approach.
- 3.5.5 *Theodolite Survey (optional):* the use of a theodolite is not specified within the brief but is presented here as an option to be used in conjunction with the plane table. The data would be drawn up in the field using an accurate A2 sized film based protractor and ruler. The technique was used successfully on the recent Holwick project and has the advantage that second hand theodolites and disto can be purchased for under £300.00.
- 3.5.6 *Survey Control:* it is proposed that survey control be introduced to the sites by means of a high accuracy survey type differential GPS where possible. This can achieve accuracies of +- 20mm, and will ensure that the survey is accurately located onto the Ordnance Survey National Grid. If at any of the sites there is no mobile reception (necessary to provide corrections for the GPS) then the control will be established by means of a total station. In practise the technique is limited by woodland canopy cover and it is proposed therefore to locate stations in clearings by GPS and then use a closed traverse, with a total station, to extend the control to the proposed sites of the detailed surveys.
- 3.5.7 *Detail Survey Overview:* the detail survey by plane table and Disto / tape will record all structural and earthwork components, which will be drawn by hachure survey. Survey points will be marked on the ground using spray paint and the survey drawing will be manually drawn up with respect to them. On completion of the survey the field drawings will be digitised into a CAD system. The survey will record all archaeological features, earthworks and elements. The survey will aim to identify, locate and record all built elements of the landscape.
- 3.5.8 *Gazetteer:* a descriptive record of all features will be compiled using a standard proforma, which will incorporate a provisional interpretation of the function of the site / feature, where possible, and similarly will provide a provisional interpretation of the site's chronology where possible. Once the digital gazetteer has been collated and edited, it will be output as an Access Report and input directly into a Microsoft Word format. The gazetteer out put will be compatible with the LDNPA HER. This data will be formatted and topped and tailed within word to produce the gazetteer volume for the survey project. The description will include the same fields as the identification survey.
- 3.5.9 *Photographic Record:* a photographic archive will be generated in the course of the field project, comprising landscape and detailed photography. Detailed photographs will be taken of the archaeological features 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 undertaken using a digital SLR camera with 8 megapixel resolution.

3.6 REPORT PRODUCTION

- 3.6.1 *Archive:* the results of the management programme will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The 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 Central Archaeological Services format. A synopsis (normally the index to the archive and the report) should be placed in the Lake District Historic Environment Record. The archive will include the raw survey digital data in AutoCAD format. A copy of the revised SMR will be deposited with the ADS.
- 3.6.2 *Report:* the report will present, summarise, and interpret the results of the programme detailed in Stages 3.1-3.5 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, a methodology and a statement of the project aims. The report will include a record of all the volunteers who have contributed to the project.

- 3.6.3 The report will identify the significance of the archaeological and architectural evidence and will also include the following:
 - An outline landscape history of the Windermere area, including the woodlands.
 - An historical background for the individual woods.
 - Results of the survey, presented in conjunction with the identification survey of the woodlands, incorporating mapping superimposed on 1:10,000 base OS mapping.
 - Results of the detailed surveys, presenting the individual survey areas in relation to the wider landscape. This will include detailed mapping at an appropriate scale.
 - A discussion presenting an interpretative account of the woodlands and the woodland industries, and setting their context within the landscape.
- 3.6.4 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 which will be based directly upon the project database and will be compatible with the Lake District HER.
- 3.6.5 The report will incorporate appropriate illustrations, including copies of the site plans, detailed survey plans of each woodland area, maps of the wider landscape, all reduced to an appropriate scale. The site mapping will be based upon the CAD base. The report will be accompanied by photographs and historic illustrations illustrating the principal elements of the landscape.
- 3.6.6 *Editing and submission:* the report will be subject to the OA North's stringent editing procedure; then a draft will be submitted to the LDNPA Senior Archaeology and Heritage Advisor. Following acceptance of the report, six bound copies of the report (and digital copy) will be submitted to the LDNPA / Windermere Reflections Partnership. A summary of the work will be provided for OASIS. Digital copies of the survey mapping will be provided in MAPINFO version 7 and AutoCAD.

3.7 Other Matters

- 3.7.1 *Access:* access for the sites has been negotiated by LDNPA. Parking at some of the sites may be restricted and arrangements will be made with the landowners.
- 3.7.2 *Health and Safety:* full regard will be given to all constraints 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. Risk assessments are undertaken as a matter of course for all projects, and will anticipate the potential hazards arising from the project.
- 3.7.3 *Insurance:* insurance in respect of claims for personal injury to or the death of any members of the public in the course of the project will be provided by OA North, who has insurance cover which complies 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. The insurance cover is as follows:
 - £10 million public liability
 - £10 million employers liability
 - £5 million professional indemnity

4. WORK TIMETABLE

- 4.1 The proposed timetable is defined in the brief and is reproduced below.
- 18th February Opening Field Meeting
- 27th February to 8th April Identification and Detailed Survey
- The submission for the draft report by 7th of May
- Presentation week of 25th June

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- 4.2 OA North has four experienced landscape surveyors, all of whom are capable of undertaking the proposed survey work. Although there is potential for overlap between the woodland survey, fulling mill survey and the Eskdale Mines survey (for the National Trust), OA North has sufficient resources to be able to undertake the surveys without conflict. The weekend work will be undertaken by Jamie Quartermaine, who will also undertake the last week of survey of the woodland survey (detailed survey), ensuring that there is no conflict of resources and that the report can be initiated by project officers in advance of the start of the Fulling Mill survey.

5. **RESOURCES**

- 5.1 OA North Project Team
- 5.1.1 The survey will be undertaken by Peter Schofield (Project Officer), Alastair Vannan (Project Officer), David Maron (Project Supervisor) under the guidance of the project manager, Jamie Quartermaine (who will also undertake survey work). The reports will in part be written by members of the society, and part by staff of OA North. The OA North element of report production will be split between Peter, Alastair and Jamie.
- 5.1.2 Project Management: the project will be under the project management of Jamie Quartermaine, BA Surv Dip MIFA (OA North Project Manager) to whom all correspondence should be addressed. Jamie is a very experienced landscape surveyor, who has undertaken or managed literally hundreds of surveys throughout Northern England since 1984, and has considerable experience of working on similar projects to that proposed. He has managed a major recording programme of Lyme Park, Cheshire, and very detailed surveys of the South West Fells including areas such as Barnscar and Burnmoor. He has also undertaken surveys of Lowther Park, Cumbria, Rufford Park, Lancashire and has also managed the recording programme of Lathom Hall and Park, Lancashire and the survey of the Forest of Bowland for United Utilities. He has been a project manager since 1995 and has managed over 400 very diverse projects since then, which are predominantly survey orientated, but of all periods from the Palaeolithic to the twentieth century.
- 5.1.3 Jamie is a qualified land surveyor (Topographic Sciences Diploma Glasgow University) and has an exhaustive knowledge and understanding of surveying techniques. He regularly runs training courses in survey techniques and has the expertise to devise a variety of low tech survey techniques for training volunteers.
- 5.1.4 *Peter Schofield* (OA North Project Officer): Peter works full time on landscape surveys across the north-west. He has undertaken surveys at Hardknott Forest, Cumbria, Hartley Fold Estate, Cumbria, Ennerdale Valley, West Cumbria, a major programme of landscape survey across nine upland areas in North Wales, Little Asby Common for the Friends of the Lake District, and the Holwick and Force Garth surveys, Teesdale. With the exception of Jamie Quartermaine, he is our most experienced landscape archaeologist.
- 5.1.5 *Alastair Vannan* (OA North Project Officer): Alastair Vannan has considerable experience in the survey of upland landscapes. Fore example he undertook with Peter the surveys of Buttermere and Nether Wasdale on behalf of the National Trust. He also has considerable experience of documentary work and undertook both the documentary study for the recent Holwick community survey, but also supervised the field teams. Alastair would undertake the documentary study for the proposed survey. Alastair has been leading a number of community excavations, which included the major excavation of Lathom House (nr Ormskirk), and also the excavations of Stocks Church, Forest of Bowland.
- 5.1.6 *David Maron:* support for the surveyors will be provided by David Maron, who has considerable experience of assisting with surveys from all across the country. He was formerly a head teacher and has a remarkable aptitude for training volunteers.

APPENDIX 3: SITE GAZETTEER

ESTHWAITE COPPICE (EC)

OA North Number: EC 1000 Period: Post-medieval/Industrial
Name: Charcoal-burning Platform, Esthwaite Coppice
Easting: 335500 Northing: 496080
Type: Charcoal-burning Platform
Description:
A charcoal-burning platform located in Esthwaite Coppice. It is situated on a craggy steep slope and is D-shaped. There is a stream 50m to the south of the feature, and a mature birch tree is growing in it.

OA North Number: EC 1001 Period: Post-medieval/Industrial Name: Quarry, Esthwaite Coppice Easting: 335461 Northing: 496071 Type: Quarry Description: A possible quarry scoop lying 5m to the east of a boundary wall.

OA North Number: EC 1002Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Esthwaite CoppiceEasting: 335456 Northing: 495940Type: Charcoal-burning PlatformDescription:A sub-circular charcoal-burning platform located 20m to the west of a Hag Boundary (EC 1004) and 15m

south of a stream. There is a slight bank to the east of the feature.

OA North Number: EC 1003Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Esthwaite CoppiceEasting: 335475 Northing: 495941Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Esthwaite Coppice. There is a stream 6m to the south of the site and a

possible sammel pit is located 3m to the north.

OA North Number: EC 1004 Period: Post-medieval/Industrial Name: Possible Boundary Stone, Esthwaite Coppice

Easting: 335481 Northing: 495933 Type: Boundary Stone

Description:

Two possible stone boundary markers are located in Esthwaite Coppice. One stone is 0.75m high, the other is 0.80m high. These upright stones show no evidence of quarrying. The stones sit 0.80m apart and there is an adjacent charcoal-burning platform to the south. The stones may be hag or coupe markers.

OA North Number: EC 2000 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Esthwaite Coppice Easting: 335610 Northing: 495955 Type: Charcoal-burning Platform Description: A charcoal hurning platform located in Esthwaite Coppice. Quad rut

A charcoal-burning platform located in Esthwaite Coppice. Quad ruts run through the centre of the site and there is a tree growth at the western edge. Trackway EC 2001 is situated at the western side of the site.

OA North Number: EC 2001 Period: Post-medieval/Industrial Name: Trackway, Esthwaite Coppice Easting: 335598 Northing: 495968 Type: Trackway Description: A short trackway located in Esthwaite Coppice, running to the western side of charcoal-burning platform EC 2000. The track is aligned north/south.

 OA North Number: EC 2002
 Period: Post-medieval/Industrial

 Name: Charcoal-burning Platform, Esthwaite Coppice
 Easting: 335600 Northing: 496035

 Type: Charcoal-burning Platform
 Description:

 A charcoal-burning platform located in Esthwaite Coppice. The feature has a very shallow lip to the eastern side. Hawthorn is growing in the centre.

OA North Number: EC 2003 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Esthwaite Coppice Easting: 335544 Northing: 496065 Type: Charcoal-burning Platform Description:

A charcoal-burning platform located in Esthwaite Coppice. It is sub-circular and is situated on a natural break of slope beside a stream. A small piece of charcoal was found. There are quad tracks through the centre of the site and a white marker post numbered '6' at the edge of the site.

OA North Number: EC 2004 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Esthwaite Coppice Easting: 335547 Northing: 496084 Type: Charcoal-burning Platform Description:

A sub-ovoid charcoal-burning platform located in Esthwaite Coppice. It has become overgrown with brambles and fallen trees lie in the centre. There is a large stone in the centre of the feature. Charcoal was found at the site.

OA North Number: EC 2005 Period: Post-medieval/Industrial
Name: Trackway, Esthwaite Coppice
Easting: 335513 Northing: 496145
Type: Trackway
Description:
A trackway located in Esthwaite Coppice. One end of the track is obscured by brambles. It has been terraced, with a slight build-up of material on the eastern, downslope, side. The track is aligned north-west/south-east.

OA North Number: EC 2006 Period: Industrial/modern

Name: Coppice, Esthwaite Coppice Easting: 335495 Northing: 496155 Type: Coppice Description:

A coppice located in Esthwaite Coppice. There are seven hazel coppice stools along the north-west boundary of the wood that follow the line of an old wall.

OA North Number: EC 2007 Period: Industrial/modern Name: Coppice, Esthwaite Coppice Easting: 335456 Northing: 495943 Type: Coppice Description: An alder coppice located in Esthwaite Coppice. The trees are mature and lie within an area of wet ground and a stream.

OA North Number: EC 2008 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Esthwaite Coppice Easting: 335490 Northing: 495885 Type: Charcoal-burning Platform Description: A large sub-circular charcoal-burning platform located in Esthwaite C

A large sub-circular charcoal-burning platform located in Esthwaite Coppice. A natural rock outcrop defines the eastern side and a slight rim is visible at the north-eastern side.

OA North Number: EC 2009 Period: Post-medieval/Industrial Name: Trackway, Esthwaite Coppice Easting: 335465 Northing: 495860 Type: Trackway Description: A trackway running parallel to a wall at the south-western side of Est

A trackway running parallel to a wall at the south-western side of Esthwaite Coppice. Although boundary banks and walls are often associated with ditches, the track appears to be too wide and shallow to represent a boundary ditch.

OA North Number: EC 2010 Period: Post-medieval/Industrial Name: Wall, Esthwaite Coppice Easting: 335616 Northing: 495909 Type: Wall Description: A boundary wall located in Esthwaite Coppice, which was not shown on the First edition mapping.

RIDDING WOOD (RW)

OA North Number: RW 1000 Period: Post-medieval/Industrial
Name: Charcoal-burning Platform, Ridding Wood, Graythwaite
Easting: 336147 Northing: 494840
Type: Charcoal-burning Platform
Description:
A charcoal-burning platform located in Ridding Wood. There is a bank at the rear of the feature.

OA North Number: RW 1001 Period: Post-medieval/Industrial Name: Trackway, Devil's Gallop Easting: 336148 Northing: 494687 Type: Trackway Description: A trackway located in Ridding Woods and aligned north/south.

OA North Number: RW 1002 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Devil's Gallop
Easting: 336148 Northing: 494662
Type: Charcoal-burning Platform
Description:
A charcoal-burning platform located in Ridding Wood.

OA North Number: RW 1003 Period: Post-medieval/Industrial
Name: Charcoal-burning Platform, Devil's Gallop
Easting: 336467 Northing: 494352
Type: Charcoal-burning Platform
Description:
A charcoal-burning platform located in Ridding Wood and situated between two streams and two tracks. The south-east edge, close to the stream, is revetted.

OA North Number: RW 1004 Period: Post-medieval/Industrial Name: Trackway, Devil's Gallop Easting: 336425 Northing: 494357 Type: Trackway Description: A trackway located in Ridding Wood.

OA North Number: RW 1005 Period: Post-medieval/Industrial
Name: Bark Peeler's Hut, Devil's Gallop
Easting: 336457 Northing: 494503
Type: Bark Peeler's Hut
Description:
A bark peeler's hut located in Ridding Wood. The chimney is extant, although the lintel has fallen.

OA North Number: RW 1006 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Devil's Gallop Easting: 336460 Northing: 494503 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Ridding Woods. The edges are

A charcoal-burning platform located in Ridding Woods. The edges are well defined and it is situated west of a track. There is a tree in the centre of the site.

OA North Number: RW 1007 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Ridding Wood Easting: 335966 Northing: 495495 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Ridding Woods. Charcoal was found at the site.

OA North Number: RW 1008 Period: Post-medieval/Industrial
Name: Potash Kiln, Ridding Wood
Easting: 335977 Northing: 495486
Type: Potash Kiln
Description:
A possible potash kiln located in Ridding Woods. There was no visible evidence of a stone lining and a possible flue was present at the down-slope side.
OA North Number: RW 1009 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Ridding Wood
Easting: 336006 Northing: 495458
Type: Charcoal-burning Platform
Description:
A charcoal-burning platform located in Ridding Woods. Charcoal was found at the site.

OA North Number: RW 1010 Period: Post-medieval/Industrial
Name: Charcoal-burning Platform, Ridding Wood
Easting: 336009 Northing: 495383
Type: Charcoal-burning Platform
Description:
A charcoal-burning platform located in Ridding Woods. The platform is 1m high and charcoal was found at the site.

OA North Number: RW 1011Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Ridding WoodEasting: 336043 Northing: 495365Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Ridding Woods. Charcoal was found at the site.

OA North Number: RW 1012 Period: Post-medieval/Industrial Name: Trackway, Ridding Wood Easting: 336032 Northing: 495343 Type: Trackway Description: A trackway located in Ridding Wood.

OA North Number: RW 1013Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Ridding WoodEasting: 336088Northing: 495280Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Ridding Woods. Charcoal was found at the site.

OA North Number: RW 1014 Period: Post-medieval/Industrial Name: Quarry, Ridding Wood Easting: 336170 Northing: 495221 Type: Quarry Description: A quarry located in Ridding Woods. It is stepped in the middle and has filled up with water. The quarry is shown on the modern mapping.

OA North Number: RW 1015 Period: Post-medieval/Industrial
Name: Charcoal-burning Platform, Ridding Wood
Easting: 336202 Northing: 495188
Type: Charcoal-burning Platform
Description:
A charcoal-burning platform located in Ridding Woods. Charcoal was found at the site.

OA North Number: RW 1017 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Ridding Wood Easting: 336286 Northing: 495027 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Ridding Woods and cut by a deep track. Charcoal was found at the site.

OA North Number: RW 1018Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Ridding WoodEasting: 336260 Northing: 494927Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Ridding Woods. Charcoal was found at the site.

OA North Number: RW 1019 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Ridding Wood Easting: 336277 Northing: 494898 Type: Charcoal-burning Platform Description:

A charcoal-burning platform located in Ridding Woods. There is a possible sammel pit associated with the feature and charcoal was found at the site.

OA North Number: RW 1020Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Ridding WoodEasting: 336286 Northing: 494835Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Ridding Woods. Charcoal was found at the site.

OA North Number: RW 1021 Period: Name: Charcoal-burning Platform, Ridding Wood Easting: 336259 Northing: 494793 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Ridding Woods. Charcoal was found at the site.

OA North Number: RW 1022 Period: Post-medieval/Industrial
Name: Charcoal-burning Platform, Devil's Gallop
Easting: 336299 Northing: 494620
Type: Charcoal-burning Platform
Description:
A charcoal-burning platform located in Ridding Woods. Charcoal was found at the site.

OA North Number: RW 1023 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Devil's Gallop Easting: 336279 Northing: 494643 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Ridding Woods. Charcoal was found at the edge of the site.

OA North Number: RW 1024 Period: Name: Trackway, Devil's Gallop Easting: 336266 Northing: 494650 **Type:** Trackway **Description:** A trackway located in Ridding Woods.

OA North Number: RW 1025 Period: Name: Trackway, Devil's Gallop Easting: 336265 Northing: 494635 Type: Trackway Description: A trackway located in Ridding Wood.

OA North Number: RW 1026 Period: Post-medieval/Industrial
Name: Charcoal-burning Platform, Devil's Gallop
Easting: 336366 Northing: 494623
Type: Charcoal-burning Platform
Description:
A charcoal-burning platform located in Ridding Wood. Charcoal was found at the site.

OA North Number: RW 1027 Period: Name: Trackway, Ridding Wood Easting: 336241 Northing: 494985 Type: Trackway Description: A trackway located in Ridding Wood.

OA North Number: RW 2001 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Devil's Gallop Easting: 336169 Northing: 494656 Type: Charcoal-burning Platform Description:

A well-defined sub-circular charcoal-burning platform that is terraced into a steep eastern slope. A possible sammel pit was identified adjacent to the site and charcoal was found.

OA North Number: RW 2002 Period: Post-medieval/Industrial Name: Bark Peeler's Hut, Devil's Gallop Easting: 336207 Northing: 494642 Type: Bark Peeler's Hut Description: The remains of the hut comprised a regular horseshoe-shaped hearth, formed by double-thickness dry-stone

walls and built using large stones. The lintel was present, but had collapsed. The hearth lay immediately adjacent to charcoal-burning platform RW 2004.

OA North Number: RW 2003 Period: Post-medieval/Industrial Name: Trackway, Devil's Gallop

Easting: 336189 Northing: 494651 Type: Trackway Description: A sinuous trackway that occurred in some places as a hollow way and in others as a terrace cut into the hill slope. The track runs adjacent to charcoal-burning platforms RW 2001 and RW 2004, and bark peeler's hut RW 2002.

OA North Number: RW 2004 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Devil's Gallop Easting: 336205 Northing: 494648 Type: Charcoal-burning Platform Description: A circular charcoal-burning platform immediately adjacent to bark peeler's hut RW 2002 and trackway RW 2003.

OA North Number: RW 2005 Period: Post-medieval/Industrial? Name: Charcoal-burning Platform, Devil's Gallop Easting: 336287 Northing: 494535 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform with two pine trees growing on the site.

OA North Number: RW 2006 Period: Post-medieval/Industrial? Name: Trackway, Devil's Gallop Easting: 336202 Northing: 494449 Type: Trackway

Description:

A trackway that is heavily rutted from modern vehicles, but possibly follows the line of an earlier track. It is sinuous, respects the topography, and has been cleared of loose stone, whereas many of the modern vehicle and quad tracks follow straighter lines and are not associated with stone clearing.

OA North Number: RW 2007 Period: Post-medieval/Industrial

Name: Trackway, Devil's Gallop Easting: 336316 Northing: 494289 Type: Trackway

Description:

A trackway partially formed by a deep hollow way, the eastern part of which is overgrown. The hollow way is currently occupied by a stream, and runs parallel to the modern surfaced track, which gives it the appearance of being a stream channel. Where it passes through the wall between Devil' Gallop and Eels Intake there is a gateway with two standing gate stoops. Gate furniture survives on both stoops and they are up to 2m high.

OA North Number: RW 2008Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Devil's GallopEasting: 336382 Northing: 494352Type: Charcoal-burning PlatformDescription:A sub-ovoid charcoal-burning platform with a pine tree in the centre.

OA North Number: RW 2009 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Devil's Gallop Easting: 336378 Northing: 494436 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform with a fallen tree to one side. Charcoal was found at the site.

OA North Number: RW 2010 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Devil's Gallop Easting: 336420 Northing: 494469 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform.

OA North Number: RW 2011 Period: Industrial Name: Trackway, Devil's Gallop Easting: 336424 Northing: 494522 Type: Trackway Description: A trackway to the east of Bark Peeler's Hut RW1005 that leads to the main road.

OA North Number: RW 2012 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Ridding Wood Easting: 335939 Northing: 495413 Type: Charcoal-burning Platform Description: A sub evoid platform occupied by four conifers and two tree stump

A sub-ovoid platform occupied by four conifers and two tree stumps. At the south-eastern side there is a conspicuous hollow that might be a sammel pit.

OA North Number: RW 2013 Period: Post-medieval/Industrial Name: Trackway, Ridding Wood Easting: 335948 Northing: 495403 Type: Trackway Description: A wide and sinuous trackway, which has been subject to modern usage but passes close to charcoal-burning platform 2012.

OA North Number: RW 2014 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Ridding Wood Easting: 335979 Northing: 495353 Type: Charcoal-burning Platform Description: A sub-circular platform occupied by a conifer. Charcoal was found at the site.

OA North Number: RW 2015 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Ridding Wood Easting: 336052 Northing: 495311 Type: Charcoal-burning Platform Description: A platform occupied by several conifers, in addition to fallen trees. Charcoal was found at the site.

OA North Number: RW 2016 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Ridding Wood Easting: 335983 Northing: 495265 Type: Charcoal-burning Platform Description: A charred 'bren and' piece of wood and charcoal were found on this

A charred 'bran end' piece of wood and charcoal were found on this sub-circular platform. Trees, fallen branches, and tree stumps occupied the site.

OA North Number: RW 2017 Period: Post-medieval/Industrial/Modern Name: Trackway, Ridding Wood Easting: 336062 Northing: 495282 Type: Trackway Description: A trackway that has been cleared of loose stone and runs east/west. Rutting suggests that there has been modern use.

OA North Number: RW 2018 Period: Post-medieval/Industrial/Modern Name: Trackway, Ridding Wood Easting: 335961 Northing: 495275 Type: Trackway Description: A trackway that has been cleared of loose stone. Rutting suggests that there has been modern use.

OA North Number: RW 2019 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Ridding Wood Easting: 336030 Northing: 495213 Type: Charcoal-burning Platform Description:

A charcoal-burning platform located adjacent to a stream in Ridding Wood. A trackway runs through the feature and it is occupied by trees growing. There is also litter on the site. Charcoal was found at the platform.

OA North Number: RW 2020 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Ridding Wood Easting: 336070 Northing: 495217 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Ridding Wood. There is a tree growing on the platform and fallen

branches partially cover it. Charcoal was found at the site.

OA North Number: RW 2021 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Ridding Wood Easting: 336115 Northing: 495166 Type: Charcoal-burning Platform Description:

A charcoal-burning platform located in Ridding Wood. Modern 4x4 tracks cross the site and it is also occupied by conifers. There is a ruined wall at the southern side of the charcoal-burning platform, which was shown on the first edition OS mapping. Charcoal was found at the site.

OA North Number: RW 2022 Period: Post-medieval/Industrial Name: Trackway, Ridding Wood Easting: 336295 Northing: 494985 Type: Trackway Description:

A terraced trackway located in Ridding Wood.

OA North Number: RW 2023 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Ridding Wood Easting: 336197 Northing: 494878 Type: Charcoal-burning Platform

Description:

A charcoal-burning platform located in Devils Gallop. Trees, and fallen trees, occupy the site and it is eroded at the western side.

OA North Number: RW 2024 Period: Post-medieval/Industrial

Name: Boundary Stone, Devil's Gallop Easting: 336214 Northing: 494667

Type: Boundary Stone

Description:

A possible coupe or hag boundary stone located in Devils Gallop. It is a single standing stone and an absence of moss suggests that it may have been moved from its original, naturally deposited, position. It is near a bark peeler's hut (RW 2004).

OA North Number: RW 2025 Period:

Name: Charcoal-burning Platform, Devil's Gallop Easting: 336430 Northing: 494560 Type: Charcoal-burning Platform Description:

A charcoal-burning platform located in Devils Gallop. It is situated near a trackway and charcoal was found at the site.

RIGG WOOD (RGW)

OA North Number: RGW 1000 Period: Post-medieval/Industrial Name: Trackway, Dumbarton Wood Easting: 337055 Northing: 494055 Type: Trackway Description: A trackway with passing places has been cut into the hillside and respects a stream and a field boundary. It adjoins track RGW 1001.

OA North Number: RGW 1001 **Period:**

Name: Trackway, Dumbarton Wood Easting: 337054 Northing: 494067 Type: Trackway Description:

A possible loading bay associated with track RGW 1000. The back edge has collapsed, hiding some parts of the track and the eastern end of the bay. There is also a possible turning circle to the east adjacent of the bay, leading to track RGW 1000.

OA North Number: RGW 1002 Period:

Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337026 Northing: 494140 Type: Charcoal-burning Platform Description:

A possible charcoal-burning platform within a flat area that would have required little modification and lay adjacent to a track shown on the first edition OS map.

OA North Number: RGW 1003 **Period:**

Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337061 Northing: 494091 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform that is slightly terraced with a slight lip.

OA North Number: RGW 1004 **Period:**

Name: Bird Feeders/shelters, Dumbarton Wood Easting: 337046 Northing: 494131 Type: Charcoal-burning Platform

Description:

Three sunken features in a line at the western edge of the wood which appear to be the remains of feeders or shelters associated with game-bird keeping. One comprises a rectangular pit measuring 2m by 1.5m, which is covered by corrugated iron that rests on four wooden posts. A second site features only a rectangular pit and a single wooden post, and measures 2m by 2m, and 0.2m deep. This site cuts, and therefore, post-dates, a trackway shown the first OS edition map. A third site has two posts and the remains of corrugated iron and measures 2m by 2m.

OA North Number: RGW 1005 Period:

Name: Charcoal Burner's Hut?, Dumbarton Wood Easting: 337074 Northing: 494172 Type: ?Structure

Description:

The remains of a possible structure comprising a scoop defined by linear settings of stones at the eastern and northern sides, and earthfast outcropping stone to the south. There were no indications of a hearth and the base was sloping and uneven.

OA North Number: RGW 1006 Period: Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337100 Northing: 494184 **Type:** Charcoal-burning Platform **Description:** A sub-circular charcoal-burning platform with a revetment at the western side.

OA North Number: RGW 1007 Period: Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337135 Northing: 494242 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform bisected by trackway RGW 1008.

OA North Number: RGW 1008 Period: Post-medieval/Industrial Name: Trackway, Dumbarton Wood Easting: 337084 Northing: 494356 Type: Trackway

Description:

The southern extension of this trackway may have joined with track RGW 2002 and formed a north/south link through the western side of the wood, between the track running along the southern boundary and the track network within the northern part of the wood. The track terminated close to the western boundary, which is where an access to the nearby road is available.

OA North Number: RGW 1009 Period: Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337105 Northing: 494267 Type: Charcoal-burning Platform Description: An elliptical charcoal-burning platform.

OA North Number: RGW 1011 Period: Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337013 Northing: 494338 Type: Charcoal-burning Platform Description: A sub-circular revetted charcoal-burning platform.

OA North Number: RGW 1012 Period:

Name: Charcoal-burning Platform, Rigg Wood Easting: 336969 Northing: 494468 Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform that is partially obscured by two fallen trees. A tree throw has exposed considerable quantities of charcoal. The platform is located immediately to the north of the path shown on the current OS map.

OA North Number: RGW 1013 Period:

Name: Charcoal-burning Platform, Rigg Wood
Easting: 337015 Northing: 494489
Type: Charcoal-burning Platform
Description:
A slightly terraced sub-circular charcoal-burning platform. A depression at the south-west contained charcoal.

OA North Number: RGW 1014 Period: Post-medieval/Industrial Name: Coppice, Rigg Wood Easting: 337047 Northing: 494463 Type: Coppice Description: An area of overgrown coppiced hazel stools.

OA North Number: RGW 1015 **Period:** Post-medieval/Industrial **Name:** Trackway, Rigg Wood

Easting: 336966 Northing: 494672 Type: Trackway Description: A sinuous trackway leading from the main track. The full extent was not discernible.

OA North Number: RGW 1016 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 336965 Northing: 494766 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform with a possible associated sammel pit. The presence of stone suggests a possible revetment at the southern side.

OA North Number: RGW 1017 Period: Post-medieval/Industrial Name: Wall, Rigg Wood Easting: 336961 Northing: 494770 Type: Wall Description: A dry-stone stone wall occurring to each side of a dry-stone structure (RGW 1018) and along the southern edge of a track.

OA North Number: RGW 1018 Period: Post-medieval/Industrial Name: Structure, Rigg Wood Easting: 336964 Northing: 494778 Type: Structure

Description:

A ruinous rectangular building measuring 3m by 2.25, with double-thickness dry-stone walls surviving up to 0.75m high. The foundations of this structure lie contiguous with the western side of a dry-stone wall (RGW 1017) and there is no obvious indication of an entrance. The structure is of unknown function, but the lack of an entrance might suggest that it did not serve as a hut, but was perhaps used for storage or as an animal trap.

OA North Number: RGW 1019 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Rigg Wood
Easting: 336961 Northing: 494884
Type: Charcoal-burning Platform
Description:
A sub-circular charcoal-burning platform measuring 7m diameter. The platform was slightly terraced and cut by the current trackway.

OA North Number: RGW 1020 Period: Post-medieval/Industrial Name: Wall, Rigg Wood Easting: 336960 Northing: 494863 Type: Wall Description: A dry stone wall associated with charcoal-burning platform RGW 1019.

OA North Number: RGW 1021 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 336965 Northing: 494934 Type: Charcoal-burning Platform Description: A sub-circular and terraced charcoal-burning platform that is 0.3m deep and is cut by the current trackway.

OA North Number: RGW 1022 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 336938 Northing: 494950 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform terraced into the hillside.

OA North Number: RGW 1023 Period: Post-medieval/Industrial

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Name: Charcoal-burning Platform, Rigg Wood
Easting: 336877 Northing: 495004
Type: Charcoal-burning Platform
Description:
A sub-circular charcoal-burning platform in a raised area within a wet portion of the wood.

OA North Number: RGW 1024 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 336912 Northing: 495010 Type: Charcoal-burning Platform Description: A charcoal-burning platform cut by the current track.

OA North Number: RGW 1025 Period: Post-medieval/Industrial Name: Potash Kiln, Rigg Wood Easting: 336917 Northing: 494999 Type: Potash Kiln Description: A circular potash kiln lined with dry-stone walling to form an inverted cone partially filled with soil and leaf litter.

OA North Number: RGW 1026 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 336982 Northing: 495021 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform with a possible associated sammel pit.

OA North Number: RGW 1027 Period: Post-medieval/Industrial Name: Ditch, Rigg Wood Easting: 336906 Northing: 495070 Type: Ditch Description:

A possible boundary ditch or natural ditch, although it appears to be too large to have been caused by erosion from the weak stream that currently flows along it. It may have been a drainage channel associated with the adjacent track and the presence of well-established trees on either side suggests that it is of some antiquity.

OA North Number: RGW 1028 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 336857 Northing: 495078 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform with conspicuous quantities of large lumps of charcoal.

OA North Number: RGW 1029 Period: Name: Charcoal-burning Platform, Rigg Wood Easting: 336975 Northing: 495126 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform within which charcoal was found.

OA North Number: RGW 1030 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 336970 Northing: 495134 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform.

OA North Number: RGW 1031 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Castle Wood Hill Easting: 337054 Northing: 495180 **Type:** Charcoal-burning Platform **Description:** A charcoal-burning platform.

OA North Number: RGW 1032 Period: Post-medieval/Industrial Name: Trackway, Rigg Wood Easting: 336914 Northing: 494884 Type: Trackway Description: A series of sinuous trackways within the north-west portion of the wood.

OA North Number: RGW 1033 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 337102 Northing: 494999 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform.

OA North Number: RGW 1034 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 337119 Northing: 494987 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform

OA North Number: RGW 1035 Period: Post-medieval/Industrial Name: Trackway, Rigg Wood Easting: 337143 Northing: 494687 Type: Trackway Description: A sinuous trackway close to the boundary wall of Rigg Wood.

OA North Number: RGW 1036 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Garnett Wood Easting: 337233 Northing: 494628 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform cut by trackway

OA North Number: RGW 1037 Period: Post-medieval/Industrial
Name: Charcoal-burning Platform, Dumbarton Wood
Easting: 337276 Northing: 494377
Type: Charcoal-burning Platform
Description:
A sub-circular charcoal-burning platform that has been slightly terraced and is cut by a trackway.

OA North Number: RGW 1038 Period: Post-medieval/Industrial Name: Trackway, Dumbarton Wood Easting: 337275 Northing: 494298 Type: Trackway Description: A sinuous trackway that terminates at charcoal-burning platform RGW 1040.

OA North Number: RGW 1039 Period: Post-medieval/Industrial Name: ?Charcoal-burning Platform, Dumbarton Wood Easting: 337293 Northing: 494153 Type: ?Charcoal-burning Platform Description: A possible charcoal-burning platform.

OA North Number: RGW 1040 Period: Post-medieval/Industrial

Description: A charcoal-burning platform with possible associated sammel pits. Trackway RGW 1038 terminates at the platform.

OA North Number: RGW 1041 Period: Post-medieval/Industrial
Name: Charcoal-burning Platform, Dumbarton Wood
Easting: 337337 Northing: 494152
Type: Charcoal-burning Platform
Description:
A charcoal-burning platform and possible associated sammel pit with modern disturbance from a fallen tree.

OA North Number: RGW 1042 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337213 Northing: 494086 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform.

OA North Number: RGW 1043 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337136 Northing: 494104 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located at the edge of a trackway.

OA North Number: RGW 2000 Period: Post-medieval/Industrial Name: Shelter, Dumbarton Wood Easting: 337138 Northing: 494038 Type: Shelter Description:

A sub-rectangular dry-stone shelter facing downslope at the eastern side of a boundary wall. The doublethickness walls are 0.5m wide and up to 0.6m high and an entrance in the southern wall is 0.6m wide. The structure might have been used as a shooting butt.

OA North Number: RGW 2001 Period: Post-medieval/Industrial

Name: Wall, Dumbarton Wood Easting: 337159 Northing: 494054 Type: Wall Description:

A double-thickness dry stone wall built with irregular angular stone that might have been roughly quarried, or have fragmented and tumbled from adjacent outcrops. The wall may have been used as a hag boundary.

OA North Number: RGW 2002 Period: Post-medieval/Industrial

Name: Trackway, Dumbarton Wood Easting: 337147 Northing: 494071 Type: Trackway Description: A trackway that follows the assist r

A trackway that follows the easiest route, topographically, over the top of the crag. There is no indication of terracing and the track was formed by the removal of coarse stones along a curvilinear route.

OA North Number: RGW 2003 Period: Industrial/modern Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337138 Northing: 494116 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform terraced into the slope

A sub-ovoid charcoal-burning platform terraced into the slope at the bottom of a crag. The south-eastern side is terraced into the crag and there is a slight raised lip at the north-east edge.

OA North Number: RGW 2005 Period: Industrial/modern Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337124 Northing: 494189 Type: Charcoal-burning Platform Description: A shallow sub-ovoid charcoal-burning platform with a possible sammel pit at the southern side.

OA North Number: RGW 2006 Period: Post-medieval/Industrial Name: Hollow Way, Dumbarton Wood Easting: 337156 Northing: 494208 Type: Hollow Way Description:

This possible hollow way follows the easiest route through an area between two crags. It is sinuous and subject to water erosion, which has resulted in a variety of widths and depths along the length of the feature.

OA North Number: RGW 2007 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Dumbarton Wood
Easting: 337157 Northing: 494219
Type: Charcoal-burning Platform
Description:
A sub-circular charcoal-burning platform terraced into a slope. Charcoal was found at the site.

OA North Number: RGW 2008 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337146 Northing: 494312 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform on a west-facing slope.

OA North Number: RGW 2009 Period: Industrial/modern Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337179 Northing: 494323 Type: Charcoal-burning Platform Description: A D-shaped charcoal-burning platform on a west-facing slope.

OA North Number: RGW 2010 Period: Industrial/modern Name: Trackway, Dumbarton Wood Easting: 337166 Northing: 494350 Type: Trackway Description: A trackway that has been cleared of stones and may have been subject to terracing. It is distinctive as a single

OA North Number: RGW 2011 Period: Name: Coppice, Dumbarton Wood Easting: 337143 Northing: 494432 Type: Coppice Description: An area of coppice stools of alder, hazel, and oak. The oak and hazel are prevalent in drier areas.

track close to charcoal-burning platform RGW 2009, but becomes braided further away.

OA North Number: RGW 2012 Period: Name: Charcoal-burning Platform, Rigg Wood Easting: 337017 Northing: 494491 Type: Charcoal-burning Platform Description: A charcoal-burning platform that is associated with possible sammel pits.

OA North Number: RGW 2013 Period: Post-medieval/Industrial Name: Coppice, Rigg Wood Easting: 337115 Northing: 494578 Type: Coppice Description: An area of overgrown coppice stools of mixed species. Parts of the area are damp and waterlogged and some of the coppiced trees are alder.

OA North Number: RGW 2014 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 337009 Northing: 494560 Type: Charcoal-burning Platform Description:

A charcoal-burning platform measuring approximately 8m by 8m, although the presence of hawthorn made it difficult to measure. A trackway that is in current use lies immediately to the west and might be associated.

OA North Number: RGW 2015 Period:

Name: Charcoal-burning Platform, Rigg Wood Easting: 337047 Northing: 494577 Type: Charcoal-burning Platform Description: A charcoal-burning platform that has become over

A charcoal-burning platform that has become overgrown with hawthorn. The northern edge has been almost completely destroyed by water erosion.

OA North Number: RGW 2016 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 337064 Northing: 494613 Type: Charcoal-burning Platform Description: A charcoal-burning platform measuring 8m in diameter.

OA North Number: RGW 2017 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 337086 Northing: 494750 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform occupied by a hazel tree.

OA North Number: RGW 2018 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 337032 Northing: 494780 Type: Charcoal-burning Platform Description: A charcoal-burning platform terraced into a steep west-facing slow

A charcoal-burning platform terraced into a steep west-facing slope. The lip at the western side is welldefined, but slippage at the eastern side has disguised the cut into the slope.

OA North Number: RGW 2019 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 337011 Northing: 494789 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform with a small spring lying 15m to the north.

OA North Number: RGW 2020 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 337028 Northing: 494850

Type: Charcoal-burning Platform

Description:

A sub-ovoid charcoal-burning platform that is deeply terraced into the slope. A possible sammel pit measuring 2m in diameter lies to the north and a trackway (RGW 2021) leads southwards to charcoal-burning platform RGW 2019.

OA North Number: RGW 2021 Period: Post-medieval/Industrial Name: Trackway, Rigg Wood Easting: 337019 Northing: 494820 Type: Trackway Description: A trackway running between two charcoal-burning platforms (RGW 2020 and RGW 2021) and a natural spring. It has been terraced into a west-facing slope.

OA North Number: RGW 2022 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Rigg Wood Easting: 336962 Northing: 494927 Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform with a small plateau lying adjacent that might represent an associated encampment.

OA North Number: RGW 2023 **Period:** Post-medieval/Industrial **Name:** Charcoal-burning Platform, Rigg Wood

Easting: 337020 Northing: 494948

Type: Charcoal-burning Platform

Description:

A charcoal-burning platform with two adjacent hollows with level bases lying to the north-east that might represent an associated encampment or sammel pits.

OA North Number: RGW 2024 Period: Post-medieval/Industrial Name: Trackway, Rigg Wood Easting: 337031 Northing: 494972 Type: Trackway Description: A trackway associated with charcoal-burning platform RGW 2023.

OA North Number: RGW 2025 Period: Post-medieval/Industrial

Name: Trackway, Rigg Wood Easting: 337008 Northing: 494983 Type: Trackway Description:

A trackway terraced into a slope that is occupied by a watercourse and has been subject to subsequent erosion.

OA North Number: RGW 2026 Period: Post-medieval/Industrial Name: Coppice, Rigg Wood Easting: 336913 Northing: 495017 Type: Coppice Description: An area of overgrown coppice stools, which includes hazel.

OA North Number: RGW 2027 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 336982 Northing: 495024 Type: Charcoal-burning Platform Description:

A sub-ovoid charcoal-burning platform with trees growing in the centre and around the edge. Two small plateaux on either side might represent associated sammel pits or an encampment.

OA North Number: RGW 2028 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 337037 Northing: 495124 Type: Charcoal-burning Platform Description: A charcoal-burning platform that is occupied by hawthorn and fallen trees.

OA North Number: RGW 2029 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Castle Wood Hill Easting: 337052 Northing: 495180 Type: Charcoal-burning Platform Description: A charcoal-burning platform with two or three adjacent possible sammel pits

OA North Number: RGW 2030 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 337061 Northing: 495037 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform.

OA North Number: RGW 2031 Period: Post-medieval/Industrial Name: Bark Peeler's Hut, Rigg Wood Easting: 337050 Northing: 494969 Type: Hearth Description:

A dry-stone hearth and chimney represent the remains of a bark peeler's hut. There are no structural remains of additional walling, suggesting that the building utilised a timber superstructure. The double thickness walls are 0.6m wide and were built using roughly squared stone. There is a surviving double lintel above a fireplace aperture measuring 0.5m wide, 0.75 deep, and 0.6 high.

OA North Number: RGW 2032 Period:

Name: Charcoal-burning Platform, Rigg Wood
Easting: 337059 Northing: 494945
Type: Charcoal-burning Platform
Description:
A sub-oval platform occupied by a hazel tree. Two regular hollows near the platform might represent sammel pits.

OA North Number: RGW 2033 Period:

Name: Trackway, Rigg Wood Easting: 337063 Northing: 494976 Type: Trackway Description:

A trackway running from the eastern side of charcoal-burning platform RGW 2032. The track follows the natural contours and leads to a pond. There is no evidence of terracing, although the track has been cleared of stone and is marked by modern wheel rutting.

OA North Number: RGW 2034 Period: Name: Charcoal-burning Platform, Rigg Wood Easting: 337079 Northing: 494836 Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform with a stone revetment at the western side. Hollow pits adjacent to the eastern side may be sammel pits.

OA North Number: RGW 2035 Period: Name: Coppice, Rigg Wood Easting: 337128 Northing: 494491 Type: Coppice Description: An area of coppice stools to the southern side of a ruined dry-stone wall. The stools are mainly alder, with some hazel.

OA North Number: RGW 2037 Period: Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337203 Northing: 494358 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform.

OA North Number: RGW 2038 Period:
Name: Charcoal-burning Platform, Dumbarton Wood
Easting: 337105 Northing: 494405
Type: Charcoal-burning Platform
Description:
A charcoal-burning platform at the edge of a an area of coppice and adjacent to a stream. Charcoal was found at the site.

OA North Number: RGW 2039 Period: Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337088 Northing: 494370 Type: Charcoal-burning Platform Description: A charcoal-burning platform adjacent to the southern side of a t

A charcoal-burning platform adjacent to the southern side of a track. A minor track connects the platform with charcoal-burning platform RGW 2038. The platform is occupied by hazel.

OA North Number: RGW 2040 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337294 Northing: 494296 Type: Charcoal-burning Platform Description: A charcoal-burning platform. Charcoal was found at the site.

OA North Number: RGW 2041 Period: Post-medieval/Industrial/industrial Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337295 Northing: 494222 Type: Charcoal-burning Platform Description: A charcoal-burning platform with a low stone revetment at the southern side.

OA North Number: RGW 2042 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337255 Northing: 494176 Type: Charcoal-burning Platform Description: A charcoal-burning platform lying to the southern side of a trackway that runs up the slope.

OA North Number: RGW 2043 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Dumbarton Wood Easting: 337212 Northing: 494024 Type: Charcoal-burning Platform Description: A charcoal-burning platform cut into an east-facing slope with a trackway running to the south.

OA North Number: RGW 2044 Period: Post-medieval/Industrial Name: Possible Boundary Stones, Rigg Wood Easting: 336964 Northing: 494778 Type: Structure Description: Two possible boundary stones located to the north of a ruined hut (RGW 1018). The stones comprise large, apparently unmodified, slabs, set as upright orthostats along a shared alignment and immediately adjacent to each other. The stones appear to have formed part of a now denuded boundary represented by a low bank and portions of dry-stone walling.

OA North Number: RGW 2045 Period: Post-medieval/Industrial Name: Possible Sammel Pit, Rigg Wood Easting: 336959 Northing: 494757 Type: Earthwork – possible Sammel pit Description: A sub circular pit adjacent to charge hurning platform PGW1016. I

A sub-circular pit adjacent to charcoal-burning platform RGW1016. It has well-defined edges and is 4.6m across. Given its proximity to a platform there is the probability that it was a sammel pit.

OA North Number: RGW 2046 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Rigg Wood Easting: 336943 Northing: 494751 Type: Charcoal-burning Platform Description: A charcoal-burning platform on top of a low rise such that it forms a slight hollow and has raised aprons to the north and south. It is 11.7m x 7.2m in extent.

OA North Number: RGW 2047 Period:

Name: Trackway, Rigg Wood

Easting: 336955 Northing: 494754 to Easting: 336945 Northing: 494725 Type: Trackway

Description:

A trackway running past charcoal-burning platforms RGW 1016 and 2046, and extends out from trackway RGW2048. It extends over an area of flat ground and there is no evidence of terracing. It clearly relates directly to the platforms and evidently served the woodland industries. It has variable width but extends up to 2.3m across.

OA North Number: RGW 2048 Period:

Name: Trackway, Rigg Wood

Easting: 336923 Northing: 494774 to Easting: 336995 Northing: 494751 Type: Trackway

Description:

A trackway running past charcoal-burning platforms RGW 1016 and 2046. There is some terracing on the eastern part of the track. It clearly relates directly to the platforms and evidently served the woodland industries.

OA North Number: RGW 2049 Period:

Name: Trackway, Rigg Wood Easting: 336926 Northing: 495058 to Easting: 336908 Northing: 494971 Type: Trackway Description:

Description: A trackway runnin

A trackway running into charcoal-burning platforms RGW 1024. There is some terracing as it is set into a west facing slope. The northern and southern sections of the track do not converge with other, and instead have slightly different orientations; the terminals of each section turn in towards the centre of the platform at a distance of only 7m away. The implication is that this is not a platform constructed on top of an existing track, and the platform undoubtedly predated the track. The track sections were evidently intended to provide access for the platform, and may have been constructed shortly after the platform, as their functions seem to be closely linked into that of the platform.

BISHOP WOOD (BW)

OA North Number: BW 1000 Period: Industrial Name: Barn, Sparrow Howe Wood Easting: 337904 Northing: 494601 Type: Barn Description:

This barn appears to have been constructed from surface-picked stone. The walls are 0.6m wide and it stands 2m tall at the front and 3m at the peak of the gable. Remnants of a single peg slate roof can be seen at the western side and the eastern side utilises corrugated iron. The front has been partially slatted with wood in a clapper-board style, but appears to have been originally open fronted. The barn is built into a field boundary.

OA North Number: BW 1001 Period: Modern?

Name: Clearance Bank, Sparrow Howe Wood Easting: 337822 Northing: 494631 Type: Clearance Description:

An L-shaped irregular mound, probably derived from stone clearance. It lies on bedrock, within a slight hollow, and may be associated with activity undertaken during a phase when the area had been cleared of trees.

OA North Number: BW 1002 Period: Post-medieval/Industrial

Name: Clearance Bank, Sparrow Howe Wood

Easting: 337746 Northing: 494629

Type: Clearance

Description:

A clearance bank formed by piling stones along a natural outcrop. Further accumulations of clearance material lie within the local area.

OA North Number: BW 1003 Period: Unknown

Name: Pit, Sparrow Howe Wood Easting: 337753 Northing: 494616

Type: Pit

Description:

A line of five pits aligned parallel, and to the south of, clearance bank BW 1002. The pits are aligned east/west. The pits might represent sammel pits associated with charcoal-burning platform BW 1004, or they could be tree throws formed as a result of a wind being funnelled through the local topography. The pits measure approximately 3.5m in diameter and 0.7m deep.

OA North Number: BW 1004 Period: Post-medieval/Industrial Name: ?Charcoal-burning Platform, Sparrow Howe Wood Easting: 337756 Northing: 494606 Type: ?Charcoal-burning Platform Description:

A sub-circular charcoal-burning platform on a naturally flat area with minimal modification to the ground surface.

OA North Number: BW 1005 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Sparrow Howe Wood Easting: 337602 Northing: 494557 Type: Charcoal-burning Platform Description: A charcoal-burning platform with a modern track running through the

A charcoal-burning platform with a modern track running through the front edge. It contains one fallen and one standing Birch tree.

OA North Number: BW 1006 Period: Post-medieval/Industrial Name: Quarry, Bishops Wood Easting: 337474 Northing: 494496

Type: Quarry

Description:

A quarry scoop that appears to have been used to extract material to build a boundary wall. The boundary wall was shown on the first edition OS map.

OA North Number: BW 1007 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bishops Wood Easting: 337507 Northing: 494498 Type: Charcoal-burning Platform Description: A probable charcoal-burning platform with a possible boundary marker stone in the north-west corner. Bracken obscures the edge of the platform and a track runs along one edge.

OA North Number: BW 1008 Period: Post-medieval/Industrial Name: Quarry, Bishops Wood Easting: 337467 Northing: 494442 Type: Quarry Description: A quarried outcrop of rock that might have produced material for the construction of a boundary wall. The

stone occurring within the west-facing side of the nearby boundary appears to have been quarried. **OA North Number:** BW 1009 **Period:** Post-medieval/Industrial

Name: Charcoal-burning Platform, Bishops Wood Easting: 337453 Northing: 494361 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform. The northern side comp

A sub-circular charcoal-burning platform. The northern side comprises a lip that is 0.3m high, which protects the site from marshy ground to the north.

OA North Number: BW 1010 Period: Name: Trackway, Bishops Wood Easting: 337500 Northing: 494251 Type: Trackway Description: A track that is marked on the present OS ma

A track that is marked on the present OS map with a slightly different route. The track shows evidence of modern wheel-rutting and is approximately 80m in length.

OA North Number: BW 1011 Period:

Name: Charcoal-burning Platform, Bishops Wood Easting: 337655 Northing: 494255 Type: Charcoal-burning Platform Description:

A sub-circular charcoal-burning platform that is raised by 2m rise at the front. It is located beside a track that runs around the western and south-western sides and a boundary wall lies to the north-north-west.

OA North Number: BW 1012 Period: Post-medieval/Industrial Name: Trackway, Sparrow Howe Wood Easting: 337934 Northing: 494580 Type: Trackway Description: An east/west oriented trackway, leading from the present road to a crossing point over Wilfin Beck. A new wooden bridge over the beck reuses older stone footings.

OA North Number: BW 1013 Period: Post-medieval/Industrial Name: Dam, Sparrow Howe Wood

Easting: 337954 Northing: 494552 Type: Dam Description:

A dam shown on the first edition OS map. The dam contains a beck forming a mill pond, with an abutment at the western side. This appears to have supported a wooden launder that led to a leat to the east. The dam has been extended with modern infill and passes over a small beck.

OA North Number: BW 1014 Period: Name: Leat, Pert Wood Easting: 338064 Northing: 494455 Type: Leat HER Number: 18495 Description:

High Cunsey mill race was shown on the first edition OS map. The race ran from the mill pond (BW 1013), which remains partially defined by extant field boundaries, to the saw mill. The eastern part of the race comprised a cut channel, which led from a raised launder, with stone footings marking the transition. The south-eastern portion of the channel is stone-lined. A modern fence line follows the race.

OA North Number: BW 1015 Period: Post-medieval/Industrial

Name: Lime Kiln, Sparrow Howe Wood Easting: 337905 Northing: 494400 Type: Lime Kiln Description:

A possible lime kiln that forms part of a boundary wall and possibly pre-dates the wall. The structure tapers from the entrance towards the rear, and towards the top. A metal spike that might have been a rail, tie, or nail was found near the entrance. There appears to be an additional point of entrance at the rear of the structure, and there is a depression at the north side that could be a collapsed potash kiln.

OA North Number: BW 1016 **Period:**

Name: Spring, Sparrow Howe Wood Easting: 337919 Northing: 494456 Type: Spring Description:

A stream flows through a boundary wall and into a drainage ingress. It then emerges within a pool that is also filled from a stream running down the field at times of heavy rain.

OA North Number: BW 1017 Period: Name: Field Boundary, Sparrow Howe Wood Easting: 337794 Northing: 494469 Type: Field Boundary Description: A relict field boundary that was marked on the first edition OS map and has an associated lynchet.

OA North Number: BW 1018 Period: Unknown/medieval
Name: Boundary Bank, Sparrow Howe Wood
Easting: 337697 Northing: 494477
Type: Boundary Bank
Description:
An earth and stone bank that incorporates large stones from primary clearance. Modern fencing 3m to the north-west has replaced this boundary.

OA North Number: BW 1019 Period: Name: Gate Pier, Sparrow Howe Wood Easting: 337777 Northing: 494544 Type: Gate Pier Description:

A gate stoop, for a barred gate, with five round holes.

OA North Number: BW 1020 Period: Post-medieval/Industrial
Name: Boundary Bank, Sparrow Howe Wood
Easting: 337866 Northing: 494453
Type: Boundary Bank
Description:
A redundant and slight earth and stone boundary that was shown on the

A redundant and slight earth and stone boundary that was shown on the first edition OS map. The bank is generally up to 0.5m high, but at the eastern end it is up to 1m high.

OA North Number: BW 1021 Period: Name: ?Charcoal-burning Platform, Sparrow Howe Wood Easting: 337869 Northing: 494437 Type: ?Charcoal-burning Platform Description: A probable charcoal-burning platform consisting of a level area with a slight lip.

OA North Number: BW 1022 Period: Name: Charcoal-burning Platform, Pert Wood Easting: 337997 Northing: 494496 Type: Charcoal-burning Platform Description: A charcoal-burning platform, within which charcoal was found. A possible sammel pit lies adjacent to it.

OA North Number: BW 1023 Period: Name: Trackway, Pert Wood Easting: 337927 Northing: 494448 Type: Trackway Description: A trackway running through Pert Wood at the eastern side of Bishop Woods.

OA North Number: BW 1024 Period: Name: Charcoal-burning Platform, Pert Wood Easting: 338045 Northing: 494394 Type: Charcoal-burning Platform Description: A charcoal-burning platform with deer fencing crossing through it.

OA North Number: BW 1025 Period: Name: Wall, Pert Wood Easting: 338054 Northing: 494335 Type: Wall Description: A collapsed and partially grassed and mossed over dry-stone wall within Pert Wood.

OA North Number: BW 1026 Period: Name: Potash Kiln, Long Parrock Easting: 338104 Northing: 494269 Type: Potash Kiln Description: A sub-circular hollow representing a partially infilled potash kiln.

OA North Number: BW 1027 Period: Name: Trackway, Long Parrock Easting: 338075 Northing: 494199 Type: Trackway Description: A trackway within Long Parrock that occurs as both a terraced track and as a hollow way in different areas.

OA North Number: BW 1028 Period: Name: ?Charcoal-burning Platform, Long Parrock Easting: 337977 Northing: 493946 Type: ?Charcoal-burning Platform Description: A possible charcoal-burning platform, overlaid by a trackway (BW 1029).

OA North Number: BW 1029 Period: Name: Trackway, Long Parrock Easting: 337969 Northing: 493931 Type: Trackway Description: A terraced trackway with rutting from modern vehicles. OA North Number: BW 1031 Period: Name: Trackway, Long Parrock Easting: 337788 Northing: 493843 Type: Trackway Description: This trackway passes charcoal-burning platform BW 1030.

OA North Number: BW 1032 Period:

Name: Irregular Enclosure, Bishops Wood Easting: 337540 Northing: 493758 Type: Irregular Enclosure Description:

A small, irregular enclosure incorporating a natural boulder. This feature consists of a dry-stone wall up to three courses high and vertical slate fragments. This may have been a stock enclosure or possibly the foundations of a workman's hut.

OA North Number: BW 2000 Period: Post-medieval/Industrial Name: Retting Pond, Sparrow Howe Wood Easting: 337906 Northing: 494633 Type: Retting Pond Description: A possible retting pond that is ill-defined and lies adjacent to Wilfin Beck. Several low earthen banks are evident.

OA North Number: BW 2001 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Sparrow Howe Wood Easting: 337875 Northing: 494638 Type: Charcoal-burning Platform Description: A sub-oval charcoal-burning platform, within which some charcoal was found.

OA North Number: BW 2002 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Sparrow Howe Wood Easting: 337846 Northing: 494673 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform, within which some charcoal was found.

OA North Number: BW 2003 Period: Post-medieval/Industrial Name: Trackway, Sparrow Howe Wood Easting: 337830 Northing: 494680 Type: Trackway Description: A linear trackway orientated approximately south-east/north-west.

OA North Number: BW 2004 Period: Post-medieval/Industrial Name: Wall, Sparrow Howe Wood Easting: 337808 Northing: 494697 Type: Wall Description: A short linear section of collapsed wall orientated roughly north/south.

OA North Number: BW 2005 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Sparrow Howe Wood Easting: 337763 Northing: 494703 Type: Charcoal-burning Platform Description: A wall-defined sub-circular charcoal-burning platform.

OA North Number: BW 2006 Period: Post-medieval/Industrial Name: Trackway, Sparrow Howe Wood

Easting: 337781 Northing: 494657 Type: Trackway Description: A sinuous trackway that was shown on the first edition OS map.

OA North Number: BW 2007 Period: Post-medieval/Industrial Name: Trackway, Sparrow Howe Wood Easting: 337639 Northing: 494619 Type: Trackway Description: A sinuous trackway that was shown on the first edition OS map.

OA North Number: BW 2008 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Sparrow Howe Wood Easting: 337740 Northing: 494747 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform. Charcoal was found at the site.

OA North Number: BW 2009 Period: Post-medieval/Industrial Name: Trackway, Sparrow Howe Wood Easting: 337725 Northing: 494744 Type: Trackway Description: A short linear section of a trackway.

OA North Number: BW 2010 Period: Post-medieval/Industrial Name: Bridge, Sparrow Howe Wood Easting: 337748 Northing: 494772 Type: Bridge Description:

A slab bridge on an access track into the northern side of Sparrow How Wood, show on the first edition OS map. One large slab is in place, measuring 0.5m wide, on top of the bridge footings. Other slabs have fallen into the stream.

OA North Number: BW 2011 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Sparrow Howe Wood Easting: 337673 Northing: 494753 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform, slightly terraced at its west side.

OA North Number: BW 2012 Period: Post-medieval/Industrial Name: Wall, Sparrow Howe Wood Easting: 337672 Northing: 494642 Type: Wall Description: The sparse remains of wall foundations orientated approximately south-west/north-east.

OA North Number: BW 2013 Period: Post-medieval/Industrial Name: Trackway, Sparrow Howe Wood Easting: 337678 Northing: 494540 Type: Trackway Description: A sinuous trackway shown on the first edition OS map.

OA North Number: BW 2014 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Sparrow Howe Wood Easting: 337691 Northing: 494617 Type: Charcoal-burning Platform Description: 102

A large sub-circular charcoal-burning platform that is slightly terraced.

OA North Number: BW 2015 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Sparrow Howe Wood Easting: 337649 Northing: 494507 Type: Charcoal-burning Platform Description: A large sub-ovoid charcoal-burning platform, within which charcoal was found.

OA North Number: BW 2016 Period: Post-medieval/Industrial Name: Hearth, Bishops Wood Easting: 337467 Northing: 494303 Type: Hearth Description: A poorly preserved hearth of a bark peeler's hut.

OA North Number: BW 2017 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bishops Wood Easting: 337476 Northing: 494293 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform, within which charcoal was found. There is a small scoop at the northern side.

OA North Number: BW 2018 Period: Post-medieval/Industrial Name: Wall, Bishops Wood Easting: 337466 Northing: 494343 Type: Wall Description: The remnants of a linear section of collapsed wall, which was shown on the first edition OS map. It is oriented north/south.

OA North Number: BW 2019 Period: Post-medieval/Industrial Name: Trackway, Bishops Wood Easting: 337419 Northing: 494236 Type: Trackway Description: A sinuous trackway running approximately east-west.

OA North Number: BW 2020 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bishops Wood Easting: 337399 Northing: 494187 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform, within which charcoal was found.

OA North Number: BW 2021 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bishops Wood Easting: 337582 Northing: 494227 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform with low banking surrounding much of the site.

OA North Number: BW 2022 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bishops Wood Easting: 337650 Northing: 494206 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform with low banking at the eastern side and cut into the slope on the western side. Easting: 338016 Northing: 494400 Type: Charcoal-burning Platform **Description:** A platform at the edge of the woods. There is a possible track leading away from this feature.

OA North Number: BW 2024 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Pert Wood Easting: 338017 Northing: 494342 Type: Charcoal-burning Platform **Description:** A platform crossed by a modern forest track on the southern side.

OA North Number: BW 2025 Period: Post-medieval/Industrial

Name: Wall, Long Parrock Easting: 337971 Northing: 494267 Type: Wall **Description:**

OA North Number: BW 2023

A dry-stone boundary wall that terminates at a coppiced Alder at the northern end, with the southern end joining a boundary wall.

OA North Number: BW 2026 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Long Parrock Easting: 337968 Northing: 494035 Type: Charcoal-burning Platform **Description:** A platform at the edge of the woods. Charcoal was found at the site.

OA North Number: BW 2027 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Long Parrock Easting: 337981 Northing: 494036 Type: Charcoal-burning Platform **Description:** A charcoal-burning platform lying to the west of a boundary wall that is crossed by a modern trackway.. Charcoal was found at the site.

OA North Number: BW 2028 Period: Name: Charcoal-burning Platform, Long Parrock Easting: 337889 Northing: 493920 Type: Charcoal-burning Platform **Description:** A charcoal-burning platform, within which charcoal was found.

OA North Number: BW 2029 Period: Name: Charcoal-burning Platform, Long Parrock Easting: 337783 Northing: 493854 Type: Charcoal-burning Platform **Description:** A charcoal-burning platform.

OA North Number: BW 2030 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Long Parrock Easting: 337738 Northing: 493819 Type: Charcoal-burning Platform **Description:**

A charcoal-burning platform, within which charcoal was found. It is riveted at the western side and this survives to a height of 1m and is formed by three dry-stone courses. It lies close to a hazel coppice copse and there is a collapsed boundary wall 5m to the west of the platform.

OA North Number: BW 2031 Period: Post-medieval/Industrial Name: Potash Kiln, Bishops Wood Easting: 337700 Northing: 493717 Type: Potash Kiln Description:

A well-preserved potash kiln. The rear wall shows obvious courses of stones and survives to a height of 1.5m. The surrounding stone banking is up to 1.5m wide and 0.6m high. There is a raking point to the western (Cunsey Brook) side.

OA North Number: BW 2032 Period: Post-medieval/Industrial Name: Wall, Bishops Wood Easting: 337522 Northing: 493812 Type: Wall Description: A dilapidated dry stone boundary wall, which was shown on the first edition OS map.

OA North Number: BW 2033 Period: Post-medieval/Industrial Name: Potash Kiln, Rigg Wood Easting: 337500 Northing: 494200 Type: Earthwork HER Number: 2682 Description: A Charcoal-burning Platform.

OA North Number: BW 2034Period: Post-medieval/IndustrialName: Potash Kiln, Machell Coppice, CunseyEasting: 337750 Northing: 494680Type: Potash KilnHER Number: 30140Description:

A potash Kiln measuring 10 feet by 10 feet by 5 feet included on M Davies Shiels annotated map and list from 1995. This site could not be located during a walk-over survey conducted by Eleanor Kingston in 2004 or during the Windermere Reflections survey in 2012.

THREE BIRKS (TB)

OA North Number: TB 1000 Period: Post-medieval/Industrial Name: Quarry, Baswicks Easting: 337191 Northing: 491677 Type: Quarry Description: A quarry to the north of East Lodge comprising at least three scoops at

A quarry to the north of East Lodge comprising at least three scoops at the southern end of a field. The downslope sides of some rocky knolls have also been quarried with some spoil being evident. The face is 1.75m high.

OA North Number: TB 1001Period: Post-medieval/IndustrialName: Quarry, BaswicksEasting: 337316Northing: 491866Type: QuarryHER Number: 18210Description:

A quarry to the east of North Lodge, which is marked on both the current and first edition OS mapping. It was probably associated with extraction for the estate. The quarry is dug into a rocky outcrop. There is some evidence of spoil, which includes small-grade material that is indicative of on-site dressing.

OA North Number: TB 1003 Period: Post-medieval/Industrial Name: Trackway, Baswicks Easting: 337241 Northing: 491862 Type: Trackway Description: A trackway to the east of North Lodge. The track is sinuous and appears to have utilised material from the quarry (TB 1002). It is shown on both the modern and first edition OS mapping.

OA North Number: TB 1004 Period: Post-medieval/Industrial Name: Retting Pond, Baswicks Easting: 337261 Northing: 491980 Type: Retting Pond Description: A retting pond to the east of North Lodge. The feature comprises a linear earth and stone bank adjacent to a shallow boggy area.

OA North Number: TB 1005 Period: Name: Drain, Baswicks Easting: 337293 Northing: 491961 Type: Drain Description:

A linear drain to the east of North Lodge that was probably associated with retting. It is orientated approximately east/west. The feature consists of up-cast earth banks either side of a shallow depression.

OA North Number: TB 1006 Period: Name: Retting Pond, Baswicks Easting: 337428 Northing: 491885 Type: Retting Pond Description: An area of hemp retting west of Baswicks. The

An area of hemp retting west of Baswicks. The site includes a shallow linear earth bank with a well-defined drain at the eastern end. A long central depression is surrounded by low external banks.

OA North Number: TB 1007 Period: Post-medieval/Industrial Name: Boundary Bank, Baswicks Easting: 337450 Northing: 491787 Type: Boundary Bank Description: A boundary bank to the west of Baswicks. It is curvilinear and abuts an extant wall.
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OA North Number: TB 1008 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Baswicks Easting: 337501 Northing: 491825 Type: Charcoal-burning Platform Description:

A charcoal-burning platform to the south of Baswicks. It is circular in plan with a diameter of 6m and has well-defined edges. Two or three possible sammel pits lie adjacent to the south-western side of the platform.

OA North Number: TB 1009 Period: Post-medieval/Industrial Name: Bark Peeler's Hut, Baswicks Easting: 337604 Northing: 492026 Type: Bark Peeler's Hut Description: The remains of a bark peelers hut, comprising a dry-stone hearth and

The remains of a bark peelers hut, comprising a dry-stone hearth and part of the south wall. The building is built upon a charcoal-burning platform (TB 1010).

OA North Number: TB 1010 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Baswicks Easting: 337602 Northing: 492030 Type: Charcoal-burning Platform Description:

A charcoal-burning charcoal-burning platform in Baswicks. It is sub-circular in plan, with a stone revetment at the northern side. There are two possible sammel pits adjacent on the south-eastern side. Bark Peelers Hut (TB 1009) overlies this platform.

OA North Number: TB 1011 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Baswicks Easting: 337582 Northing: 491960 Type: Charcoal-burning Platform Description: A charcoal-burning platform in Baswicks Wo

A charcoal-burning platform in Baswicks Wood. It is sub-circular in plan and measures approximately 8m in diameter and has well-defined edges.

OA North Number: TB 1012 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Baswicks

Easting: 337648 Northing: 492041

Type: Charcoal-burning Platform

Description:

A possible small charcoal-burning platform in Baswicks Wood. There is some indication of a front lip and slumping may have obscured the rear of the platform.

OA North Number: TB 1013 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Baswicks Easting: 337642 Northing: 491996 Type: Charcoal-burning Platform Description:

A charcoal-burning platform in Barswick. It is located within a large and naturally flat area and two possible sammel pits lie adjacent. Charcoal was found at the site.

OA North Number: TB 1014 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Baswicks Easting: 337659 Northing: 492056 Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform with a stone revetment at the north-eastern side. There is a possible sammel pit to the south-west.

OA North Number: TB 1015 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Baswicks Easting: 337716 Northing: 492058

Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform, which is cut by a track. There is a possible sammel pit to the west of the site.

OA North Number: TB 1016 Period: Post-medieval/Industrial Name: Trackway, Baswicks Easting: 337727 Northing: 492052 Type: Trackway Description: A rough and poorly defined trackway with evidence of terracing and disturbance by modern wheel rutting.

OA North Number: TB 1017 Period: Post-medieval/Industrial Name: Gravel Pit, Low Cat Crag Easting: 337777 Northing: 492032 Type: Gravel Pit Description: A gravel quarry that is shown on the current mapping and is like

A gravel quarry that is shown on the current mapping and is likely to have been associated with road construction. Three depressions form the quarry.

OA North Number: TB 1018 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Baswicks Easting: 337695 Northing: 492033 Type: Charcoal-burning Platform Description:

A sub-circular charcoal-burning platform in Baswicks with a diameter of 8m. The feature is adjacent to track TB 1016 and is well-preserved with a low revetment at the eastern side. Charcoal was found at the site.

OA North Number: TB 1019 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Low Cat Crag Easting: 337793 Northing: 492027 Type: Charcoal-burning Platform

Description:

A charcoal-burning platform in Baswick's Wood that is approximately semi-circular. The platform is conspicuously terraced and has a 2m high bank. The site has been truncated by the road.

OA North Number: TB 1020 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Low Cat Crag

Easting: 337827 Northing: 492023

Type: Charcoal-burning Platform

Description:

A large charcoal-burning platform to the east of the road within Baswicks and to the south of little Baswick. The front lip, to the north, is 1m high and charcoal was found at the site.

OA North Number: TB 1021 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Low Cat Crag Easting: 337586 Northing: 491843 Type: Charcoal-burning Platform Description:

A charcoal-burning platform to the south of Baswicks immediately to the east of the road. It has been terraced into the slope and the front lip is situated at the north-eastern side.

OA North Number: TB 1022 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Moss End Wood Easting: 337644 Northing: 492125 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Baswicks Wood

A sub-circular charcoal-burning platform located in Baswicks Wood. The platform is crossed by a trackway and charcoal was found at the site.

OA North Number: TB 1023 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Moss End Wood Easting: 337602 Northing: 492078 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Baswicks Wood. It is crossed by a trackway on the north-western side.

 OA North Number: TB 1024
 Period: Post-medieval/Industrial

 Name: Charcoal-burning Platform, Moss End Wood
 Easting: 337400 Northing: 492216

 Type: Charcoal-burning Platform
 Description:

 A sub-circular charcoal-burning platform located in Moss End Wood. It has a well-defined retaining wall on the eastern side.

OA North Number: TB 1025Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Briar ShotEasting: 337404 Northing: 492304Type: Charcoal-burning PlatformDescription:A sub-circular charcoal-burning platform located in Briar Shot Wood. The feature is crossed by a trackwayand is cut into the slope at the northern side.

OA North Number: TB 1026 Period: Post-medieval/Industrial Name: Trackway, Briar Shot Easting: 337370 Northing: 492325 Type: Trackway Description: A trackway located in Briar Shot Wood and constructed with cinder surfacing.

OA North Number: TB 1027 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Briar Shot Easting: 337465 Northing: 492352 Type: Charcoal-burning Platform Description: A small sub-circular charcoal-burning platform located in Briar Shot Wood. It is crossed by trackway TB 1026. There is a possible sammel pit at the northern side of the feature.

OA North Number: TB 1028Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Bark House WoodEasting: 337516 Northing: 492310Type: Charcoal-burning PlatformDescription:A sub-circular charcoal-burning platform located in Moss End Wood. The feature is adjacent to the boundarywall.

OA North Number: TB 1029 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bark House Wood Easting: 337539 Northing: 492327 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Bark House Wood. It is a well-defined terraced platform with a dry-stone revetment.

OA North Number: TB 1030 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Moss End Wood Easting: 337478 Northing: 492246 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Moss End Wood. OA North Number: TB 1031 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Moss End Wood Easting: 337505 Northing: 492230 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Moss End Wood.

OA North Number: TB 1032Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Moss End WoodEasting: 337579 Northing: 492170Type: Charcoal-burning PlatformDescription:A sub-circular charcoal-burning platform located in Moss End Wood. There is a possible sammel pit to the west of the feature.

OA North Number: TB 1033Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Moss End WoodEasting: 337614 Northing: 492190Type: Charcoal-burning PlatformDescription:A sub-circular charcoal-burning platform located in Moss End Wood. There is a possible sammel pit at north-eastern side.

OA North Number: TB 1034 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bark House Wood Easting: 337690 Northing: 492184 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Bark House W

A sub-circular charcoal-burning platform located in Bark House Wood. There is a bark peeler's hut at the north-north-eastern edge of the feature (TB 1035). A north/south aligned wall has been used as a retaining wall for the platform.

OA North Number: TB 1035Period: Post-medieval/IndustrialName: Bark Peeler's Hut, Bark House WoodEasting: 337687 Northing: 492191Type: Bark Peeler's HutDescription:A bark peeler's hut located in Bark House wood. Only the stone hearth is extant. It is located on a charcoal-
burning platform (TB 1034).

OA North Number: TB 1036 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bark House Wood Easting: 337702 Northing: 492173 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Moss End. It has been terraced into a slope.

OA North Number: TB 1037 Period: Name: Charcoal-burning Platform, Bark House Wood Easting: 337748 Northing: 492182 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Bark House Wood.

OA North Number: TB 1038 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bark House Wood Easting: 337741 Northing: 492256 Type: Charcoal-burning Platform Description:

 OA North Number: TB 1039
 Period: Post-medieval/Industrial

 Name: Charcoal-burning Platform, Bark House Wood
 Easting: 337755 Northing: 492276

 Type: Charcoal-burning Platform
 Description:

 A sub-ovoid charcoal-burning platform in Bark House Wood, to the north of a bark peeler's hut. It is a well defined terraced platform.

OA North Number: TB 1040 Period: Post-medieval/Industrial Name: Bark Barn, Bark House Wood Easting: 337744 Northing: 492299 Type: Bark Peeler's Hut Description:

Building foundations for a bark barn located at Bark House Wood. The foundations are rectangular and define a single cell terraced into the slope. The southern wall is 0.8m high and there is a possible semicircular cleared yard on the north-eastern side, and a track running along the eastern side.

OA North Number: TB 1041 Period: Post-medieval/Industrial

Name: Bark Peeler's Hut, Bark House Wood Easting: 337700 Northing: 492400 Type: Bark Peeler's Hut Description: The remains of the chimney of a bark peeler's hut locate

The remains of the chimney of a bark peeler's hut located in Bark House Wood. There is no other evidence of the hut. The feature is adjacent to a charcoal-burning platform (TB 1042).

OA North Number: TB 1042 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Bark House Wood Easting: 337715 Northing: 492400 Type: Charcoal-burning Platform

Description:

A charcoal-burning platform in Bark House Wood. It is sub-circular, with a depression in the centre. There is an embankment surrounding the feature. Charcoal was found at the site.

OA North Number: TB 1043 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Bark House Wood

Easting: 337682 Northing: 492338

Type: Charcoal-burning Platform

Description:

A charcoal-burning platform located in Bark House Wood. It is sub-circular in plan and is terraced into the slope. A slight lip is evident at the northern side. Charcoal was found at the site.

OA North Number: TB 1044 Period: Post-medieval/Industrial Name: Bark Peeler's Hut, Bark House Wood Easting: 337603 Northing: 492305 Type: Bark Peeler's Hut Description:

Description:

The remains of the hearth of a possible bark peeler's hut in Bark House Wood. Stones appear to delineate the outer edge of the site.

OA North Number: TB 1045Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Bark House WoodEasting: 337595 Northing: 492259Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Bark House Wood. It is sub-circular in plan and sits on top of a crag.The feature is terraced into the slope.

OA North Number: TB 1046 Period: Post-medieval/Industrial Name: Trackway, Bark House Wood Easting: 337874 Northing: 492219 Type: Trackway Description: A track located in Bark House wood with a revetment wall at the eastern side.

OA North Number: TB 1047 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bark House Wood Easting: 337811 Northing: 492195 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Bark House Wood. Th

A sub-circular charcoal-burning platform located in Bark House Wood. There is a possible sammel pit at the south-western side and charcoal was found at the site.

OA North Number: TB 1048Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Bark House WoodEasting: 337811Northing: 492238Type: Charcoal-burning PlatformDescription:A sub-circular charcoal-burning platform located in Bark House Wood. Charcoal was found at the site.

OA North Number: TB 1049 Period: Post-medieval/Industrial Name: Trackway, Bark House Wood Easting: 337804 Northing: 492245 Type: Trackway Description: A trackway located in Bark House Wood. The track is sinuous and is aligned south-west/north-east.

OA North Number: TB 1050 Period: Name: Boundary Bank, Bark House Wood Easting: 337839 Northing: 492257 Type: Boundary Bank Description: A sub-divisional boundary bank on a stream located in Bark House Wood.

OA North Number: TB 1051 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bark House Wood Easting: 337854 Northing: 492248 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Bark House Wood. Charcoal was found at the site.

OA North Number: TB 1052 Period: Name: Charcoal-burning Platform, Bark House Wood Easting: 337858 Northing: 492289 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Bark House Wood. A trackway runs to the western side of the platform and charcoal was found at the site.

 OA North Number: TB 1053
 Period: Post-medieval/Industrial

 Name: Charcoal-burning Platform, Bark House Wood
 Easting: 337851 Northing: 492380

 Type: Charcoal-burning Platform
 Description:

 A charcoal-burning platform located in Bank House Wood. The platform is clearly defined and charcoal was found at the site.

OA North Number: TB 1054 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Bark House Wood

Easting: 337798 **Northing:** 492374 **Type:** Charcoal-burning Platform **Description:**

A charcoal-burning platform located in Bark House Wood. There are two possible sammel pits at the southern side of the platform and charcoal was found at the site.

OA North Number: TB 1055 Period: Name: Trackway, Holme Well Wood Easting: 337894 Northing: 492520 Type: Trackway Description: A trackway located in Holme Well Wood. It leads to a charcoal-burning platform.

OA North Number: TB 1056 Period: Name: Charcoal-burning Platform, Holme Well Wood Easting: 337850 Northing: 492459 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Holme Well Wood. Charcoal was found at the site.

OA North Number: TB 1057 Period: Name: Charcoal-burning Platform, Holme Well Wood Easting: 337816 Northing: 492455 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Holme Well Wood. Charcoal was found at the site.

OA North Number: TB 1058 Period: Name: Charcoal-burning Platform, Holme Well Wood Easting: 337818 Northing: 492495 Type: Charcoal-burning Platform Description:

A charcoal-burning platform located in Holme Well Wood. Charcoal was found at the site. The feature lies within a boggy area, which is covered with branches.

OA North Number: TB 1059 Period: Name: Charcoal-burning Platform, Holme Well Wood Easting: 337856 Northing: 492534 Type: Charcoal-burning Platform Description:

A charcoal-burning platform located in Holme Well Wood. Charcoal was found at the site and a possible sammel pit is situated to the north-east of the feature.

OA North Number: TB 1060Period:Name: Charcoal-burning Platform, Holme Well WoodEasting: 337905 Northing: 492533Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Holme Well Wood. Charcoal was found at the site. A trackway lies to the south of the feature.

OA North Number: TB 1061 Period: Name: Trackway, Holme Well Wood Easting: 337788 Northing: 492475 Type: Trackway Description: A track located in Bark House Wood. The track forms a junction with trackway TM 1062 and skirts a charcoal-burning platform.

OA North Number: TB 1062 Period: Name: Trackway, Holme Well Wood A track located in Bank House Wood. The track joins with trackway TB 1061 and leads to a charcoalburning platform (TB 1063).

OA North Number: TB 1063Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Holme Well WoodEasting: 337735 Northing: 492530Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Bank House Wood. Charcoal was found at the site. The feature is situated in a saturated area.

OA North Number: TB 1064 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Holme Well Wood Easting: 337738 Northing: 492555 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Bank House Wood. Charcoal was found at the site.

OA North Number: TB 1065Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Holme Well WoodEasting: 337753 Northing: 492565Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Bank House Wood. There is a possible sammel pit located to the east of the platform. Charcoal was found at the site.

OA North Number: TB 1066 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Holme Well Wood Easting: 337765 Northing: 492459 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Bank House Wood. There are two sub-ovoid possible sammel pits 25m to the north-east. Charcoal was found at the site.

OA North Number: TB 1067 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Holme Well Wood Easting: 337785 Northing: 492493 Type: Charcoal-burning Platform Description: A shellow charcoal burning platform located in Bank House Wood. Charcoal was

A shallow charcoal-burning platform located in Bank House Wood. Charcoal was found at the site.

OA North Number: TB 1068Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Holme Well WoodEasting: 337857 Northing: 492530Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Bank House Wood. There is a possible sammel pit to the north-east of the platform. A large flat stone is situated 25m to the south.

OA North Number: TB 1069Period:Name: Charcoal-burning Platform, Holme Well WoodEasting: 337945Northing: 492566Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Holme Well Wood. Charcoal was found at the site.

OA North Number: TB 1070 Period: Name: Charcoal-burning Platform, Holme Well Wood

Easting: 337906 Northing: 492518

Type: Charcoal-burning Platform

Description:

A charcoal-burning platform located in Holme Well Wood. Charcoal was found at the site. A trackway lies to the north of the feature.

OA North Number: TB 1071 Period: Name: Charcoal-burning Platform, Holme Well Wood Easting: 337981 Northing: 492588 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Holme Well wood. Charcoal was found at the site, although the platform was obscured by fallen branches.

OA North Number: TB 1072 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Holme Well Wood Easting: 337895 Northing: 492700 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Holme Well Wood. Possi

A sub-circular charcoal-burning platform located in Holme Well Wood. Possible sammel pits were found to the east and west of the site.

OA North Number: TB 1073 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Holme Well Wood Easting: 337759 Northing: 492662 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Holme Well Wood. Charcoal was found at the site. There is an Lshaped possible sammel pit located to the north-east of the platform.

OA North Number: TB 1074 Period: Post-medieval/Industrial Name: Trackway, Holme Well Wood Easting: 337744 Northing: 492622 Type: Trackway Description: A trackway located in Holme Well Wood leading to charcoal-burning platform TB 1086.

OA North Number: TB 1077 Period: Post-medieval/Industrial Name: Trackway, Middle How Wood Easting: 337050 Northing: 491988 Type: Trackway Description: A trackway located in Middle How Wood.

OA North Number: TB 1078 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Middle How Wood Easting: 337031 Northing: 492028 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Middle How Wood. There is a possible sammel pit on the western side of the feature. Charcoal was found at the site.

OA North Number: TB 1079 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Middle How Wood Easting: 337028 Northing: 491941 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Middle How W

A sub-circular charcoal-burning platform located in Middle How Wood. The platform has a well-defined bank. There is a possible sammel pit on the western side of the feature. Charcoal was found at the site.

OA North Number: TB 1080 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Holme Well Wood Easting: 337970 Northing: 492688 Type: Charcoal-burning Platform Description: A shallow charcoal-burning platform located in Bank House Wood. There is a possible sammel pit to the north-west of the platform and charcoal was found at the site.

OA North Number: TB 1081 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Holme Well Wood Easting: 337898 Northing: 492659 Type: Charcoal-burning Platform Description: A shallow charcoal-burning platform located in Bank House Wood. A track runs to the western side of the platform (TB 1083).

OA North Number: TB 1082Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Holme Well WoodEasting: 337879 Northing: 492666Type: Charcoal-burning PlatformDescription:A shallow charcoal-burning platform located in Bank House Wood. There is a possible sammel pit to the south of the platform. The feature is crossed by a track (TB 1083).

OA North Number: TB 1083 Period: Post-medieval/Industrial Name: Trackway, Holme Well Wood Easting: 337853 Northing: 492662 Type: Trackway Description: A trackway located in Bank House Wood. It skirts two charcoal-burning platforms (TB 1081 and 1082).

OA North Number: TB 1084 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Holme Well Wood Easting: 337827 Northing: 492614 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Bank House Wood. Charcoal was found at the site.

OA North Number: TB 1085 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Holme Well Wood Easting: 337802 Northing: 492575 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Bankhouse Wood. The platform has a well defined front edge and charcoal was found at the site.

OA North Number: TB 1086 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Holme Well Wood Easting: 337769 Northing: 492629 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Holme Well Wood. Charcoal was found at the site, which was skirted by a sinuous track (TB 1074).

OA North Number: TB 1087 Period: Name: Gate Pier, Middle How Wood Easting: 337221 Northing: 492030 Type: Gate Pier Description: A broken gate stoop with a square cross-section located in Moss End Wood. OA North Number: TB 1088 Period: Post-medieval/Industrial Name: Boundary Wall, Middle How Wood Easting: 337075 Northing: 492037 Type: Boundary Wall Description: A boundary wall located in Middle How Wood. It is north/south aligned and formed an internal division in Middle How Woods.

OA North Number: TB 1089 Period: Name: Charcoal-burning Platform, Middle How Wood Easting: 337184 Northing: 491989 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Middle How Wood. The feature lies 150m to the north-east of a small stream.

OA North Number: TB 1090 Period: Name: Charcoal-burning Platform, Middle How Wood Easting: 337131 Northing: 491941 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Middle How W

A charcoal-burning platform located in Middle How Wood. The rear wall has slumped and a tree stump is situated at the rear of the platform. There is a boundary wall to the east, immediately adjacent to the platform. Charcoal was found at the site.

OA North Number: TB 1091 Period: Name: Trackway, Middle How Wood Easting: 337045 Northing: 491930 Type: Trackway Description: A trackway located in Middle How Wood.

OA North Number: TB 1092 Period: Post-medieval/Industrial Name: Trackway, Middle How Wood Easting: 337010 Northing: 492103 Type: Trackway Description: A trackway located in Middle How Wood.

OA North Number: TB 1093 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Middle How Wood Easting: 336998 Northing: 492084 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Middle How Wood. Charcoal was found at the site.

OA North Number: TB 1094 Period: Post-medieval/Industrial Name: Trackway, Middle How Wood Easting: 337016 Northing: 492215 Type: Trackway Description: A curvilinear trackway located in Middle How Woods.

OA North Number: TB 1095 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Middle How Wood Easting: 336981 Northing: 492195 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Middle How Wood. Charcoal was found at the site. It is situated near a trackway.

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OA North Number: TB 1096 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Middle How Wood Easting: 336968 Northing: 492174 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Middle How Wood. Charcoal was found at the site.

OA North Number: TB 1097 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Middle How Wood Easting: 337046 Northing: 492187 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Middle How Wood. Charcoal was found at the site. A possible sammel pit is situated at the northern side.

OA North Number: TB 1098Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Briar ShotEasting: 337240 Northing: 492302Type: Charcoal-burning PlatformDescription:A circular charcoal-burning platform located in Middle How Wood. Charcoal was found at the site.

OA North Number: TB 1099 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Briar Shot Easting: 337334 Northing: 492257 Type: Charcoal-burning Platform Description: A circular charcoal-burning platform located in Middle How Wood. Charcoal was found at the site.

OA North Number: TB 1100Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Briar ShotEasting: 337415 Northing: 492408Type: Charcoal-burning PlatformDescription:A sub-circular charcoal-burning platform located in Briar Shot. Charcoal was found at the site.

OA North Number: TB 1101 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Briar Shot Easting: 337468 Northing: 492439 Type: Charcoal-burning Platform Description: A sub circular charcoal burning platform located in Briar Shot. Charcoal was

A sub-circular charcoal-burning platform located in Briar Shot. Charcoal was found at the site and a possible sammel pit is situated to the east of the feature.

OA North Number: TB 1102Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Briar ShotEasting: 337611Northing: 492522Type: Charcoal-burning PlatformDescription:A sub-circular charcoal-burning platform located in Briar Shot. Charcoal was found at the site.

OA North Number: TB 1103 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Briar Shot Easting: 337638 Northing: 492622 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Briar Shot. Trackway TB 2005 crosses the platform and

A sub-circular charcoal-burning platform located in Briar Shot. Trackway TB 2005 crosses the platform and charcoal was found at the site.

OA North Number: TB 1104 Period: Post-medieval/Industrial Name: Trackway, Briar Shot Easting: 337391 Northing: 492428 Type: Trackway Description: A trackway located in Briar Shot.

OA North Number: TB 1105Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Briar ShotEasting: 337364Northing: 492422Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Briar shot. Charcoal was found at the site.

OA North Number: TB 1106Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Briar ShotEasting: 337317 Northing: 492417Type: Charcoal-burning PlatformDescription:A charcoal-burning platform located in Briar shot. Charcoal was found at the site.

OA North Number: TB 1107 Period: Post-medieval/Industrial Name: Trackway, Briar Shot Easting: 337225 Northing: 492348 Type: Trackway Description: A curving trackway located in Briar Shot.

OA North Number: TB 1108 Period: Post-medieval/Industrial Name: Trackway, Middle How Wood Easting: 337236 Northing: 492136 Type: Trackway Description: A trackway located in Middle How Wood.

OA North Number: TB 1109 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Three Birks Wood Easting: 338092 Northing: 492738 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform.

OA North Number: TB 1110 Period: Post-medieval/Industrial Name: Trackway, Three Birks Wood Easting: 338103 Northing: 492806 Type: Trackway Description:: A trackway located in Holme Well Wood. The track is aligned north-east/south-west.

OA North Number: TB 1111 Period: Post-medieval/Industrial Name: Trackway, Three Birks Wood Easting: 338063 Northing: 492840 Type: Trackway Description: A trackway located in Holme Well Wood.

OA North Number: TB 1112 Period: Post-medieval/Industrial Name: Trackway, Three Birks Wood Easting: 338052 Northing: 492883 Type: Trackway Description: A sinuous trackway located in Holme Well Wood.

OA North Number: TB 1113 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Three Birks Wood

Easting: 338045 Northing: 492892

Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform located in Holme Well Wood. The feature is slightly terraced. There is a small flat stone near located on the north-western side.

OA North Number: TB 1114 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Three Birks Wood Easting: 337584 Northing: 492859 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Holme Well Wood. The feature is slightly terraced.

OA North Number: TB 1115 Period: Name: Charcoal-burning Platform, Three Birks Wood Easting: 337981 Northing: 492887 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Holme Well Wood. The feature is slightly terraced and banked.

OA North Number: TB 1116 Period: Name: Charcoal-burning Platform, Three Birks Wood Easting: 337966 Northing: 492905 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Holme Well Wood. The feature is slightly terraced.

OA North Number: TB 1117 Period: Name: Charcoal-burning Platform, Three Birks Wood Easting: 337879 Northing: 492999 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Three Birks Wood. The feature is slightly terraced.

OA North Number: TB 1118 Period: Name: Charcoal-burning Platform, Three Birks Wood Easting: 337874 Northing: 492870 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Three Birks Wood. The feature is adjacent to a stream.

OA North Number: TB 1119 Period: Name: Charcoal-burning Platform, Holme Well Wood Easting: 337832 Northing: 492723 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Three Birks Wood. Charcoal was found at the site. The platform is adjacent to a bark peeler's hut (TB 1120).

OA North Number: TB 1120Period: Post MedievalName: Bark Peeler's Hut, Holme Well WoodEasting: 337797Northing: 492716Type: Bark Peeler's HutDescription:A well-preserved dry-stone hearth and platform of a bark peeler's hut located in Three Birks Wood.

OA North Number: TB 1121 Period: Name: Charcoal-burning Platform, Holme Well Wood Easting: 337806 Northing: 492754 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Three Birks Wood. The feature is slightly terraced.

OA North Number: TB 1122 Period: Name: Trackway, Holme Well Wood Easting: 337743 Northing: 492690 Type: Trackway Description: A north-east/south-west aligned sinuous trackway located in Three Birks Wood.

 OA North Number: TB 1123
 Period:

 Name: Charcoal-burning Platform, Holme Well Wood

 Easting: 337683 Northing: 492681

 Type: Charcoal-burning Platform

 Description:

 A sub-circular charcoal-burning platform located in Three Birks Wood. There is a possible sammel pit to the south of the platform.

OA North Number: TB 1124 Period: Name: Trackway, Holme Well Wood Easting: 337665 Northing: 492713 Type: Trackway Description: A linear trackway located in Three Birks Wood. It is aligned east/west and joins the eastern end of another trackway (TB 3007).

OA North Number: TB 1125 Period: Name: Charcoal-burning Platform, Three Birks Wood Easting: 337625 Northing: 492789 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Three Birks Wood.

OA North Number: TB 1126 Period: Name: Boundary Stone, Three Birks Wood Easting: 337548 Northing: 492826 Type: Boundary Stone Description:

A possible coupe stone located in Briar Shot. The stone is an angular slab that has become slightly titled. It is situated 100m from another coupe stone (TB 3012).

OA North Number: TB 2000 Period: Name: Charcoal-burning Platform, Middle How Wood Easting: 337047 Northing: 492089 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Middle How Wood. Charcoal was found at the site. A track lies 10m to the east.

OA North Number: TB 2001 Period: Name: Trackway, Middle How Wood Easting: 337082 Northing: 492146 Type: Trackway Description:

A terraced trackway located in Middle How Wood. The course of the track becomes unclear on level ground. There are modern wheel ruts in a marshy area that may follow the course of the older track. The track becomes more clearly defined to the east, where it traverses a ridge.

OA North Number: TB 2002 Period: Name: Potash Kiln, Middle How Wood Easting: 337126 Northing: 492246 Type: Potash Kiln Description:

A potash kiln located in Middle How Wood. It is constructed from coursed and is in extremely good condition. The opening of the feature is to the north. It is 2m wide at the base and 5m wide at the top.

OA North Number: TB 2003 Period: Name: Boundary Wall, Briar Shot Easting: 337305 Northing: 492409 Type: Boundary Wall Description: An old dry-stone boundary wall located in Middle How Wood. It was depicted on the first edition OS map. It is badly tumbled and may have been partially robbed out.

OA North Number: TB 2004 Period: Name: Trackway, Bark House Wood Easting: 337537 Northing: 492388 Type: Trackway Description: A sinuous trackway located in middle How Wood.

OA North Number: TB 2005 Period: Name: Trackway, Briar Shot Easting: 337605 Northing: 492601 Type: Trackway Description: A sinuous trackway located in Middle How Wood, which crosses charcoal-burning platform TB 1103.

OA North Number: TB 2006 Period: Name: Charcoal-burning Platform, Briar Shot Easting: 337492 Northing: 492572 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Middle How Wood.

OA North Number: TB 2007 Period: Name: Boundary Wall, Middle How Wood Easting: 337201 Northing: 492163 Type: Boundary Wall Description: A boundary wall located in Middle How Wood aligned approximately east/west.

OA North Number: TB 2008 Period: Name: Charcoal-burning Platform, Middle How Wood Easting: 337138 Northing: 492077 Type: Charcoal-burning Platform Description: A charcoal-burning platform located in Middle How Wood. The southern side of the site is crossed on the by a track.

OA North Number: TB 3000 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Three Birks Wood Easting: 338119 Northing: 492920 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Holme House Wood. OA North Number: TB 3001 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Three Birks Wood Easting: 338009 Northing: 492940 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Holme House Wood. A possible sammel pit is associated with the feature.

OA North Number: TB 3002 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Three Birks Wood Easting: 337996 Northing: 492966 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Home House Wood.

OA North Number: TB 3003 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Three Birks Wood Easting: 337996 Northing: 492966 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Holme House Wood. The feature is slightly terraced.

OA North Number: TB 3004 Period: Post-medieval/Industrial Name: Boundary Bank, Three Birks Wood Easting: 337875 Northing: 493020 Type: Boundary Bank Description: A curvilinear boundary bank located in Three Birks Wood.

OA North Number: TB 3005 Period: Post medieval Name: Charcoal-burning Platform, Three Birks Wood Easting: 337830 Northing: 492961 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform located in Three Birks Wood. A possible sammel pit is associated with the feature.

OA North Number: TB 3006 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Three Birks Wood Easting: 337778 Northing: 492887 Type: Charcoal-burning Platform Description: A sub-circular platform located in Three Birks Wood.

OA North Number: TB 3007 Period: Post-medieval/Industrial Name: Trackway, Holme Well Wood Easting: 337732 Northing: 492734 Type: Trackway Description: A sinuous trackway located in Three Birks Wood.

OA North Number: TB 3008Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Holme Well WoodEasting: 337735 Northing: 492739Type: Charcoal-burning PlatformDescription:A sub-circular charcoal-burning platform located in Three Birks Wood. There is a possible sammel pitassociated with the feature. It is situated next to a trackway (TB 3007).

OA North Number: TB 3009 Period: Post-medieval/Industrial Name: Trackway, Holme Well Wood

Easting: 337741 Northing: 492714 Type: Trackway Description:

A short sinuous trackway located in Three Birks Wood, which joins two larger trackways (TB 3007 and TB 1122).

OA North Number: TB 3010Period: Post-medieval/IndustrialName: Charcoal-burning Platform, Holme Well WoodEasting: 337708 Northing: 492718Type: Charcoal-burning PlatformDescription:A sub-circular charcoal-burning platform located in Three Birks Wood. There is a possible sammel pitassociated with the feature. It is situated next to trackway (TB 3007).

OA North Number: TB 3011 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Three Birks Wood Easting: 337676 Northing: 492753

Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform located in Three Birks Wood. There is a possible sammel pit associated with the feature.

OA North Number: TB 3012 Period: Post-medieval/Industrial Name: Boundary Stone, Three Birks Wood Easting: 337579 Northing: 492773 Type: Boundary Stone Description: A standing slate coupe stone or boundary marker located in Briar Shot. Possibly associated with a nearby stone (TB 1126).

LITTLE ORE GATE (LOG)

OA North Number: LOG 1001 Period: Post-medieval Name: Quarry, Little Ore Gate Easting: 336821 Northing: 493098 Type: Quarry Description:

A worked scoop adjacent to the modern road, measuring 6m in diameter. A terrace has been set into the slope with a lip at the southern end. It is flat-based with a bank on its eastern side. This is possibly a quarry scoop or a kiln.

OA North Number: LOG 1002 Period:

Name: Trackway, Little Ore Gate Easting: 336844 Northing: 493201 Type: Trackway

Description:

An early track, cut into the slope and lying adjacent to a quarry (LOG 1001). There is a slight gully present and the track is orientated up the slope towards the modern road.

OA North Number: LOG 1003 Period: Post-medieval

Name: Charcoal-burning Platform, Little Ore Gate Easting: 336822 Northing: 493162 Type: Charcoal-burning Platform Description:

A possible charcoal-burning platform, which has been terraced into the slope with a slight lip on the north side.

OA North Number: LOG 1004 Period: Post-medieval Name: Trackway, Little Ore Gate Easting: 336841 Northing: 493237 Type: Trackway Description:

A sinuous track which has been terraced into the slope. It is built up on its southern side and appears to have been well-constructed. It appears to be of some antiquity and has mature trees growing in the associated bank.

OA North Number: LOG 1005 Period: Post-medieval ? Name: Potash kiln?, Little Ore Gate Easting: 336841 Northing: 493232 Type: Potash kiln? Description: A scoop that appears to be man-mad and faces onto a stree

A scoop that appears to be man-mad and faces onto a stream. The function is unknown, but its size and context set into a slope, and its association with a water supply could be indicative of a small kiln.

OA North Number: LOG 1006 Period: Post-medieval ? Name: Leat, Little Ore Gate Easting: 337033 Northing: 493285 Type: Leat

Description:

This is an artificial channel for water, possibly a culvert. It was evidently fed by a small stream, just above its western end, but may also have been fed by the main steam that it extends up to. It follows the contours and converges with the putative fulling mill LOG 1007. It has been impacted by a forest track, and has either been adopted, formed in part or even potentially wholly by the track. It has two large parallel gullies which are potentially wheel ruts.

OA North Number: LOG 1007 Period: Medieval Name: Fulling Mill?, Little Ore Gate Easting: 337098 Northing: 493297

Type: Fulling Mill? **Description:**

A rectangular structure with an internal partition and a wall that is 0.4m thick. The northern side of the building lies adjacent to a stream. A wide earth bank extends to the north, which may have originally supported by a wooden launder. The bank extends from a large leat (LOG 1006). An apparent wheel pit corresponds with the line of the stream and a tail race leads southwards into the main stream.

OA North Number: LOG 1009 Period: Post-medieval Name: Boundary, Little Ore Gate Easting: 336827 Northing: 492924 Type: Boundary Description: A large earth bank associated with a ditch. This may have been a field boundary.

OA North Number: LOG 2000 Period: Industrial/modern Name: Trackway, Little Ore Gate Easting: 336848 Northing: 493093 Type: Trackway Description: A sinuous trackway aligned approximately east/west and represented by an eroded hollow with indications of

OA North Number: LOG 2001 Period: Industrial/modern Name: Trackway, Little Ore Gate Easting: 336891 Northing: 493205 Type: Trackway Description: A sinuous terraced trackway with indications of modern vehicle usage.

modern vehicle rutting. It has been picked free of loose stones.

OA North Number: LOG 2002 Period: Industrial Name: Coppice, Little Ore Gate Easting: 336927 Northing: 493297 Type: Coppice Description: Overgrown coppice stools of alder and hazel.

OA North Number: LOG 2003 Period: Industrial/modern Name: Trackway, Little Ore Gate Easting: 336882 Northing: 493389 Type: Trackway Description: A sinuous track running approximately parallel to a boundary wall.

OA North Number: LOG 2004 Period: Post-medieval Name: Quarry, Little Ore Gate Easting: 336812 Northing: 493403 Type: Quarry Description: This is a D-shaped roadside slate-quarry.

OA North Number: LOG 2005 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Little Ore Gate Easting: 337083 Northing: 493296 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform to the eastern side of a leat. The

A sub-ovoid charcoal-burning platform to the eastern side of a leat. There are trees growing along its eastern edge and charcoal has been found at the site.

OA North Number: LOG 2006 Period: Post-medieval/Industrial Name: Potash kiln, Little Ore Gate Easting: 337145 Northing: 493302

Type: Potash kiln **Description:**

This sub-ovoid scoop that narrows towards the western edge and is set into the side of the river bank. It has a slight bank on the outside, and an aperture facing westwards. It has the characteristic form of a potash kiln

OA North Number: LOG 2007 Period: Post-medieval Name: Coppice, Little Ore Gate Easting: 337119 Northing: 493189 Type: Coppice Description: An area of overgrown alder coppice occupying a saturated area of woodland.

OA North Number: LOG 2008 Period: Name: Hollow Way, Little Ore Gate Easting: 336922 Northing: 493071 Type: Hollow Way Description: A sinuous hollow way that has been cleared of loose stones and has become overgrown with grass.

OA North Number: LOG 2009 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Little Ore Gate Easting: 337010 Northing: 493235 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform to the north-western side of leat LOG 1006. It is terraced into the

south-facing slope and its forward lip coincides with the leat.

SUMMER HOUSE KNOTT (SMK)

OA North Number: SMK 1000 Period: Post Medieval/Industrial Name: Charcoal-burning Platform, Water Side Knott Easting: 337211 Northing: 486844 Type: Charcoal-burning Platform **Description:** A charcoal-burning platform cut by a path at the western side. Charcoal was found at the site.

OA North Number: SMK 1001 **Period:** Post Medieval/Industrial

Name: Seat, Water Side Knott Easting: 337218 Northing: 486874 **Type:** Seat

Description:

A possible dry-stone step, or retaining wall situated on a slope alongside a pathway that was shown on the current OS mapping. The feature overlooks a charcoal-burning platform (SMK 1000).

OA North Number: SMK 1002 Period: Post Medieval/Industrial

Name: Charcoal-burning Platform. Water Side Knott **Easting:** 337224 Northing: 486883

Type: Charcoal-burning Platform

Description:

A charcoal-burning platform in the corner of two relict walls and adjacent to a trackway. Charcoal was found at the site. The walls were shown on the first edition OS mapping. A charcoal-burning platform just outside the survey area adjoins it to the north-north-east. A boundary wall forms a revetment that measures up to 1m high at the northern and eastern sides.

OA North Number: SMK 1003 Period: Post Medieval

Name: Charcoal-burning Platform, Water Side Knott Easting: 337050 Northing: 486750 **Type:** Charcoal-burning Platform

Description:

A charcoal-burning platform with a substantial and well-constructed dry-stone revetment at the southern side that is up to 1.2m high. The platform is terraced into the slope to a depth of 1m. The earthwork is narrow due to the extremely steep slope and no obvious trackway was visible.

OA North Number: SMK 1004 Period:

Name: Charcoal-burning Platform, Summer House Knott Easting: 336898 Northing: 486913 Type: Charcoal-burning Platform

Description:

A charcoal-burning platform located 10m to the south-west-west of Pennington Tower. The charcoal-burning platform has a revetment that is 0.8m high and is terraced to a depth of 0.6m. Three trees grow on the site, one of which has fallen across it. Charcoal was found at the site. A clear track (SMK 1005), leads to the north.

OA North Number: SMK 1005 Period: Post-medieval/Industrial

Name: Trackway, Summer House Knott Easting: 336895 Northing: 486926

Type: Trackway

Description:

A trackway running north/south through woodland to the west of Pennington Tower. It links a series of charcoal-burning platforms and there is an obvious lip.

OA North Number: SMK 1006 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Summer House Knott Easting: 336904 Northing: 486901 Type: Charcoal-burning Platform

Description:

A charcoal-burning platform and possible sammel pit located 10m south west of Pennington Tower. The platform has a shallow lip measuring 0.4m high and is terraced to a depth of 0.4m. A track (SMK 1005) terminates at the platform and a possible loading platform lies to the south of SMK 1004.

OA North Number: SMK 1007 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Summer House Knott Easting: 336898 Northing: 486953 Type: Charcoal-burning Platform Description: A possible charcoal-burning platform located 70m west of Pennington Tower. There is a possible sammel pit to the south-west.

OA North Number: SMK 1008 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Summer House Knott Easting: 336916 Northing: 487002 Type: Charcoal-burning Platform

Description:

A possible charcoal-burning platform located 60m west of Pennington Tower. There is a tree located in the centre and a possible sammel pit to the south-east.

OA North Number: SMK 1009 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Summer House Knott Easting: 336921 Northing: 487037 Type: Charcoal-burning Platform Description:

A charcoal-burning platform located 100m north west of Pennington Tower. There is a lip at the western edge.

OA North Number: SMK 1010 Period:

Name: Charcoal-burning Platform, Summer House Knott Easting: 336935 Northing: 486957 Type: Charcoal-burning Platform Description: A charcoal-burning platform located 30m west of Pennin

A charcoal-burning platform located 30m west of Pennington Tower. It is covered heavily with bracken. Three flat stones to the south may have been deliberately placed. Charcoal was found at the site.

OA North Number: SMK 1011 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Summer House Knott

Easting: 336993 Northing: 487063

Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform located 80m north of Pennington Tower. The platform measures approximately 7m by 6m.

OA North Number: SMK 1012 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Summer House Knott Easting: 336974 Northing: 487088

Type: Charcoal-burning Platform

Description:

A charcoal-burning platform located 90m north-north-west of Pennington Tower. It is approximately 5.5m to 6m in diameter. It is covered in bracken on the northern side and lies close to a track at the eastern side. Charcoal was found at the site and a possible sammel pit lies to the south-east.

OA North Number: SMK 1013 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Summer House Knott

Easting: 336963 Northing: 487140

Type: Charcoal-burning Platform

Description:

A charcoal-burning platform located 100m north-west of Pennington Tower, approximately 15m to the north-west of a trackway and 10m to the south of a ruined boundary wall. The feature appears as a shallow concave

earthwork with little evidence of upcast. Charcoal was found at the site and three possible sammel pits are located to the west.

OA North Number: SMK 1014 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Summer House Knott Easting: 337039 Northing: 487081 Type: Charcoal-burning Platform Description: A charcoal-burning platform 140m north of Pennington Tower. The si

A charcoal-burning platform 140m north of Pennington Tower. The site is subtle and a slight bank is visible at the south west. A path lies 10m to the east.

OA North Number: SMK 1015 Period:

Name: Charcoal-burning Platform, Summer House Knott Easting: 337045 Northing: 487058 Type: Charcoal-burning Platform

Description:

A charcoal-burning platform that is 140m south of Pennington Tower and 6m south-east of the path. The feature can be seen as a sub-circular earthwork and has a mature Hazel tree growing in it. Charcoal was found at the site.

OA North Number: SMK 1016 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Back Knott Wood

Easting: 337135 **Northing:** 487189 **Type:** Charcoal-burning Platform

Description:

A charcoal-burning platform on a track. The site is a sub-circular level platform with a substantial bank to the south-east.

OA North Number: SMK 1017 Period:

Name: Charcoal-burning Platform, Back Knott Wood Easting: 337103 Northing: 487237 Type: Charcoal-burning Platform

Description:

A charcoal-burning platform which is occupied by a fallen larch tree. The site is substantial and measures 1m high on the south-eastern side. Charcoal was found at the site. There are possible sammel pits to the north and east of the platform.

OA North Number: SMK 1018 Period: Post-medieval/Industrial

Name: Charcoal-burning Platform, Summer House Knott Easting: 337043 Northing: 486954

Type: Charcoal-burning Platform

Description:

A charcoal-burning platform located 30m east of Pennington Tower. A possible small sammel pit lies 6m to the north-east of the feature.

OA North Number: SMK 1019 Period: Post Medieval

Name: Charcoal-burning Platform, Summer House Knott Easting: 337074 Northing: 486909 Type: Charcoal-burning Platform Description:

A charcoal-burning Platform 50m north-east of Pennington Tower. This is a sub-circular platform on a level terrace within a craggy slope. It is crossed by a trackway.

OA North Number: SMK 1020 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Summer House Knott Easting: 337137 Northing: 486971 Type: Charcoal-burning Platform

Description:

A charcoal-burning platform adjacent to the boundary wall. There is a substantial stone revetment, which is 0.75m high, at the eastern, down-slope, edge. The western edge is cut 0.75m into the hill side. Charcoal was found at the site. The platform is in line with a slight trackway.

OA North Number: SMK 1021 Period: Post-medieval/Industrial Name: Charcoal-burning Platform, Summer House Knott Easting: 337148 Northing: 486920 Type: Charcoal-burning Platform Description:

A charcoal-burning platform close to a junction of woodland boundaries. The feature is sub-circular and measures 7.5m east-west and 5.5m north-south. There are at least three courses of stone revetment at the eastern edge, but little evidence of excavation into the northern, up-slope, edge. Charcoal was found at the eastern edge.

OA North Number: SMK 2000 Period: Post Medieval/Industrial Name: Charcoal-burning Platform, Water Side Knott Easting: 337256 Northing: 486792 Type: Charcoal-burning Platform Description: A well-defined sub-circular charcoal-burning platform with a dry-stone revetment.

OA North Number: SMK 2001 Period: Post Medieval Name: Charcoal-burning Platform, Water Side Knott Easting: 337226 Northing: 486801 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform with a dry-stone revetment. The platform lies to the south of a stream

and there are five possible pits in the vicinity.

OA North Number: SMK 2002 Period: Post Medieval

Name: Charcoal-burning Platform, Water Side Knott Easting: 337184 Northing: 486788 Type: Charcoal-burning Platform Description:

A charcoal-burning platform that has become eroded at the eastern side. An apparently later dry-stone revetment overlies the north-eastern corner of the platform.

OA North Number: SMK 2003 Period: Post Medieval

Name: Trackway, Water Side Knott Easting: 337170 Northing: 486760 Type: Trackway Description: A trackway oriented north/south and terraced into a south-east-facing slope.

OA North Number: SMK 2004 Period: Post Medieval/Industrial Name: Extractive Pit, Water Side Knott Easting: 337131 Northing: 486716 Type: Extractive Pit Description:

An area of several extraction pits, which occupy an area approximately 50m long, with a possible quarry face in the rock face above. The area is adjacent to the southern end of trackway SMK 2003. This area lies close to the main road and may have supplied material for road building and walling.

OA North Number: SMK 2005 Period: Post Medieval/Industrial Name: Trackway, Water Side Knott Easting: 337075 Northing: 486710 Type: Trackway Description: A terraced trackway that rises gently and runs past an area of extraction pits (SMK 2006).

OA North Number: SMK 2006 Period: Post Medieval Name: Extractive Pit, Water Side Knott Easting: 337070 Northing: 486702 Type: Extractive Pit

Description:

Three semi-circular recesses into the hillside produced by stone or gravel extraction. The pits are adjacent to Trackway SMK 2005.

OA North Number: SMK 2007 Period: Post Medieval Name: Charcoal-burning Platform, Water Side Knott Easting: 336879 Northing: 486840 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform adjacent to a terraced trackway (SMK 2008).

OA North Number: SMK 2008 Period: Post Medieval Name: Trackway, Water Side Knott Easting: 336888 Northing: 486810 Type: Trackway Description: A terraced trackway.

OA North Number: SMK 2009 Period: Post Medieval Name: Tower, Summer House Knott Easting: 336990 Northing: 486940 Type: Tower Listed Building Number: 1225215 Description:

Pennington Tower Folly is a monument to naval victories of the Napoleonic war in 1799. It was built for James King of Finsthwaite House. The listed building entry describes a square two-stage tower in coursed slate with projecting courses between the stages and at the top, with an embattled parapet. Each face has two vertical slots within each stage and the south face has a blocked pointed entrance. The second stage has an oval plaque that is inscribed: ERECTED/TO HONOUR THE/OFFICERS, SEAMEN AND MARINES/OF THE/ROYAL NAVY/WHOSE MATCHLESS CONDUCT, AND/IRRESISTIBLE VALOUR, DECISIVELY DEFEATED/THE FLEETS OF FRANCE, SPAIN, AND HOLLAND/AND PRESERVED AND PROTECTED/LIBERTY AND COMMERCE/ 1799. The other faces have round openings at the second stages.

OA North Number: SMK 2010 Period: Post Medieval/Industrial?

Name: Foundation, Summer House Knott Easting: 336984 Northing: 486941

Type: Foundation

Description:

A dry-stone foundation course forming three sides of a rectangle. The structure is of unknown date and function and lies within 5m of Pennington Tower (SMK 2009). Hazel and elder Coppices lie close to Pennington Tower and it is possible that the structure was associated with woodland industry, or was associated with the construction of the folly.

OA North Number: SMK 2011 Period: Post Medieval Name: Charcoal-burning Platform, Summer House Knott Easting: 336992 Northing: 487003 Type: Charcoal-burning Platform Description:

A sub-circular concave charcoal-burning platform. It is situated within a hazel coppice and beside a trackway (SMK 2008). The platform has become overgrown.

OA North Number: SMK 2012 Period: Post Medieval Name: Charcoal-burning Platform, Summer House Knott Easting: 336990 Northing: 487060 Type: Charcoal-burning Platform Description: A sub-circular charcoal-burning platform close to an oak coppice and a trackway.

OA North Number: SMK 2013 Period: Post Medieval Name: Charcoal-burning Platform, Summer House Knott Easting: 337044 Northing: 487051

OA North Number: SMK 2014 Period: Post Medieval

Name: Charcoal-burning Platform, Summer House Knott Easting: 337038 Northing: 487085 Type: Charcoal-burning Platform Description:

The faint remains of a charcoal-burning platform at the western side of a trackway. A possible sammel pit lies 6m to the east.

OA North Number: SMK 2015 Period: Post Medieval

Name: Charcoal-burning Platform, Summer House Knott Easting: 337122 Northing: 487070

Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform with coppiced hazel nearby. The platform lies to the eastern side of a trackway. A sub-circular possible sammel pit lies 3m to the south.

OA North Number: SMK 2016 Period: Post Medieval/Industrial

Name: Charcoal-burning Platform, Summer House Knott Easting: 337114 Northing: 487103

Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform adjacent to a trackway (SMK 2008). Several trees are growing along the edge and one is growing in the centre.

OA North Number: SMK 2017 Period: Post Medieval/Industrial

Name: Charcoal-burning Platform, Summer House Knott Easting: 337166 Northing: 487066 Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform with several trees growing on and around it. Three sub-ovoid hollows are situated around the edge, which might represent sammel pits. These are up to 3m in diameter. The site lies just to the east of a trackway (SMK 2018).

OA North Number: SMK 2018 Period: Post Medieval/Industrial

Name: Trackway, Summer House Knott Easting: 337156 Northing: 487056 Type: Trackway

Description:

A trackway associated with a charcoal-burning platform (SMK 2017), which has been picked free of stone. It follows the easiest path through the topography.

OA North Number: SMK 2019 Period: Post Medieval/Industrial

Name: Charcoal-burning Platform, Summer House Knott

Easting: 337201 Northing: 487150

Type: Charcoal-burning Platform

Description:

A sub-circular charcoal-burning platform, bisected by a modern footpath on an east/west alignment. Charcoal was found at the site.

OA North Number: SMK 2020 Period: Post Medieval/Industrial Name: Charcoal-burning Platform, Back Knott Wood Easting: 337153 Northing: 487221 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform Modern forestry work has le

A sub-ovoid charcoal-burning platform. Modern forestry work has led to the storage of logs over part of the platform, which is adjacent to trackway SMK 2021. Charcoal was found at the site.

OA North Number: SMK 2021 Period: Name: Trackway, Back Knott Wood

Name: Trackway, Back Knott Wood Easting: 337145 Northing: 487204 Type: Trackway Description: A partly terraced sinuous trackway with a

A partly terraced sinuous trackway with a maximum depth of 0.2m. There are indications of modern vehicle usage, but it appears to terminate at charcoal-burning platform SMK 2020.

OA North Number: SMK 2022 Period: Post Medieval/Industrial Name: Trackway, Back Knott Wood Easting: 337092 Northing: 487196 Type: Trackway

Description:

A terraced trackway with evidence of modern vehicle usage. The track is up to 0.2m deep and follows a sinuous route through the wood through charcoal-burning platform SMK 2023.

OA North Number: SMK 2023 Period: Post Medieval/Industrial Name: Charcoal-burning Platform, Back Knott Wood Easting: 337121 Northing: 487286 Type: Charcoal-burning Platform Description: A sub-ovoid charcoal-burning platform that is crossed by trackway SMK 2022.

OA North Number: SMK 2024 Period: Post Medieval/Industrial

Name: Charcoal-burning Platform, Back Knott Wood Easting: 337038 Northing: 487323

Type: Charcoal-burning Platform

Description:

A shallow sub-circular charcoal-burning platform lying adjacent to trackway SMK 2022. Standing and fallen trees are occupy the platform and charcoal was found at the site.

OA North Number: SMK 2025 Period: Post Medieval/Industrial Name: Bark Peeler's Hut, Summer House Knott Easting: 337021 Northing: 486881 Type: Bark Peeler's Hut

Description:

The foundation-level remains of a bark peeler's hut. The walls form a D-shaped structure with a fireplace at the north-eastern end. The walls are of double-thickness dry-stone construction and survive to a height of three courses. They are 0.5m wide and 0.25m high and are likely to represent the complete survival of stone footings to support a timber superstructure. The entrance is at the north-eastern corner of the structure and the fireplace measures 1.5m wide by 2.5m long and is horseshoe-shaped. The maximum height of the fireplace is 1.3m and no lintel is present. Trackway 2026 runs alongside this structure.

OA North Number: SMK 2026 Period: Post Medieval/Industrial

Name: Trackway, Summer House Knott Easting: 337031 Northing: 486910 Type: Trackway Description: A sinuous trackway

OA North Number: SMK 2027 Period: Post Medieval/Industrial Name: Charcoal-burning Platform, Summer House Knott Easting: 337038 Northing: 486881 Type: Charcoal-burning Platform Description:

A sub-circular charcoal-burning platform, located north-east of bark peeler's hut SMK 2025. Possible sammel pits lie to the north of the platform.

OA North Number: SMK 2028 Period: Post Medieval Name: Charcoal-burning Platform, Summer House Knott Easting: 337100 Northing: 486890

Type: Charcoal-burning Platform

Description:

A sub-ovoid charcoal-burning platform occupying a level area on a natural shelf. There is a lip at the northeastern side and a possible sammel pit.

OA North Number: SMK 2029 Period: Post Medieval/Industrial
Name: Charcoal-burning Platform, Summer House Knott
Easting: 337122 Northing: 486917
Type: Charcoal-burning Platform
Description:
A sub-ovoid charcoal-burning platform occupying a natural shelf with platform SMK 2028.

OA North Number: SMK 2030 **Period:** Post Medieval/Industrial **Name:** Charcoal-burning Platform, Landing Knott Wood

Easting: 337184 Northing: 486946

Type: Charcoal-burning Platform

Description:

A well-defined and revetted charcoal-burning platform. The dry stone revetment measures up to four courses high and defines the southern edge. A modern path crosses the northern side.

APPENDIX 4: NOTES FOR ARCHAEOLOGICAL SURVEY FIELD RECORDING FORM

Defined below are the guidance notes for filling in the survey proforma (*Appendix 5*)

Field 1 Survey number

Each site that is recorded should be given a unique survey number, even if it has been recorded before. Use this number to distinguish the site from others. This is particularly important in areas where there are several sites close to each other. Each survey team will be supplied with a series of unique numbers for the area it is surveying i.e. starting 1001, 2001, 3001.

Field 2 Monument Name

If the site has already been recorded in the LDHER (or NTSMR or SAM description), use the name that has already been given. Only record the main name of the site, not the alternatives. If you think the name they have given is incorrect, record these names, stating why you think it is wrong, and write in the correct name. If the site has not been previously recorded, please write your own name for the site. The name given is usually that of the nearest marked point on the Ordnance Survey map. Include, if necessary, a description of where the site is in relation to this place (for example, *sheepfold located at the south end of Rannerdale Knotts* or *jetty located on eastern side of Crummock Water 200 metres north-west of Hause Point*).

Field 3 Lake District Historic Environment Record (LDHER) number

If the site has been recorded in the LDHER, write the number here.

Field 4 National Trust Sites and Monuments Record (NTSMR) Number

If the site has been recorded in the NTSMR, write the number here.

Field 5 Scheduled Ancient Monument (SAM) Number

If the site is designated as a Scheduled Ancient Monument, write the SAM number here.

Field 6 Parish

Tick the box for either Borrowdale or Loweswater

(NATIONAL GRID REFERENCE (NGR)

Field 7 Easting

Eastings are the numbers at the bottom of a map, and are the first numbers given by a GPS.

Field 8 Northing

Northings run up the side of a map, and are the second numbers given by the GPS.

Field 9 Accuracy of National Grid Reference (NGR)

Record how accurate your estimation of the NGR is. If using a GPS, the instrument will tell you the level of accuracy at the time of taking the reading. If using a map, the accuracy will depend upon the scale of the map and on the number and proximity of other features marked that you can use to determine the site's position. Normally, survey using GPS or tape should offer survey accuracy of 10m or better. Surveying in upland areas or woodlands using just a 1:25000 OS map will usually provide accuracy of within 100m. Try to aim for 10m or better if possible.

Field 10 NGR Obtained how?

Enter the method used to work out the NGR, (for example, map or GPS).

Field 11 Site Type

Enter the site type if known. This can be quite general (for example, *rectangular building, dry-stone wall*). If unsure, record what you think it may be, using a question mark at the end.

Field 12 Site Form

Please select from the following:

Building	Other Structure			
Building Foundation	Place Name			
Circumstantial Evidence	Roofed Building			
Cropmark	Roofed Ruin			
Documentary evidence	Ruined Building			
Earthwork	Site Of			
Find	Soilmark			
Cultural Tradition/ Personal Recollection	Site or Monument			
Natural Feature	Unknown			
Field 13 Period				
Please select from the following:				
Palaeolithic				
Prehistoric or Roman				
Prehistoric				
Mesolithic (12,000 - 4000 BC)				
Neolithic (4000 - 2200 BC)				

Bronze Age (2500 - 700 BC)

Iron Age (800 - 43 BC)

Roman (AD43 – 409 AD)

Early Medieval (409 - 1066 AD)

Medieval (1066 - 1540 AD)

Post Medieval (1540 - 1901 AD)

Modern (1901 -)

Uncertain

Field 14 Certainty of interpretation

Use the tick boxes to record your relative certainty about site type and date. For example certainty about a *stone field wall* is likely to be 'Absolute'. On the other hand the type and date of a *partially surviving circular stone structure* may be unclear and certainty will be recorded as 'Medium' or 'Low'.

Field 15 Length

Record the length of the site, and state which orientation the measurement relates to (for example 12.20m N-S).

Field 16 Width

Record the width of the site, and state which orientation the measurement relates to (for example 6.45m *E*-*W*).

Field 17 Height/Depth

Record the height of the site if above ground (for example, the height of standing walls or of a mound), or the depth if below ground (for example, a pit seen in an eroding section). It is usual to note the maximum height or depth. State what has been measured and whether the measurement given is 'height' or 'depth' (for example, *max. height of walls 0.45m; max. depth of pit 1.20m*).

Field 18 Description

Use this space for a full description of the site. Where necessary, take photographs to illustrate features within the site. Describe the shape and form of the site (for example, *linear wall; rectangular building;* or *circular mound*) and if the site is a structure, state what it is made from and how it is constructed (for example, *mortared bricks; heap of loose stones*). Record other features that the site relates to (for example, *one of several clearance cairns in the area*), and put it in its setting (*on a small hill overlooking Gatesgarthdale Bck*). Draw a sketch of the site if necessary.

If necessary, continue writing the description or draw a sketch on another sheet of paper and make sure that you label any additional sheets with the same survey number and attach them to the primary record sheet.

Site Condition

- Field 19 Principal land use on monument
- Field 20 Other land uses on monument
- Field 21 Principal land use around monument
- Field 22 Other land uses around monument

These fields will provide basic information about the management of monuments. Some land uses will carry more risk than others. Recording this information will give us basic information to help monitor future changes affecting monuments.

Please select land uses from the list below but add comments if in doubt.

Allotment garden	Mineral extraction - active	
Built over - residential	Mineral extraction - disused	
Built over - commercial	Orchard	
Canal	Parkland	
Churchyard	Railway	
Cliff, scree and related features	Recreation	
Cultivated land - depth of cultivation unknown	Road/track - metalled	
Cultivated land - depth of cultivation < .25m	Road/track - unsurfaced	
Cultivated land - depth of cultivation > .25m	Road/track - verge	
	-	

Field 23 Management Issues and Vulnerability

This field is for describing both actual and potential problems. The list below will cover many (but by no means all) issues. Describe as many issues and vulnerabilities as necessary, indicating which is the principal one (i.e. the one posing the greatest threat).

AGRICULTURE:

ARABLE PLOUGHING

This also includes regularly ploughed and reseeded grassland. Are earthworks in improved fields not visible or very faint? Let us know if you think a monument or area of archaeological interest has been ploughed, and mark the affected area on the map.

STOCK EROSION

For example 'sheep scrapes' can be a problem on sloping ground or earthworks, or areas of trampling where sheep or cattle congregate (often these are around troughs, gates or supplementary feeders).

TREE PLANTING

Is there recent tree planting on or near the monument? If the monument is within established plantation or woodland, are any damaging management activities occurring?

VEHICLE DAMAGE

Modern agricultural vehicles are increasingly heavy and potentially damaging. Are there tyre tracks/wheel ruts from agricultural vehicles on/around the monument?

NATURAL PROCESS:

STRUCTURES/BUILDINGS

Decay of exposed brick/stonework. Indicate whether this is localised to a particular area, or more extensive (is there evidence of recent or ongoing damage or collapse?)

PLANT GROWTH

On earthworks, including weeds (thistles, nettles, Ragwort, Giant Hogweed), bracken - also invasive plants found on masonry remains e.g. ivy, Red Valerian.

SCRUB/TREE GROWTH

Scrub includes invasive woodland species (e.g. sycamore saplings), shrubs (e.g. hawthorn, elder), gorse, brambles and other woody species; trees include coniferous and deciduous. Also look out for trees growing on or adjacent to structures and buildings.

WIND AND WATER EROSION

Are water courses, or is water run-off affecting the monument? Look for erosion by the edges of watercourses, or for bare patches on wetter slopes. Once erosion scars are formed, wind can cause further damage. Sites under heather moorland can be particularly vulnerable to wind and water erosion if rotational burning is not well managed.

OTHER:

VANDALISM

This is common on sites close to urban areas, but can also include the robbing of some monuments for building/walling stone e.g. from cairns, ruins and the robbing of spoil heaps for improving access tracks.

MODERATE VEHICLE DAMAGE/EROSION

e.g. bikes, off road vehicles, farm vehicles/machinery, traffic. Damage includes wheel rutting, compaction and water management problems.

FOOTPATH EROSION

Are very large numbers of people walking over archaeological remains? Is the passage of feet focussed in one particular place? If this is damaging the archaeology, we would like to know.

DUMPING

Farm or building waste may be dumped on sites of archaeological interest.

GARDENS

Gardening activity is potentially damaging to archaeological sites.

METAL DETECTING

Neatly cut turves, often replaced are a good indication of metal detecting.

ANIMAL EROSION:

RABBITS

Are the principal animal threat to archaeological monuments and landscapes in the Dales. Look for signs of burrowing in earthworks and spoil heaps and structural damage caused by rabbits undermining walls etc.

MOLES

Are generally less damaging than Rabbits, although a large amount of mole activity is undesirable on monuments.

BADGERS

A balancing act between a nature conservation interest and a serious problem in some archaeological sites. We would like to know of any badger setts in the vicinity of archaeological remains and whether you think they are active or inactive.

DEGREE OF DAMAGE:

Where possible, please indicate the degree of damage caused by the above management issues:

extensive erosion/damage/animal action is defined as severely compromising the integrity of the monument (i.e. management action is needed in the short-term to ensure the survival of the monument in its present form).

moderate erosion/damage/animal action is defined as more localised or compromising the integrity of only minor components of the monument (i.e. management action is the recommended medium-term solution).

limited erosion/damage/animal action is defined as being at an acceptable level (i.e. no management action required at present, but damage might require monitoring or addressing as a long-term management aim).

Field 24 Overall Fabric Condition

Use the following codes, described more fully in the table:

A requires no immediate management action

B-C requires management action in the medium-long term

D-E requires short-term management action

Code	Appearance
A	Optimal i.e. the best we can realistically expect to achieve. There is very little or no intrusive vegetation, erosion or other damage
В	Generally satisfactory but with minor localised problems. There may be some intrusive vegetation, minor erosion scars caused by stock trampling or natural erosion but this is localised, typically affecting up to 15% of the monument. It does not constitute serious damage and is an acceptable feature of the monument, for example, seasonal damage around gateways. No management action required provided it does not greatly exceed its current extent.

С	Generally satisfactory but with significant localised problems. More significant damage is apparent, such as animal burrowing, moderate vehicle, stock or visitor erosion. The damage is localised and may affect up to 25% of the monument.					
D	Generally unsatisfactory with major localised problems. Severe localised damage, such as part collapse of a structure, animal burrowing (badger, rabbit), plough clipped earthwork, unauthorised works.					
E	Extensive significant problems. There is widespread damage which may affect 50% or more of the monument. This category includes all monuments under plough. Damage could be caused by one or more factors, such as dense vegetation cover or erosion, typically affecting structures, leading to severe structural problems and/or collapse. Extensive animal burrowing, such as a badger sett in a burial mound.					

FIELD 25 FABRIC: CONDITION TREND

For use in re-survey only. Select from the following:

Improving. There is a visible improvement in the condition of the monument since the last inspection. This may be as a result of ongoing management, for example, as part of an Agri-Environment Scheme or S17 Management Agreement.

Declining. The condition of the monument is deteriorating as a result of ongoing damage, causing loss of fabric which might be gradual (e.g. through repeated cultivation, scrub encroachment) or rapid (severe animal burrowing, structural collapse). Rapid decline in condition of field monuments in intensive cultivation is indicated by subsoil/vulnerable material/ artefacts exposed in the plough soil.

Stable. The monument shows no sign of active deterioration either recent or midterm. The condition of monuments with localised seasonal stock erosion is stable provided the damage remains constant.

FIELD 26 SETTING: APPEARANCE

Select one code from the following

C	Code	Appearance				
Δ	Ą	No or few modern features or contrasting forms of management affecting setting. If modern features are present, they are of an appropriate or sympathetic type/massing/material such that the significance and history of the site can be easily 'read' e.g. enclosed field containing barrow				
E	3	Some modern features or contrasting forms of management have a limited negative impact on setting by virtue of inappropriate and unsympathetic type/massing/material e.g. stone wall truncating a barrow, electricity poles, adjacent development				
C	C	Setting is entirely compromised by modern features or contrasting forms of management that have a major negative impact on setting by virtue of inappropriate and unsympathetic type/massing/material e.g. barrow on edge of quarry, cultivated land around an earthwork in pasture, site hemmed in by development				

Field 27 Physical Accessibility

Select one from the following and if there is full access, indicate whether the site shows signs of public use

Full. No restrictions on access (i.e. on open access land, easily visible from footpath, or on land for which public access has secured through agreement), free entry and no impediments (e.g. noise) to appreciation of the monument.

Restricted. Not always open and/or charges for entry and/or impediments to appreciation of the monument i.e. remote, very difficult terrain, only partly visible from path or adjacent road, traffic noise.

NO PUBLIC ACCESS. ALL MONUMENT INFORMATION PACKS REFER TO SITES THAT ARE AT LEAST PARTLY ACCESSIBLE FROM PUBLIC RIGHTS OF WAY, OR ARE ON ACCESS LAND. PLEASE ADD DETAILS ON THE **MANAGEMENT ISSUES** SECTION OF THE FORM IF THE MONUMENT(S) IN QUESTION ARE FOR SOME REASON NOT ACCESSIBLE.

Field 28 Risk to safety

Is the site likely to pose a risk to either the general public or stock in its current condition? If so please write a short description of the type of risk (e.g. open mine shaft/ risk of falling in, ruined building located alongside public footpath/ risk of collapse.

Field 29 Management recommendations or suggestions

Please indicate any management actions that you think would benefit the monument – e.g. increased rabbit control, scrub clearance, repair and consolidation of standing structures etc.

Field 30 Photograph Yes / No

Delete as appropriate. Please photograph if possible, even if only a representative part of the site as they are very useful for comparing changes in vegetation and fabric over time.

PROCEDURE FOR TAKING PHOTOGRAPHS:

We need to be able to link any photographs that you take to the relevant site record. In order to do this, please ensure that you FIRST take a photograph of the top half of the Level 1 Record Sheet for the site (to show Survey Number and Monument Name) so that your subsequent photograph(s) of the site can be identified.

Afterwards record the number of photographs taken of that one feature in the box.

Field 31 Photographer

The name of the photographer should then be written in the box to help link the photograph to the photography back at the office and to allow the use and reproduction of the photograph at a later date.

Field 32 Visit by

Please write in the initials of those in the group.

Field 33 Visit date

Please comment if the date of photograph is different

Field 34 Any other comments?

This is an area of free text to record any other observations.

APPENDIX 5: SURVEY RECORDING PROFORMA

Archaeological Survey Field Recording Form						
1 OA North Survey	No.	2 SITE N	AME.			
3 HER No:		4 Period	:	5 OAN Field No:		
6 EASTING: (N = 3) 3	7 Northing:	(Y = 5) —	8 ACCURACY OF NGR: □ < 10M □ <100M	9 NGR OBTAINED HOW?: □ GPS □ Map		
10 Site Type:	11 Site Form	1:	 12 Condition: Good Moderate Bad Destroyed 	13 Certainty of interpretation:□Absolute□High□Medium□Low		
14 Length:		15 Width:	-	16 Height depth:		
17 Description: (inc	lude sketch if	required)				
18 Compiled By:	19 Phot	o Taken?:		20 Date:		
	Y/N					

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- Plate 24: A conspicuous and uniform hollow representing a potash kiln in Bishop Wood (BW 1026)
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- Plate 26: A trackside gravel pit used to obtain surfacing material for the track in Summer House Knott (SMK 2006)
- Plate 27: A possible lime kiln within Bishop Wood (BW 1015)
- Plate 28: A low bank and saturated depressions associated with former retting ponds at Three Birks (**TB 1004**)
- Plate 29: A possible shooting butt built into a wall within Rigg Wood (RGW 2000)
- Plate 30: The distribution of woodland features in the area prior to the survey (left) and after the survey (right)
- Plate 31: Coniston Lake Charcoal Burners by William Heaton-Cooper