LAND AT THORNEYTHWAITE FARM, BORROWDALE
CUMBRIA

Historic Landscape Survey Report

Oxford Archaeology North

May 2017

National Trust

Issue No: 2016-17/1786
OA North Job No: L11028
NGR: NY 245 134 (centred)

Document Title: **THORNEYTHWAITE FARM, BORROWDALE, CUMBRIA**

Document Type: **Historic Landscape Survey Report**

Client Name: **The National Trust**

Issue Number: **2016/17-1786**
OA Job Number: L11028
National Grid Reference: **NY 245 134 (centred)**

Prepared by:	Helen Evans	
Position:	Project Officer	
Date:	April 2017	
Checked by:	Jamie Quartermaine	Signed……..
Position:	Senior Project Manager	
Date:	April 2017	
Approved by:	Rachel Newman	Signed……..
Position:	Senior Executive Officer: Research and Publication	
Date:	May 2017	

Oxford Archaeology North
Mill 3, Moor Lane Mills
Moor Lane
Lancaster
LA1 1QD
t: (0044) 01524 541000
f: (0044) 01524 848606

w: www.oxfordarch.co.uk
e: info@oxfordarch.co.uk

© Oxford Archaeology Ltd (2017)
Janus House
Osney Mead
Oxford
OX2 0EA
t: (0044) 01865 263800
f: (0044) 01865 793496

Oxford Archaeology Limited is a Registered Charity No: 285627

CONTENTS

PLATES

SUMMARY

In December 2016, following the purchase of the Thorneythwaite Farm landholding (centred NY 248 132), the National Trust commissioned Oxford Archaeology North (OA North) to produce a landscape history of the property. This was to establish the presence and condition of the archaeological resource, and inform the development of a conservation management strategy. Borrowdale had been subject to a landscape survey by OA North (2007), though this did not include Thorneythwaite. This project will therefore provide an updated record of the National Trust landholdings in the valley. The work was undertaken between December 2016 and March 2017.

The project comprised two parts: a desk-based assessment; and landscape reconnaissance and field survey. This latter included aerial photographic modelling of an enclosed settlement identified close to the present farm (Site **15**), whilst the desk-based assessment collected and analysed the documentary and cartographic sources relating to Thorneythwaite.

Furness Abbey held Thorneythwaite in the medieval period, and was mentioned in the assize rolls of 1230. Following the dissolution of the abbey, the land passed to private hands. In 1615, John Birkett of Thorneythwaite is mentioned in the *Great Deed of Borrowdale*. Hetherington's map of 1759 focused on the Borrowdale graphite mines, but shows that Thorneythwaite was the abode of one Daniel Jopson, father of John Jopson, a farmer at Seathwaite. The documentary evidence illustrates that the tenancy, if not always the ownership, of Thorneythwaite has long been held by the farming families first recorded in the tenants' lists of Fountains and Furness Abbeys. Alongside others, the names of Byrkehead (Birkett), Fyssher (Fisher) and Jopson are consistently associated with Borrowdale. Tithe mapping in the 1840s records Abraham Fisher as living at Thorneythwaite and holding much of the land in the valley (including Seathwaite and Seatoller), which was rented to local tenants. The land was sold in the 1860s following Fisher's death, and again in the 1890s to the Wasdale Hall Estate, which was then planning to build a road over Sty Head. Whilst there are gaps in the historical record, it seems that the Jopson family retained tenancy of the farm until at least 1923.

Whilst there were no confirmed prehistoric sites identified by the landscape survey, there is an enclosed settlement, which could be of Iron Age or Roman date, on the valley floor close to the farmhouse (Site **15**). The majority of the sites identified are charcoal-burning platforms or features relating to woodland management, on the steep slopes at the eastern extent of the property. There are very few industrial sites, and those that have been identified are quarries serving local needs. Many of the sites identified are features relating to a post-medieval pastoral economy, including field boundaries, smoots and sheepfolds. There are also several communication features, such as hollow-ways, trackways and bridges. One of these, a former packhorse route (Site **17**), is likely to be of medieval origin.

Whilst the majority of the sites identified remain in a fair condition of preservation, bracken growth on the fellside is a subject of concern and it is recommended that this be managed and removed as appropriate. The enclosed settlement, which is of potentially national significance, is in poor condition, having been used as a dump in recent decades. It is recommended that this modern material be removed under archaeological supervision, to ameliorate the present condition and facilitate further archaeological investigation.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to thank Jamie Lund of the National Trust for commissioning the project and for the provision of archival sources and data. Thanks are also due to staff of the Cumbria Archives, at the Record Offices in Whitehaven and Carlisle, and the Lake District National Park Historic Environment Record.

The documentary research was undertaken by Helen Evans, and the field survey by Peter Schofield and Debbie Lewis. The figures were by Peter Schofield and Anne Stewardson. The report was written by Helen Evans, Peter Schofield and Jamie Quartermaine, who edited the report and managed the project.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 In December 2016, following the purchase of the Thorneythwaite landholding (NY 248 132), the National Trust commissioned Oxford Archaeology North (OA North) to produce a landscape history of the property. This was intended to combine documentary research and field survey to identify, describe, and contextualise the features of archaeological and historical interest within the 1.2 sq km study area. It was also required that the condition of the archaeological resource within the landholding should be defined.

1.1.2 This followed on from a landscape survey of National Trust holdings in Borrowdale undertaken in 2006 by OA North (2007), which drew upon earlier unpublished work undertaken by the National Trust, in addition to further fieldwork, and the creation of a GIS dataset to provide a full over-arching record of the valley's landscape history.

1.2 THE NATIONAL TRUST LANDHOLDINGS

1.2.1 The National Trust manages almost 12,000 hectares in the area, including land in the Borrowdale, Newlands and Watendlath valleys. This includes hamlets, farms, fellside and common land, woodland, lake shore and islands, and half of Derwent Water.

1.2.2 The recent acquisition of land at Thorneythwaite, which is at the head of Borrowdale (Fig 1), does not extend to the farmhouse at Thorneythwaite or its immediate environs. The landholding covers *c* 303 acres (1.2 sq km) and includes valley-bottom pasture, woodland and rough fell.

1.3 OBJECTIVES

1.3.1 The objectives of the project can be summarised as:

- To collate and interpret any relevant documentary or archival material evidence (including both primary and secondary sources) that might assist in the understanding of land-use, enclosure, settlement and industry on the property;
- To undertake an archaeological survey of the property and identify and describe any previously unrecorded sites, to expand existing data on the National Trust's Sites and Monuments Record (NTSMR);
- To assess the condition of the archaeological resource and make recommendations for its future conservation and management;
- To collate and interpret documentary and archival material relating to the property in order to develop an understanding of land-use, enclosure, settlement and industrial features identified by the survey;

- To produce a chronological narrative to describe the evolution and development of the property, from the prehistoric period to the present day;
- To undertake a detailed survey of a settlement site identified adjacent to Thorneythwaite Farm;
- To produce a written and illustrated report that presents the results of the historic landscape survey and condition survey in a meaningful way, and is able to be used as a tool for future property management.

1.3.2 Following discussions with the National Trust Archaeologist, it was recognised that a landscape survey that simply looked at the Thorneythwaite landholding and was not set within a wider context would not have a very high archaeological or historical significance or value. It was therefore agreed that the data from the documentary study and field survey of the Thorneythwaite estate would be incorporated into the Borrowdale Valley Survey GIS, and the results of that wider survey would be graphically output to show how the Thorneythwaite estate compared with the rest of the valley. The historic landscape survey report would reflect the GIS study and would similarly describe the development of Thorneythwaite in relation to the rest of Borrowdale. The work was undertaken between December 2016 and March 2017.

2. METHODOLOGY

2.1 INTRODUCTION

2.1.1 Jamie Lund of the National Trust issued a brief for historical research and a landscape survey of land recently purchased at Thorneythwaite Farm, Borrowdale (National Trust 2016). In response to this, OA North compiled a project design (*Appendix 1*). The work programme was divided into four elements: desk-based research; field survey; detailed survey; and reporting. The survey area was 1.2 sq km in extent (Fig 2). The work was consistent with the relevant CIfA and English Heritage guidelines (Chartered Institute for Archaeologists 2012; Historic England 2015).

2.2 DESK-BASED ASSESSMENT

2.2.1 The desk-based assessment examined information from a number of sources, primarily the Lake District Historic Environment Record and the National Trust Sites and Monuments Record, and documents held by the Cumbria Archives and the National Trust. Following this work, the GIS compiled as part of the 2006 Borrowdale Survey (OA North 2006) was enhanced.

2.2.2 ***Historic Environment Record (HER and NTSMR):*** an assessment was undertaken of data held in both the Lake District National Park Historic Environment Record (HER) and the National Trust Sites and Monuments Record (NTSMR). These are databases of archaeological sites within the county, and are maintained by the Lake District National Park Authority in Kendal and the National Trust in Grasmere. Any records of sites recorded within the study area were obtained.

2.2.3 ***Aerial Photographs:*** available aerial photographs from the Lake District National Park HER were consulted.

2.2.4 ***Cumbria Archives (Whitehaven and Carlisle):*** the County Record Offices at Whitehaven and Carlisle were visited to consult documents specific to the study area. These included cartographic sources, such as enclosure awards, tithe maps, estate maps, and documents, such as sale particulars. Several secondary sources and archaeological or historical journals were also consulted.

2.2.5 ***National Trust Archives:*** the archives held by the National Trust were consulted for any unpublished primary information regarding the study area.

2.2.6 ***GIS Enhancement:*** a detailed GIS had been compiled for Borrowdale as part of the 2006 Borrowdale Survey (OA North 2007). This was enhanced by the addition of data from the present study.

2.3 FIELD SURVEY METHODOLOGY

2.3.1 The identification survey was undertaken as an enhanced Level 1b-type survey (English Heritage 2007). The survey involved four main elements: reconnaissance; mapping; description; and photography.

2.3.2 ***Reconnaissance:*** the reconnaissance consisted of close fieldwalking, with transects varying between 20m and 50m, dependent on visibility and safety considerations. The survey aimed to identify, locate, and record all visible sites and features of

archaeological interest. Any sites identified by the NTSMR and LDNPA HER, and the Ordnance Survey (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. The GPS is a Leica differential system and uses a base station in conjunction with a roving station to correct the raw data, and thereby has much greater accuracies than can be achieved with a hand-held GPS. The technique works in areas of woodland, albeit with reduced accuracy. The GPS was used to record the extent of all sites.

2.3.4 ***Site Description and Assessment:*** a detailed description was provided for all identified sites, for subsequent transcription into an access database. The data format is consistent with the NTSMR, running ExeGISis, using their mandatory fields. Sites identified from documentary sources, but not identified on the ground, were incorporated into the gazetteer. The input into the system was guided by a pro-forma to ensure uniformity and consistency of input, for the following fields:

- NTSMR No (if applicable)
- Site Description
- Site Type
- Survey Number
- Site Name
- NGR
- Location
- Period
- Sources
- Significance
- Condition
- Stability
- Vulnerability
- Survival
- Damage Agents
- Recommendations
- Compiler
- Photo Reference

2.3.5 Each site was categorised for its significance as:

National: Scheduled Monuments and undesignated sites of national importance;

Regional: Sites recorded on Historic Environment Records and undesignated sites of regional significance which fit into regional research objectives;

Local: Sites with a local or district archaeological value or interest;

Low Local: Sites with only limited local archaeological significance.

2.3.6 Each site was categorised in terms of its condition (*eg* good, fair, or poor) and obvious threats to its present condition were noted. These included evidence for inappropriate agricultural practices, erosion, bracken colonisation, or flood damage. The description incorporated a provisional interpretation of the function and purpose of a site, where possible, and a provisional interpretation of its chronology.

2.3.7 ***Photographic Survey:*** a photographic archive was generated in the course of the field project, comprising landscape and detailed photography. All photography was

recorded on pro-forma sheets, which record the subject, orientation and date. The photography was undertaken with a Sony NEX5 digital camera (16 megapixels).

2.4 DETAILED SURVEY

2.4.1 A more detailed topographic survey was undertaken of an enclosed settlement (Site **15**; *Section 7.1*), which was identified during the walkover survey. This was undertaken by photogrammetry, using aerial photographs taken with a drone (*Section 2.4.3*).

2.4.2 ***Survey Control:*** a survey-control network was established as control for the photogrammetry using a survey-grade Leica 1200 differential Satellite Global Positioning System (GPS). The 1200 series GPS was able to provide real-time accuracies of ± 0.02m. Visible survey-control markers were placed on the ground for the aerial photogrammetry.

2.4.3 ***Aerial Photographic Modelling:*** the ground plan of the enclosed settlement (Site **15**) was modelled by photogrammetry using aerial photographs taken from an Unmanned Aerial Vehicle (UAV), which was a small remote-controlled NAZA F550 UAV containing a 16 megapixel Sony NEX5 camera. The photogrammetric processing was undertaken using Agisoft Photoscan software, which provided detailed modelling using an overlap of up to 300 photographs, leading to the creation of a very detailed DTM (Digital Terrain Model) for the site. The photographs were then digitally draped over the model to create an accurate three-dimensional representation of the ground surface. The primary output, however, was an accurate two-dimensional image that was used to provide plan information. In addition, precise 100mm contour information was generated from the primary DTM using ArcGIS, and hillshade views of the model were also generated.

2.5 GAZETTEER OF SITES

2.5.1 Information concerning the sites of archaeological interest within the study area has been collated and summarised in a gazetteer (*Appendix 2*), which provides details of location, period, physical description, and management issues. Locations are given as ten-figure NGRs, where possible, and the position of each site is indicated on maps of the study area.

2.6 ARCHIVE

2.6.1 A full archive has been produced to a professional standard in accordance with standard guidelines (Historic England 2015) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (Walker 1990). The project archive represents the collation and indexing of all of the data gathered during the course of the project.

3. LOCATION, GEOLOGY AND TOPOGRAPHY

3.1 LOCATION, GEOLOGY AND TOPOGRAPHY

3.1.1 Thorneythwaite (centred on NY 768 505) lies *c* 10km south of Keswick in the central Lake District in the historic county of Cumberland. The landholding is at the mouth of the Seathwaite valley, which is the westerly spur of two valleys, the other being Langstrath, and which both feed into the main north/south Borrowdale valley. Thorneythwaite is *c* 400m to the south of Seatoller and the Honister/Keswick road (the B5289), and 1.5km to the north-east of Seathwaite (Fig 1), which is at the head of the valley.

3.1.2 Borrowdale presents a landscape containing a series of flat but narrow valley floors, prone to flooding in some areas, flanked by dramatic and rapidly ascending fell sides and crags. Glacial activity and subsequent frost action has formed a distinctively rugged and fractured landscape, characteristic of the central Lake District.

3.1.3 The landscape comprises a narrow U-shaped, glaciated, valley (Plate 1) underlain by the igneous rocks of the Borrowdale Volcanic Series, formed during the late Ordovician period some 450 million years ago, which represent the most dramatic period of Lake District rock formation (Plate 2; British Geological Survey 2016; Countryside Commission 1998).

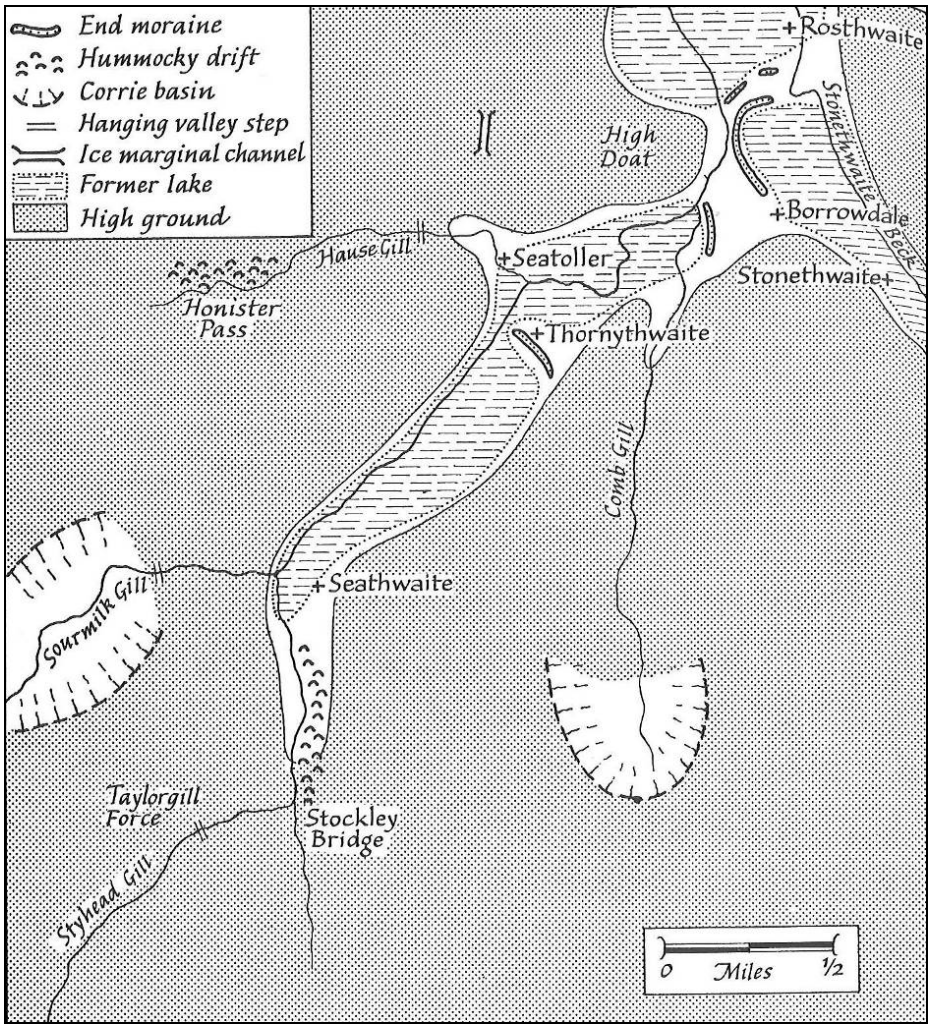


Plate 1: Glacial features in the upper part of Borrowdale (Millward and Robinson 1970)

Plate 2: The valley floor enclosure of Thorneythwaite, from the south-east

3.1.4 Glaciers had a massive impact on the creation of the Borrowdale landscape, widening and deepening the main river valleys, which were ground down by rock and debris carried along with the ice, resulting in a number of tributary valleys and ghylls. Hollows were also scoured out, and filled with water to create the tarns and lakes. Borrowdale is a good example of such a glaciated valley, with many of the former lakes now filled in by post-glacial deposits (*ibid*). The area also has a series of morainic ridges, where the 'glacier snout must have temporarily rested for a while, dumping an arcuate ring of stone and other small debris' (Millward and Robinson 1970, 47; Plate 1).

3.1.5 ***The landholding:*** Thorneythwaite Farmhouse is situated in the base of the valley, at *c* 117m AOD, to the east of the River Derwent. The farm sits on the crest of a morainic ridge which, to some extent, must have protected it from the periodic flooding of the valley floor (Millward and Robinson 1970, 47). The western edge of the property follows alongside the Derwent to where it meets with the Seathwaite farm estate (Fig 1). On the valley floor, to the east and south of Thorneythwaite Farm, are various tributary becks, which join the Derwent to the west of the farm. To its east, the land rises sharply and is composed of wooded fellside to a height of *c* 200m, where Comb Gill defines the north-eastern extent of the holding. At the south-eastern extent of the property, Thorneythwaite Fell rises to a height of 574m.

4. HISTORICAL BACKGROUND

4.1 PREHISTORIC, ROMAN AND EARLY MEDIEVAL ACTIVITY

4.1.1 ***Prehistoric period:*** information on the early development of the landscape is recorded in pollen diagrams from Johnny's Wood and the Seathwaite Valley (Parker *et al* 1994; Birks 1993; Wild *et al* 2001). Following the retreat of the ice after the last glaciation, dense woodland developed to an altitude of *c* 700m, and by *c* 4000 BC most native trees are thought to have been present (Pennington 1997), with extensive areas of alder in upland and lowland wetland areas. Later Mesolithic and Neolithic activity and woodland clearance is relatively widely recorded across the region. Recent palaeoenvironmental work at Blea Tarn, 10km south of Borrowdale across the high central massif, has identified the presence of charcoal peaks, possibly related to occupation, in the Later Mesolithic period (*c* 4650 cal BC), followed by woodland clearance and burning in the Early Neolithic period, *c* 4000 cal BC (Grosvenor 2014).

4.1.2 ***Neolithic Activity:*** the study area forms the northern extent of the nationally important 'Langdale' stone-axe production sites (Claris and Quartermaine 1989); axes are found distributed across Cumbria and the country as a whole (Clough and Cummins 1988; Bradley and Edmonds 1993). Whilst the largest of the production sites are at South Scree and the Langdale site made famous by the discoveries of Bunch and Fell (1949), axes were made at many other locations, including Glaramara and Scafell Pike (Claris and Quartermaine 1989). Axe-production sites are widely distributed, but grouped at intervals, near to the Seathwaite Fell Tuff outcrops, which continue west from Great Langdale to Scafell Pike and north to Glaramara (*ibid*).

4.1.3 Several groups of axe-flaking/quarrying sites have been discovered in Borrowdale, the first being located on the route up to and on Seathwaite Fell (Sprinkling Tarn; *ibid*), the second cluster being at Glaramara. The third group is at Stake Beck, north of Martcrag Moor, and is characterised by a line of sites following the beck and leading into Langstrath, following what is believed to be the line of an historic routeway (*ibid*). The sites on Glaramara, which are the most northerly of the axe-working site groups, represent a greater level of production, possibly because this is on a gently sloping terrace close to a high-level access route (*ibid*). The possibility exists that there was also an historic routeway following the line of the Glaramara spur out from Scafell Pike and leading into Borrowdale, which could potentially follow the present-day route towards Thorneythwaite.

4.1.4 Regionally, stone-axe working floors are distributed along the valleys and high-level routes, such as Wasdale and Langdale, radiating out from production areas in the central Lakeland Massif. Axe finds are common along the western and south coasts of Cumbria and in the Eden Valley, leading to suggestions that, following their initial production in the mountainous central fells, they were widely traded by both land and sea (Fell 1950; Bradley and Edmonds 1993). Distribution routes, as defined by alignments of working floors, have been identified at Brown Tongue, leading into the Wasdale Valley (Claris and Quartermaine 1989).

4.1.5 ***Bronze Age Activity:*** there are very few known Bronze Age sites in the immediate vicinity of Thorneythwaite, but one within Borrowdale is a probable funerary cairn, at Styhead Ghyll, on land rising up by the ghyll onto Seathwaite Fell (NTSMR 22494). Many groups of clearance cairns and associated stone-built structures, such as ring

cairns, kerbed cairns, roundhouses and stock enclosures, have been identified in upland contexts in the central Lake District (Quartermaine and Leech 2012). Whilst several clearance cairn groups (often attributed a Bronze Age date) have been identified in Borrowdale, for example at Langstrath (OA North 2007), it is equally likely that these could relate to medieval clearance activity (Quartermaine and Leech 2012).

4.1.6 In lowland contexts, relatively few of the agricultural and occupational features found in the uplands have been identified, largely as a result of large-scale clearance, improvement and enclosure of agricultural land in recent centuries. Some examples, however, have survived; near Loweswater, 11.5km to the north-west of Borrowdale, an enclosed settlement incorporates roundhouses, probable stock pens and a large annexe defined by a rubble bank (OA North 2007; NTSMR 29273). Located just beyond the extent of locally enclosed land, it is probably Iron Age or Roman in date, and may have been reoccupied in the medieval period.

4.1.7 Burnt mounds have also been identified in many valley-bottom locations in the Lake District, often strung out along the edges of watercourses, being suggestive of stopping points on valley-side routeways (Nixon 1990; Hodgson 2007). Although most of those which have seen excavation have been dated to the Bronze Age, an example in Wasdale provided Bronze Age, Roman and early medieval radiocarbon dates (OA North 2015), and others have provided late Neolithic dates (Brown *et al* in prep). In common with many of the cairnfields and associated structures identified in upland contexts, it seems that particularly favourable sites and locations have seen long histories of use.

4.1.8 ***Iron Age and Roman Activity:*** with the exception of the univallate hillfort on Castle Crag above Rosthwaite, there is very limited evidence for Iron Age activity in Borrowdale, and indeed the entire Lake District as a whole (Hodgson and Brennand 2006). The site is an irregularly shaped enclosure, damaged by subsequent slate quarrying, but typologically suggestive of a late Bronze Age to Iron Age date (OA North 2007; NTSMR 20125). Its position allows a commanding view along the north/south axis of Borrowdale, and the difficulty of access may imply a defensive function. Roman Samian ware and other pottery, along with smelted iron slag, have been found at the site (Shotter 1984), suggesting its utilisation into later periods.

4.1.9 ***Early Medieval Activity:*** archaeological information for the early medieval period in the Lake District is lacking and it is believed that, in general, land management probably continued very much as in earlier periods. The results of upland cairnfield surveys and palaeoenvironmental data suggest that some at least of the structures within cleared areas may be later in date (Quartermaine and Leech 2012) and related to transhumance suggested by shieling place-names (*eg* Whyte 1985; Winchester 1987). In Wasdale, evidence for the early medieval reuse of a Bronze Age burnt mound has been identified, and excavations in the area have also produced evidence for early medieval iron smelting and smithing associated with post-built structures (OA North 2015).

4.1.10 Whilst there is no known archaeological evidence for settlement in Borrowdale during the early medieval period, place-names in the valley are dominated by those of Old English and Scandinavian origin. Stockley Bridge, just south of Seathwaite, is derived from the Old English *stocc*, a tree stump, and *leah*, a woodland clearing, meaning 'the clearing with the tree stumps' (Gambles 1980). Its location on a primary communication route is significant; as the name may have originated as early as the

seventh century, it could suggest clearance activity deep into the valley several hundred years before the arrival of Scandinavian-speaking populations. Old Norse place-name elements include *thwaite* (clearing), which is particularly common, and seems to be associated with low-status settlements in poorer areas of lowland. The occurrence of many *thwaite* place-names in the valley may suggest that Scandinavian-speaking settlers found it uninhabited or sparsely settled, with the valley floor thickly wooded, compelling them to create clearings. However, Gillian Fellows-Jensen (1989) suggests that such Thwaite settlements are not necessarily indicative of primary Scandinavian settlements, and may reflect later medieval assarts. Seatoller derives from the *seatr* (shieling) place-name element (Winchester 1987), which may suggest a transhumant pasture in the upper, remote reaches of the valley bottom, before a permanent farm was set up later in the medieval period.

4.1.11 The generally accepted view is that the newcomers to the area were restricted to the less agriculturally attractive, and therefore less populated, areas of land (*eg* Higham 1985). However, it is equally possible that population pressure simply led to agricultural expansion into previously marginal areas. Whilst it is tempting to interpret Scandinavian place-names as direct evidence of tenth-century immigration, both *thwaite* and shieling-derived place-names, such as *seatr* and *scale*, were incorporated into local dialect and were still being applied to new clearings as late as the thirteenth century, when they are often associated with assarts (Winchester 1987; Newman 2015).

4.2 MEDIEVAL AND POST-MEDIEVAL HISTORICAL DEVELOPMENT OF THE VALLEY

4.2.1 Cumbria had not been fully incorporated into England at the time of the Norman Conquest, and it was only after the conquest of 'the land of Carlisle' in 1092 by William Rufus that most of the present county came under Norman control. Borrowdale was within Derwentfells or the Forest of Cockermouth, a baronial estate hived off from the larger Copeland Barony in *c* 1100 (Winchester 1987). Lying between the Rivers Cocker and Derwent, the area, amounting to *c* 241 sq km, included much of the high central massif (which was given over to free chase), Lorton Vale, Borrowdale, the valley on the west side of Bassenthwaite Lake and the Wythop valley (Newman 2015). In general, the upland and lowland portions of the baronies possessed different tenurial characteristics, most vills being subinfeudated manors, with the uplands retained as free chase (Winchester 1987).

4.2.2 The Norman Manor of Borrowdale remained intact until *c* 1195, when Watendlath, Langstrath and part of Stonethwaite were granted to Fountains Abbey by Alice de Rumeli, the grand-daughter of the first Norman overlord (Lancaster 1915, nos 55 and 56). Furness Abbey bought the remainder of the manor from Alice de Rumeli in 1209 (Pearsall and Pennington 1973; CRO (C) D/Law/1/168/3). This meant that Langstrath, Watendlath, the surrounding fells and the delta plain between Derwent Water and Bassenthwaite were in the possession of Fountains Abbey, and Furness Abbey owned all the remaining lands south of Derwentwater. A document detailing the boundary between the two abbey lands in Borrowdale was drawn up in 1211 (Lancaster 1915; Collingwood 1918).

4.2.3 From the last years of the twelfth century, the monks oversaw the drainage and cultivation of the land, possibly building the first field walls. They are also likely to have cleared or allowed assarting on areas of former waste for pastoral farming

(Robinson *et al* 1998). Although the emphasis was on pastoralism, rye, barley and oats were grown on the more fertile land and stored in *grangia*, a term which gave the name to the nearby village of Grange (on Furness Abbey land; Johnson 1981). On Fountains Abbey land in Borrowdale, a thirteenth-century grange is recorded in Watendlath and by the early fourteenth century, a vaccary had been established at Stonethwaite (Winchester 1987). According to Johnson (1981), Furness Abbey held a vaccary in Borrowdale, although the source of this information is unclear. Other activity includes the mining of iron ore by Fountains Abbey from nearby Ore Gap under Bowfell, which is likely to have then been taken to bloomeries that have been identified in Langstrath (*ibid*).

4.2.4 Although archaeological evidence for the medieval period in Borrowdale is limited, a boundary wall and fence sealed beneath a colluvial fan in Seathwaite have revealed that local woodland was being cleared and coppiced around cal AD 1300-1450 (Wild *et al* 2001). Woodland clearance may have exacerbated the effects of flooding in the valley, which coincided with climatic deterioration in the fourteenth and fifteenth centuries. A stone wall and fenceline excavated from a peat layer overlying the flood deposits hints at the enclosure of parts of the valley with stock boundaries (LUAU 1998a; Wild *et al* 2001).

4.2.5 A succession of bad harvests brought famine in 1315-17, followed by catastrophic cattle and sheep epidemics between 1319 and 1321, and the Black Death in 1348, 1361, and 1362 (Winchester 1987). This resulted in the abandonment of many farms, and sometimes whole villages, especially on the more marginal land (*ibid*). By the late fourteenth century there are hints of recovery, the reoccupation of abandoned land and the creation of new farms as former demesne, and also waste and forest was being let (*ibid*). Account books from Fountains Abbey showed considerable numbers of cattle and extensive hay meadows in Borrowdale, Eskness and Stainthwaite (Elliott 1961).

4.2.6 The general pattern of the later medieval farming landscape was based on a system of fields on the valley floor, separated from the fellside by a ring-garth wall. Angus Winchester (1987) has suggested that the typical farm of this period had livestock husbandry as the principal occupation, but with a small acreage of cultivated land growing oats, barley, and hay. A 1418 survey of Borrowdale gives details of 41 farms granted to Fountains Abbey, each having an average of three acres of enclosed land, for which a total rental of £28.10s *per annum* was paid (British Museum Add MS 24764 f6, in Elliott 1961).

4.2.7 That the tenants on the Furness portion of Borrowdale held the estates in 'tenant right' is demonstrated by the Abbey rental at the time of its dissolution (Brownbill 1915-19; Hall 1886). Brownbill gives the list of tenants in Borrowdale, including Byrkehead, Fyssher, Bratwhate and Jopson. Each tenant held one tenement and between 1.5 and 4 acres of arable/meadow, with John Fyssher and his son Launcellot (the bailiffs for the king) holding 6 acres, and Christopher Byrkhed also with 6 acres.

4.2.8 Above the valley floor, on the fellsides, rights were often retained by the landowner, providing summer pasture for tenants, access to which were subject to stringent regulations policed by manorial courts (Winchester 1987). Peat from areas of waste was also cut for fuel and bracken for thatching, bedding, and potash production (*ibid*).

4.2.9 By the start of the sixteenth century, evidence from elsewhere in the region suggests that land around the settlements was becoming increasingly enclosed. This increasing

division of the valley bottoms into small individual farms led to the rise of what became known as the yeoman or statesman farmer (Winchester 1987). Customary tenant rights handed down amongst the Lakeland communities gave them almost the same security as if they held the land freehold, which restricted the influence of the Abbey or Lord of the Manor (*ibid*). Evidence of the customary tenant rights in Borrowdale is provided by a Furness Abbey rental (Brownbill 1915-19) and is detailed in the Duchy of Lancaster surveys (Hall 1886). They include the right of succession of tenure and the right to sell the holding; in return they were to serve on the Scottish border whenever required, as horsemen in summer and footmen in winter.

4.2.10 ***The Dissolution of the Monasteries:*** Henry VIII's commissioners began their work of closing the religious houses of the region in 1536; Furness Abbey was handed over in 1537 and its holdings were added to the estates of the Duchy of Lancaster, retained by the Crown until 1613-14 (Johnson 1981). Fountains Abbey was dissolved in 1539 and in 1546 its Borrowdale holdings were sold to Richard Greames of Eske, at Netherby (37 HenVIII (Gardner and Brodie 1908); Bouch and Jones 1961; Collingwood 1928). James I sold Furness Abbey's former lands to London entrepreneurs, William Whitmore and Jonas Verdon, in 1613-14 (Collingwood 1928; Johnson 1981). Whilst retaining the graphite mines (*Section 4.2.15*), they sold off much of the land in an agreement known as the *'Great Deed of Borrowdale'* (*ibid*; CRO (C) D/Ben/Crosthwaite Tithes/1/List of Tenements 1614). Whilst interpretations of its significance vary considerably, the individual holdings and the commons were clearly sold to a group of 38 yeoman and gentlemen, headed by Sir Wilfred Lawson of Isel (*eg* Collingwood 1928; Johnson 1981). The 38 were largely tenants of the upper Borrowdale farmsteads, including one John Birkhead of Thorneythwaite, yeoman.

4.2.11 Lawson had obtained land around Stonethwaite and Watendlath from the Greames family in 1606, and he then bought more in the valley in 1617 (Johnson 1981). In 1614, just before the *Great Deed of Borrowdale*, Lawson bought Seathwaite and Rosthwaite from Verdon and Whitmore (*ibid*). By 1617, the Lawson family was the major landholder in Borrowdale, owning much of the land previously held by Fountains and Furness Abbeys. Whilst readings of the *Great Deed of Borrowdale* suggest that the 38 had 'bought' the freehold of the farms and commons, according to manorial records, Lawson remained the lord of the manor, in that customary rents and fines for grasses (upland grazing rights) were still paid by members of the 38 to him (*ibid*).

4.2.12 A mill, mentioned in the 1546 sale document to Richard Greames (*Section 4.2.10*), was tenanted by 'John Byrkhedd and Richard Benson'. A former watermill exists in Stonethwaite, just outside the north-eastern boundary of the Thorneythwaite landholding, and whilst it seems unlikely that the same John Birkhead (Birkett) is the same as the signatory to the *Great Deed of Borrowdale* (*Section 4.2.11*), it is possible that there was once a connection between Thorneythwaite Farm and the adjacent mill.

4.2.13 ***Industrial Landscape:*** Whitmore and Verdon were aware of the potential profit to be made from the wad-hole (graphite or plumbago mine) at Seathwaite, as mentioned by a survey of former Furness Abbey lands in 1555. It was sold to Lamplugh and Hudson of Bowtherbeck, in a separate agreement, around the same time as the *Great Deed of Borrowdale* was signed (Boon 1976; Johnson 1981).

4.2.14 Graphite was an extremely valuable commodity; initially used for sheep-marking and medicinal purposes, by the eighteenth century it was used in the manufacture of

munitions, pottery glazing, dye-fixing, crucible production and pencil-making (Tyler 1995); counterfeit coin moulds of graphite have been found in Nether Wasdale, dated to around 1500 (Ferguson 1878; Boon 1976). Into the eighteenth century, the mines were only opened one year in seven to maintain a high market value; in 1788 the price was reaching £3300 a ton, and in 1751 it was made a felony by Act of Parliament to steal or deal in stolen graphite (DRO D/BKL/Box 8c/144/3). The mine closed in 1891, in the face of cheaper foreign imports (Winchester 2016).

4.2.15 There are four known bloomery sites within Langstrath, closely associated with Langstrath Beck, which is linked in documentary sources to the nearest source of iron ore at Ore Gap (Postlethwaite 1877). Whilst there is strong evidence for post-medieval use, it is likely that these bloomery sites were originally operated by Fountains Abbey. The production of substantial quantities of iron would have required a supply of large amounts of charcoal, and many charcoal-burning platforms have been identified along the sides of the valley (OA North 2007). Whilst these remain undated, their abundance related in part to the proliferation of charcoal production in the post-medieval period, when lead- and copper mining was being undertaken by the Mines Royal company (Collingwood 1928). Although little mining took place in Borrowdale, the effects on the valley landscape were significant; it is believed that many areas were clear-felled for timber and the smelting industry promoted large-scale charcoal production (OA North 2007). Documentary sources demonstrate the post-medieval production of charcoal in Borrowdale; a 1594 lease of woods for charcoal at Thickside, south of Langstrath, states: 'It will make 3000 seams of charcoal, every seam containing 8 bushells as measured at the smelting house at Keswick' (CRO (C) D/Law/1/55). This was the headquarters of the company of the Mines Royal (Collingwood 1928).

4.2.16 ***Enclosure and Improvement:*** the agricultural improvements taking place across much of lowland Britain were slow to reach Cumbria, and for at least the first half of eighteenth century, the area was agriculturally backward and under-exploited (Bailey and Culley 1794). Innovations were slow to reach Borrowdale, where according to Hutchinson, 'the surface of the ground was very little cultivated' (1794, 209).

4.2.17 Enclosure had been piecemeal until in the second half of the eighteenth century, when it was achieved through agreement between tenants or by Act of Parliament (Whyte 2003). Parliamentary enclosure in particular marked the demise of the statesman farmer; as the size of the landholdings increased, the number of small farms declined. The start of the nineteenth century saw clear signs of improvement in agricultural practice, partly due to an increasing demand for food and the resulting high prices. This increased activity was further boosted by the introduction of the General Enclosure Act of 1801, which virtually extinguished the long-held common rights (*ibid*).

4.2.18 Drainage, liming and other forms of improvement brought previously unusable or rough pastureland into more productive use; oats could be grown on all but the rockiest of ground, and pasture was now capable of supporting double the amount of stock (Whyte 2003). Within Borrowdale, the upper valley sides and tops were enclosed at first, and then the sheep-grazing lands or 'dalts', and later, more extensive areas of remote land were parcelled up as 'intakes' (*ibid*).

4.2.19 Across Lakeland, the pattern of enclosure on the valley floor and lower fellsides was largely completed by the time of the tithe mapping of the 1840s (Whyte 2003). Borrowdale's tithe map (CRO (C) D RC/8/54/4) and apportionment (CRO (C) D

RC/8/55/5.6) illustrate some of the effects that improvement had on land-use at Thorneythwaite; for example, Lamb Close (fields 582 and 588) and Horse Close (field 585) are both listed as arable, yet their names clearly suggest former pastoral use.

4.2.20 The nineteenth century was a time of growth, which marked the final end to the social and economic isolation of the valley. The opening up of the roads connecting it to the outside world brought in tourists, and, coupled with the quarrying at Honister, and later at Yewcrag, which employed between 100 and 150 people, the net effect was an unprecedented burst of activity within the valley. A small service industry grew up to support this increased economic activity, such as blacksmiths and joiners, and the evidence suggests a picture of growing activity with little sign of recession. This is further reflected by the steady growth in the population, with 342 in 1801, growing to 452 in 1851 and 506 in 1891 (Bulmer and Snape *c* 1901).

4.2.21 Utilities, such as water and electricity, did not arrive until relatively late; sewage-disposal works were built in 1938 and again in 1949, when the first water supplies were connected to the upper valley; however, many houses still used a private supply (Johnson 1981). The arrival of electricity was delayed due to opposition to the use of overhead cables, and eventually an underground cable was laid in 1961 (*ibid*).

4.2.22 After the Second World War, there was a fundamental shift in the development of the area, with the creation of the Lake District National Park in 1951 (National Parks 2017). Rather than different valleys and areas developing at different paces according to the inclinations of the individual landowners, the area began to be administered and treated as a whole. This development has been strengthened by the introduction of various conservation schemes, designations, European initiatives, and government grants.

4.2.23 ***Flooding and Drainage:*** Borrowdale is well-known for repeated episodes of catastrophic flooding, most recently in 2005, 2009 and 2016. In 1958, the Cumberland River Board dredged parts of the river and built flood banks and gabions, although this was not able to prevent serious flooding in August 1966 (Johnson 1981). This flood washed away most of the bridges and many of the walls, which have now been repeatedly replaced (on the same alignment) often by fences (OA North 2007). Following the 1966 floods, sections of the river between Seathwaite and Thorneythwaite were straightened in an attempt to prevent a repeat occurrence (Johnson 1981). The evidence suggests that such flooding events have been relatively regular in the valley; two major floods occurred in the space of three weeks in 1898, damage to buildings, farmland and loss of livestock reckoned at £250,000 (Johnson 1981). Cartographic evidence suggests that, between the production of the tithe map in 1842 (CRO (C) D RC/8/55/4) and the First Edition Ordnance Survey map, surveyed in 1862, the Derwent west of Thorneythwaite and south of Seatoller bridge had been straightened as far south as the Seathwaite bridge, and a ditch or drain had been constructed between the Derwent and Black Syke. Archaeological data from Seathwaite illustrated several episodes of medieval flooding (Wild *et al* 2001). Across Cumbria as a whole, 34 major flood events in upland catchments, including Borrowdale, have been identified from historical records from the 1600s onwards (Whatkins and White 2008). Notwithstanding flooding in the early twenty-first century, similar concentrations of extreme flood events were recorded in the late seventeenth century, the mid- to late eighteenth century, the early and late nineteenth century, and between the 1920s and 1960s (*ibid*). The repeated rebuilding of walls

and fencing following flood events has hindered the interpretation of the historical development of field systems and other boundaries in the valley (*Section 8*).

5. HISTORY AND DEVELOPMENT OF THORNEYTHWAITE FARM

5.1 SOURCES

5.1.1 Borrowdale is illustrated on various historical maps and plans, at a variety of different scales and levels of detail. Many of the earliest maps of the Lake District (*eg* Saxton's map of 1576; Plate 3) incorporated errors and incorrect details, and later copied versions often compounded previous mistakes (Hindle 1984).

Plate 3: Saxton's Map of Westmorland and Cumberland, 1576

5.1.2 Whilst many published historical maps of Cumberland and the Lake District show Borrowdale, and often Seathwaite Farm, Thorneythwaite is rarely illustrated. Hodgkinson and Donald's map of 1770-1 shows some woodland on the fellside to the east of Thorneythwaite but the farm is not shown (Plate 4). Greenwood and Greenwood's *Map of the County of Cumberland* (1824) shows a single rectangular unnamed building at Thorneythwaite Farm, adjacent to the north side of a small plantation, and it also clearly illustrates the large woodland compartments on the flank of the fell above it to the south and east (Plate 5). The valley was, however, surveyed in more detail by Hetherington's 1759 plan of the Borrowdale graphite mines (CRO (C) DX/294/9; *Section 4.1.8*; Plate 6).

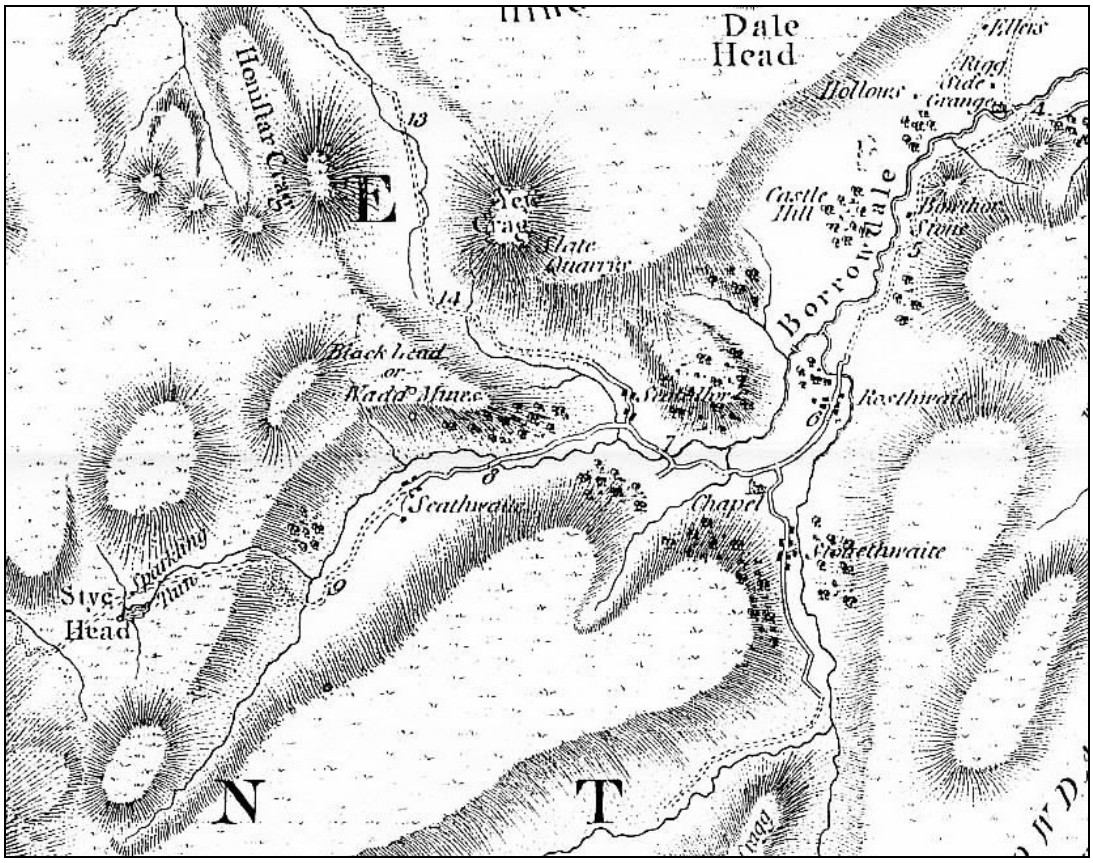


Plate 4: Hodgkinson and Donald's Map of the County of Cumberland, surveyed 1770-1

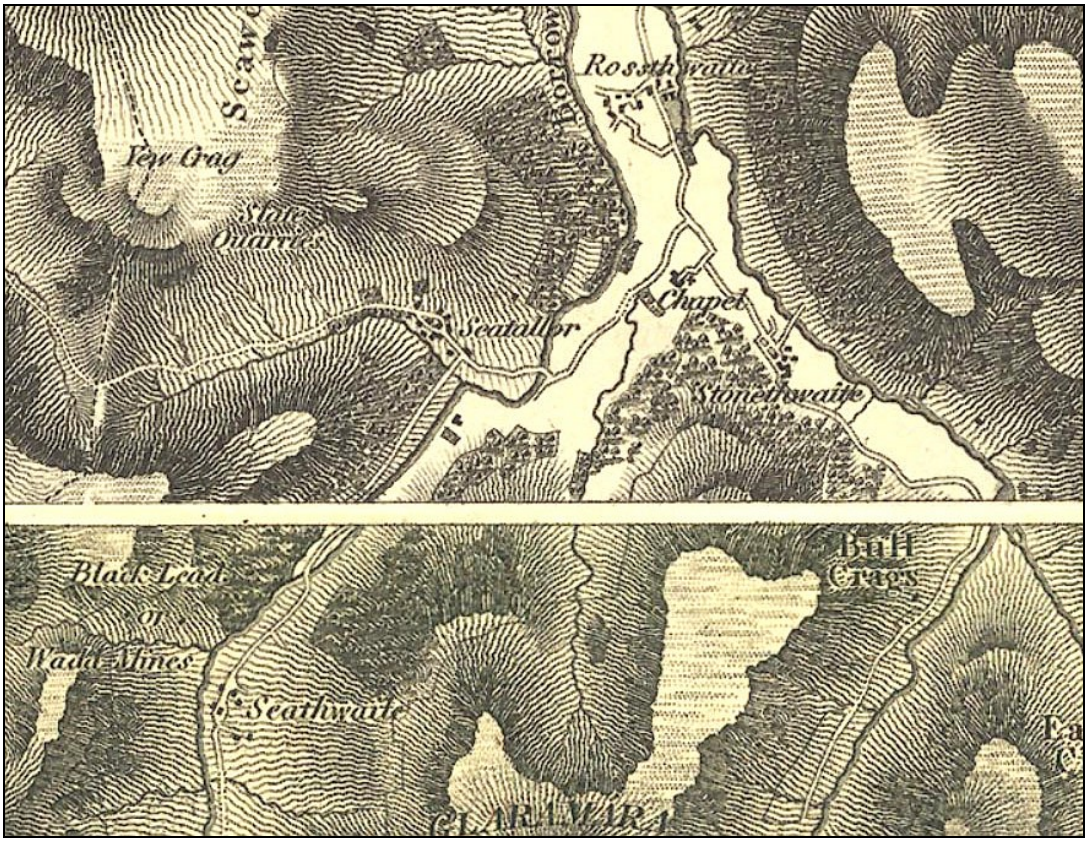


Plate 5: Greenwood and Greenwood's Map of Cumberland, 1824

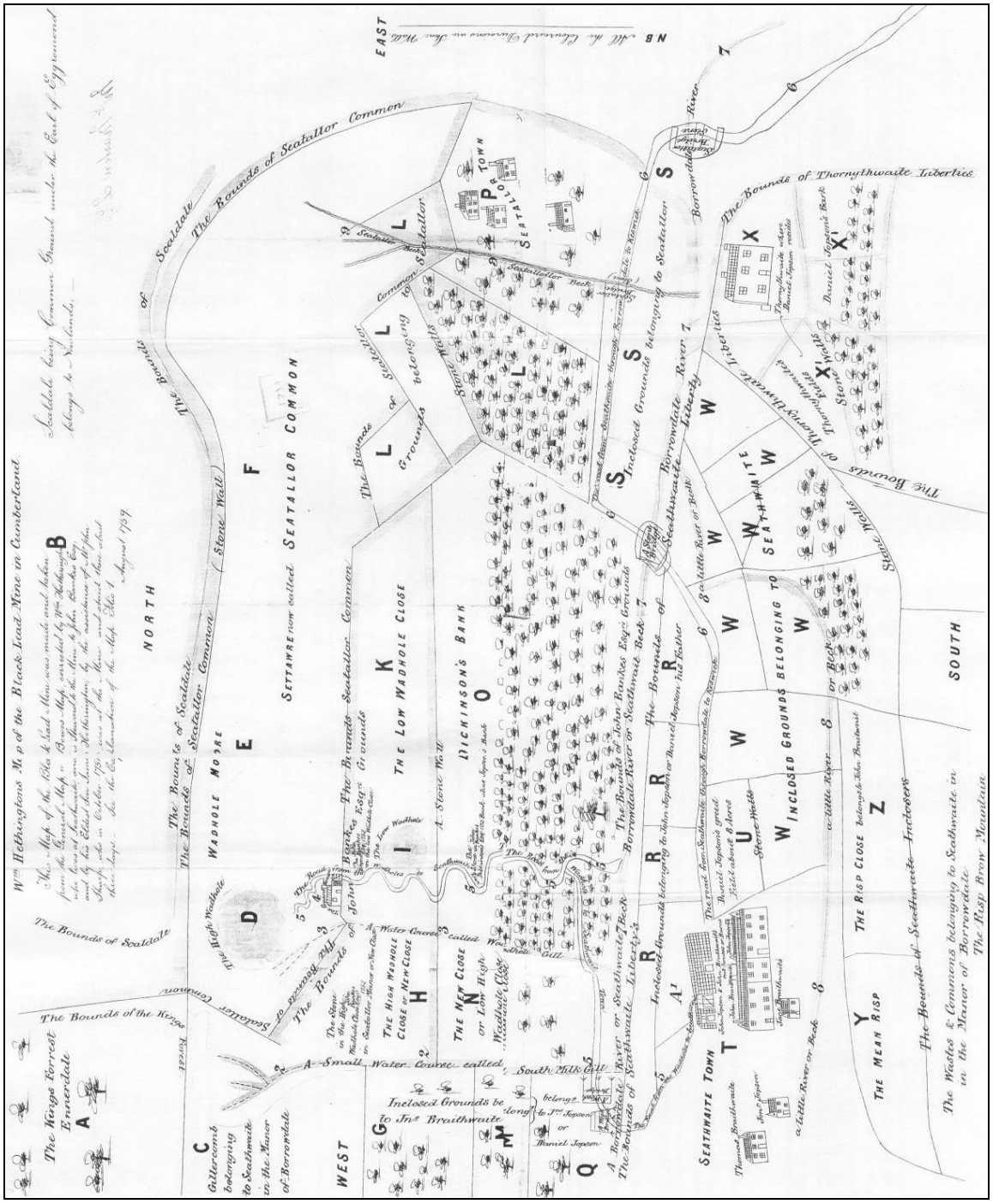


Plate 6: William Hetherington's map of 1759 (CRO (C) DX/294/9)

5.2 THORNEYTHWAITE FARM

5.2.1 Thorneythwaite, first mentioned in the assize rolls of 1230 (Millward and Robinson 1970), was held by Furness Abbey until its dissolution, following which it remained in Crown hands until it was sold by Whitmore and Jonas Verdon in 1613-14 (Collingwood 1928; Johnson 1981). Documentary evidence pertaining to Thorneythwaite (also spelt Thornithwaite and Thornythwaite) illustrates quite clearly that tenancy, if not always ownership, of the farm has long been held by the farming

families recorded in the tenant's lists of Fountains and Furness Abbeys (*Sections 4.2.7, 4.2.11-13*). Alongside others, the names of Byrkehead (Birkett), Fyssher (Fisher) and Jopson have been associated with Borrowdale since this time (Crosthwaite 1876; Johnson 1981).

5.2.2 The Birkett family, consistently associated with Seathwaite, are first mentioned in 1511 in relation to the lease of a tenement in Stonethwaite (Michelmore 1981). Around 1542, they are listed as tenants of Furness Abbey in Borrowdale (Crosthwaite 1876, 66-70) and in 1562, in relation to the baptism of child in the Crosthwaite Parish register (*ibid*). In 1606, several members of the Birkett family are mentioned in the deeds of Wilfred Lawson's land purchases in the valley, including one of John Birkett of Stonethwaite (possibly associated with the mill; *Section 4.2.13*). In 1614, John Birfedd of Thornithwaite was mentioned in relation to tenements at Seatoller (CRO (C) D/Ben/Crosthwaite tithes). In the following year, 'John Birkhead of Thorneythwaite, yeoman', was one of the 38 people who signed up to the *Great Deed of Borrowdale* (Collingwood 1928; 12; *Section 4.2.11*; Crosthwaite 1879).

5.2.3 A Fyssher was listed as a Furness Abbey tenant in Borrowdale in *c* 1542 and also as bailiff for the king (Crosthwaite 1876, 66-70). The Fisher family were recorded as tenants of Seatoller farmhouse in the sixteenth century (OA North 2007, 63), and as the producers of charcoal, from Borrowdale, for the Mines Royal (Collingwood 1912; 1928). In this same period, Fishers were the subject of many entries in the Crosthwaite Parish register, 'residing at Seatoller, Grange, Snabb and Gillbeck in Newlands, one generation after the other, and spreading out into all parts of the world' (Crosthwaite 1876, 236).

5.2.4 The Jopson family are mentioned as tenants of Furness Abbey in the sixteenth century; and in the mid-eighteenth century were resident at Thorneythwaite Farm (Hetherington 1759 (CRO (C) DX/29419); Johnson 1981). In the nineteenth and early twentieth centuries, a great many Jopsons lived in Thorneythwaite, Chapel House, Seatoller and Yew Tree Farms (Johnson 1981).

5.2.5 Following the mention of John Birkett (yeoman) at Thorneythwaite in 1614 and 1615 in relation to the *Great Deed of Borrowdale* and negotiations beforehand (CRO (C) D/Ben/Crosthwaite tithes; Collingwood 1928, 12), no documentary or cartographic sources were identified until Hetherington's plan of 1759 (CRO (C) DX/29419). This map (Plate 6) is the first detailed plan of the area and the first documentary source since the *Great Deed of Borrowdale* in 1615. The survey, which was focused on the graphite mines, illustrates *'The Wastes and Commons Belonging to Seathwaite in the Manor of Borrowdale'*. The annotated plan includes a three-dimensional representation of the Thorneythwaite Farmhouse, as resided in by Daniel Jopson, the extent of the associated land marked as 'the bounds of Thornythwaite liberties'. The plan shows the enclosed land on the valley floor apportioned with the various farms of the valley. The farmhouse is marked 'Thornythwaite where Daniel Jopson lives'. The farm is shown within several enclosed fields and woodland, in three enclosed fields, two of which are marked 'Daniel Jopson's Bark'.

5.2.6 Jopson of Thorneythwaite is also cited in a document listing the numbers of grasses held on Langstrath/Stoneythwaite fell and Watendlath fell (Johnson 1981). In 1831, the will of John Jopson of Thorneythwaite left the property to his brother Daniel (CRO (C) PROB/1831/W1 611). Daniel Jopson died at Thorneythwaite in 1833 (*Carlisle Journal*, 30 November 1833) and the following year his nephew, Joseph Hodgson the younger, sold it to Abraham Fisher (CRO (W) DMG/80/1) (Plate 7).

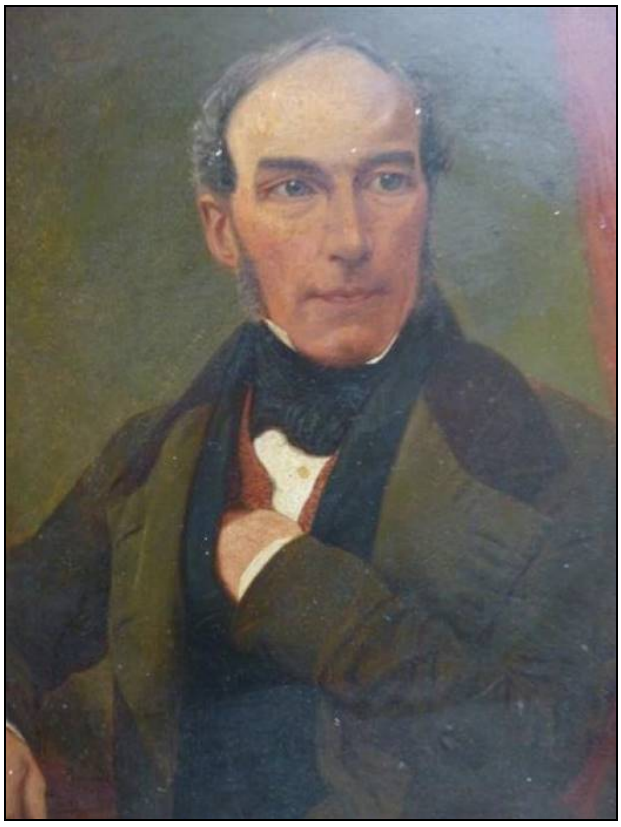


Plate 7: Portrait of Abraham Fisher, c *1850 (Holt Antique Furniture 2017)*

5.2.7 An 1838 citation by John Birkett of Seathwaite, in relation to the deeds of Seathwaite Farm, stated that the Seathwaite estate had been owned by Daniel Birkett, then Joseph Birkett (John's father), who died in 1836, after which it was sold to Abraham Fisher (CRO (W) DMG/80/1); so by 1836, Fisher (Plate 7) owned both Seathwaite and Thorneythwaite Farms. The extent of his holdings, which encompassed virtually all of the valley (including lands and tenements at Seatoller and Stonethwaite), is illustrated by the tithe map and apportionment of 1842 (Plate 8). This demonstrates that much of the land surrounding Seatoller and extending southwards into the eastern side of the valley proper was rented out to Thomas Wren. To the south of Thorneythwaite, the land around Seathwaite was rented to John Birkett, albeit with the exception of a house and land to the south of Seathwaite and a number of cottages in Seatoller and Stonethwaite. Various plantations/small areas of woodland within Thorneythwaite and the wider rented holdings were retained by Fisher, perhaps providing income from coppice.

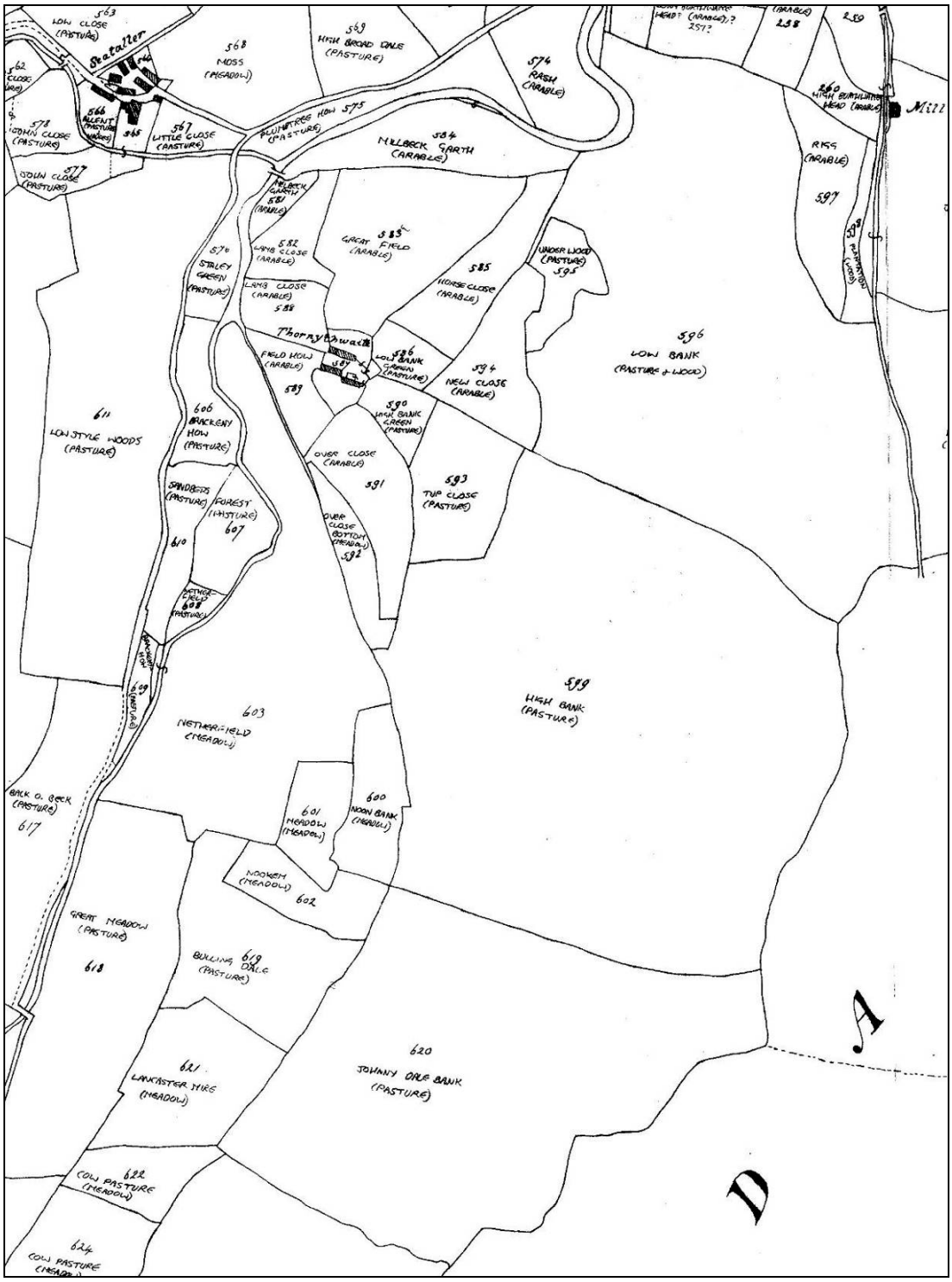


Plate 8: Thorneythwaite Farm on part of the Borrowdale Tithe Map, 1842 (CRO (C) D RC/8/54/4)

5.2.8 Thorneythwaite Farm and the fields immediately surrounding it are described on the tithe apportionment (CRO (C) D RC/8/55/5.6) as being owned and occupied by Fisher himself. The 1851 census return (UK Census Online 2017) records Abraham Fisher as County Magistrate and local landowner; a memorial in St Andrew's Church, Stonethwaite, states that he was 'of Seatoller' at his death in 1864 (Gravestone Project 2017).

5.2.9 According to the will of one Robert Walker, recorded as a farmer of Thorneythwaite (CRO (C) PROB/1861/A70), by 1861 Fisher appears to have let Thorneythwaite Farm (and possibly returned to Seatoller). He died in 1864 and under his will, which also established a trust fund for Borrowdale School (Open Charities 2016), J Fisher Crosthwaite had become joint owner of Thorneythwaite and Seathwaite. The property was sold in 1868 to HC Marshall, and its extent was illustrated as 'Lot 10' of the sale, Lots 9 to 12 being Seathwaite Farm, Thornythwaite, Seatoller and Seatoller mansion and grounds (CRO (W) DMG/80/1).

5.2.10 Ordnance Survey mapping of the area took place in 1862 (Plate 9), and the map was copied for the 1868 sale particulars (Plate 10). As shown on the First and Second Edition Ordnance Survey maps (Plate 9; Fig 2). The majority of field boundaries had remained the same since the tithe map, many of these also being illustrated on Hetherington's plan of 1759 (CRO (C) DX/294/19).

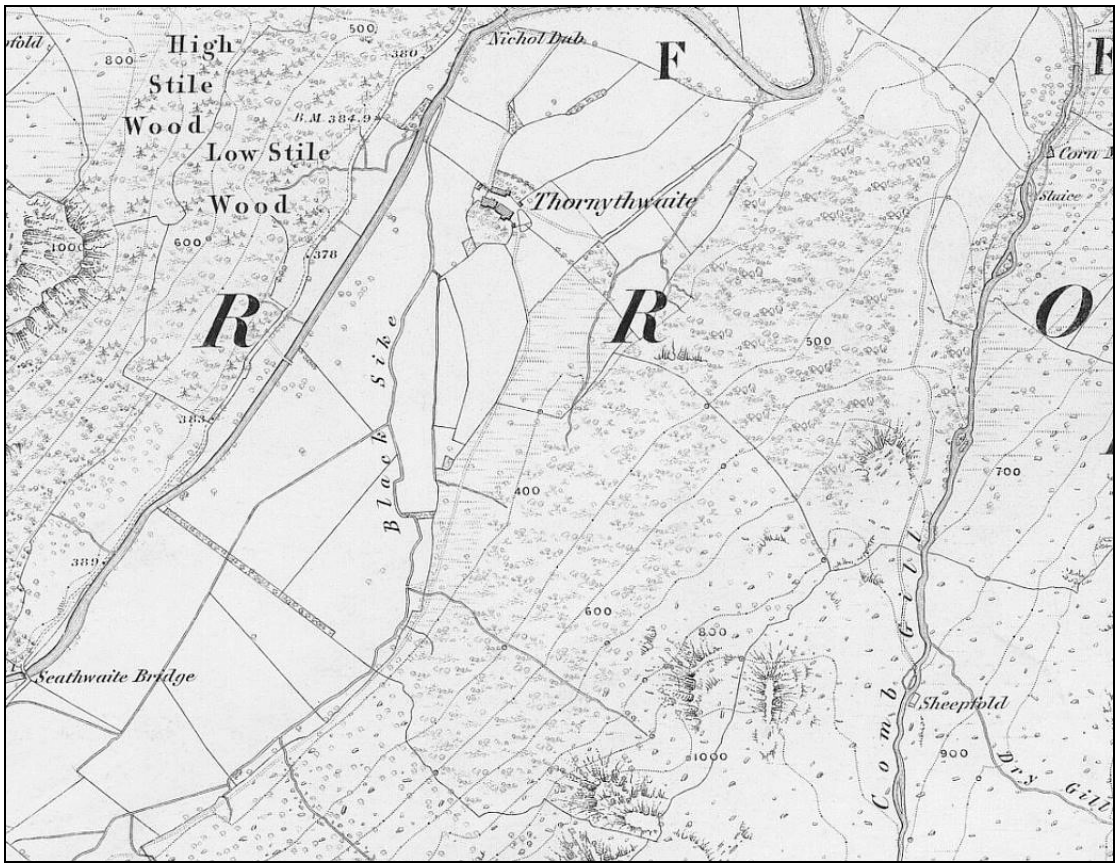


Plate 9: Ordnance Survey First Edition, six-inch map, Cumberland LXX, surveyed 1862, published 1867

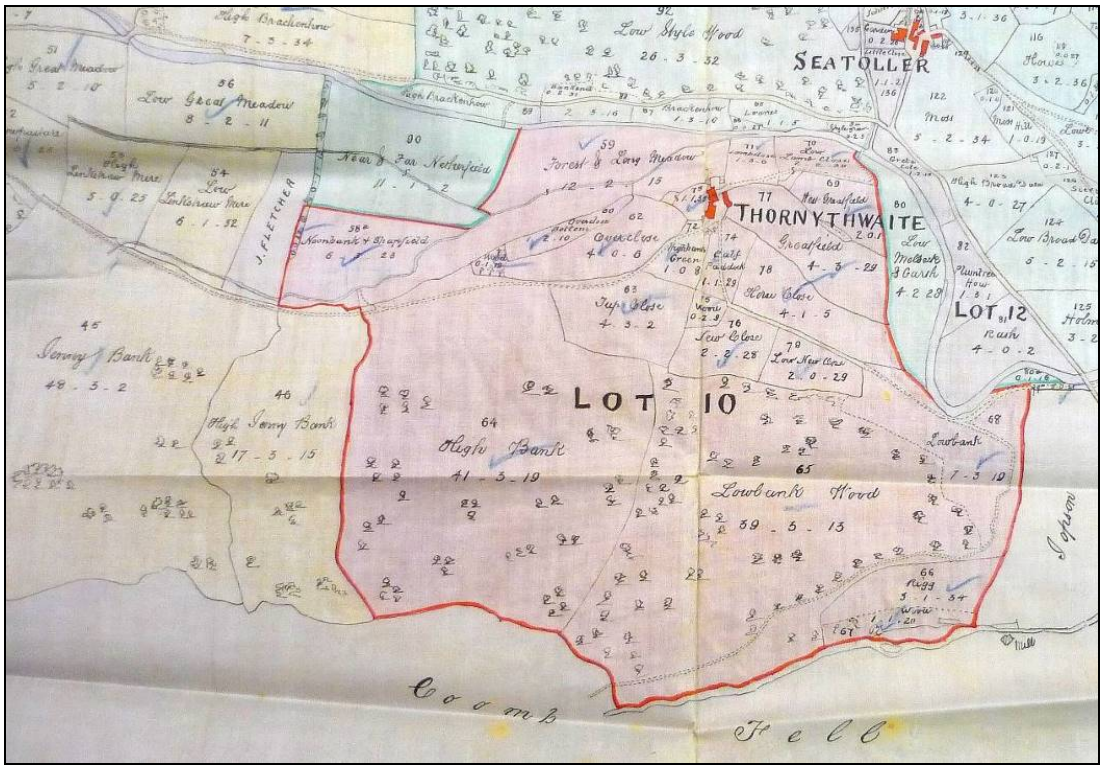


Plate 10: Sale Particulars, 1868 (CRO (W) DMG/80/1)

5.2.11 In 1896, the estate was again sold, this time to John Musgrave of Wasdale Hall, who planned to benefit from proposals to construct a road over Sty Head (Johnson 1981). In the meantime, the Jopson family had returned to, and tenanted, the farm. Thorneythwaite appears as Lot 14 (CRO (W) DMG/236/1: Plate 11) and is described in the accompanying sale catalogue:

'Thorneythwaite-Borrowdale. The freehold farm and woodlands called "THORNEYTHWAITE", near Seatoller, comprising farm house, outbuildings, cottage, and several closes of arable, meadow, pasture and woodland, containing in the whole 221a. 3r. 9p. more or less, coloured YELLOW on the plan No.4, partly in hand and partly occupied by Messrs. Robert Jopson and Daniel Jopson. Also 38 grasses for 380 sheep on Comb Fell, and 9 grasses for 90 sheep on Langstrath Fell. And included in the sale are 440 sheep now going on the above fells. The nine grasses on Langstrath Fell are of customary tenure held by the Manor of Borrowdale by payment of the yearly customary rent of 9d., and of a reasonable arbitrary fine on death of lord or change of tenant….'

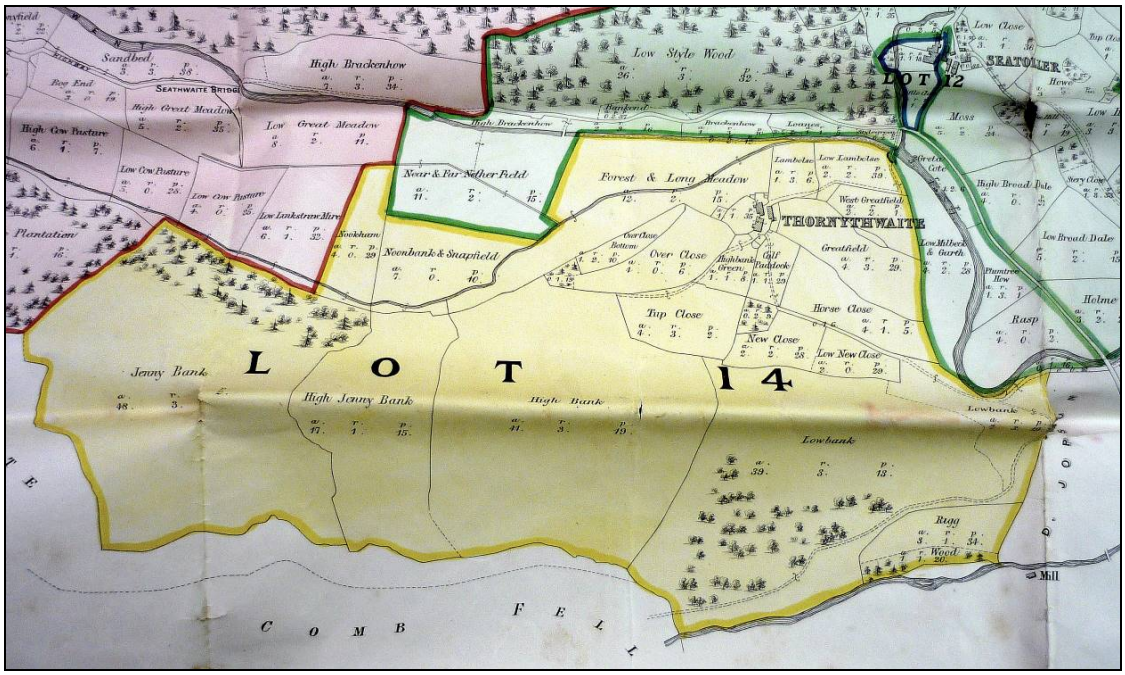


Plate 11: Sale Particulars, 1896 (CRO (W) DMG/236/1)

5.2.12 The lease of Thorneythwaite Farm dating from 1900 (copied from an 1871 version) states that the holding consists of 220 acres of arable, meadow and pasture, 36 acres of pasture in Whinlatter, ten grasses on Langstrath Fell, and a flock of 440 sheep (CRO (W) DMG/105-3). No details pertaining to the house or its occupants were included.

5.2.13 In 1920, Thorneythwaite came up for sale again, and appears in the sale catalogue of the Wasdale Hall estate. Only nine lots were sold and the remainder were bought up by Herbert Walker, who later donated parts of it to the National Trust (Martin 1993). It is unclear, from the available archival material, who bought the property; however, it seems that the Jopson family remained at the farm. A will in the Cumbria Archives (CRO (C) PROB/1923/A23) relates to the death of Robert Jopson, Farmer, of Thorneythwaite, in 1923.

6. ARCHAEOLOGICAL SURVEY

6.1 SUMMARY OF RESULTS

6.1.1 The archaeological survey identified 63 previously unrecorded sites within the Thorneythwaite landholding. It appears that prior to its recent acquisition there had been no earlier archaeological investigations on the property, and indeed, the landholding is depicted as a large empty gap in the wider Borrowdale Historic Landscape Survey (OA North 2007). The sites discovered during the present survey are listed in a gazetteer (*Appendix 2*) and can be compared with those of the valley as a whole.

6.1.2 To summarise, the 63 newly discovered sites within the Thorneythwaite study area comprise the following site types:

- 21 charcoal-burning platforms (Sites **3**-**10**, **13**, **43**, **45**, **47**, **48**, and **50**-**7**; Fig 3),
- seven field boundaries (Sites **1**, **11**, **12**, **44**, **49**, **62** and **63**),
- five trackways (Sites **17**, **40**, **46**, **60** and **61**),
- four sheepfolds/shelters (Sites **18**, **27**, **58** and **59**; Fig 4),
- four gateways (Sites **19**, **33**, **37** and **38**),
- four water smoots (Sites **16**, **32**, **39** and **41**),
- three plantations (Sites **2**, **22** and **23**),
- three bridges/culverts (Sites **14**, **20** and **24**),
- three consumption banks (Sites **34**-**6**),
- two quarries (Sites **26** and **31**),
- two boundary-marker cairns (Sites **28** and **29**),
- an enclosed settlement/farmstead (Site **15**),
- a possible shieling (Site **42**),
- a hollow-way (Site **30**),
- a stile (Site **25**), and
- a beck-clearance heap or possible burnt mound (Site **21**).

6.1.3 The range of sites includes no confirmed prehistoric activity, although there is a possible burnt mound, and an enclosed settlement, which could be of Iron Age / Roman date. The majority of the sites are charcoal-burning platforms or features relating to woodland management, which demonstrate that much of the area was formerly woodland. There are, however, very few industrial sites, and those that have been identified are quarries serving local needs. Many are features relating to a post-medieval pastoral economy and include field boundaries, smoots and sheepfolds. There are also substantial numbers of sites related to communication, such as hollow-ways, trackways and bridges, which demonstrate that the study area is on the line of the principal Borrowdale communication route, giving access to the

centre of the Lake District, and providing routes for the transfer of the products of woodland and other industries to urban centres.

7. SETTLEMENT

7.1 ENCLOSED SETTLEMENT

7.1.1 The earliest evidence for settlement within the study area is an enclosed farmstead/settlement site (Site **15**; Fig 3; Plate 12), centred on the junction of four modern field boundaries immediately south-east of Thorneythwaite Farmhouse; it is in an elevated position on the north side of, and in the lee of, an end moraine. Thorneythwaite Farm is in a similar position on the moraine a little further to the north-west (Plate 1).

*Plate 12: Aerial view of the Site **15** enclosed settlement; the main enclosure bank extends through the northern and western quadrants but is best represented on the contour plot (Fig 5)*

7.1.2 The well-defined enclosure bank (**15.8**; Fig 5), consisting of packed turf-covered small/medium-sized stones (with some boulders present), is D-shaped in plan, and measures at least 85 x 80m. The enclosure bank is 2-3m wide, and survives to a

height of up to 0.4m. The outer boundary is evident on the north, west and east sides and is almost intact in the north-east quadrant (Fig 6). The west quadrant is in a field that has been improved but the enclosure bank remains as a slight earthwork feature. The field to the south is rough, unimproved pasture, with many small sections of sub-divisional walling and possible structural elements evident within the enclosure, including a U-shaped earthwork (**15.10**; 6 x 6m in extent and 0.2m high) that may have formed the end of a rectangular structure. These features are masked by the current vegetation and have probably been denuded by stone-picking to create the modern field walls. The eastern side of the enclosure abuts a small stream. The north-east quadrant has also been subject of modern dumping internally, which masks some of the features within. It is clear that there are several sub-divisional boundaries in this area, as well as a possible large platform (**15.1**), up to 29m in diameter, that may have been the position of a domestic structure. To the east is a putative sub-rectangular structure, much obscured by dumping, which is incorporated against the outer bank (**15.4/15.3**).

7.1.3 The north-east quadrant was depicted as a plantation on the First Edition OS mapping (Plate 9). This plantation is then shown on early to mid-twentieth-century OS mapping, after which it appears to have been cleared. Although these are clearly not contemporary with the creation of the plantation, stumps of coniferous trees remain on top of the banks. That is has been a plantation suggests that features within the north-east corner of the enclosure could be relatively well preserved beneath modern dumped deposits.

7.1.4 Whilst the enclosure was identifiable, it is in relatively poor condition to the west, where fields have been improved, to the south, where structures have been denuded by stone robbing, and to the north, where it is masked by modern dumping (Plate 12). In terms of its morphology, there are strong parallels with both prehistoric and medieval to post-medieval settlement enclosures identified in the region. Whilst most are known only from survey evidence and very few examples have been excavated, they are often attributed a Roman date (Higham 1986; Hoaen and Loney 2004; Collingwood 1908). Characteristically, the interiors of these 'complex enclosed settlements' are filled with roundhouses and more irregular enclosures which merge into the enclosing bank; many of these are circular or oval but there are substantial numbers with square or rectilinear shapes (Quartermaine and Leech 2012).

7.1.5 The sub-divisional walling and potential structural elements, including the possibly rectangular earthwork (**15.10**) and the apparent platform (**15.1**), may, however, equally suggest that the enclosure is later in date. Several examples of rectilinear buildings within enclosures, including possible stock pounds, exist, for example in Eskdale, associated with documentary evidence placing their abandonment in the post-medieval period (EDLHS 2008). There are also probable medieval farmsteads which have reused prehistoric enclosures and fields, for example at Rannerdale (NTSMR 24355) and Lanthwaite Green (NTSMR 29273), Buttermere (OA North 2008), and also at Woundell Beck (EF VIb), Ennerdale, where a medieval enclosure seems to have developed out of a prehistoric cairnfield and settlement (LUAU 1998b).

7.1.6 It is very difficult to provide a reliable interpretation of the site, given the amount of modern dumping and vegetation over it, but the possibility exists that this site has been the focus for early settlement activity, such that an Iron Age / Romano-British

enclosed settlement, which may have been reoccupied in the medieval period. This would need to be tested by excavation, however.

7.2 THORNEYTHWAITE FARM

7.2.1 Thorneythwaite Farm itself is not within the remit of the present study as it is not owned by the National Trust, but it was assessed by the documentary study and it is discussed briefly to set the context for the development of the surrounding farm. Despite a documented medieval origin (*Section 5.2.1*), the first cartographic source to depict the property in any detail is Hetherington's map of 1759 (CRO (C) DX/294/9; Plate 6), which includes an apparently schematic representation of the farmhouse, as resided in by Daniel Jopson. The house is illustrated as having two chimneys, one central to the building; as many early farmhouses had one gable-end chimney (Denyer 1991), this may suggest that it had been enlarged prior to this date. Whilst some have much earlier origins, the majority of surviving early farmhouses in Cumbria date to *c* 1670-1720, with many being extended by the latter part of this period (Denyer 1991; Brunskill 2002). Photographs (Plate 13) suggest the house has been extended further since 1759, and that it has a fire window adjacent to its western gable, this feature being suggestive of a seventeenth- or early eighteenth-century date *(ibid*). Associated with the house are two barns (Fig 3), one of which is a bank barn which is likely to have incorporated a threshing floor. Whilst the map is fairly schematic, it provides sufficient detail to demonstrate that the boundaries of the landholding and the enclosed landscape have not changed significantly since 1759, and that the woodland areas to its east, one labelled 'Daniel Jopson's Bark', were being exploited at this time (*Section 8*).

Plate 13: Thorneythwaite Farmhouse

7.3 TRANSHUMANT SETTLEMENT

7.3.1 The Thorneythwaite estate is on a very narrow valley floor within Borrowdale, which affords little quality enclosed land, being surrounded by steep craggy valley sides. The agricultural economy of the farm would therefore have relied on upland grazing, the lower-lying land being insufficient in extent to support the farm. The existence of transhumant practice is well established in Cumbria; as winter grazing is not viable on the high fells, remote outposts (or shielings) were built to allow stock to be grazed there in the summer (*eg* Whyte 1985; Winchester 1987). Shieling sites have been identified within Borrowdale and are defined either by the remains of upland structures or through place-name evidence (OA North 2007). Shieling sites have been documented, both singly and in groupings, within the uplands of the Lake District, and have been found, with similar morphology and in isolated locations, on other National Trust landholdings. These include examples in Langdale, Ennerdale and nearby in Watendlath (Lund and Southwell 2002; National Trust 1993; OA North 2003; 2007). The name Seatoller means 'the *saetr* by the alder tree' (Armstrong *et al* 1950) and it probably started life as a temporary summer settlement before becoming a permanent farm. The characteristics of shielings are their isolated position, relatively small size, simple construction, and absence of associated field systems (Ramm *et al* 1970), although some shielings seem to have developed into more permanent farmsteads, such as Seatoller (*Section 7.4.1*; and is discussed further in OA North 2016).

7.3.2 A small, double-celled, stone-platformed structure in a figure-of-eight pattern (Site **42**; Fig 3) was located on the eastern side of Borrowdale, just above the valley floor and the enclosed lands, to the south-east of both the intake wall and to the west of a small stream (Black Sike; Plate 14). It is on a north/south orientation and consists of two conjoined circular cells with small dwarf-wall foundations, one 9m and one 8m in diameter; the smaller southern cell is 0.4m higher than the northern cell. The structure is slightly revetted on the western downslope side and the east side is much more fragmentary. There is an earthfast boulder on the eastern side of the central sub-dividing wall. This structure may be a fold or a shieling; if it is the latter, it seems unlikely that it belonged to Thorneythwaite Farm, which is only 0.75km away. The structure is just to the south of a field wall that extends up the valley side from the enclosure, Site **15**, and is perhaps more likely to have belonged to Seathwaite, only 1km away. The structure is not dissimilar to a group of sub-circular (annular) structures near Stickle Tarn, Great Langdale, which were often constructed against large boulders, and which were tentatively suggested as being shielings (OA North 2005).

*Plate 14: Double-celled possible shieling, Site **42***

7.4 THORNEYTHWAITE SETTLEMENT WITHIN THE WIDER CONTEXT

7.4.1 Permanent settlement in Borrowdale probably began with a small number of scattered farmsteads set amongst a few enclosed fields. Some of the farmsteads may have acted as monastic vaccaries and granges from the thirteenth century onwards and some may have had earlier roots. This pattern of small farms with enclosures appears to have persisted (*Section 8*), although both Seathwaite and Seatoller grew into small townships, both positioned along important communication routes. Seathwaite Farm, is believed to be of seventeenth-century date on the basis of a timber of 1633, but is first mentioned in the documentary record in 1292 (Millward and Robinson 1970). Seatoller Farm is first mentioned in sixteenth-century documentary sources, with the present farmhouse dated to the early seventeenth century. The settlement, which is believed to have originated as a summer settlement (*Section 7.3.1*), is situated on the edge of the available farmland on the valley floor, close to the route over Honister.

7.4.2 The Thorneythwaite Farmhouse is now lime rendered, obscuring its fabric, but, from its general form and large windows, it is likely to be of eighteenth- or nineteenth-century date. However, given that it was not possible to examine the building closely, an earlier date cannot be ruled out. A farmhouse is depicted on the 1759 map (CRO (C) DX/294/19), and it is probable that the present building, at least in some form, was that schematically represented there, it being perfectly possible that the standing building masks the footprint of an earlier farmhouse. It is also possible that the original settlement at Thorneythwaite was actually at Site **15**. Clarification of the origins of the settlement would, however, require undertaking an archaeological survey of the present farmhouse and a closer investigation of the enclosed settlement.

8. DEVELOPMENT OF ENCLOSURE

8.1 THE PRIMARY DEVELOPMENT OF THE THORNEYTHWAITE ENCLOSURE

8.1.1 The early development of the enclosure of Thorneythwaite can be seen as secondary to that of the neighbouring townships of Seathwaite and Seatoller, which both appear to exhibit primary ring-garths. The analysis of these early enclosures was undertaken in the course of the earlier study of Borrowdale (OA North 2007), which provides a context for the analysis of the Thorneythwaite enclosure.

8.1.2 ***The Medieval Origins of Enclosure in the Lakeland Valleys:*** early enclosure in the valleys of the Lake District typically contrasts with that of the less topographically constrained areas beyond the core of the mountainous areas. In these latter areas, there seems to have been a greater emphasis on arable farming during the medieval period than was the case in the mountainous valleys, where stock-rearing always seems to have been important (Elliott 1959). Therefore, because there was relatively little topographical constraint, open fields (often called townfields, being the open fields belonging to a township) were established, which extended out from the tofts of the settlement, and were communally farmed (Winchester 1987, 74). These fields were not permanently enclosed, those areas of the open fields that were under crop being temporarily fenced to keep grazing animals out (Elliott 1959). In the mountainous valleys, there was a greater emphasis on pastoral farming, which exploited the considerable areas of waste land. Only limited amounts of flat land were available for arable farming, typically on the valley floor; as these areas were very tightly constrained by the topography, there was little, or no, opportunity to vary the areas under crop and so they were typically permanently enclosed by a fence called a ring-garth, which served to keep the grazing animals off the crop (Winchester 2000, 54). Often the farm buildings were placed on the line of the ring-garth, so that they could manage animals on the pastoral side of the ring-garth and arable farming on the other. This situation is very effectively demonstrated at Holwick, in Teesdale, where all the medieval farmsteads can be found on the ring-garth (OA North 2011), and also in Great Langdale (Lund and Southwell 2002).

8.1.3 The results of both documentary and field survey in the Lake District (Winchester 1987, 59-60; Lund and Southwell 2002; National Trust 2000; OA North 2003) indicates that the earliest, and most substantial, boundary feature, would be a ring-garth. This feature generally took the form of a continuous fence or wall, constructed along the break of slope between the fellside and flat lands, enclosing all, or part, of the valley floor. During the summer, it allowed stock to roam freely on the open fellside while preventing them from entering the valley floor and damaging crops being grown there; in the winter, they could be brought in to graze and fertilise the valley fields safely. Examples of this type of wall, the earliest of which dates from the late twelfth century at Preston Richard, have been found at Windermere, Crosby Ravensworth, Helton, Great Langdale (National Trust 2005), Grayrigg and Wasdale (National Trust 2000). Perhaps most significantly, such a feature has also been identified in the adjacent property of Watendlath (National Trust 1993). The limit for potential arable production in the valley is defined principally by the distribution of the Enborne and Ellerbeck soil types (Farewell *et al* 2011), which follows closely the topographical break of slope between the valley floor and the fellside; this is therefore an obvious place to look for such a feature.

8.1.4 ***Ring-Garths in Borrowdale:*** the field evidence for the ring-garth in Borrowdale is fractured and insubstantial. Some sections of wall have been identified as potentially part of such a feature, but are just as likely to have been part of enclosing walls for parcels of ancient coppice woodland. Many of the junctions recorded in the wall survey (*Section 9*) are inconclusive, making it difficult to 'deconstruct' the network of enclosures and reveal the presence of an early enclosing wall. Despite extensive ground investigation, a definitive ring-garth enclosing lands farmed in the medieval period could not be proved conclusively for the valley as a whole (OA North 2007).

8.1.5 Although a ring-garth cannot be demonstrated across the whole valley, such features around individual townships can be proposed based on cartographic analysis of the historical mapping. It is likely that the flat valley floors to the north of Seathwaite, and east of Seatoller, provided the original focus for farming; Thorneythwaite seems to be located between these two primary enclosures (Fig 7). The valley has been subject to numerous destructive floods over the centuries, which have resulted in the rebuilding of enclosure boundaries on the valley floor on many occasions, thus obliterating any trace of earlier patterns (Millward and Robinson 1970). The modern pattern is almost certainly the result of rebuilding at some point in the second half of the nineteenth century, but it is not clear to what extent the boundaries were rebuilt on the line of the earlier ones; many of these survive as fenced hedges and these may mirror early field boundaries. The limits of garth enclosures can, however, be suggested through inspection of the cartographic sources in several places.

8.1.6 The nature of at least one medieval enclosure boundary has been recorded by archaeological work in Seathwaite. A boundary wall and fence, excavated from beneath colluvial deposits, indicated that at least part of the valley was being exploited around cal AD 1300-1450 (535±45 BP; OxA-7750 and 520±40 BP; OxA-7751); the stone wall and fence-line hints at the enclosure of parts of the valley with stock boundaries in this period (LUAU 1998a; Wild *et al* 2001). This boundary was part of an early intake extending out from the river and is defined as the earliest phase of the boundary development in this area (OA North 2007). Within a discrete area around the excavation site, numerous fragmentary sections of enclosure bank were identified, all with hawthorn hedges on top (every hawthorn in this part of the valley was planted upon a boundary). These boundary fragments have been badly disturbed by many prolonged periods of flooding over the centuries (*Section 4.2.23*), and their form has both changed and degraded; it is not possible, therefore, on purely morphological grounds, for any direct parallels with the excavated example to be inferred.

8.1.7 ***Early Enclosure:*** although the primary enclosure in Borrowdale was seemingly a ring-garth or isolated intakes, there is documentary evidence for the establishment of townfields, which may have developed after the establishment of the enclosed grounds around the tenements, as these were not specifically mentioned until the relatively late date of 1659 (CRO (C) DX/241/9). They typically survive within the field system as 'where that impetus (to increase the arable acreage) was absent, as on higher land more suited to stock rearing, the single townfield remained' (Winchester 1987, 75).

8.1.8 ***Seathwaite (Phase 1 Enclosure):*** the general distribution of the earliest enclosure within the Seathwaite valley (Fig 7) should be taken as the maximum extent of enclosed lands by the time of the Dissolution of the Monasteries, and this is broadly still represented on the Hetherington map of 1759 (CRO (C) DX/294/9). Within this

earliest phase, several sub-phases can be discerned relating to known enclosure, such as small farmstead enclosures. Although there is no usable mapping prior to 1759, analysis allows an assessment of the line of the ring-garth around Seathwaite, which is seen to take in much of the valley floor but stops at the break of slope up onto the fellside. There is, however, no physical evidence of a substantial boundary surviving on the lower, shallower, slopes immediately above the valley floor that would be indicative of a ring-garth. To the east of the village is an enclosure incorporating a large curvilinear and banked boundary, extending up the lower valley side and capped at the top by a funnelled boundary leading to a sheepfold. This could relate to a stock-corralling area beyond the village but looking out onto the medieval sheepwalks. The north-eastern end of the enclosure corresponded to the line of Black Sike, as implied by the Hetherington map of 1759, and formed a long-standing boundary between the Seathwaite enclosure and the enclosure of Thorneythwaite.

8.1.9 ***Seatoller (Phase 1 Enclosure):*** the earliest enclosure associated with Seatoller was seemingly on the east side of the settlement adjacent to the river (Fig 7), as evidenced by the Hetherington map and boundary analysis. The tithe award records the southern boundary of these fields as 'Millbeck Garth', which takes in the edge of the floodplain where it falls sharply down towards the river (CRO (C) D RC/8/55/5.6). The other boundaries were formed by natural landscape features, the edges of flat land and the limits of river/stream courses. In addition, there is an area of ancient enclosure to the north of the hamlet, where the ruinous remains of substantial drystone walls can be seen as banked boundaries. Again, this enclosure would appear to relate to stock corralling outside of the hamlet and near to the sheepwalks, and may potentially post-date the primary enclosure on the east side of the settlement, but it has not been possible to clarify this.

8.1.10 ***Thorneythwaite Enclosure (Phase 2):*** it seems likely that the enclosure around Thorneythwaite (Fig 7) comprised an extension to the earlier enclosures; however, there is no clear archaeological evidence and very little documentary information to back up this episode. The primary enclosure for Thorneythwaite was set within the valley floor, and in between the areas of enclosure around Seatoller and Seathwaite, with the primary boundaries of Thorneythwaite butting onto the respective Seatoller and Seathwaite ring-garths (OA North 2007). Thorneythwaite Farm is central to this land intake, and since it was first mentioned in the assize rolls of 1230 (Millward and Robinson 1970) and was held by Furness Abbey until its dissolution, it is probable that this element of enclosure was undertaken in the medieval period. The early Thorneythwaite intake is very small in extent and comprises only the land immediately around the farm itself; it did not include an area of later enclosed rough ground on the margins of the valley slides.

8.1.11 The primary intake comprised lands to the west of the farm, presumably for arable, with unenclosed lands directly to the east, based on the earliest usable mapping available (1759; CRO (C) DX/294/9) and an assessment of the relationships between boundaries. This would be a conventional mixed farming arrangement, where the steading was placed at the interface between the enclosed arable lands and the unenclosed grazing lands; the intake incorporated a funnel arrangement intended to help take stock off the open fell and into the enclosed lands for winter grazing. The primary purpose of the enclosure, however, was to keep the animals off the crops during the summer months.

8.1.12 ***Thorneythwaite Enclosure (Phase 3: 1759):*** the evidence for a later enclosure at Thorneythwaite is based upon the schematic map of 1759 (CRO (C) DX/294/9; Plate 6). This indicates that, by this time, the presumed upland grazing land for the farm had been enclosed, extending up much of the valley side, as far as Combe Gill to the south-east, and a wall had been constructed along the top of the ridge to define the south-eastern extent of the wider enclosure (Phase 3B on Figure 7). By 1759, part of this land was shown as being woodland and had been partly coppiced; however, it is not evident if the enclosure was intended to define the extent of a plantation or if this was enclosed grazing land that had been subsequently coppiced. The enclosure on the valley floor had also been expanded to the south-east (Phase 3A), effectively increasing the amount of arable lands, and the existing enclosed arable land had been sub-divided by a series of radial field boundaries extending out from the farm. Although Phases 3A and 3B were two separate episodes of enclosure, it is not apparent from the cartographic evidence or boundary analysis which was the earlier.

8.1.13 ***Thorneythwaite Enclosure (Phase 4: 1842):*** between 1759 and the production of the tithe map (1842; CRO (C) D RC/8/55/4; Plate 8), the basic layout of the farm continued unchanged, although the existing enclosure had been subject to further division. Several presumed arable fields had been further sub-divided so that by the mid-nineteenth century, most of the fields were relatively small. The primary open fell enclosure had been sub-divided by a further boundary extending straight up the valley side from the farm, and the resultant compartments for woodland were labelled on the tithe map as 'Low Bank', 'High Bank' and 'Johnny Dale Bank'.

8.1.14 ***Thorneythwaite Enclosure (Phase 5: 1867):*** a further sub-division of what was called Great Field (583) on the tithe map had occurred by the time the OS First Edition map was surveyed (1862; Plate 9). Since then, there has been very little material change in the enclosure pattern.

9. AGRICULTURAL SITES

9.1 FARMING FEATURES

9.1.1 Across Borrowdale, the majority of archaeological evidence for agriculture relates to pastoral farming. Bields, shepherd's shelters, sheepfolds and stock enclosures are relatively common on the fellsides, and several shielings have been identified (OA North 2007). On the lower-lying ground, surviving evidence relates largely to field boundaries, field barns, clearance cairns, consumption banks and limited areas of ridge and furrow (*ibid*). Antiquarian accounts of the valley suggest that arable agriculture was limited (British Museum Add MS 24764 f6, in Elliott 1961), although the tithe map and apportionment illustrate that by the nineteenth century many valley-bottom fields had been improved and were utilised for growing crops (CRO (C) D RC/8/55/4; CRO (C) D RC/8/55/5.6).

9.1.2 Several agricultural features have been identified on the Thorneythwaite property. These reflect upland pastoral agriculture, in the form of stock-management features, including both sheepfolds and shelters, on the valley side. Evidence for clearance within the fields on the valley floor is illustrated by several large consumption banks (*Section 9.1.3*). There are also further sites consisting of architectural furniture associated with the establishment of walled fields/enclosures surrounding Thorneythwaite Farm.

9.1.3 ***Field Boundaries:*** the fields surrounding Thorneythwaite Farm are well defined by substantial walled boundaries. The walls to the north of the farm are thicker than elsewhere, and in three places (Sites **34**-**6**; Fig 3) in what was depicted as 'Great Field' on the tithe map (Plate 8; CRO (C) D RC/8/55/4), there are large consumption banks, where field stone has been cleared to improve the fields, being placed within the field walls (Plate 15). These consumption banks may not be of any great antiquity, however, as the sub-dividing wall containing the largest consumption bank (Site **34** in 'Great Field') was not depicted on the 1842 tithe map. The boundaries on the property contain a limited amount of wall furniture of archaeological/historical interest; there are several blocked gateways (Sites **33** and **38**), the latter being located along the alignment of, which presumably is the earlier route of, the packhorse track on the south-east side of Thorneythwaite Farm (Site **17**; *Section 10*). There are two further gateways with single or double gate stoops surviving (Sites **19** and **37**), both of simple slab construction in locally quarried stone. None of the gate stoops have early architectural features, such as inscriptions or gate-stoop holes. A single stepped stile (Site **25**) is on a modern footpath, which follows the former packhorse route down the east side of the valley (Site **17**), and four simple slab-topped water smoots were found in the field walls on the valley floor (Sites **16**, **32**, **39** and **41**). Other water-management features and bridges were limited to three small slab bridges or culverts crossing tributary streams in the valley floor (Sites **7**, **14, 20** and **24**).

*Plate 15: Consumption wall, Site **36***

9.1.4 Foundations for field walls were identified within the three valley-side intakes of 'Low Bank', 'High Bank' and 'Johnny Dale Bank'. These relate either to earlier lower external intake walls pre-dating the large intakes, which took in all of the valley sides up to the top break of slope, or reflect later sub-divisions separating parcels of the intake. These smaller parcels, in particular those sub-dividing the area along the break of slope, would have functioned to separate pasture and/or small woodland coppice compartments (Sites **44**, **49**, **62** and **63**). Two boundaries relate to smaller pasture fields, one depicted on the tithe map as 'Under Wood Pasture' (Site **12**), and another unnamed field was partially depicted as a tree-lined boundary on the First Edition OS map, surveyed in 1862 (Site **1**). A further boundary marked the northern edge of a clump of trees on a craggy outcrop on that map (Site **11**).

9.1.5 ***Stock Management:*** four sheepfolds/shelters were identified in the upland intakes on the eastern valley side, reflecting pastoral stock management. The folds within the survey area were all simple, single celled, stone-walled structures at the edges of intake walls. One example was located on the lower valley side (Site **18**; Plate 16) in the north-west corner of the intake of Johnny Dale Bank and on the route of the packhorse track (Site **17**). Another was in the south side of the wall sub-dividing the intakes of Low Bank and High Bank (Site **58**). The single sheep shelter (Site **27**) was external to the corner of an intake wall on the top of Thorneythwaite Fell (Fig 4) and a further sheepfold was attached to the external side of the intake wall on Thorneythwaite Fell (Site **59**). The character of the sheepfolds/shelters is very much in keeping with the monuments found elsewhere in Borrowdale, but the number of sheepfolds is relatively low by comparison with those found elsewhere within the valley (OA North 2007).

*Plate 16: Sheepfold, Site **18**, looking north-east*

9.1.6 Several larger sheepfold/washfolds were located in an elevated position in the sheltered area around Combe Gill (just to the east of the survey area), which were accessed from the valley floor via the sinuous hollow-way/peat track heading up from Thorneythwaite Farm (Site **30**; Fig 3; *Section 10*). Washfolds are larger and more complex sheepfolds, next to water sources, for the purpose of cleaning sheep prior to shearing. Typically, they have a funnelled exit which feeds the sheep through a deep section of beck, ensuring that they are well washed (Winchester 2016).

9.1.7 ***Beck Clearance/ Possible Burnt Mound:*** a shallow, oval turf-covered mound was identified within enclosed farmland between the River Derwent and Black Sike (Site **21**). Situated on the eastern side of an oval, boggy area containing obvious palaeochannels, the feature (10m long by 5m wide and 0.25m high) has a rounded profile with gently sloping sides (Plate 17). The mound was initially identified because of the presence of lush green grass on its top, suggesting rich organic material within its make-up. Analysis of aerial photographs held by the LDNPA identified a second kidney-shaped mound at the northern end of the boggy area (beyond the present study area). On the basis of the position of the Site **21**, adjacent to a series of palaeochannels, it could relate to beck clearance (possibly following flooding), or, alternatively, it could be a burnt mound, since these are frequently found in such locations (Nixon 1990; Hodgson 2007).

*Plate 17: The putative burnt mound / clearance feature, Site **21***

9.1.8 Burnt mounds are formed of fire-cracked stone, resulting from the heating of water by dropping hot stones into water-filled troughs, often revealed as depressions within or external to the mound. There has been much debate over the function of such sites (*eg* Barfield and Hodder 1987; Waddell 1998), but it is generally accepted that they had a special purpose, rather than being related to permanent domestic settlement involving cooking food. In Cumbria, burnt mounds have been identified in coastal, valley-bottom and upland contexts (*eg* Heawood and Huckerby 2002; Appley 2012; Brown 2015; Brown *et al* in prep). Whilst most appear to relate to Bronze Age activity, one of the series of burnt mounds on the north bank of the River Eden, west of Carlisle, produced a later Neolithic date (Brown *et al* in prep) and an excavated site on the valley floor in Wasdale contained two burnt mounds associated with an array of postholes and stakeholes, which returned Bronze Age, Iron Age and early medieval radiocarbon dates (OA North 2015).

9.1.9 Given the frequency and ferocity of flooding events, and the fact that sections of the river between Seathwaite and Thorneythwaite have been straightened and cleared on numerous historically documented occasions (Johnson 1981; *Section 4.2.23)*, it seems likely that the feature is of relatively recent origin. Beck clearance is widely attested in Borrowdale, as watercourses were routinely cleaned out following floods, and as preventative measures for further inundation of meadowland (*ibid*).

10. COMMUNICATIONS

10.1 PACKHORSE TRACKS

10.1.1 Communication routes appear in several forms within the Thorneythwaite study area. Within the main Borrowdale valley, packhorse routes occur most frequently, providing access over the fells and linking with wider communication routes. At a localised scale, they also run between farms and areas of industrial activity. Other types of routeways include walled lanes through enclosed land, allowing access onto the fellside to areas of peat cutting, tracks through woods made by charcoal burners, tracks up the fellside, and roads and paths created as a result of various small- and larger-scale industrial activities.

10.1.2 ***Packhorse Track:*** a packhorse track (Site **17**) extends along the whole length of the valley on its eastern side. Beginning south of Strands Bridge, it follows in a north-east/south-west direction along the lower wooded slopes of Thorneythwaite Fell, just outside and slightly upslope of the enclosed lands, to Seathwaite, at the head of the valley. The trackway follows the break between the valley-bottom lands and the fellside, thus providing access to both; it also links up with trackways on the fellside used for coppicing. The section of the track within the survey area is approximately 1050m in length.

10.1.3 The best surviving section is 300m south of Thorneythwaite Farm and consists of a well-defined 2m-wide trackway, cut slightly into the hillside, with a large retaining wall, up to 1m high, downslope on the north-west side (Plate 18). The track there passes immediately adjacent to the farmstead enclosure (Site **15**), where it originally passed through a gateway, now blocked (Site **38**). It also crosses a drainage gully by way of a small slab-topped bridge (Site **24**), to the south, on High Bank.

*Plate 18: Section of the packhorse track, Site **17**, looking south-west*

10.1.4 The route of the packhorse track is visible on historical mapping, to the east of Black Sike and parallel to what is now the main route down the valley to Seathwaite, to the west of the River Derwent, though it is not depicted on Hetherington's map of 1759 (Plate 6; CRO (C) DX/294/9), or the tithe map of 1842 (Plate 8; CRO (C) D RC/8/54/4). It does appear, however, on the First Edition OS map, surveyed in 1862 (Plate 9). Whilst its former route is clearly discernible (along the field wall running through the enclosed farmstead (Site **15**)), it has been diverted up to Thorneythwaite Farm. Along with the blocked gateway (Site **38**; *Section 10.1.3*), this would suggest that it pre-dates the present farmhouse.

10.1.5 Further to the south, and beyond the study area, the packhorse route joins up at Seathwaite with the other north/south route down the valley, which extends towards Styhead Pass. Continuing south from there, a roadway once known as 'Le Cauce' was documented in 1294, which was apparently a well-established 'causey' by the late thirteenth century (Sutton 1961; Lefebure 1970). Although Sutton (followed presumably by Lefebure) does not provide references to the source document or map, it is certainly feasible that this route was well established by this time. The principal function of the routes in the medieval period was presumably to enable communication between the various dispersed holdings of the abbeys, although they would also have had more localised roles, for the movement of stock onto the fells and as links between valleys (Hindle 1984). The major routeways through the high fells exploited the natural topography, and, prior to documentary records, finds of prehistoric stone axes along the routes of the principal passes and valleys indicate that they were established many thousands of years ago.

10.2 WOODLAND TRACKWAYS

10.2.1 The woodland enclosures are criss-crossed by networks of sinuous trackways following the contours around the hill slopes, or very gradually ascending up the slopes. These provided direct routes in or out of the woodland and would have provided access to the dispersed charcoal platforms within the coppice compartments. Although some of the trackways crossing steep slopes were easily identifiable, being terraced, sections where flat ground was crossed were not necessarily deliberately modified and, therefore, were only visible where use had created hollow-ways.

10.2.2 One such trackway (Site **40**; Fig 3), which had cut into the hillside at the foot of Thorneythwaite Fell, had two junctions with the main packhorse route along the lower slopes of the valley (Site **17**). The trackway runs upslope and appeared to zig-zag past a structure (Site **63**) near to where it was crossed by a later intake wall. Another trackway (Site **46**), some of which remains as part of a footpath, runs upslope across Low Bank and High Bank. Passing between two woodland intakes, it provided access to several charcoal-burning platforms, and joined with another trackway (Site **61**) at its northern end. This latter trackway, extending diagonally through the northern end of a woodland intake, also joined with another trackway (Site **60**), again running through the northern end of a woodland intake on Low Bank.

10.2.3 The trackways identified relate closely to the charcoal-burning platforms (*Section 12*) and bear comparison with those identified in valley-side charcoal-producing woodlands in Borrowdale (OA North 2007), and in other parts of Cumbria (Bowden 2000). These frequently extended between woodland intakes, in diagonal lines and zig-zags between charcoal-burning platforms, joining principal trackways and, in turn,

main communication routes (*ibid*). Often, parts of these trackways were reused as footpaths, but many went out of use and are crossed by later enclosure walls (*ibid*).

10.2.4 One substantial hollow-way was identified (Site **30**), which was a sinuous braided ribbon-like track leading upslope on the northern flank of Thorneythwaite Fell. It ascends from Thorneythwaite Farm and reaches a series of sheepfolds/shelters nestled in Combe Gill, just beyond the intakes (and beyond the present survey area). From there, the modern footpath continues southwards, up Capell Crag. Where it was identified within the present survey area, the section of trackway measured at least 875m in length, and, where well-preserved, it has a V-shaped profile up to 3m wide by 1m deep. Whilst it is likely to have been used as a droveway onto the high fells, the V-shaped profile may also be indicative of use as a peat sledway.

10.2.5 The development of peat in the Lake District is related more to the slope of the ground than the degree of rainfall; it appears to have developed mainly in level areas with only localised formation on the steeper Borrowdale fells (Pearsall and Pennington 1973). Across the valley as a whole, there is only limited evidence for peat-cutting (OA North 2007).

10.2.6 The right to cut peat for fuel (turbary rights) was extremely important to tenants, however, as they relied on peat for their principal supply of domestic fuel; timber and charcoal could be more profitably sold elsewhere and were not extensively used for domestic fires (Winchester 1984). Hutchinson's description of the valley and its residents in the late eighteenth century provides an illustrative account of the mechanics of peat exploitation in the valley:

> '*... procuring of fuel is among their greatest hardships. In most parts of the world this article is sought, either in pits, or on the surface of the earth. Here the inhabitants are obliged to procure it from the tops of mountains, which abounding with mossy grounds, seldom found in the valleys below, supply them with peat. The difficulty lies in conveying them from such immense heights. In doing this, they have recourse to a strange and dangerous expedient, though similar to the modes of conveyance which necessity dictates in other mountainous countries. They make their peat into bundles, and fasten it upon sledges; on each of which a man sits, and guides the machine with his foot down the precipices. We saw many tracks along the sides of mountains, made by these sledges; several of which were four or five hundred feet high, and appeared from the bottom almost perpendicular'* (Hutchinson 1794, 211).

11. INDUSTRY

11.1 INDUSTRIAL FEATURES

11.1.1 The evidence for industrial activity within the study area is fairly limited, comprising an outcrop of the material used in Neolithic axe production, although no actual evidence of extraction was identified, as well as two more recent stone quarries. This certainly contrasts with the more intensive industrial activity identified elsewhere in the valley, such as the graphite and lead mines, the slate quarries of Honister and evidence for iron production (OA North 2007). Whilst the Thorneythwaite study area may not contain mineral resources for industrial exploitation, woodland industries associated with charcoal production are well represented in the study area (*Section 12*).

11.1.2 Just outside the study area to the north-east is a water mill with a surviving leat; a mill is mentioned in sixteenth-century documents and marked on the First Edition OS as a corn mill (Plate 9*; Section 4.2.12*). On the Second Edition OS map of 1900 (Fig 2), it is marked as a timber mill, having been taken over as a saw mill for Honister quarry (Sutton 1961).

11.2 AXE FACTORIES

11.2.1 The elevated southern end of the survey area on Thorneythwaite Fell is some 465m north of the outcropping geological band of Group VI tuff on the north-facing flank of Glaramara, where the northernmost of the production sites, associated with the wider Langdale axe factories, were identified (Claris and Quartermaine 1989). Axe-production sites are widely distributed but grouped at intervals near the Seathwaite Fell tuff outcrops, which continue west from Great Langdale to Scafell Pike and north to Glaramara (*ibid*; Clough and Cummins 1988).

11.2.2 There was clear potential for axe-working sites being exposed within the modern footpath leading downslope north from Glaramara. The footpath had previously been identified in the Borrowdale Valley Survey (OA North 2007) as a potential high-level routeway leading downslope from the axe factories. This may have been similar to other routeways with axe-flaking sites exposed on the footpaths leading away from the heart of the axe-factory complex in Great Langdale, where they are distributed to the east of the Pike o'Stickle (OA North 2005) and to the west along Martcrag Moor (OA North 2009), and also to the south-west of Scafell Pike at Brown Tongue (Claris and Quartermaine 1989).

11.2.3 The short section of the footpath within the present survey area was *c* 300m in length. No axe-flaking debitage was identified in the footpath erosion scars, however. Limited peat-hag erosion was identified and investigated on the western flank of Thorneythwaite Fell/Capell Crag, but with negative results. However, there remains a possibility of extant isolated axe-working sites within this part of the survey area, but presently masked by later peat development.

11.3 QUARRYING

11.3.1 Two stone quarries were identified (Sites **26** and **31**; Fig 3), which are both adjacent to a sinuous hollow-way (Site **30**) extending upslope along the northern flank of Thorneythwaite Fell, and between Thorneythwaite Farm and a series of

sheepfolds/shelters nestled in Combe Gill. Quarry ***26*** worked a crag adjacent to Combe Gill and is 25m long and in places up to 4m high; there is little associated spoil, which indicates that all or most of the stone product was being used, probably for general building stone. Given the location of the quarry and its accessibility to the farm, it may have provided stone for the building and enclosure boundaries. Quarry **31** (Plate 19) is lower, adjacent to Strands Bridge, and therefore on a good communication route to both Thorneythwaite and nearby Seatoller. It is teardrop-shaped, 15m long by 9m wide and up to 3m deep, set into gentle sloping ground. Whilst there is a slight spoil mound on its eastern side, for the most part all the stone was used and is likely to have supplied general building stone.

*Plate 19: The teardrop-shaped quarry pit, Site **31***

12. WOODLANDS

12.1 WOODLAND INDUSTRIES

12.1.1 Whilst evidence for the exploitation of mineral resources in the Thorneythwaite study area is lacking compared to that from other parts of Borrowdale (OA North 2007), there is extensive evidence for woodland exploitation. The sites identified relate predominantly to charcoal production and associated trackways (*Section 10*). In this regard, the charcoal-burning platforms identified corroborate well with the numerous examples previously identified, as is illustrated by their distribution across the valley as a whole (Fig 8).

12.1.2 There is evidence that charcoal was being produced by burning timber in pits from the medieval period. Fourteenth-century radiocarbon dates have been obtained from a pit at Bark House Bank, in the Rusland Valley (LDNPP 2017), which demonstrate that charcoal burning was being undertaken by that time. Whilst it is likely that, in Borrowdale, charcoal production was also taking place in the medieval period, potentially to fuel bloomeries associated with the abbeys, it is best illustrated in relation to industrial-scale metal production, and in Borrowdale this was associated with the arrival of the Company of Mines Royal in the 1560s (*Section 4.2.15*). Archival sources suggest that, up until the sixteenth century, charcoal-burners were granted access to deadwood and underwood and may have ranged quite freely (Winchester 1987). That such rights were infringed is clearly illustrated by Elizabeth I's decree of 1564, which abolished bloomsmithies in Furness, ostensibly to protect trees for timber, but possibly to ensure supplies for her own interests (Marshall and Davies-Shiel 1977). Records illustrate that enclosed coppice was being cut in rotation by the sixteenth century (Winchester 1987), and that this change in management was driven by the post-medieval industrial development which characterises the landscape history of many Cumbrian dales.

12.2 COPPICING

12.2.1 Most broad-leaved tree species were coppiced, the process involving cutting a young tree down to a height of about 0.3m above the ground, so that in spring it would send up young shoots which would later grow into straight poles. Post-medieval coppiced woodland was cut at intervals, typically varying between 14 and 25 years (Rackham 2003; Bowden 2000, 22) and, in Cumbria, intervals of more than 20 years were not common (Fell 1908, 106). Most coppice was cut in autumn, although oak was left until May or June, when the sap was rising and the bark could be peeled off.

12.2.2 After cutting, the coppice wood was enclosed to prevent grazing and stock trampling; the enclosure could take a number of different forms such as a fence, hedge or wall. Banks and ditches were also dug and it is not unusual to find old coppice woodland divided up into a series of compartments by the remnants of these banks and ditches running through them (Bowden 2000).

12.3 CHARCOAL-BURNING PLATFORMS

12.3.1 Platforms were essential in providing cleared level bases for the construction of charcoal stacks in the hilly terrain of the Lake District. Many platforms were terraced into hill slopes; these are the most conspicuous and easy to identify as they

appear as anomalous earthworks in comparison to the surrounding sloping ground. Most of the charcoal-burning platforms identified in the Thorneythwaite survey area had well-defined revetment walling, and were all cut into the steep hillside, with the platform downslope.

12.3.2 The majority of the Thorneythwaite property consists of steep valley-side, divided into three large intakes labelled 'Low Bank', 'High Bank' and 'Johnny Dale Bank' on the tithe map of 1842 (Plate 8; *Section 8.1.13*). These were depicted as both pasture/woodland on the tithe and nineteenth-century OS mapping (Plate 9). The sites identified, within both the Low Bank and High Bank intakes, consisted of 21 circular/oval charcoal-burning platforms (Plate 20; Sites **3**-**10**, **13**, **43**, **45**, **47**, **48**, and **50**-**57**; Fig 3) spread out in loose clusters. No definitive platforms were identified in the southernmost intake of Johnny Dale Bank, which may be because of its relative steepness and apparent large-scale flood damage along the slope (particularly in the southern half of the intake).

*Plate 20: A typical charcoal-burning platform, Site **3***

12.3.3 One platform (Site **50**) was clearly overlain by a wall foundation (Site **49**), which may indicate the relatively recent nature of at least one of the walls sub-dividing High Bank intake. There was no evidence of extant historic coppice stools within the woodland; however, there are veteran oak trees present, interspersed with birch. Numerous holly trees may indicate that holly hags (holly being a winter fodder crop; Meier 2008-16) may have once created the coppice compartments, in addition to the walled sub-divisional boundaries (Kelley 2002; OA North 2012).

12.3.4 The process of charcoal-burning in the post-medieval period involved the construction of a mound on a charcoal-burning platform (Plate 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 (Plate 22). 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 (Plate 23) 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*).

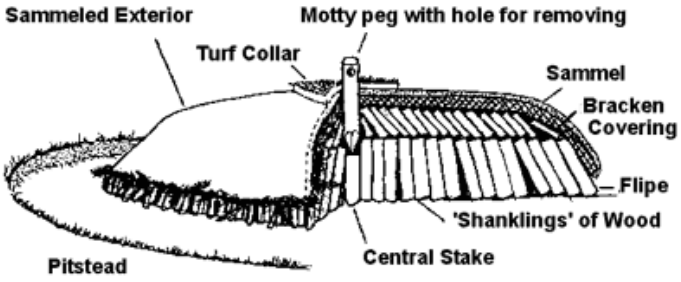


Plate 21: A schematic view of a charcoal-burning mound

Plate 22: A charcoal-burning mound prior to firing

Plate 23: Sketch of the preparation of a charcoal-burning stack by Alfred Heaton Cooper (1908; in Bowden 2000, 80)

12.3.5 Due to the bulky nature of the felled coppice rods, the process of charcoal production would have required clusters of platforms in each of the coppice hags/woodland enclosures. During the production process, adjacent platforms would have been in different stages of construction, firing and disassembly.

12.3.6 Many of the platforms are located adjacent to sinuous access trackways (*Section 10*), which were required to transport both raw coppiced wood and then finished charcoal to and from the platforms. Many of the platforms were placed along similar contour lines, suggesting routeways ran along the easiest path across the slope, even if conspicuous trackways were not visible.

12.3.7 Coppice platforms were often placed adjacent to streams, as water was an integral part of the maintenance and quenching processes (Bowden 2000). Whilst none have been identified through this landscape survey, it is likely that temporary charcoal-burners' huts formerly lay in the environs of the platforms. 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 (*ibid*). No bark-peeler's huts were, however, encountered during the present survey.

12.4 PLANTATIONS

12.4.1 Three small areas of coniferous plantation were identified on the property. These are usually found to be nineteenth-century in date, and often function as wind breaks close to farms. The obvious examples of these are the two small plantations on the valley floor, which were depicted on historical mapping (Sites **22** and **23**).

12.4.2 Other plantations depicted on nineteenth-century OS mapping were also identified. A narrow wooded plantation near Borrowdale Mill was depicted on the tithe map (Plate 7; CRO (C) D RC/8/55/4), of which several veteran conifers survive on the western boundary (Site **2**). The outer eastern boundary of a portion of a wooded enclosure/pasture at 'Under Wood' was also extant, but contained no trees (Site **12**). A small knoll in the south-west corner of 'Low Bank' was depicted as containing coniferous plantation on the early OS mapping. This had an extant foundation for a boundary wall on the north side (Site **11**). It is possible that the knoll was deliberately planted and enclosed, or perhaps more likely, the knoll was enclosed to stop stock wandering in and falling off it. Finally, a circular plantation depicted on the early OS mapping south-east of Thorneythwaite Farm (Plate 8; part of Site **15**) was found to consist of coniferous tree stumps within a plantation constructed on top of the earlier enclosed settlement (*Section 7*).

13. THE DEVELOPMENT OF THE LANDSCAPE

13.1 INTRODUCTION

13.1.1 The Thorneythwaite landholding, whilst relatively limited in size, has produced a corpus of evidence pertaining to a single farm within a wider valley system of landholding. Whilst the documentary and landscape survey of Thorneythwaite illustrates many themes shared with farms within Borrowdale and many other Lakeland valleys, there are also some differences, related mainly to the specifics of its position and settlement history.

13.2 POSSIBLE EARLY ORIGINS

13.2.1 The earliest indication of activity is the enclosed settlement (Site **15**), in an elevated position in the lee of an end moraine, a factor which appears to have protected it from the flooding which has destroyed much evidence on the valley floor. It is today very obscured by vegetation and modern dumping, but may have been an enclosed settlement of a type prevalent in the Iron Age and Roman period (Quartermaine and Leech 2012). Such settlements were typically populated by roundhouses, either built into the outer bank or free-standing, although none have been identified at Site **15**. There is, however, evidence for a putative rectangular structure (Site **15.10**), which raises the possibility that either this settlement was a medieval foundation, or that it had earlier origins but was reused in the medieval period. In either case, given its proximity to the present-day farmhouse, it could have been the forerunner to the present farm, although, without excavation, it is not possible to confirm if there was prehistoric activity at the site. If its origins were prehistoric, it would be the first archaeological indicator of prehistoric or Romano-British occupation within Borrowdale.

13.2.2 On the basis of the limited amount of palaeoenvironmental work undertaken to date in the valley (Birks 1993; Wild *et al* 2001), it would appear that the earliest major episode of forest clearance was *c* AD 1000. This derives from a single pollen diagram from a small hollow (50m in diameter) in Johnny's Wood, on the east-facing hillside to the north-east of Seatoller, and about a 1km north-east of Thorneythwaite Farm. This pollen diagram recorded the vegetation in the area surrounding the site and, therefore, provides a relatively local history rather than of Borrowdale as a whole (Birks 1993). At this site, a mixed deciduous woodland of hazel, birch, alder, with a little lime, elm, ash, oak and yew, developed in the Holocene. Although the diagram is undated, Birks (1993) suggests that in the early medieval period the forest became more open, although it was not completely cleared (*ibid*). The implication is that there was not a great deal of clearance activity in the area around Johnny's Wood prior to the medieval period, which may add weight to the suggestion that the settlement was an early medieval or medieval foundation.

13.3 MEDIEVAL EVIDENCE

13.3.1 In terms of its documentary history, Thorneythwaite is first mentioned in the assize rolls of 1230 (Millward and Robinson 1970) and the derivation of its place-name also suggests some antiquity. The presence of a shieling (Site **42**) less than 1km from the present farm could suggest that, like Seatoller, this was a summer

encampment pre-dating permanent medieval colonisation of marginal land or waste, or perhaps that it was dependent on Seathwaite Farm.

13.3.2 Both Seatoller and Seathwaite developed into small townships. The evidence that Thorneythwaite did not is equivocal, given the presence of a possible second medieval settlement focus associated with the enclosure (Site **15**), although this remains to be established. However, the landscape setting of the farm suggests that it was of secondary importance, as might also be suggested by the lack of a ring-garth in this part of the valley, and that its primary field system post-dated those of Seatoller and Seathwaite (Fig 7).

13.3.3 Both Seatoller and Seathwaite were positioned on important communication routes. Thorneythwaite is in a similar location, being close to the junction of the western route at Strands Bridge and the packhorse route (Site **17**) down the eastern side of the valley. That the packhorse route appears originally to have passed immediately to the west of Site **15**, only later being diverted towards the present farmhouse, might suggest it was in use in the medieval period. Possibly due in part to post-medieval mining activities, the main focus of settlement and communication in Borrowdale subsequently developed on land to the west, rather than to the east of the River Derwent. This means that Thorneythwaite Farm became relatively isolated, on what became the 'wrong' side of the river.

13.4 POST-MEDIEVAL THORNEYTHWAITE

13.4.1 Hetherington's map of 1759 (CRO (C) DX/294/9) shows that Thorneythwaite Farmhouse was the abode of one Daniel Jopson, father of John Jopson, farmer at Seathwaite. The documentary evidence illustrates that tenancy, if not always ownership, of Thorneythwaite, has long been held by the farming families recorded in the tenants' lists of Fountains and Furness Abbeys. Alongside others, the names of Byrkehead (Birkett), Fyssher (Fisher) and Jopson have long been associated with Borrowdale. The tithe maps of the 1840s show that Abraham Fisher, the local JP, lived at Thorneythwaite and held much of the land in the valley, rented to tenants (*eg* CRO (C) RC/8/55/4), the extent of his holdings, including Thorneythwaite and lands and tenements at Seatoller and Stonethwaite, being illustrated. Various plantations/small areas of woodland within the rented holdings appear to have been retained by Fisher, and seemingly provided income from coppicing, and evidence for charcoal production has been identified on the Thorneythwaite estate (*Section 12*). Fisher's land was sold in the 1860s following his death (CRO (W) DMG/80/1); it was sold again in the 1890s to the Wasdale Hall estate (CRO (W) DMG/236/1), which was, at that time, planning to build a road over Sty Head. Whilst there are gaps in the historical record, it seems that the Jopson family retained the Thorneythwaite tenancy until at least 1923 (*Section 5.2.13*).

13.4.2 The majority of the sites identified by the landscape survey were charcoal-burning platforms, or features relating to woodland management, on the steep slopes at the eastern extent of the property, and these are likely to be post-medieval. There are also substantial numbers of sites related to communication, such as hollow-ways, trackways and bridges. Charcoal-burning platforms are widespread in Borrowdale and survive mostly within enclosed woodlands. Whilst the majority of medieval charcoal-making would have been relatively small-scale, records indicate that enclosed coppice was being cut in rotation by the sixteenth century (Winchester 1987), and that this change in management was driven by the post-medieval

industrial development characterised in the region by the arrival of the Mines Royal (*Section 4.2.16*). Woodlands in Langstrath and Stonethwaite, and many other parts of Borrowdale, were being used for post-medieval charcoal production (OA North 2007). The documentary and survey evidence relating to the Thorneythwaite landscape survey now provides an important addition to the picture, filling in a gap in the previously known distribution of sites in the valley.

14. CONDITION SURVEY AND MANAGEMENT RECOMMENDATIONS

14.1 INTRODUCTION

14.1.1 This section provides a general overview of the management of the archaeological resource within the Thorneythwaite landholding, and highlights any positive management required to conserve and protect the local historic environment. These recommendations should be viewed in conjunction with the results of the earlier Borrowdale Survey (OA North 2007).

14.2 CONDITION SURVEY

14.2.1 The gazetteer (*Appendix 2*) sets out the specific sites identified, together with their significance, condition and the obvious potential threats to their current states of preservation. Whilst specific types of site have different kinds of associated threats, two main issues were identified which require broad-scale monitoring and possible remedial action.

14.2.2 ***Bracken:*** the most significant threat to the preservation of the sites identified is the unchecked growth of bracken on the steep fellside within the eastern part of the study area, where many charcoal platforms and associated trackways have been identified (*Sections 10* and *12*). Bracken depends mainly on the growth of underground rhizomes to spread, and these can cause significant damage to sub-surface and upstanding archaeological remains. Bracken growth should be monitored and removed as per wider landscape management plans, and with due regard for the conservation and protection of archaeological sites.

14.2.3 ***Erosion***: the potential for erosion is of significance, in particular with regard to the numerous paths and trackways identified on the fellside (*Section 10*). Erosion can be caused by rainwater running off the fell along lines of least resistance, such as footpaths, and to a lesser extent by footfall on what is open-access fellside. Whilst this is not deemed to be a significant threat to the archaeological resource, these areas should be monitored and repaired as required, with due regard for the conservation and protection of archaeological remains.

14.3 MANAGEMENT RECOMMENDATIONS

14.3.1 ***Archaeological Site Management Priorities:*** in terms of archaeological site management, the most significant site identified is the settlement enclosure (Site **15**). Many similar enclosures identified in the county have been designated as Scheduled Monuments. Whilst this site is not designated, scheduling legislation indicates that undesignated heritage assets of archaeological interest should be subject to the policies reserved for designated heritage assets if they are of equivalent significance to Scheduled Monuments (DCLG 2012, section 12.132; DCMS 2013). In terms of management, this means that the site should be treated as if it were a Scheduled Monument, and every effort should be made to regulate potentially harmful interventions and promote beneficial stewardship by effective land management.

14.3.2 There are several issues regarding the future management of the enclosure site (Site **15**). It straddles the boundary of the land owned by the National Trust, being

partially within improved fields owned by Thorneythwaite Farmhouse; the owners of Thorneythwaite should therefore be made aware of the site's archaeological significance and the associated conservation management issues.

14.3.3 The portion of the site owned by the National Trust is divided between two fields, which have different management issues. The field to the north, which was an enclosed plantation until the 1950s, contains a possible building platform and an enclosure boundary, both of which have been damaged by historical tree planting and more recent dumping; the latter is presently masking possible archaeological features. Given that the area was a plantation and remains agriculturally unimproved, any features may be relatively well-preserved. To improve the condition of the site, and to ascertain the survival and nature of these features, it is recommended that the modern dumped material be carefully removed, under archaeological supervision, to the top of archaeologically significant levels. Any surviving features should then be fully recorded, and investigated further if deemed necessary and appropriate by the National Trust.

14.3.4 The field to the south of the present boundary wall is also unimproved, with many small sections of sub-divisional walling and possible structural elements evident, but these are denuded and masked by current vegetation cover. Bracken growth should be managed and removed where necessary, in order to protect and further define extant archaeological remains. Presently masked archaeological features may be revealed by bracken removal and should be subject to further archaeological recording.

14.3.5 ***Charcoal-burning Platforms:*** the extensive distribution of charcoal-burning platforms on the eastern fellside, together with associated trackways, is of significance, as it ties in with the current understanding of post-medieval Borrowdale and woodland exploitation for industry at a regional scale (Marshall and Davies Shiel 1977; Bowden 2000, 22). These monuments are situated in what is presently scrubby open woodland and includes expansive areas of bracken. Their survival is therefore threatened by bracken growth, which should be managed and removed where necessary. Presently masked archaeological features may be revealed by bracken removal and should be subject to archaeological recording. Future forestry, including felling, clearance and additional tree planting, should also take account of the archaeological remains, which should be recorded where necessary and protected from forestry operations.

14.3.6 ***Shieling site:*** the probable shieling site (Site **42**) identified on Johnny Dale Bank is of significance, as it has the potential to add to our understanding of the medieval landscape history of Borrowdale, and is a significant addition to such sites identified at a regional scale. Whilst the site is currently in fair condition, the threat of bracken growth should be considered, and its condition should be the subject of monitoring. Where time and resources permit, this feature should be subject to more detailed archaeological assessment. The medieval Regional Research Agenda notes the need for the archaeological assessment of medieval upland settlement remains as, at present, the understanding of shielings is dominated by historical studies (Newman and Newman 2007, 98).

14.3.7 ***Other Archaeological Sites:*** every effort should be made to afford an appropriate level of care to all other archaeological sites in the study area, which contains a range of sites typical of the Lakeland valleys, many associated with agricultural land management and communication routes. The majority of these sites are of local/low

local significance and are in fair condition. However, every effort should be made to keep them in good order and retain them as features in the landscape, irrespective of their legal status. Archaeological sites listed on the National Trust Sites and Monuments Record should be regularly monitored to check for potential threats or impacts.

14.3.8 Additional archaeological mitigation or research, in the form of survey or excavation, should be required ahead of any activity that is potentially destructive or involves disturbance of archaeologically sensitive areas. No materials that constitute part of an archaeological site should be removed. Future activities, such as stone picking for footpath renewal, tree-planting and agricultural land management, should include consideration of the potential impact on archaeological remains.

14.3.9 ***Landscape Conservation:*** strategies to conserve and maintain the distinctive characteristics of the three separate landscape zones across the study area (lowland pasture and meadow, fellside intake and high fell) should be devised. The term 'distinctive characteristics' is used here to refer to criteria such as boundary type, vegetation type and agricultural use.

14.3.10 The existing stone walls, and other boundaries within the study area, are integral parts of the local historic landscape and in some cases are of great archaeological significance. For this reason, long-term management of the farming landscape should aim to avoid further boundary loss and perpetuate the separate, and enclosed, character of the local landscape. Walls and hedges that are in stock-proof or near stock-proof condition should be maintained as such, even if they become agriculturally redundant, and if in a partial state of deterioration should be considered for restoration as and when resources become available.

14.3.11 Collapsed walls need not be rebuilt but should not be considered as sources of building material for any planned rebuilding elsewhere. Fencing along the same line of a wall, or hedge bank, should be set away from them and not driven through the remains themselves. Fencing should not replace walls and hedges, or sections of walls and hedges, which can be reinstated with available material and resources.

15. BIBLIOGRAPHY

15.1 PRIMARY SOURCES

Cumbria Archives - Carlisle (CRO (C))

D RC/8/55/4 Plan of the Township of Borrowdale, in the Parish of Crosthwaite, in the County of Cumberland - Surveyed by Wm Robinson, Gillfoot, Caldbeck, 1842

D RC/8/55/5.6 Tithe Apportionment of the rent-charge in lieu of Tithes in the Parish of Crosthwaite, Township of Borrowdale, 11th November 1840

D/Ben/Crosthwaite Tithes/1 List of tenements 1614

D/Law/1/168/3 Grant of land at Borrowdale to Furness Abbey, AD 1209

D/Law/1/55 Deeds and manorial records relating to Borrowdale

PROB/1831/W1611 Will of John Jopson of Thorneythwaite

PROB/1861/A70 Will of Robert Walker of Thorneythwaite

PROB/1923/A23 Will of Robert Jopson of Thorneythwaite

DX/241/9 Mention of town fields, 1659

DX/294/9 William Hetherington's map of the Black Lead Mine in Cumberland, August 1759

Cumbria Archives - Whitehaven (CRO (W))

DMG/80/1 Thorneythwaite sale particulars, 1868

DMG/105-3 Lease contract of Thorneythwaite Farm, 1900

DMG/236/1 Thorneythwaite sale particulars, 1896

Dorset Archives (DRO)

D/BKL/Box 8c/144/3 Printed copy of the Act of Parliament for the more effectual securing of mines of black lead from theft and robbery, 1752

Newspapers

Carlisle Journal 30 November 1833, Obituary for Daniel Jopson of Thorneythwaite

15.2 PUBLISHED CARTOGRAPHIC SOURCES

Greenwood, C, and Greenwood, J, 1824 *Map of the County of Cumberland*, London

Hodgkinson, J, and Donald, T, 1774 *The County of Cumberland ... surveyed in 1770-1*, 2nd edn 1802, London

Ordnance Survey, 1867 *1:10,560 series, First Edition, Cumberland Sheet LXX*, surveyed 1862

Ordnance Survey, 1900 *1:10,560 series, Second Edition, Cumberland Sheet LXX*, revised 1897

Saxton, C, 1576 *Westmorlandiae et Cumberlandiae Comitatus, scale 1 inch to 5 miles*, London

15.3 PUBLISHED SOURCES

Appley, C. 2012 *The prehistoric environment of Furness: palaeoenvironmental influences upon human activity during the Neolithic and Bronze Age of the Furness Peninsula, South Cumbria, UK* [Online] Available at: http://etheses.whiterose.ac.uk/3825/ (accessed March 2017)

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

Bailey, J, and Culley, G, 1794 A *general view of the agriculture of Cumberland*, Board of Agriculture, London

Barfield, L, and Hodder, M, 1987 Burnt mounds as saunas, and the prehistory of bathing, *Antiquity*, **61**, 370-9

Birks, HJB, 1993 Quaternary palaeoecology and vegetation science - current contributions and possible future developments, *Rev Palaeobot Palynol*, **79**, 153-77

Boon, GC, 1976 An early Tudor coiner's mould and the working of Borrowdale graphite, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **76**, 97-132

Bouch, CML, and Jones, GP, 1961 *A short economic and social history of the Lake Counties 1500-1830*, Manchester

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

Bradley, R, and Edmonds, M, 1993 *Interpreting the axe trade: production and exchange in Neolithic Britain*, Cambridge

British Geological Survey (BGS), 2016 *Geology of Britain viewer* [Online] Available at: http://mapapps.bgs.ac.uk/geologyofbritain/home.html (accessed March 2017)

Brown, F. 2015 The excavation and analysis of a burnt mound, Drigg, Cumbria, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 3 ser, **15**, 9-37

Brown, F, Clark, P, Dickson, A, Gregory, R, and Zant, J, in prep *From an ancient Eden to a new frontier: an archaeological journey along the Carlisle Northern Relief Road*

Brownbill, J (ed), 1915-19, *Coucher Book of Furness Abbey*, Volume **2**, Chetham Soc, **74, 76, 78**, Manchester

Brunskill, RW, 2002 *Traditional buildings of Cumbria*, London

Bulmer, T, and Snape, T, *c* 1901 *History, topography and directory of Cumberland*, Manchester

Bunch, B, and Fell, C, 1949 A stone axe factory at Pike of Stickle, Great Langdale, *Proc Prehist Soc*, **15**, 1-20

Chartered Institute for Archaeologists (CIfA), 2012 *Code of Conduct*, Reading

Claris, P, and Quartermaine, J, 1989 The Neolithic quarries and axe factory sites of Great Langdale and Scafell Pike: a new field survey, *Proc Prehist Soc*, **55**, 1-25

Clough, THMcK, and Cummins, WA, 1988 *Stone axe studies **2**: the petrology of Prehistoric stone implements from the British Isles*, CBA Res Rep, **67**, London

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

Collingwood, WG, 1912 *Elizabethan Keswick: extracts from the original accounts books 1564-1577, of the German miners, in the Archives of Augsburg*, Trans Cumberland Westmorland Antiq Archaeol Soc, Tract Ser, **8**, Kendal

Collingwood, WG, 1918 Mountain names, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **18**, 97-101

Collingwood, WG, 1928 The Keswick and Coniston mines in 1600 and later, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **28**, 1-32

Crosthwaite, FJ, 1876 The Crosthwaite Registers, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 1 ser, **2**, 225-41

Crosthwaite, FJ, 1879 The Great Deed of Borrowdale, *The English Lakes Visitor*, 12th July 1879, Keswick

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

Denyer, S, 1991 *Traditional buildings and life in the Lake District*, London

Department for Communities and Local Government (DCLG), 2012 *National Planning Policy Framework* [Online] Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2 (accessed 12 May 2017)

Department for Culture, Media and Sport (DCMS), 2013 *Scheduled Monuments: identifying, protecting, conserving and investigating nationally important archaeological sites under the Ancient Monuments and Archaeological Areas Act 1979* [Online] Available at: https://www.gov.uk/government/publications/scheduled-monuments-policy-statement (accessed 12 May 2017)

Elliott, G, 1959 The system of cultivation and evidence of enclosure in the Cumberland open fields in the 16th century, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **59**, 85-104

Elliott, G, 1961 Decline of the woollen trade, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **61**, 112-19

English Heritage, 2007 *Understanding the archaeology of landscapes; a guide to good recording practice*, Swindon

Eskdale and District Local History Society (EDLHS), 2008 *Walking in the footsteps of Mary Fair*, Whitehaven

Farewell, TS, Truckell, IG, Keay, CA, and Hallett, SH, 2011 *The derivation and application of soilscapes: soil and environmental datasets from the National Soil Resources Institute, Cranfield University* [Online] Available at: http://www.landis.org.uk/soilscapes/ (accessed 12 May 2017)

Fell, A, 1908 *The early iron industry of Furness and District*, Ulverston

Fell, C, 1950 Great Langdale stone axe factory, *Trans Cumberland Westmorland Antiq Archaeol Soc,* n ser, **48**, 118-30

Fellows-Jensen, G, 1989 Scandinavian Settlement in England: the evidence of place-names and personal names, *Actes des congrès de la Société d'Archéologie Médiévale***, 2**, 77-83

Ferguson, RS, 1878 On certain plumbago moulds, found in Netherwasdale, Cumberland, *Trans Cumberland Westmorland Antiq Archaeol Soc,* 1 ser, **3**, 27-30

Gambles, R, 1980 *Lake District place-names*, Lancaster

Gardner, J, and Brodie, RH (eds), 1908 *Letters and Papers Henry VIII* **21/1**, *1546*, London

Gravestone Project, 2017 *The Gravestone Project 2017: gravestone & church transcriptions, Borrowdale: St Andrew's* [Online] Available at: http://gravestoneproject.com/?page_id=2138) (accessed 12 May 2017)

Grosvenor, MJ, 2014 *Human-environment interactions during the Mid-Holocene in Cumbria* [Online] Available at: https://ore.exeter.ac.uk/repository/handle/10871/16136 (accessed 12 May 2017)

Hall, H, 1886 *Society in the Elizabethan Age,* London

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

Higham, NJ, 1985 The Scandinavians in North Cumbria: raids and settlement in the later ninth to mid tenth centuries, in JR Baldwin, and ID Whyte (eds), *The Scandinavians in Cumbria*, Edinburgh, 37-51

Higham, NJ, 1986 *The northern counties to AD 1000,* Harlow

Hindle, BP, 1984 *Roads and trackways of the Lake District,* Ashbourne

Historic England, 2015 *Management of Research Projects in the Historic Environment (MoRPHE),* London

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

Hodgson, J, 2007 Burnt mounds in the Lake District, Cumbria, in C Burgess, P Topping, and F Lynch (eds), *Beyond Stonehenge: essays on the Bronze Age in honour of Colin Burgess*, Oxford, 204-12

Hodgson, J, and Brennand, M, 2006 The prehistoric period resource assessment, in M Brennand (ed), *The archaeology of North West England: an archaeological research framework for North West England. Volume 1: resource assessment,* CBA Archaeol North West, **8**, Manchester, 23-58

Holt Antique Furniture, 2017 *19th century English school antique oil on panel portrait of Mr Abraham Fisher of Seatoller, Cumbria, circa 1850* [Online] Available at: http://www.holtantiquefurniture.com/index.php?page=stockitem&id=395 (accessed 12 May 2017)

Hutchinson, W, 1794 *The history of the County of Cumberland,* 2 vols, Carlisle

Johnson, S, 1981 Borrowdale, its land tenure and the records of Lawson Manor, *Trans Cumberland Westmorland Antiq Archaeol Soc,* n ser, **81**, 63-71

Kelley, DW, 2002 *Charcoal and charcoal-burning*, Princes Risborough

Lancaster, WT, 1915 *Abstracts of the Chartulary of Fountains and other documents contained in the Chartulary of the Abbey*, Leeds

LDNPP (Lake District National Park Partnership), 2017 *Nomination of the English Lake District: history and development of the English Lake District*, Kendal

LUAU (Lancaster University Archaeological Unit), 1998a *Seathwaite, Borrowdale, Cumbria: archaeological assessment report*, unpubl rep

LUAU (Lancaster University Archaeological Unit), 1998b *Ennerdale Forest archaeological survey: final report*, unpubl rep

Lund, J, and Southwell, C, 2002 *An Archaeological Monitoring Report for The Great Langdale Valley*, The National Trust unpubl rep

Lefebure, M, 1970 *Cumberland heritage*, London

Lund, J, and Southwell, C, 2002 *An archaeological monitoring report for the Great Langdale Valley*, unpubl rep

Marshall, J, and Davies-Shiel, M, 1977 *Industrial archaeology of the Lake Counties*, Beckermet

Martin, J, 1993 Wasdale Hall, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **93**, 269-82

Meier, E, 2008-16 *English holly* [Online] Available at: www.wood-database.com/lumber-identification/hardwoods/English-holly (Accessed 1 November 2016)

Millward, R, and Robinson, A, 1970 *The Lake District*, London

Michelmore, DJH (ed), 1981 The Fountains Abbey lease book, *Yorkshire Archaeol J*, **140**, 50-65

National Parks, 2017 *What is a National Park?* [Online] Available at: www.nationalparks.gov.uk/students/whatisanationalpark/factsandfigures (accessed 12 May 2017)

National Trust, 1993 *Watendlath and Ashness: the historic landscape and its future management*, unpubl rep

National Trust, 2000 *Wasdale Head: an historic landscape survey*, unpubl rep

National Trust, 2005 *An archaeological atlas of Borrowdale and Derwentwater, Cumbria*, unpubl rep

National Trust, 2016 *Invitation to Tender: Historic Landscape Survey of land at Thorneythwaite, Borrowdale, Cumbria*, unpubl doc

Newman, C, 2015 Mapping the late medieval and post medieval landscape of Cumbria [Online] Available at: https://theses.ncl.ac.uk/dspace/handle/10443/2556 (accessed 12 May 2017)

Newman, C, and Newman, R, 2007 The medieval period research agenda, in M Brennand (ed), Research and *archaeology in North West England: an archaeological research framework for North West England. Volume 2: research agenda and strategy*, CBA Archaeol North West, **9**, Manchester, 95-114

Nixon, MJ, 1990 Some south Cumbrian burnt mounds - an initial survey, in V Buckley (comp), *Burnt offerings: international contributions to burnt mound archaeology*, Dublin, 112-16

Open charities, 2016 *Abraham Fisher's foundation to further the work of Borrowdale School* [Online] Available at: http://opencharities.org/charities/526804 (accessed 12 May 2017)

OA North, 2003 *Ennerdale, West Cumbria: historic landscape survey*, unpubl rep

OA North, 2005 *Stickle Tarn, Great Langdale, Cumbria: archaeological survey report*, unpubl rep

OA North, 2007 *Borrowdale, Cumbria: historic landscape survey*, unpubl rep

OA North, 2008 *Buttermere, Cumbria: historic landscape survey*, unpubl rep

OA North, 2009 *Nether Wasdale, Cumbria: historic landscape survey*, unpubl rep

OA North, 2011 *Holwick, Upper Teesdale, County Durham: community archaeology survey*, unpubl rep

OA North, 2012 *Windermere Reflections: survey of woodlands around Windermere, Central Lake District*, unpubl rep

OA North, 2015 *Nether Wasdale pipeline, Cumbria: post-excavation assessment report*, unpubl rep

OA North, 2016 *Exploring medieval longhouses in the Duddon Valley, Cumbria: Tongue House: an interim report*, unpubl rep

Parker, AG, Anderson, DE, and Boardman, J, 1994 Seathwaite Valley: buried organic deposit, in J Boardman, and J Walden, (eds), *Cumbria field guide*, Quaternary Research Association, Oxford, 143-51

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

Pennington, W, 1997 Vegetational history, in G Halliday, *A flora of Cumbria*, Centre for North West Regional Studies, Lancaster, 42-50

Postlethwaite, J, 1877 *Mines and mining in the English Lake District*, Whitehaven

Quartermaine, J, and Leech, R, 2012 *Cairns, fields, and cultivation: archaeological landscapes of the Lake District*, Lancaster Imprints, **19**, Lancaster

Rackham, O, 2003 *Ancient woodland*, Kirkcudbright

Ramm, H, McDowall, RW, and Mercer, E, 1970 *Shielings and bastles*, Royal Commission on Historical Monuments (England), London

Robinson, D, Barton, J, Coldstream, N, and Copack, G, 1998 *Cistercian abbeys of Britain*, London

Shotter, DCA, 1984 Numismatic notes from Cumbria, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **84**, 262-3

Sutton, S, 1961 *The story of Borrowdale*, Keswick

Taylor, C, 1983 Medieval rural settlement: changing perceptions, *Landscape History*, **14 (1)**, 5-17

Tyler, I, 1995 *Seathwaite Wad, and the mines of the Borrowdale Valley*, Carlisle

UK Census Online, 2017 *1851 Census* [Online] Available at: www.ukcensusonline.com (accessed 12 May 2017)

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

Walker, K, 1990 *Guidelines for the preparation of excavation archives for long term storage*, York

Whatkins, S, and Whyte, I, 2008 Extreme flood events in upland catchments in Cumbria since 1600: the evidence of historical records, *North West Geography*, **8/1**, 33-41

Whyte, I, 1985 Shielings and the upland pastoral economy of the Lake District in medieval and early modern times, in JR Baldwin, and ID Whyte (eds), *The Scandinavians in Cumbria*, Edinburgh, 103-18

Whyte, I, 2003 *Transforming fell and valley: landscape and Parliamentary enclosure in North West England*, Lancaster

Wild, C, Wells, C, Anderson, D, Boardman, J, and Parker, A, 2001 Evidence for medieval clearance in the Seathwaite Valley, Cumbria, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 3 ser, **1**, 53-68

Winchester, AJL, 1984 Peat storage huts in Eskdale, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **84**, 103-16

Winchester, AJL, 1987 *Landscape and society in medieval Cumbria*, Edinburgh

Winchester, AJL, 2000 *The harvest of the hills, rural life in Northern England and the Scottish Borders, 1400-1700*, Edinburgh

Winchester, AJL, 2016 *Dry stone walls: history and heritage*, Stroud

APPENDIX 1: PROJECT DESIGN

1. INTRODUCTION

1.1 TENDER BACKGROUND

1.1.1 The National Trust has invited Oxford Archaeology North to submit proposals for a historic landscape survey and condition assessment of their holdings at Thorneythwaite Farm, Borrowdale, which was purchased in 2016. This is intended to record and evaluate the archaeological and historical features, which will inform the management of the estate, and in particular will serve to inform the compilation of an overall masterplan. It is also required to undertake a condition survey to establish a baseline for future archaeological monitoring. The aim of the survey is to identify the landscape character and significance of the landscape. It will examine the archaeological history and landscape development as part of this process and will present the results of the survey, allowing the National Trust a comprehensive understanding of the overall landscape. The study area is owned by the National Trust and is 1.2 sq km in extent.

1.1.2 The following project design sets out the objectives of the project, provides a method statement demonstrating how these can be met and defines the resource implications of the method statement.

1.2 ARCHAEOLOGICAL BACKGROUND TO THORNEYTHWAITE AND BORROWDALE

1.2.1 The earliest documentary reference to Thorneythwaite was from 1230 when it was a monastic holding of Furness Abbey, and corresponds with a period, during the thirteenth century, of settlement expansion and land improvement in Borrowdale. The period of growth experienced in the thirteenth century across Cumbria was cut short and reversed by a combination of war, plague (both animal and human), famine, and climatic deterioration in the following century, and resulted in the abandonment of many farms, and sometimes whole villages, especially on the more marginal land of the Lake District. However, a boundary wall and fence excavated from beneath a colluvial fan in Seathwaite has revealed that during this period the local woodland was being cleared and that the brushwood was being coppiced around 1300-1450 cal AD (Wild *et al* 2001). In the fifteenth century Borrowdale continued to prosper; a survey of the property of Fountains Abbey in 1418 records 41 farmsteads (Elliot 1961), and provides an indication of a vigorous population in the valley at that time, and was perhaps a reflection of having been spared the worst of the violent disruption throughout the fourteenth century by way of the valleys relative isolation.

1.2.2 The general pattern of the farming landscape in the sixteenth century was based on a system of open fields on the valley floor, where each farmer held several strips, which were enclosed from the fellsides by a ring-garth wall. One of the most significant events of the century was the Dissolution of the Monasteries. Furness Abbey was handed over to Henry VIIIs commissioners in 1537 and Fountains in 1539. On Jan 20th 1546 the holdings of Fountains Abbey in Borrowdale were sold by the Crown to Richard Greames of Eske in Netherby (Bouch and Jones 1961). On Dissolution the holdings of Furness Abbey were added to the estates of the Duchy of Lancaster (Johnson 1981). The social and economic effect of the closures on the region would have been concerned with the change in ownership of the land, but there is no reason to assume that this changeover brought ruin to the livelihoods of the tenants, as the new owners would have still required shepherds and cattlemen to look after their stock and to farm the land as before. There would probably have been a period of adjustment as the economy was reoriented to accommodate the new conditions under which it operated, and principally would have been that trade no longer flowed through the monasteries but became centred more on the local market towns such as Keswick and Kendal.

1.2.3 In the seventeenth century the rise of the yeoman farmer and his growing affluence saw a re-building of many houses in stone and the further enclosure of valley floor and fellside. When James I became king he sold the land once held by Furness Abbey to two London entrepreneurs, William Whitmore and Jonas Verdon (Johnson 1981). They indulged in asset stripping, selling the individual farms in 1614 to 38 people. The next year, while retaining the graphite mines, they sold the 'Manor of Borrowdale' to the same thirty eight in an agreement referred to as the *'Great Deed of Borrowdale'* (Crosthwaite 1879). The list of these 38 people is headed by 'Sir Wilfrid Lawson of Isel, Knight' and followed by the names of people who mostly lived in the farmsteads of upper Borrowdale. It is clear that the Lawson family was a growing and powerful force in the region and, together with Wilfrid Lawson's inclusion in the Great Deed, meant that they were now the major land holder in Borrowdale

owning much of the land that had previously been held by Fountains and Furness Abbeys (Johnson 1981).

1.2.4 At the outset of the eighteenth century there was a gradual continuation of expansion of enclosure all over the region and there is no reason to suppose that this was not also the case in Borrowdale. The greatest impact on the landscape was the parliamentary enclosure of large areas of fell, entailing some 40,000 acres of waste land in Cumberland alone. Up until the middle of the century enclosure had been going on in a piecemeal fashion, but in the second half of the eighteenth century it became more systematic and was achieved through agreement between tenants or by Act of Parliament (Whyte 2003). Within Borrowdale the upper valley sides and tops were enclosed in at first a piecemeal then a systematic fashion where sheep grazing lands or 'dalts' were enclosed with more permanent boundary walls and as time went on more extensive areas of remote land were parcelled up as 'intakes'. The pattern of enclosure was completed by the time of the tithe mapping of the 1840s.

1.2.5 The valley had existed in general isolation for a considerable period, which had stifled the introduction of new initiatives and developments. The result is a community that, for the greater part of the eighteenth century, appears to have stalled and was failing to exploit its resources to the full potential. Only towards the beginning of the nineteenth century were there signs of improvement. The opening up of the roads connecting it to the outside world, brought in tourists, which coupled with the quarrying at Honister, and later at Yewcrag, employed between 100 and 150 people; the net effect was an unprecedented burst of activity within the valley. A small service industry grew up to support this increased economic activity, such as blacksmiths and joiners and the evidence suggests a picture of growing activity with little sign of recession. This is further reflected by the steady growth in the population staring with 342 in 1801 and growing to 452 in 1851 and 506 in 1891 (Bulmer and Snape *c* 1901).

1.2.6 The pattern of enclosure on the valley floor and lower fellsides would have been complete by the start of the nineteenth century resembling closely the pattern existing today. It is here that the best quality land was centred and an inspection of the 1842 tithe schedule and map shows that a surprising amount of land was given over to the growing of crops. Meadowland was also clearly of importance and its distribution seems to be in the form of blocks of land within the valley, as opposed to the areas of pasture and arable which appear more randomly scattered.

1.3 OXFORD ARCHAEOLOGY NORTH

1.3.1 Oxford Archaeology North (OA North), formerly Lancaster University Archaeological Unit, has considerable experience of the archaeological survey of sites and monuments of all periods, having undertaken a great number of small and large projects during the past 34 years. OA North employs a qualified archaeological and landscape surveyor (Jamie Quartermaine BA DipSurv MIFA FSA) who has over 31 years' experience of surveying buildings and landscapes, having worked closely with the National Trust and the Lake District National Park Authority on numerous projects. Archaeological surveys and archaeological studies of parklands include those at Lyme Park, Cheshire, Lowther Park, Cumbria, East Riddlesden, Sizergh Estate, Lathom Park and Rufford Park, both Lancashire. The Lyme Park programme involved a comprehensive documentary and archaeological survey of all elements of the large parkland, looking at the formative processes of the park and its buildings which was intended to provide the basis for the restoration and management of this extremely important site. Lowther Park involved a detailed documentary and surface survey of one of the more significant and sizeable parks in Cumbria, and examined both the development of the park and its associated deer park, but also recorded the extensive Roman and prehistoric pre-park remains.

1.3.2 Since 1982 OA North has been undertaking extensive upland landscape surveys throughout Northern England and Wales. Surveys include the Lake District National Park Survey, the Torver Common surveys (Lake District), Haweswater and Thirlmere estate surveys (Lake District), most of the Forest of Bowland AONB, Lancashire, and a multitude of smaller landscape projects which include the Otterburn Range surveys in the Northumberland National Park. In particular OA North has undertaken a detailed survey of an upland estate at Hartley, Eden Valley involving a detailed documentary study and surface survey.

1.3.3 OA North undertook surveys of moorland areas on behalf of Yorkshire Peat Partnership including Stags Fell in 2011 and 2012. OA North has undertaken archaeological surveys of substantial National Trust estates, which include Nether Wasdale, Borrowdale (see below), Buttermere, Ennerdale, and parts of the Langdale valley. To date OA North has undertaken archaeological field surveys of over a

thousand sq km of upland landscapes and can claim to be one of the foremost specialists in the field of upland landscape recording.

1.3.4 ***Borrowdale Valley Historic Landscape Survey:*** in 2006 OA North was commissioned to complete a valley survey of Borrowdale which had been mostly undertaken by the National Trust, but which had stalled before it could be completed. OA North undertook further fieldwork, and in particular undertook a boundary survey of Seathwaite and Seatoller, and created a GIS dataset comprising all the data from the National Trust survey work but also incorporated new datasets entailing a full over-arching record of changing landuse in the valley.

1.3.5 Projects have been undertaken to fulfil the different requirements of various clients and planning authorities, and to very rigorous timetables. OA North is one of the bodies endorsed by the IFA (Institute of Field Archaeologists) (No. 17) and has both the expertise and resources to undertake this project to the highest standards.

2. OBJECTIVES

2.1 NATIONAL TRUST BRIEF

2.2.1 The primary purpose of the project is to undertake an archaeological survey of the National Trust landholding and to assess the condition of the identified monuments so as to inform the management of the property. The requirements of the project are set out in the brief prepared by The National Trust and are as follows:

- Undertake an archaeological survey of the property to identify and record all visible sites, features and landscape elements of archaeological or historic interest. This will augment the existing archaeological data held by the National Trust's Sites and Monuments Record.
- To produce a gazetteer of all the monuments, sites and features of archaeological interest within the property.
- To assess the condition of the archaeological resource and make recommendations for its future conservation and management.
- To produce a chronological narrative to describe the evolution and development of the property, from the prehistoric period through to the present.
- Collate and interpret any other relevant documentary or archive material evidence (including both primary and secondary source material) that might assist in the understanding of land-use, enclosure, settlement and industry on the property.
- Produce a written and illustrated report that presents the results of the Historic Landscape Survey and condition survey in a meaningful way and is able to be used as a tool for future property management.

2.2.2 ***Verbal Brief:*** in accordance with a conversation with the National Trust Archaeologist, it was recognised that an historical landscape survey that simply looked at the Thorneythwaite landholding and was not set within a wider context would not have a very high archaeological or historical significance or value. It was therefore agreed that the data from the documentary study and field survey of the Thorneythwaite estate would be incorporated into the Borrowdale Valley Survey GIS and the results of that wider survey would be graphically output to show how the Thorneythwaite estate compared with the rest of the valley. The Historic Landscape Survey report would reflect the GIS study and would similarly describe the development of Thorneythwaite in relation to the Borrowdale valley.

3. METHODS STATEMENT

3.1 The following work programme is submitted in line with the objectives of the archaeological work summarised above.

3.2 DOCUMENTARY STUDY

3.2.1 The aim of the documentary study is to collate the historical and archaeological information relating to the Thorneythwaite study area. This will specifically look at the historical evidence for the development of the Thorneythwaite estate, and will entail a search on archives held by Whitehaven

and Carlisle record offices, and potentially Barrow Record Office. It will also draw upon the primary documentary research undertaken by both the National Trust and OA North during the compilation of the Borrowdale Historic Landscape Survey (OA North 2007).

3.2.2 ***Documentary and cartographic material:*** the data generated during the desk-based study will serve as a guide to the archaeological potential of the property, and will provide a basis from which historical narratives for the study area can be constructed. An archive search of the full range of potential sources of information will be undertaken for cartographic and documentary records relating to the property.

3.2.3 The work will also involve visiting Cumbria Records Office (Carlisle), where there are records relating to the property. A rapid search will be made for archives held by other record offices, and may include Barrow Record Office for records relating to Furness Abbey. An investigation will also be made of the Carlisle Local Studies Library. The archive at the National Trust regional office, where there may be pertinent records relating to the property. Published secondary sources that might assist in the understanding of past land-use, enclosure, settlement and industrial activity on the property will also be examined. The study will draw upon the records held by the National Trust Sites and Monuments Record.

3.2.4 ***Map regression:*** a detailed map regression will be implemented which will incorporate all available maps which will include tithe and multiple editions (6" and 25") of OS mapping. A close scrutiny of all maps will be undertaken to identify all archaeological and potential archaeological features. Each map will be presented within the report to enable direct comparisons between each map.

3.2.5 ***HER:*** A search will be made of all pertinent records from the Lake District HER, the HER database records, aerial photography. HLC data and reports. In addition, a search will be made on all records held by National Trust SMR. These will often point to useful secondary sources.

3.2.6 ***Geology and Topography:*** a rapid compilation of geological (both solid and drift), pedological, topographical, and palaeoenvironmental information will be undertaken, using information available from the Ordnance Survey and ADAS. This will not only set any archaeological features in context but also serves to provide predictive data, that will increase the efficiency of the field investigation.

3.2.7 ***Borrowdale Historic Landscape Survey:*** a search will be made of the digital archive of the Borrowdale Historic Landscape survey. This archive comprises the GIS which is the compilation of all the landscape research, but also the report, the report figures, digital copies of historic mapping and digital photographs. The paper archive for the project is held by the National Trust and this will be consulted for any data pertinent to the Thorneythwaite estate.

3.2.8 ***Aerial Photography:*** a survey of the extant air photographic cover will be undertaken. Aerial photographic collections to be consulted will include any obliques and verticals held by the Cumbria HER, the NMR, and the National Trust.

3.2.9 ***Map Processing:*** the historic mapping will be incorporated into a GIS system (ArcMap). Initially the historic maps will be scanned and adjusted with respect to the 1:2500 OS base map. Features identified from the map regression will be plotted and an entry incorporated into the gazetteer. LiDAR coverage for the study area will be extracted and incorporated into the GIS and an examination of the raster data would add to the quality of the survey output, both in terms of the final mapping and in terms of the ability to be able to define and record subtle earthworks. In particular, it would show features and structures within the woodland, and the recording of these would be more precise and detailed than can be achieved with a GPS.

3.2.10 ***Gazetteer:*** existing known sites within the study area, held by the National Trust SMR, will form the basis of the gazetteer. New sites discovered through the documentary and cartographic research will then be added to the gazetteer. The results will be presented as a GIS map linked to a database incorporating the gazetteer, which can then be used during the archaeological survey.

3.2.11 ***Archive:*** as part of the documentary research a file containing copies of all relevant documents will be collated. The file will also have a comprehensive catalogue page, listing its contents. Secondary source material will also be listed in the file.

3.3 FIELD SURVEY METHODOLOGY

3.3.1 The survey will be undertaken as an enhanced Level 1 type survey (details of OA North's survey levels are contained in *Appendix 1*). The survey study areas are as defined in the project brief and encompasses 1.2sq km. The sites already identified on the Cumbria HER and NT SMR will be

checked and recorded at the same level of consistency as other newly discovered monuments. The survey will involve four elements: Reconnaissance, Mapping, Description and Photography.

3.3.2 ***Reconnaissance:*** the reconnaissance will consist of close field walking, varying from 10m to 30m line intervals dependent on visibility and safety considerations. The survey will aim to identify, locate and record archaeological sites and features on the ground and thus all sites noted will be recorded. The extent of any areas where there is no access will be defined on maps and depicted on the CAD mapping. All sites identified from the Historic Environment Record and also the National Trust SMR, and OS First Edition maps will be investigated. Sites already on the NTSMR will be included in the resultant site gazetteer.

3.3.3 The area of Thorneythwaite Fell is potentially on the line of a northerly route out from the Neolithic axe factory sites on Glaramara, and there is the potential for small working sites on these communication routes as has been found at Brown Tongue, north of Scafell Pike and on Mart Crag Moor in Langdale. It is therefore intended to search the area intensively for any evidence of axe working.

3.3.4 ***Survey mapping:*** a Satellite Global Positioning System (GPS) will be utilised to satisfy the Level 1 survey requirements. GPS uses electronic distance measurement along radio frequencies to satellites to enable a positional fix in latitude and longitude which can be converted mathematically to Ordnance Survey national grid. The GPS is a Leica differential system and uses a base station in conjunction with a roving station to correct the raw data and thereby achieve much greater accuracies than can be achieved with a hand held GPS. The technique will work in areas of woodland, albeit with reduced accuracy, but where a site is in an area that has dense canopy cover and there is not Fair satellite reception, then a bearing and distance measurement will be obtained from a nearby location which does have Fair reception. The GPS techniques will be used to record the extent of the site.

3.3.5 ***Site Description and Assessment:*** a detailed description will be provided for all identified sites for subsequent transcription into an access database. The data format will be consistent with the NTYSMR, running ExeGISis, using their mandatory fields, and will use a block of NTSMR numbers. Sites identified from documentary sources, but not identified on the ground will be incorporated into the gazetteer. The input into the system will be guided by a pro-forma to ensure uniformity and consistency of input, and will provide input for the following fields.

- NTSMR No
- Site Description
- Site Type
- Survey Number
- Site Name
- NGR
- Location
- Character
- Period
- Condition
- Threats
- Recommendations
- Significance

3.3.6 Each category will be categorised for their significance as defined below:

Grade 1: Archaeological sites of the highest importance, and will include Scheduled Ancient Monuments and sites of national importance.

Grade 2: Archaeological Sites of regional significance

Grade 3: Archaeological Sites of local significance

Grade 4: Non extant sites or sites which are not authentic

3.3.7 The description will incorporate a provisional interpretation of the function and purpose of a site, where possible, and similarly will provide a provisional interpretation of the site's chronology where possible.

3.3.8 ***Photographic Survey:*** a photographic archive will be generated in the course of the field project, comprising landscape and detailed photography. Detailed photographs will be taken of all sites using a

scale bar. All photography will be recorded on photographic pro-forma sheets which will show the subject, orientation and date. The photography will be primarily undertaken with a digital camera (at least 16 megapixels).

3.4 CONDITION SURVEY

3.4.1 The condition survey will entail visiting each site and recording its current condition and making any necessary recommendations for future management. The condition information will be recorded on *Pro-Forma* description sheet templates provided by the National Trust and will include mandatory fields using a set of pre-defined terms agreed with the National Trust prior to the commencement of the survey and compatible with entry onto the NTSMR. The mandatory fields will include Date, Condition, Stability, Vulnerability, Survival, Compiler, Damage Agents, Comments/ Recommendations, Next monitor date and Photo. A list of generic management terms will be agreed the National Trust prior to the commencement of the survey and will likely include such elements as tree growth, footpath erosion, animal burrows, water erosion and vandalism.

3.4.2 The condition survey will also include site wide management recommendations in order to address the most commonly identified issues and threats.

3.4.3 The condition description will include the digital photographic record made during the field survey.

3.5 REPORT AND ARCHIVE

3.5.1 ***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 (2006). 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 Cumbria HER and also the National Trust SMR. The archive will include the raw survey digital data in GIS shape file format.

3.5.2 ***Historic Landscape Assessment:*** an historic landscape assessment has previously been compiled for Borrowdale by OA North (OA North 2007) and this incorporates a GIS comprising all pertinent, archaeological and topographical information that was available at the time. This included the area of the Thorneythwaite estate, incorporating data from documentary sources.

3.5.3 The proposed Historic Landscape Assessment for Thorneythwaite needs to be set within the context of the whole valley and not just the limited 1.2sq km confines, if it is to have any historical or archaeological value. It is therefore proposed that the data captured as part of the present study be incorporated into the Borrowdale Valley GIS and the GIS be brought up to date. The graphic outputs for the whole of the valley will be output from the GIS so as to show how landuse change within this estate has compared with that of the rest of the valley. The report will similarly represent the development of the estate in relation to that of the whole valley.

3.5.4 The assessment will examine the chronological development of the estate lands in relation to the overall valley, it will describe the evidence for the history of the wider site, the character and development of the property, and the changes that have been made to them. The report will identify areas of archaeological importance, and will examine their level of preservation and fragility.

3.5.5 ***Report:*** the report will present, summarise, and interpret the results of the programme detailed in Stages 3.1-3.4 above, and will include a full index of archaeological features identified in the course of the project. The reports will consist of an acknowledgements statement, lists of contents, summary, introduction summarising the brief and project design and any agreed departures from them. The report will identify the significance of the archaeological and architectural evidence and will include the following:

- Introduction, aims and objectives,
- Methodology, documentary sources, and previous fieldwork and research,
- Results of the archaeological survey, presented in conjunction with survey mapping.
- A historical account of the property, examining its origins and development, providing a detailed landscape history. This would incorporate a map regression to show the growth and decline of the property based on historic maps and plans.
- An assessment of changes to settlement and land use patterns across the area,

- A series of thematic studies concentrating on particular landscape themes, and would include an account of mineral and stone extraction from the study area.
- Statement of archaeological significance of the archaeological resource,
- Site specific and generic management recommendations
- Recommendations for further research

3.5.6 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. There will be an appendix gazetteer of sites which will be based directly upon the project database (which will be compatible with the NTSMR).

3.5.7 The report will incorporate appropriate illustrations, including copies of the site plans, landscape survey mapping, all reduced to an appropriate scale. The site mapping will be based upon the GIS and CAD base. The report will be accompanied by photographs and historic illustrations illustrating the principal elements of the landscape.

3.5.8 ***Editing and submission:*** the report will be subject to the OA North's stringent editing procedure and then a draft will be submitted to the National Trust for consultation. Following acceptance of the report five bound copies of the report will be submitted.

3.5.9 ***Archive:*** a digital copy of the report in word and pdf formats, along with cad drawings, the digital database, all photographs and digital copies of documentary mapping will be submitted on a datastick. This digital archive will be deposited with the National Trust.

4. OTHER MATTERS

4.1 HEALTH AND SAFETY

4.1.1 Full regard will, of course, be given to all constraints (services) during the survey, as well as to all Health and Safety considerations. The OA North Health and Safety Statement conforms to all the provisions of the SCAUM (Standing Conference of Unit Managers) Health and Safety manual. Risk assessments are undertaken as a matter of course for all projects, and will anticipate the potential hazards arising from the project. In particular action will be taken to protect against eye injury from working in low, dense woodland undergrowth.

4.2 INSURANCE

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

4.3 CONFIDENTIALITY

4.3.1 The report is designed as a document for the specific use of The National Trust, for the particular purpose as defined in this project design, and should be treated as such. Any requirement to revise or reorder the material for submission or presentation to third parties or for any other explicit purpose can be fulfilled, but will require separate discussion and funding.

4.4 PROJECT MONITORING

4.4.1 Any proposed changes to this project design will be agreed with the National Trust. It is anticipated that there will be a meeting to discuss the draft plan. Any edits to the report by the client should be passed back to OA North within two months following submission of the draft report.

5. WORK TIMETABLE

5.1 It is anticipated that the proposed field survey would be undertaken in spring / winter, when the site conditions will be optimum for archaeological investigation. The documentary study will be undertaken prior to this in anticipation of the field survey. The phases of work will comprise the

following elements. The days quoted are the duration for each individual task rather than the number of man-days. The programme anticipates that the work would need to be completed by the end of May, and the documentary survey would be undertaken as soon as the project is awarded. It is anticipated that the fieldwork would be undertaken at the earliest possible opportunity afforded by the weather, and could be in January or February.

i) ***Documentary Study***
10 days

ii) ***Field Survey***
4 days

iii) ***Report Production***
25 days

iv) ***Condition Survey Processing***
5 days

v) ***Report Editing***
8 days

6. RESOURCES

6.1 PROJECT TEAM

6.1.1 The documentary research will be carried out by Helen Evans (Project Officer) and it is anticipated that the survey will be undertaken by Peter Schofield (Project Officer), under the guidance of the project manager, Jamie Quartermaine. In order to prevent an impact upon the Alderley Edge project which would be undertaken alongside the Borrowdale surveys, the survey work will be undertaken by Peter Schofield if scheduled for January or February. If there is a conflict with Alderley Edge in March then the survey at Borrowdale would be undertaken by Jamie Quartermaine and Helen Evans. The report writing and analysis will be undertaken by Helen Evans.

6.1.2 ***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, for the National Trust. He has also undertaken surveys of Lowther Park, Cumbria, Rufford Park, Lancashire and also a structural survey of Rufford Old Hall, he has also managed the recording programme of Lathom Hall and Park, Lancashire. In particular he managed the earlier survey of Borrowdale Valley. He has been a project manager since 1995 and has managed over 700 diverse projects since then, which are predominantly survey orientated, but of all periods from Palaeolithic to twentieth century.

6.1.3 ***Project Director:*** the survey will be directed by **Peter Schofield** (OA North Project Officer) who presently 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 six upland areas in North Wales, Little Asby Common for the Friends of the Lake District, and a survey at Lowther Park. Peter has considerable experience of recording industrial and specifically mining landscapes in north-west England and north Wales. Peter undertook the survey of Paddy End copper mines for the Lake District National Park Authority (LDNPA) and other surveys include those at Greenside lead mines (Glenridding), Keld Heads (Wensleydale), Greenhead Mines (Grasmere), the Bengarth and Blea Tarn iron mines (Eskdale), and Carrock Fell mines (Caldbeck Fells). In particular Peter Schofield undertook the earlier survey of Borrowdale.

6.1.4 ***Documentary Specialist: Documentary/archival study:*** will be undertaken by **Helen Evans** (OA Heritage Management Services Project Officer). Helen regularly undertakes archival and documentary analysis and will research the historical background of the site, and contribute to the landscape historical analysis and reporting. Helen produces desk-based archaeological and heritage assessments for OA North, and specialises in landscape conservation reports.

APPENDIX 2: SITE GAZETTEER

Site Number **1**
Site Name Boundary Wall, Low Bank, Thorneythwaite Farm (Fig 3)
NGR NY 25072 13589
NTSMR No N/A
Site Type Field Boundary
Period Post-medieval
Sources Walkover Survey, First Edition OS map, 1867
Significance Low local
Condition Fair
Stability Fair
Vulnerability Low
Survival Poor
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5464
Description An L-shaped wall foundation constructed of large scree stones extending south-west/north-east for approximately 9m, it then turns south-east for approximately 10m. It is 1m wide by 0.6m high. In addition, there is a rough pile of clearance stones immediately adjacent on the upslope eastern side but with no obvious signs of structure. The wall is depicted as a fragmentary part of the west side of an enclosed field on the First Edition OS mapping, the rest of the field was depicted as a veteran treeline. The boundary was not depicted on the tithe map (1842).

Site Number **2**
Site Name Plantation, Rigg, Thorneythwaite Farm (Fig 3)
NGR NY 25189 13249
NTSMR No N/A
Site Type Plantation
Period Post-medieval
Sources Walkover Survey, Second Edition OS map, 1900
Significance Low local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE

Photo Ref 5465
Description Several large fir trees to the south-west of the old saw mill (LDNPA HER 11915), comprise the last remnants of a triangular area of plantation woodland in the south-east corner of a field that was depicted on the Second Edition OS mapping.

Site Number **3**
Site Name Charcoal-burning Platform, Low Bank, Thorneythwaite Farm (Fig 3)
NGR NY 25040 13151
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Photo Ref 5466
Compiler PS/HE
Description An oval charcoal-burning platform, 10m long by 8m wide and 1m high downslope on the north side.

Site Number **4**
Site Name Charcoal-burning Platform, Low Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24977 13099
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5468
Description An oval charcoal-burning platform, 10m long by 6m wide and 1.5m high downslope on the north side.

Site Number **5**
Site Name Charcoal-burning Platform, Low Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24928 13140
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5469
Description An oval charcoal-burning platform, 8m long by 7m wide and 1m high downslope on the north side. It has kerbed walling on the downslope side.

Site Number	**6**
Site Name	Charcoal-burning Platform, Low Bank, Thorneythwaite Farm (Fig 3)
NGR	NY 25038 13277
NTSMR No	N/A
Site Type	Charcoal-burning Platform
Period	Post-medieval
Sources	Walkover Survey
Significance	Regional
Condition	Fair
Stability	Fair
Vulnerability	Moderate
Survival	Moderate
Damage Agents	Bracken
Recommendations	Monitor; bracken removal as appropriate
Compiler	PS/HE
Photo Ref	5470
Description	A circular charcoal-burning platform, 8m in diameter and 1m high downslope on the north side. It has kerbed walling on the downslope side.

Site Number	**7**
Site Name	Charcoal-burning Platform, Low Bank, Thorneythwaite Farm (Fig 3)
NGR	NY 25084 13388
NTSMR No	N/A
Site Type	Charcoal-burning Platform

Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5471
Description An oval charcoal-burning platform, 8m long by 7m wide and 1m high downslope on the north side.

Site Number **8**
Site Name Charcoal-burning Platform, Low Bank, Thorneythwaite Farm (Fig 3)
NGR NY 25031 13320
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5472
Description An oval charcoal-burning platform, 8m long by 6m wide and 1.5m high downslope on the north side.

Site Number	**9**
Site Name	Charcoal-burning Platform, Low Bank, Thorneythwaite Farm (Fig 3)
NGR	NY 24984 13249
NTSMR No	N/A
Site Type	Charcoal-burning Platform
Period	Post-medieval
Sources	Walkover Survey
Significance	Regional
Condition	Fair
Stability	Fair
Vulnerability	Moderate
Survival	Moderate
Damage Agents	Bracken
Recommendations	Monitor; bracken removal as appropriate
Compiler	PS/HE
Photo Ref	5473
Description	A circular charcoal-burning platform, 8m in diameter and 1.5m high downslope on the north side.

Site Number **10**
Site Name Charcoal-burning Platform, Low Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24885 13215
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5474
Description A circular charcoal-burning platform, 7m in diameter and 0.5m high downslope on the north side. There is a flat-topped stone just upslope to the south, which may have been used for observation of the charcoal-making process.

Site Number **11**
Site Name Boundary Wall/Plantation, Low Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24820 13209
NTSMR No N/A
Site Type Plantation
Period Post-medieval
Sources Walkover Survey, Second Edition OS map, 1900
Significance Low local
Condition Poor
Stability Fair
Vulnerability Low
Survival Poor
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5475
Description A fragmentary curvilinear wall foundation was identified on the north-east side of small craggy outcrop. It measures approximately 20m long by 1m wide and up to 0.7m high, though mostly collapsed. The knoll was depicted as a small coniferous plantation on the Second Edition OS mapping.

Site Number	**12**
Site Name	Boundary Wall/Plantation, Low Bank, Thorneythwaite Farm (Fig 3)
NGR	NY 24933 13385
NTSMR No	N/A
Site Type	Field Boundary/Plantation
Period	Medieval to Post-medieval
Sources	Walkover Survey, Tithe Map, 1842, Second Edition OS map, 1900
Significance	Regional
Condition	Fair
Stability	Fair
Vulnerability	Moderate
Survival	Poor
Damage Agents	Bracken
Recommendations	Monitor; bracken removal as appropriate
Compiler	PS/HE
Photo Ref	5476
Description	A sub-triangular enclosure with a fragmentary upcast turf boundary bank and external ditch. The boundary survives best on the east side, where it measures up to 3m wide by 0.5m high. The enclosure was depicted on the Second Edition OS mapping as a coniferous plantation, although there are no coniferous trees surviving within the enclosure. The tithe map defined this enclosure as part of a small pasture field called 'Under Wood'.

Site Number **13**
Site Name Charcoal-burning Platform, Low Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24970 13336
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5478
Description An oval charcoal-burning platform, 8.5m long by 8m wide and 0.5m high downslope on the north side. The east side is not very visible.

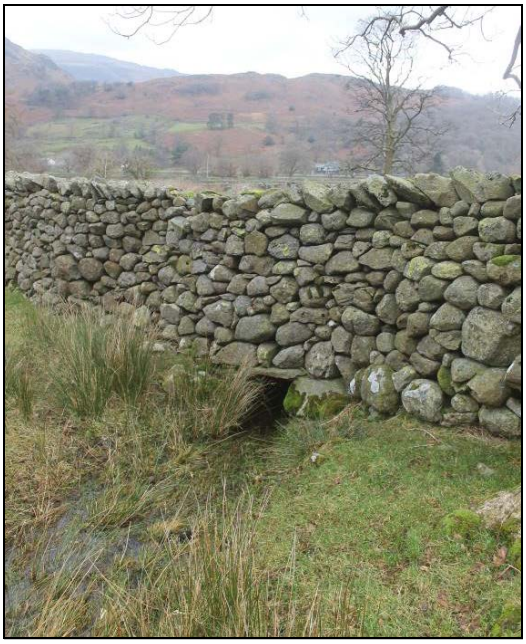
Site Number **14**
Site Name Slab Bridge, New Close, Thorneythwaite Farm (Fig 3)
NGR NY 24753 13291
NTSMR No N/A
Site Type Bridge
Period Medieval to Post-medieval
Sources Walkover Survey, LiDAR
Significance Local
Condition Poor
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Erosion, flooding
Recommendations Monitor; visit following flood events
Compiler PS/HE
Photo Ref 5479
Description A simple slab bridge across a narrow drainage gully. It consists of six angular quarried stone slabs, each measuring approximately 2 x 0.5m. In total, the bridge is 2.5m square. Two of the slabs have been displaced.

Site Number	**15**
Site Name	Enclosed Farmstead, New Close, Thorneythwaite Farm (Fig 3)
NGR	NY 24703 13281
NTSMR No	N/A
Site Type	Farmstead
Period	Prehistoric to Medieval
Sources	Walkover Survey, LiDAR, First Edition OS map, 1867, Topographic Survey
Significance	National/Regional
Condition	Poor
Stability	Poor
Vulnerability	High
Survival	Poor
Damage Agents	Modern dumping, erosion, access activity
Recommendations	Proactive conservation measures required, following which, regular monitoring
Compiler	PS/HE
Photo Ref	5481

Description An enclosed farmstead/settlement site beneath the junction of four modern field boundaries immediately south-east of Thorneythwaite Farm. The well-defined enclosure bank, consisting of packed turf-covered small/medium-sized stones (with some boulders present), is D-shaped in plan, and measures at least 85 x 80m in extent. The enclosure bank is 2-3m wide by up to 0.4m high. The outer boundary is evident on the north, west and east sides and is almost intact in the north-east quadrant. The field in the west quadrant has been improved and the enclosure bank remains as a slight earthwork feature. The field to the south remains rough, unimproved pasture, with many small sections of sub-divisional walling and possible structural elements evident, including a U-shaped earthwork (6 x 6m in extent by 0.2m high) that may be the end of a rectangular structure, but this is masked by the vegetation and both this and the walling have possibly been denuded by stone-picking to create the modern field walls. The eastern side of the enclosure abuts a small stream. The settlement is located in an elevated position on the north side, and in the lee of, an end moraine. This protected it from flooding on the valley floor. The present Thorneythwaite Farm is in a similar position on the moraine, a little further to the north-west. The north-east quadrant of the enclosure was depicted as a plantation on the First Edition OS mapping. Stumps of coniferous trees remain on top of the banks, but these are clearly not contemporary with the creation of the plantation. The north-east quadrant has also been subject of modern dumping internally, which masks some of the features within. It is clear that there are several sub-divisional boundaries in this area as well as a possible large platform, up to 29m in diameter, that may have been the focal point for a domestic structure.

Site Number	**16**
Site Name	Water Smoot, New Close, Thorneythwaite Farm (Fig 3)
NGR	NY 24730 13253
NTSMR No	N/A
Site Type	Water Smoot
Period	Post-medieval
Sources	Walkover Survey, Second Edition OS map, 1900
Significance	Low local
Condition	Fair
Stability	Fair
Vulnerability	Low
Survival	Good
Damage Agents	Flooding
Recommendations	Monitor; visit following flood events
Compiler	PS/HE
Photo Ref	5482

Description A small water smoot on the course of a narrow stream. It consists of a single slab forming a lintel above an aperture, and measures 0.3m wide by 0.4m high.



Site Number **17**
Site Name Trackway, Thorneythwaite Farm (Fig 3)
NGR NY 24111 12547 to NY 24485 12857
NTSMR No N/A
Site Type Trackway
Period Medieval to Post-medieval
Sources Walkover Survey, First Edition OS map, 1867, Second Edition OS map, 1900
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Erosion
Recommendations Monitor
Compiler PS/HE
Photo Ref 5483
Description A packhorse track follows the eastern side of the valley, just outside the enclosed lands east of the River Derwent, on the lower wooded slopes of Thorneythwaite Fell. The trackway is depicted on the historical OS mapping, extending in a north-east/south-west direction from just south of Strands Bridge, continuing opposite both Thorneythwaite Farm and Seathwaite village, further up to the head of the valley. The section within the present survey area is approximately 1050m in long. The best surviving section, located 300m south of Thorneythwaite Farm, consists of a well-defined, 2m-wide trackway, cut slightly into the hillside, with a large retaining wall up to 1m high downslope on the north-west side. The track runs in between Thorneythwaite Farm and the potentially early enclosed farmstead/settlement site (Site **15**). It passes immediately adjacent to the latter farmstead, where its original route passed through a blocked gateway (Site **38**).

Site Number **18**
Site Name Sheepfold, Johnny Dale Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24419 12768
NTSMR No N/A
Site Type Sheepfold
Period Post-medieval
Sources Walkover Survey, Second Edition OS map, 1900
Significance Low local
Condition Fair
Stability Fair
Vulnerability Low
Survival Good
Damage Agents Erosion, bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5485

Description A D-shaped sheepfold at the junction of an intake wall and the lowland enclosed fields south of Thorneythwaite Farm. The structure is depicted on the Second Edition OS mapping. It consists of well-constructed, double-thickness stone walls and is approximately 6m square. It is constructed from field clearance and scree stones, with one larger boulder in the foundations, and slanting copping stones on top. There are two angular gateposts on its northern entrance, where the packhorse track (Site **17**) passes through it.

Site Number	**19**
Site Name	Gate Stoup, Noon Bank, Thorneythwaite Farm (Fig 3)
NGR	NY 24486 12891
NTSMR No	N/A
Site Type	Gateway
Period	Post-medieval
Sources	Walkover Survey, First Edition OS map, 1867, Second Edition OS map, 1900
Significance	Low local
Condition	Fair
Stability	Fair
Vulnerability	Low
Survival	Good
Damage Agents	Erosion
Recommendations	Monitor
Compiler	PS/HE
Photo Ref	5487

Description A gateway, at which a short section of trackway splits from the packhorse track (Site **17**) and runs into enclosed fields. The gateway has a single, quarried slab gatepost on the north side. It measures approximately 1.5m long by 0.4m wide, and is depicted upon the historical OS mapping.

Site Number **20**
Site Name Bridge, Black Sike, Thorneythwaite Farm (Fig 3)
NGR NY 24459 12886
NTSMR No N/A
Site Type Bridge
Period Post-medieval
Sources Walkover Survey, First Edition OS map, 1867, Second Edition OS map, 1900
Significance Negligible
Condition Poor
Stability Fair
Vulnerability Moderate
Survival Poor
Damage Agents Flooding, erosion
Recommendations Monitor; visit following flood events
Compiler PS/HE
Photo Ref 5488
Description Abutments for a small bridge carrying part of a farm track across Black Sike. It has modern breeze blocks on the northern end but the rest has probably original stone footings. The bridge's superstructure consists of railway sleepers. It is depicted upon the historical OS mapping.

Site Number **21**
Site Name Mound, Meadow, Thorneythwaite Farm (Fig 3)
NGR NY 24335 12896
NTSMR No N/A

Site Type Earthwork Mound
Period Unknown
Sources Walkover Survey
Significance Local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Flooding
Recommendations Monitor; visit following flood events
Compiler PS/HE
Photo Ref 5490
Description A shallow, oval turf-covered mound on the eastern side of an oval boggy area within enclosed farmland between the River Derwent and Black Sike. The feature has a rounded top and gently sloping sides, and measures approximately 10m long by 5m wide but is only 0.25m high. The surrounding field contains obvious palaeochannels. It is probably not a burnt mound, although it is definitely more visible because of the lush green grass on the top. Aerial photography suggests that there is a possible further kidney-shaped mound on the northern end of the boggy area (just beyond the present study area), although this was not identified in the Borrowdale landscape survey (OA North 2007).

Site Number **22**
Site Name Plantation, Noon Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24483 12979
NTSMR No N/A
Site Type Plantation
Period Post-medieval
Sources Walkover Survey, First Edition OS map, 1867, Second Edition OS map, 1900
Significance Moderate local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5491
Description A rectangular coniferous plantation adjacent to the east side of Black Sike and south of Thorneythwaite Farm. It is depicted from 1867. Several fir trees are still evident.

Site Number **23**
Site Name Plantation, Over Close Bottom, Thorneythwaite Farm (Fig 3)
NGR NY 24516 13045
NTSMR No N/A
Site Type Plantation
Period Post-medieval
Sources Walkover Survey, First Edition OS map, 1867, Second Edition OS map, 1900
Significance Low local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5492
Description A small square coniferous plantation south of Thorneythwaite Farm, depicted on the OS First Edition map of 1867. Several fir trees are still evident.

Site Number **24**
Site Name Culvert, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24533 13012

NTSMR No N/A
Site Type Culvert
Period Post-medieval
Sources Walkover Survey, First Edition OS map, 1867, Second Edition OS map, 1900
Significance Local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Flooding
Recommendations Monitor; visit following flood events
Compiler PS/HE
Photo Ref 5493
Description A small slab-topped culvert carrying the packhorse track (Site **17**) over a narrow drainage gully. Two slabs have dimensions of 1.5 x 0.75m, and the smaller central slab is 0.5 x 0.45m. It is depicted on OS mapping from 1867.

Site Number **25**
Site Name Stile, Tup Close, Thorneythwaite Farm (Fig 3)
NGR NY 24586 13121
NTSMR No N/A
Site Type Stile
Period Post-medieval
Sources Walkover Survey
Significance Low local
Condition Fair
Stability Fair
Vulnerability Low
Survival Moderate
Recommendations Monitor
Compiler PS/HE
Photo Ref 5494
Description A three-stepped through stile adjacent to a gateway south of Thorneythwaite Farm.

Site Number	**26**
Site Name	Quarry, Low Bank, Thorneythwaite Farm (Fig 3)
NGR	NY 25090 13116
NTSMR No	N/A
Site Type	Quarry
Period	Post-medieval
Sources	Walkover Survey
Significance	Low local
Condition	Fair
Stability	Fair
Vulnerability	Low
Survival	Moderate
Damage Agents	Bracken
Recommendations	Monitor; bracken removal as appropriate
Compiler	PS/HE
Photo Ref	5495

Description The foundations of a collapsed, curvilinear double-thickness stone wall defining the upper south side of a quarried crag face. The wall is orientated roughly west/east and measures approximately 37m long by 1.3m wide and 0.5m high. The possible quarry face measures 25m long by up to 4m high.

Site Number **27**
Site Name Sheep Shelter, Thorneythwaite Fell, Thorneythwaite Farm (Fig 4)
NGR NY 24605 12230
NTSMR No N/A
Site Type Sheep Shelter
Period Post-medieval
Sources Walkover Survey
Significance Local
Condition Poor
Stability Poor
Vulnerability Low
Survival Poor
Damage Agents -
Recommendations Monitor
Compiler PS/HE
Photo Ref 5496
Description A **s**lightly curvilinear wall of a sheep shelter, external to the south-east corner of the southern intake on Thorneythwaite Fell. It extends towards the corner of the intake wall and is mostly collapsed. It is a double-thickness wall constructed of scree stones, and measures approximately 20m long by 1.2m wide, surviving up to 1.4m high in places.

Site Number **28**
Site Name Boundary Marker Cairn, Thorneythwaite Fell, Thorneythwaite Farm (Fig 4)
NGR NY 24534 12086
NTSMR No N/A
Site Type Boundary Marker Cairn
Period Post-medieval
Sources Walkover Survey
Significance Local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents -
Recommendations Monitor
Compiler PS/HE
Photo Ref 5497
Description A conical scree-constructed boundary marker, or walker's cairn, located on the northern flank of Capell Crag on Thorneythwaite Fell. It is relatively near to the modern footpath. It measures approximately 2m in diameter by up to 0.8m high.

Site Number	**29**
Site Name	Boundary Marker Cairn, Capell Crag, Thorneythwaite Farm (Fig 4)
NGR	NY 24404 11992
NTSMR No	N/A
Site Type	Boundary Marker Cairn
Period	Post-medieval
Sources	Walkover Survey, Second Edition OS map, 1900
Significance	Local
Condition	Fair
Stability	Fair
Vulnerability	Moderate
Survival	Moderate
Damage Agents	-
Recommendations	Monitor; bracken removal as appropriate
Compiler	PS/HE
Photo Ref	5499

Description A conical scree-constructed boundary-marker cairn on the summit of Capell Crag on Thorneythwaite Fell. It measures approximately 2.5m in diameter by up to 0.75m high. It is depicted as a triangulation pillar on the Second Edition OS mapping.

Site Number	**30**
Site Name	Hollow-way, High Bank, Thorneythwaite Farm (Fig 3)

NGR NY 25028 13533 to NY 25111 12920
NTSMR No N/A
Site Type Hollow-way
Period Medieval to Post-medieval
Sources Walkover Survey, LiDAR, First Edition OS map, 1867, Second Edition OS map, 1900
Significance Regional
Condition Fair
Stability Fair
Vulnerability High
Survival Moderate
Damage Agents Erosion
Recommendations Monitor
Compiler PS/HE
Photo Ref 5500
Description A sinuous, braided hollow-way leading upslope, on the northern flank of Thorneythwaite Fell. It ascends from Thorneythwaite Farm and reaches a series of sheepfolds/shelters nestled in Combe Gill, just outside the intakes (and beyond the present survey area). The modern footpath continues from there south up Capell Crag. The section of trackway within the present survey area measures at least 875m long and, where it is well preserved, it has a V-shaped profile up to 3m wide by 1m deep. The V-shaped profile may be indicative of its use as a peat sledway, as well as being for livestock access.

Site Number **31**
Site Name Quarry, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 25061 13542
NTSMR No N/A
Site Type Quarry
Period Post-medieval
Sources Walkover Survey, LiDAR
Significance Local
Condition Fair
Stability Fair
Vulnerability Low
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5502
Description Teardrop-shaped quarry adjacent to the south side of the mountain trackway leading up Thorneythwaite Fell (Site **30**). It measures approximately 15m long by 9m wide and is up to 3m deep.

Site Number **32**
Site Name Water Smoots, Horse Close, Thorneythwaite Farm (Fig 3)
NGR NY 24931 13504
NTSMR No N/A
Site Type Water Smoot
Period Post-medieval
Sources Walkover Survey, Second Edition OS map, 1900
Significance Local
Condition Fair
Stability Fair
Vulnerability Low
Survival Good
Damage Agents Flooding
Recommendations Monitor; visit following flood events
Compiler PS/HE
Photo Ref 5503
Description A pair of small water smoots located in the north-east corner of an enclosed field near the confluence of a small tributary with the River Derwent. Each measures up to 0.3m wide by 0.4m high, with a single slab lintel over a squared aperture.

Site Number **33**
Site Name Gateway, Great Field, Thorneythwaite Farm (Fig 3)
NGR NY 24774 13562

NTSMR No N/A
Site Type Gateway
Period Post-medieval
Sources Walkover Survey, First Edition OS map, 1867
Significance Local
Condition Fair
Stability Fair
Vulnerability Low
Survival Moderate
Damage Agents -
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Description A blocked gateway at the northern end of two fields north of Thorneythwaite Farm. It **Photo Ref** 5504
measures approximately 4m wide by 1.5m high. The wall it is within was not depicted upon the tithe map (1842) but was first shown on the First Edition OS mapping.

Site Number **34**
Site Name Consumption Bank, Great Field, Thorneythwaite Farm (Fig 3)
NGR NY 24708 13513
NTSMR No N/A
Site Type Consumption Bank
Period Post-medieval
Sources Walkover Survey, First Edition OS map, 1867, Second Edition OS map, 1900
Significance Local
Condition Fair
Stability Moderate
Vulnerability Low
Survival Good
Damage Agents -
Recommendations Monitor
Compiler PS/HE
Photo Ref 5505
Description A large sausage-shaped consumption bank in the centre of a field boundary within two fields north of Thorneythwaite Farm. It measures approximately 65m long by 1.5m high. It is almost completely infilled with cleared stone in the centre and there are several scrubby trees growing through it. The field boundary and consumption bank are not depicted on the tithe map (1842) but are evident on the OS mapping from 1867.

Site Number **35**
Site Name Consumption Bank, Lamb Close, Thorneythwaite Farm (Fig 3)
NGR NY 24612 13507
NTSMR No N/A
Site Type Consumption Bank
Period Post-medieval
Sources Walkover Survey, First Edition OS map, 1867
Significance Local
Condition Fair
Stability Moderate
Vulnerability Low
Survival Good
Damage Agents -
Recommendations Monitor
Compiler PS/HE
Photo Ref 5508
Description A teardrop-shaped consumption bank at the northern end of what was originally a small triangular plantation north of Thorneythwaite Farm. The plantation and consumption bank are depicted on the First Edition OS mapping. It is almost completely infilled with cleared stone in the centre and there are several scrubby trees growing through it. It measures approximately 15m long by up to 1.5m high.

Site Number **36**
Site Name Consumption Bank, Great Field, Thorneythwaite Farm (Fig 3)
NGR NY 24682 13600
NTSMR No N/A
Site Type Consumption Bank

Period Post-medieval
Sources Walkover Survey
Significance Local
Condition Fair
Stability Moderate
Vulnerability Low
Survival Good
Damage Agents -
Recommendations Monitor; tree removal as appropriate
Compiler PS/HE
Photo Ref 5509
Description A teardrop-shaped consumption bank in the northern corner of a field boundary in an enclosed field north of Thorneythwaite Farm. It is almost completely infilled with cleared stone in the centre and there are several scrubby trees growing through it. It measures approximately 25m long by up to 1.5m high.

Site Number **37**
Site Name Gate Stoup, Millbeck Garth, Thorneythwaite Farm (Fig 3)
NGR NY 24620 13611
NTSMR No N/A
Site Type Gateway
Period Post-medieval
Sources Walkover Survey, First Edition OS map, 1867, Second Edition OS map, 1900
Significance Local
Condition Fair
Stability Moderate
Vulnerability Low
Survival Good
Damage Agents -
Recommendations Monitor
Compiler PS/HE
Photo Ref 5510
Description A gateway leading to the site of the original farm/footbridge over the River Derwent at Nichol Dub. There is a single large slab gatepost on the west side. It measures 1.5m high by 1m wide.

Site Number **38**
Site Name Gateway, New Close, Thorneythwaite Farm (Fig 3)
NGR NY 24688 13298
NTSMR No N/A
Site Type Gateway
Period Post-medieval
Sources Walkover Survey
Significance Local
Condition Fair
Stability Moderate
Vulnerability Low
Survival Good
Damage Agents -
Recommendations Monitor
Compiler PS/HE
Photo Ref 5511
Description A narrow blocked field gate (not modern farm-vehicle width) located on the original alignment of the packhorse track (Site **17**) where it passes the enclosed settlement/farmstead (Site **15**). The route, now a public footpath, has been diverted north of the adjacent field wall. It measures approximately 1.25m wide by 1.5m high.

Site Number **39**
Site Name Water Smoot, Tup Close, Thorneythwaite Farm (Fig 3)

NGR NY 24683 13119
NTSMR No N/A
Site Type Water Smoot
Period Post-medieval
Sources Walkover Survey, First Edition OS map, 1867, Second Edition OS map, 1900
Significance Local
Condition Fair
Stability Fair
Vulnerability Low
Survival Good
Damage Agents Flooding
Recommendations Monitor; visit following flood events
Compiler PS/HE
Photo Ref 5512
Description A single small water smoot on the alignment of a stream flowing down Thorneythwaite Fell and into enclosed fields south-east of Thorneythwaite Farm. It consists of a single slab lintel over a small squared aperture, and is 0.6m wide by 0.3m high.

Site Number **40**
Site Name Trackway, High Bank/Johnny Dale Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24372 12720 to NY 24480 12794
NTSMR No N/A
Site Type Trackway
Period Medieval to Post-medieval
Sources Walkover Survey, Aerial Photography
Significance Local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Good
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5513
Description A slightly sinuous platformed trackway cut into the hillside at the foot of Thorneythwaite

Fell. The damaged southern end would have originally met the packhorse track running along the foot of this side of the valley (Site **17**). It leads upslope south-west/north-east and possibly zig-zags past a structure (Site **63**), although the route there is unclear. There is a definite continuation beyond the point where the track is crossed by a later intake wall and it turns north and descends back down to the packhorse track. The visible route is approximately 136m long by 2.5m wide.

Site Number	**41**
Site Name	Water Smoot, Johnny Dale Bank, Thorneythwaite Farm (Fig 3)
NGR	NY 24218 12614
NTSMR No	N/A
Site Type	Water Smoot
Period	Post-medieval
Sources	Walkover Survey, First Edition OS map, 1867, Second Edition OS map, 1900
Significance	Local
Condition	Fair
Stability	Fair
Vulnerability	Low
Survival	Good
Damage Agents	Flooding
Recommendations	Monitor; visit following flood events
Compiler	PS/HE
Photo Ref	5514
Description	A small (0.6m wide by 0.3m high) water smoot; a single slab lintel over a small squared aperture. It is situated on a stream flowing down Thorneythwaite Fell and into Black Sike.

Site Number	**42**
Site Name	Shieling, Johnny Dale Bank, Thorneythwaite Farm (Fig 3)
NGR	NY 24441 12662
NTSMR No	N/A
Site Type	Shieling
Period	Medieval to Post-medieval
Sources	Walkover Survey
Significance	Regional
Condition	Fair
Stability	Fair
Vulnerability	Moderate
Survival	Moderate
Damage Agents	Bracken
Recommendations	Monitor; bracken removal as appropriate
Compiler	PS/HE
Photo Ref	5518

Description A small double-cell stone platformed structure in a figure-of-eight pattern. It is on a north/south alignment, to the west of both an intake wall and a small stream. It consists of two conjoined circular cells with small dwarf wall foundations, one 9m and one 8m in diameter. The smaller southern cell is 0.4m higher than the northern cell. The structure is slightly revetted on the western downslope side and the east side is much more fragmentary. There is an earthfast boulder on the east side of the central sub-dividing wall.

Site Number **43**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24489 12740
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5519
Description A circular charcoal-burning platform, 7m in diameter and 0.8m high downslope on the north side. It has kerbed walling on the downslope side.

Site Number **44**
Site Name Boundary Wall, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24676 13089 to NY 24736 13030
NTSMR No N/A
Site Type Field Boundary
Period Medieval to Post-medieval
Sources Walkover Survey, Aerial Photography
Significance Local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Poor
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5520
Description The fragmentary foundations of a linear intake wall running directly upslope (north-west/south-east) from the junction of lower enclosed fields. The boundary measures at least 83m long by up to 1m high in places. It is not depicted on any historical mapping.

Site Number **45**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24753 13049
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5521
Description An oval charcoal-burning platform measuring 8m long by 7m wide and 0.6m high on the northern downslope side. It has kerbed walling on that side.

Site Number **46**
Site Name Trackway, Low Bank/High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24741 13105 to NY 25090 13335
NTSMR No N/A
Site Type Trackway

Period Medieval to Post-medieval
Sources Walkover Survey, Aerial Photography, LiDAR
Significance Local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Erosion (flooding and foot)
Recommendations Monitor; visit following flood events
Compiler PS/HE
Photo Ref 5523
Description A sinuous trackway extending upslope and passing through two woodland intakes. The trackway gave access to several charcoal-burning platforms. It measures at least 420m in length, the southern end remaining a part of a footpath, but north of a field gate that it passes through, it is harder to discern, but it meets with another trackway at its northern end (Site **61**).

Site Number **47**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24811 13077
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5524
Description An oval charcoal-burning platform measuring 7m long by 6.5m wide and 0.5m high on the northern downslope side. It has kerbed walling on that side and a trackway (Site **46**) curves around the western side.

Site Number **48**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24698 12873
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Poor
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5525
Description An oval charcoal-burning platform measuring 7m long by 6m wide and 0.5m high on the northern downslope side. It has kerbed walling on that side.

Site Number **49**
Site Name Boundary Wall, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24680 12886 to NY 24625 12779
NTSMR No N/A
Site Type Field Boundary
Period Medieval to Post-medieval
Sources Walkover Survey, Aerial Photography

Significance Local
Condition Fair
Stability Moderate
Vulnerability Low
Survival Moderate
Damage Agents -
Recommendations Monitor
Compiler PS/HE
Photo Ref 5526
Description Two sections of a well-defined linear intake wall running along the slope (north-north-east/south-south-west). The sections measure 69m and 95m in length and the better-preserved northern section consists of large, double-thickness wall foundations up to 1m wide by 0.6m high. The boundary is not depicted on any historical mapping.

Site Number **50**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24674 12879
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5527
Description An oval charcoal-burning platform measuring 8m long by 6m wide and 0.5m high on the northern downslope side. The platform is constructed on top of a natural knoll and is cut into the hillside at the rear. There is no visible retaining wall. The site is crossed by a later field wall (Site **49**).

Site Number **51**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24640 12799
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5528
Description An oval charcoal-burning platform measuring 7m long by 6m wide and 0.75m high on the northern downslope side. It has kerbed walling on that side.

Site Number **52**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24583 12705
NTSMR No N/A
Site Type Charcoal-burning Platform

Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents -
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5536
Description An oval charcoal-burning platform measuring 9m long by 6m wide and 1m high on the northern downslope side. It has kerbed walling on that side.

Site Number **53**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24652 12735
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5537
Description An oval charcoal-burning platform measuring 7m long by 5m wide and 0.5m high on the northern downslope side. It has kerbed walling on that side.

Site Number **54**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24670 12779
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5538
Description An oval charcoal-burning platform measuring 8m long by 6m wide and 0.4m high on the northern downslope side. The site is built on top of a craggy knoll and there is no visible retaining wall.

Site Number **55**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24766 12878
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval

Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5539
Description An oval charcoal-burning platform measuring 10m long by 7m wide and 0.5m high on the northern downslope side. It has kerbed walling on that side.

Site Number **56**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24815 12903
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5540
Description An oval charcoal-burning platform measuring 12m long by 6.5m wide and 0.4m high on the northern downslope side. It has possible kerbed walling on that side.

Site Number **57**
Site Name Charcoal-burning Platform, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24911 12991
NTSMR No N/A
Site Type Charcoal-burning Platform
Period Post-medieval
Sources Walkover Survey
Significance Regional
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5541
Description An oval charcoal-burning platform measuring 10m long by 7m wide and 0.4m high on the northern downslope side.

Site Number **58**
Site Name Sheepfold, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24909 13066
NTSMR No N/A
Site Type Sheepfold

Period Post-medieval
Sources Walkover Survey, First Edition OS mapping, 1867
Significance Local
Condition Fair
Stability Fair
Vulnerability Low
Survival Moderate
Damage Agents Bracken
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5542
Description A D-shaped sheepfold at the junction of an intake wall running straight upslope and a perpendicular sub-divisional boundary wall. The structure is mostly intact and measures 6m long by 5m wide, surviving up to 1m high in places. The structure is depicted on the First Edition OS mapping.

Site Number **59**
Site Name Sheepfold, Capell Crag, Thorneythwaite Farm (Fig 4)
NGR NY 23961 11810
NTSMR No N/A
Site Type Sheepfold
Period Post-medieval
Sources First Edition OS map, 1867, Aerial Photography
Significance Local
Condition Unknown
Stability Unknown
Vulnerability Unknown
Survival Unknown
Damage Agents Unknown
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Photo Ref 5503
Description A small sheepfold is depicted on the First Edition OS mapping, on the external side of the intake wall below Capell Crag. The site could not be accessed by the survey but is extant on current aerial photography (Google air photography). It appears to be a small, single-celled rectangular walled structure with an entrance at the northern end.

Site Number **60**
Site Name Trackway, Low Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24922 13310 to NY 25094 13511
NTSMR No N/A
Site Type Trackway

Period Medieval to Post-medieval
Sources Aerial Photography
Significance Local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Erosion
Recommendations Monitor
Compiler PS/HE
Description A sinuous trackway runs through the northern end of a woodland intake. It is at least 270m long, and it meets another trackway at its southern end (Site **61**).

Site Number **61**
Site Name Trackway, Low Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24814 13281 to NY 25172 13365
NTSMR No N/A
Site Type Trackway
Period Medieval to Post-medieval
Sources Aerial Photography
Significance Local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents Erosion
Recommendations Monitor
Compiler PS/HE
Description A sinuous trackway runs diagonally up through the northern end of a woodland intake. It is at least 380m long, and meets two other trackways that extend further north and south (Sites **46** and **60**).

Site Number **62**
Site Name Boundary Wall, High Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24622 12940 to NY 24485 126655
NTSMR No N/A
Site Type Field Boundary
Period Medieval to Post-medieval
Sources First Edition OS mapping, 1867
Significance Local
Condition Fair
Stability Fair
Vulnerability Moderate
Survival Moderate
Damage Agents -
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Description A section of a fragmentary linear intake wall extending along the slope (north-north-east/south-south-west). The boundary measures at least 310m long. It is depicted on the Frist Edition OS mapping.

Site Number **63**
Site Name Boundary Wall, Johnny Dale Bank, Thorneythwaite Farm (Fig 3)
NGR NY 24422 12704
NTSMR No N/A
Site Type Boundary Wall
Period Medieval to Post-medieval
Sources Aerial Photography

Significance Low local
Stability Fair
Vulnerability Moderate
Survival Moderate
Condition Fair
Damage Agents -
Recommendations Monitor; bracken removal as appropriate
Compiler PS/HE
Description A small, fragmentary section of boundary wall extending diagonally upslope in the north corner of a woodland intake. It is set partially on top of a craggy outcrop, aligned roughly east-north-east/west-south-west, and is approximately 50m long. The boundary is downslope of a possible shieling (Site **42**), and is not depicted on any historical mapping.

ILLUSTRATIONS

FIGURES

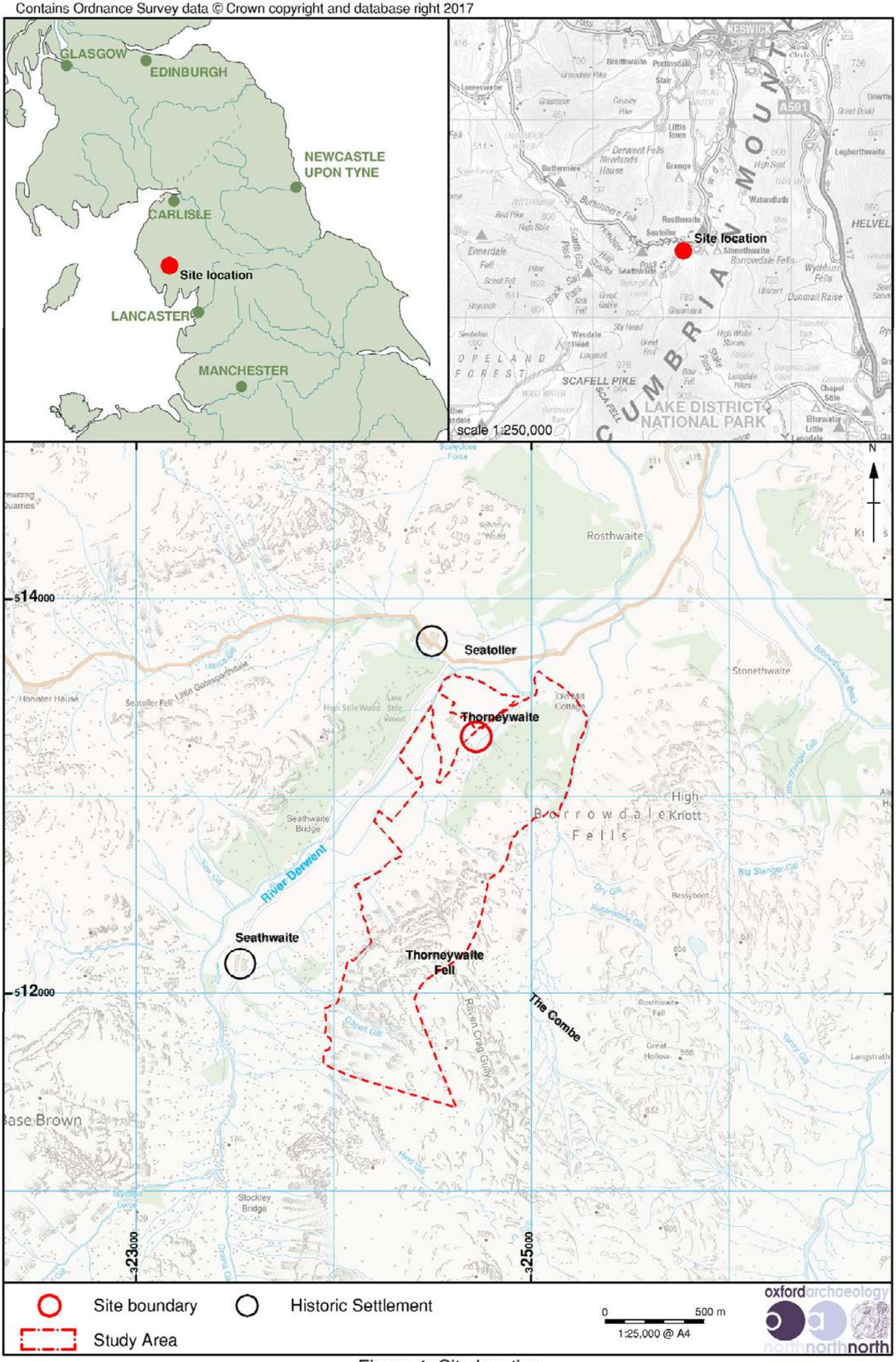


Figure 1: Site location

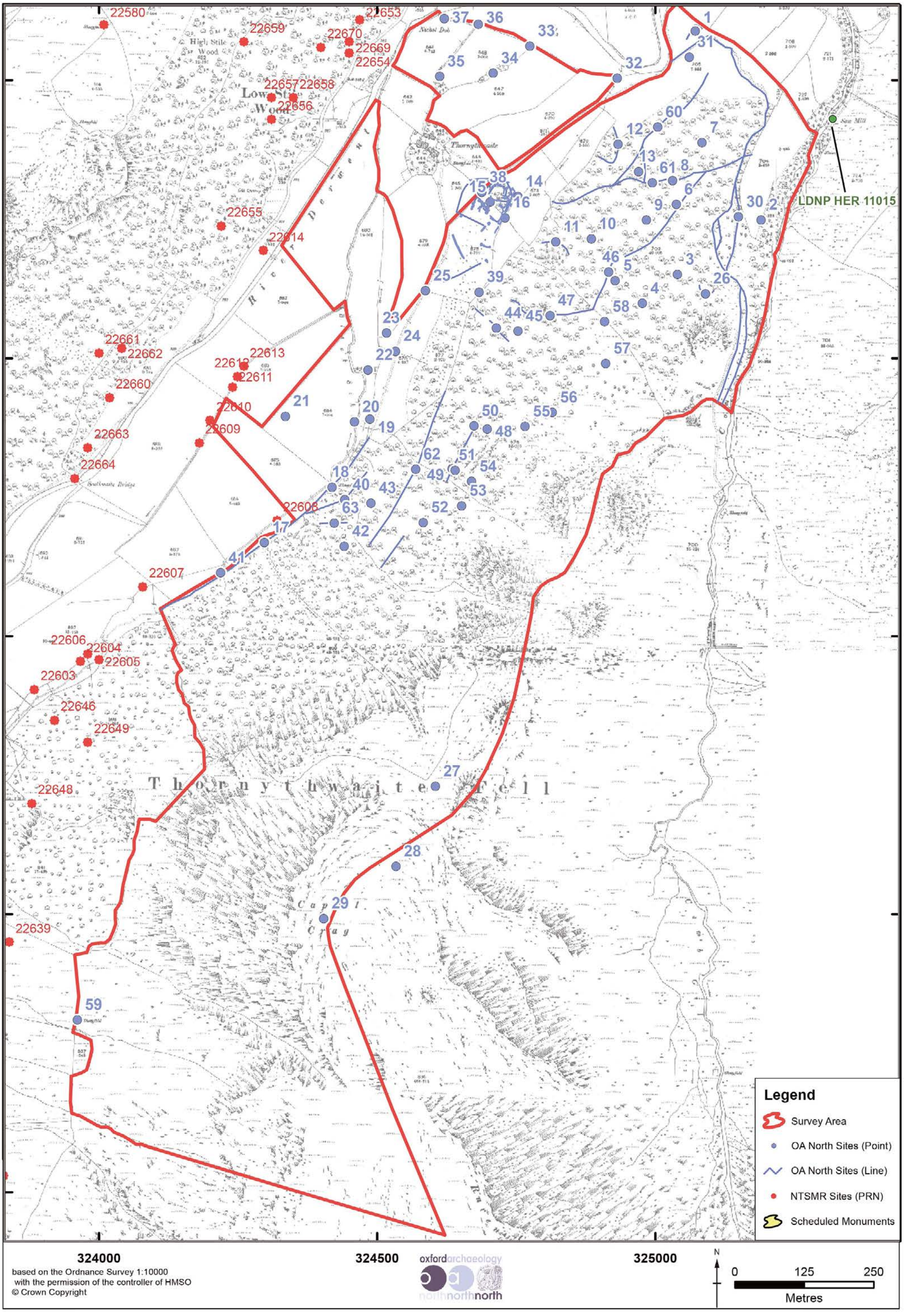


Figure 2: Thornythwaite Farm, as shown on the Second Edition OS 6 inch mapping, 1900, with the survey area superimposed

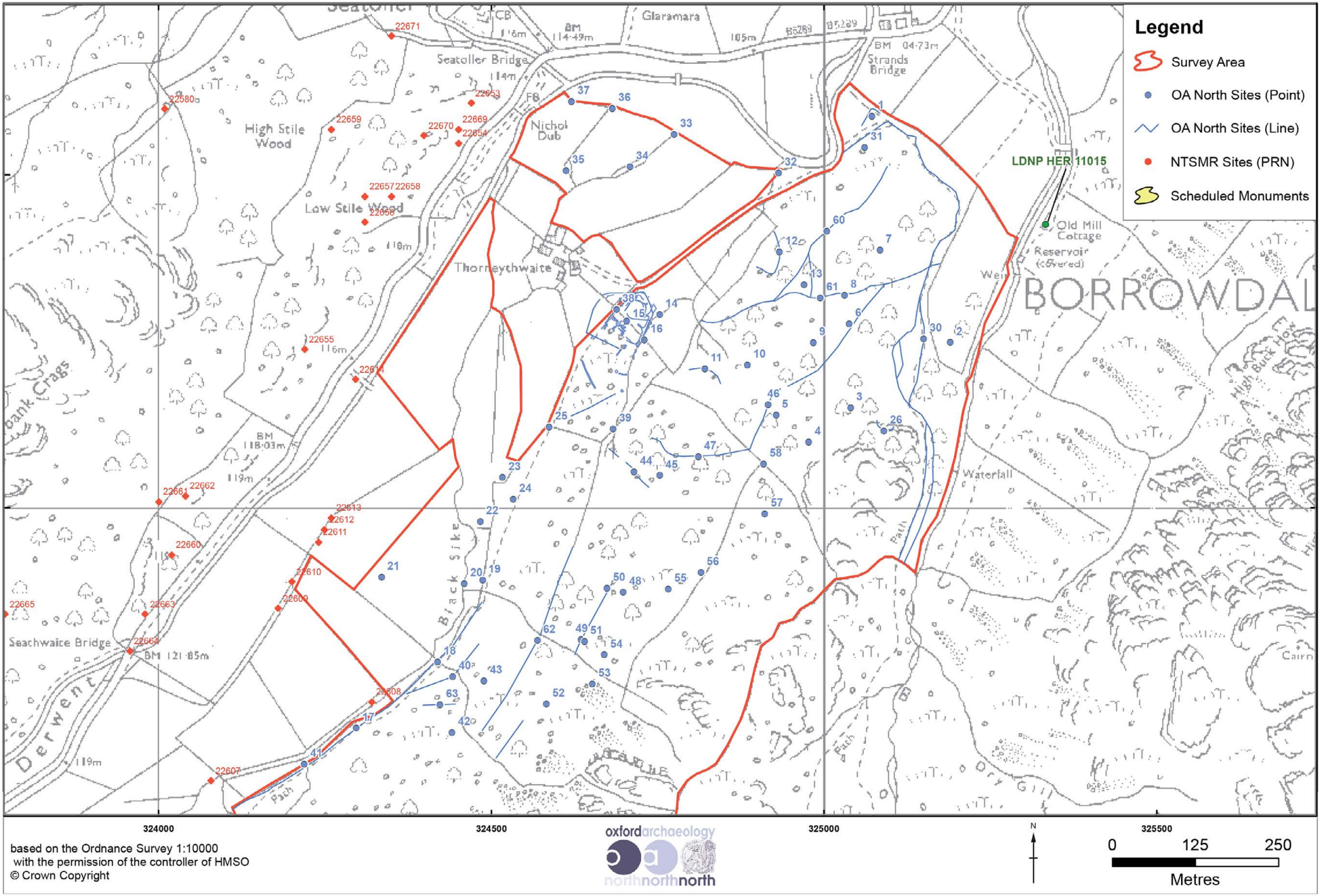


Figure 3: Archaeological Sites at Thorneythwaite Farm (North)

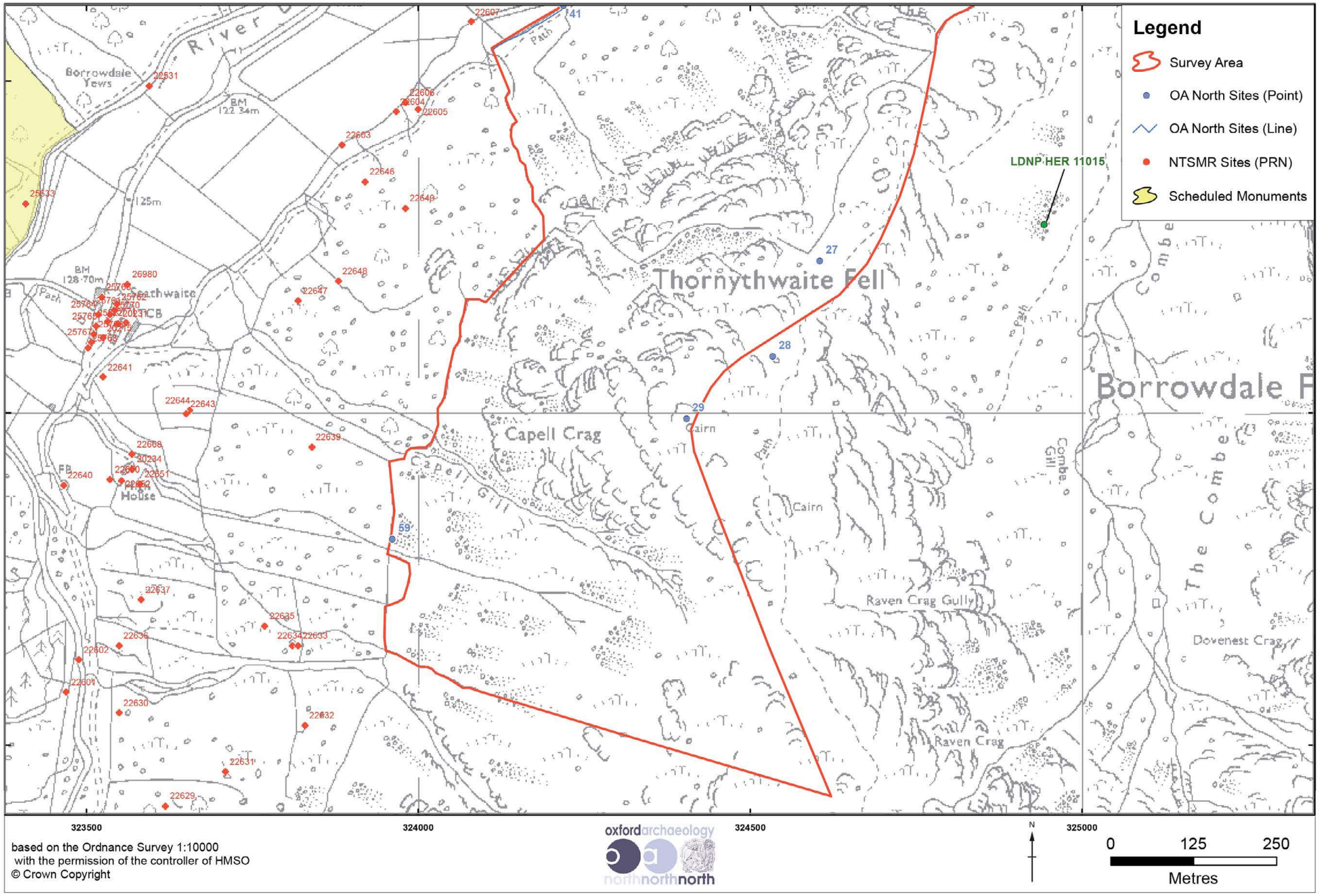


Figure 4: Archaeological Sites at Thorneythwaite Farm (South)

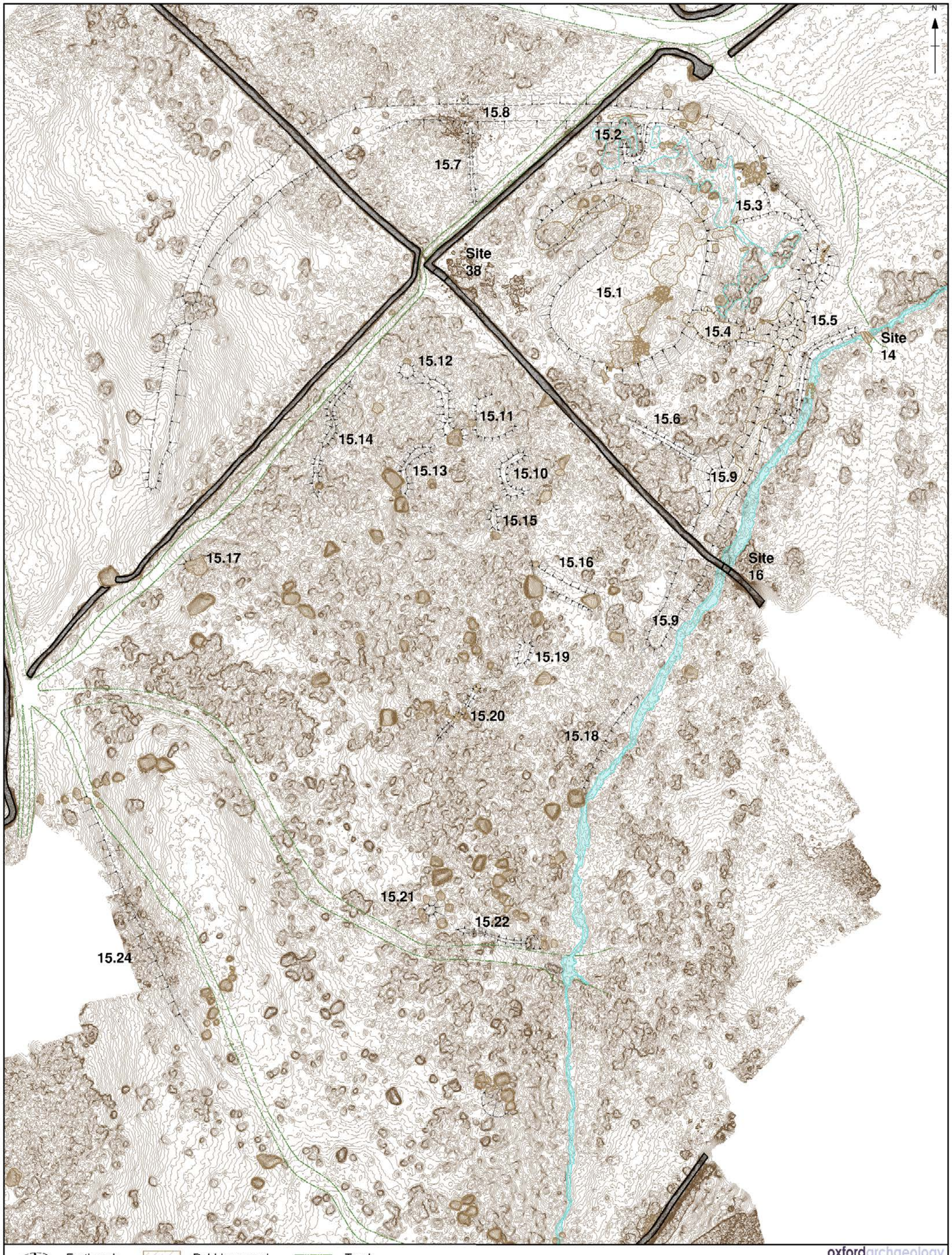


Figure 5: Detailed Topographic survey of settlement (Site **15**)

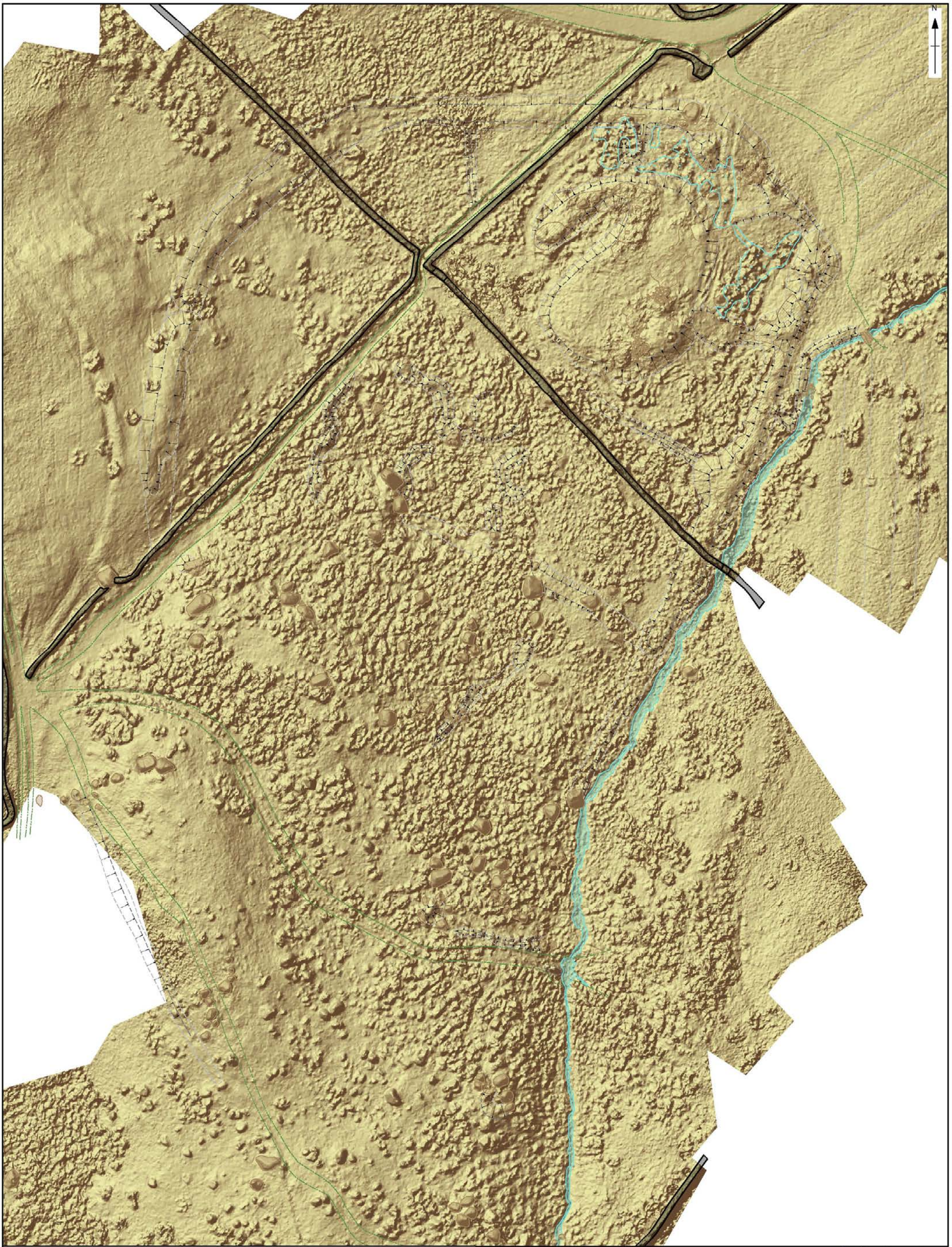


Figure 6: Topographic survey of settlement (Site **15**) overlain on the Hillshade plot

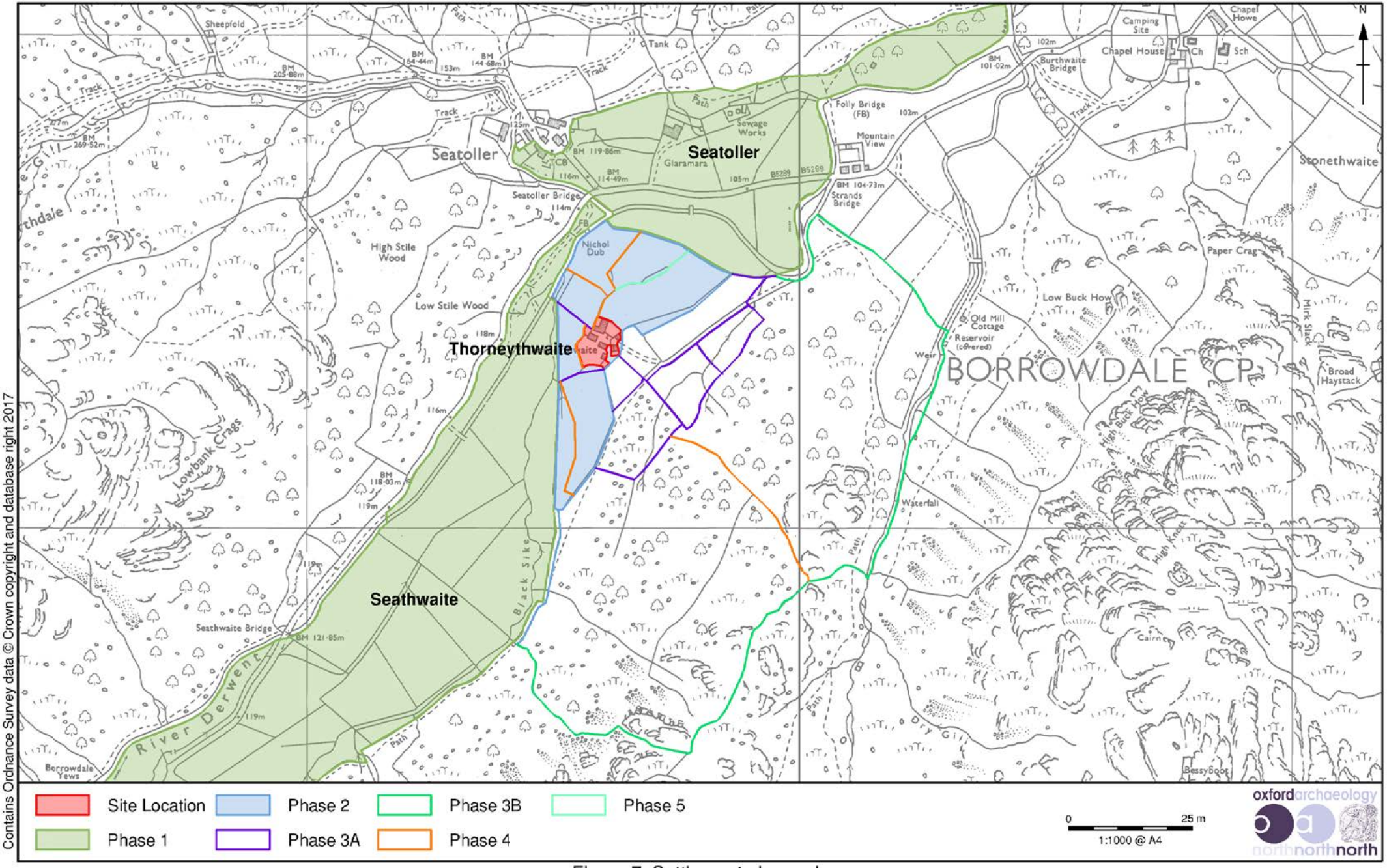


Figure 7: Settlement phase plan

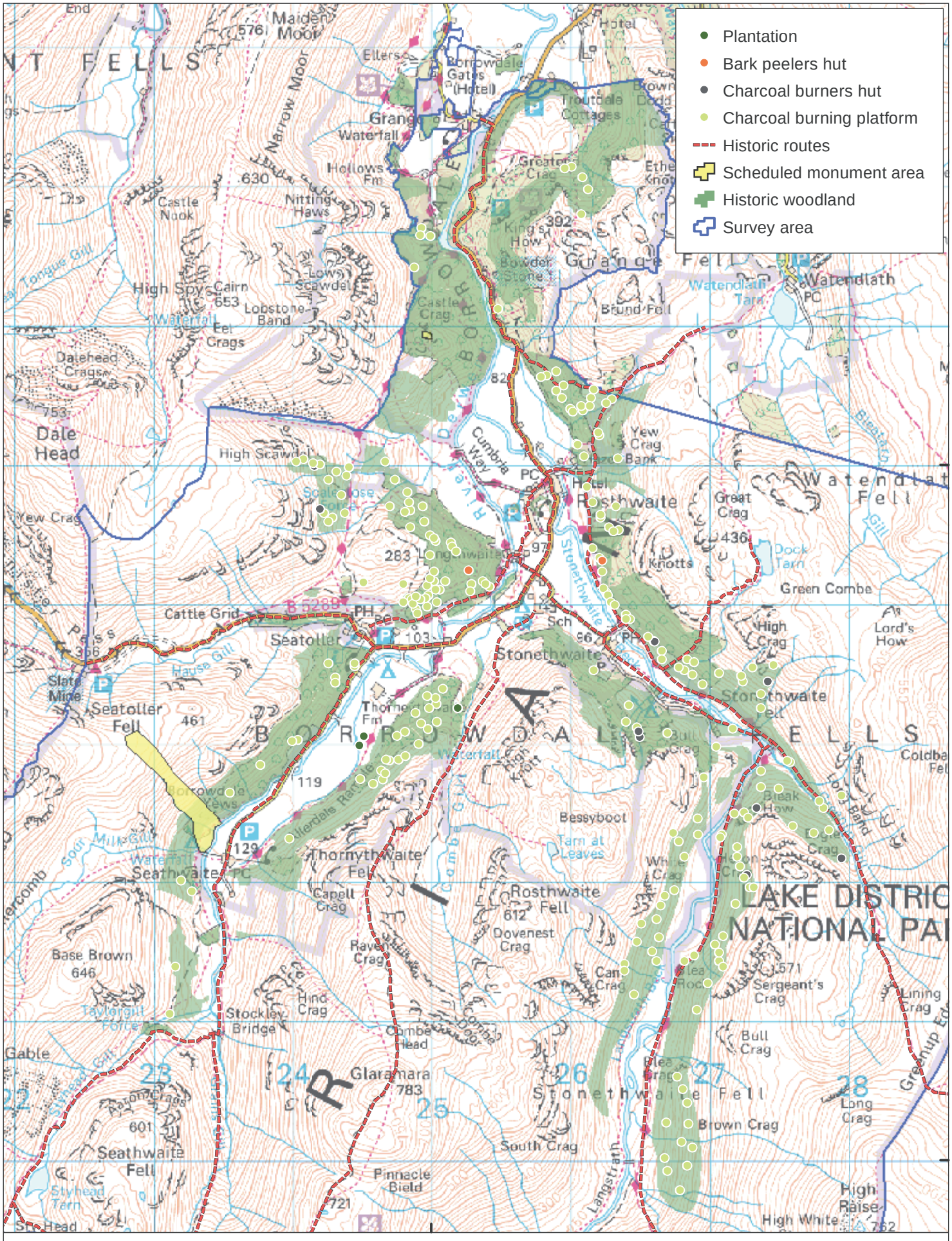


Figure 8: Post-medieval woodland and associated sites

Oxford Archaeology North
Mill 3
Moor Lane Mills
Moor Lane
Lancaster
LA1 1QD
t: (01524 541000
f: (01524) 848606
e: oanorth@oxfordarch.co.uk
w: www.oxfordarch.co.uk

Director and Chief Executive:
Gill Hey BA PhD MIfA FSA

Private Limited Company Number: 1618597

Registered Charity Number: 285627

Registered Office: Oxford Archaeology Ltd.
Janus House, Osney Mead, Oxford, OX2 0ES