

**An Archaeological Survey of Forge Valley,
Raincliffe and Row Brow Woods
Scarborough
North Yorkshire**



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*'thence let me wander mid the pathless wilds of Raincliff, who,
with intertwisted leaves, arches the bowers of silence'*

(Foster 1770)

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1. INTRODUCTION

This report summarises the results of a survey undertaken by the Scarborough Archaeological and Historical Society (SAHS) between December 2015 and September 2017 in Forge Valley, Raincliffe and Row Brow Woods on the western outskirts of Scarborough. The aim of the survey was to make the first systematic record of archaeological features surviving in the woods as a means to better understand how the area has changed over time. It is hoped also that an improved understanding of the archaeology will help in the future management of the woods and give visitors a greater appreciation of the area's heritage.

The woods form a continuous belt of trees extending for a distance of nearly five miles from East Ayton in the west to the A170 Racecourse Road in the east around the steep west, north and north-east sides of East Ayton, Irton and Seamer Moors (Figure 1). The woods have been in public ownership since they were purchased by Scarborough Corporation in 1926 (Missin 1992, 21) and are now a much-valued amenity offering a wide selection of walks, cycle routes and picnic spots. An interim report on the first season's work was produced by the SAHS in 2016 (Pearson et al. 2016) but that is superseded by the present report which as well as giving a more complete picture of the archaeology also benefits from further research into the documentary and cartographic sources.

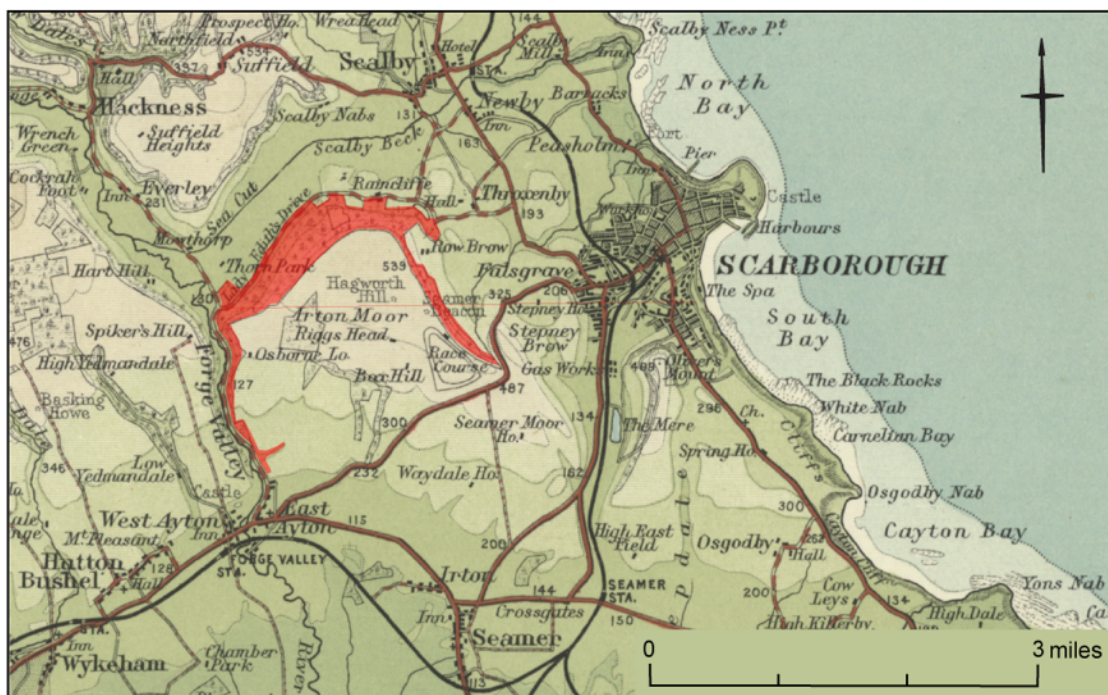


Figure 1. Bartholomew half inch to the mile scale map published in 1903 showing the extent of the woods in red.

2. GEOLOGY AND TOPOGRAPHY

East Ayton, Irton and Seamer Moors form a continuous block of high ground on the north side of the Vale of Pickering about three miles inland from the coast at Scarborough. The south side rises gently in a series of large fields above the vale-edge villages of East Ayton, Irton and Seamer to an altitude of just over 180m (Figure 1). The west side of the hill is a deep wooded gorge called Forge Valley named after the forge which existed in the valley bottom in the 18th century and through which the River Derwent flows southwards into the Vale of Pickering (Figure 2). The survey encompassed the woods on the east side of the valley. At the north end of Forge Valley, the slope turns to face to the north-west and the woods here are called Raincliffe Woods. These look out over a half-mile wide valley towards an opposing block of high ground called Silpho Moor. A two hundred year old artificial drainage channel called the Sea Cut takes excess water eastwards down the valley from the River Derwent to the coast at Scalby Mills while the west end of the valley is drained by a natural stream called the Tilla Beck which flows westwards into the River Derwent. There are also several farms in the valley bottom of

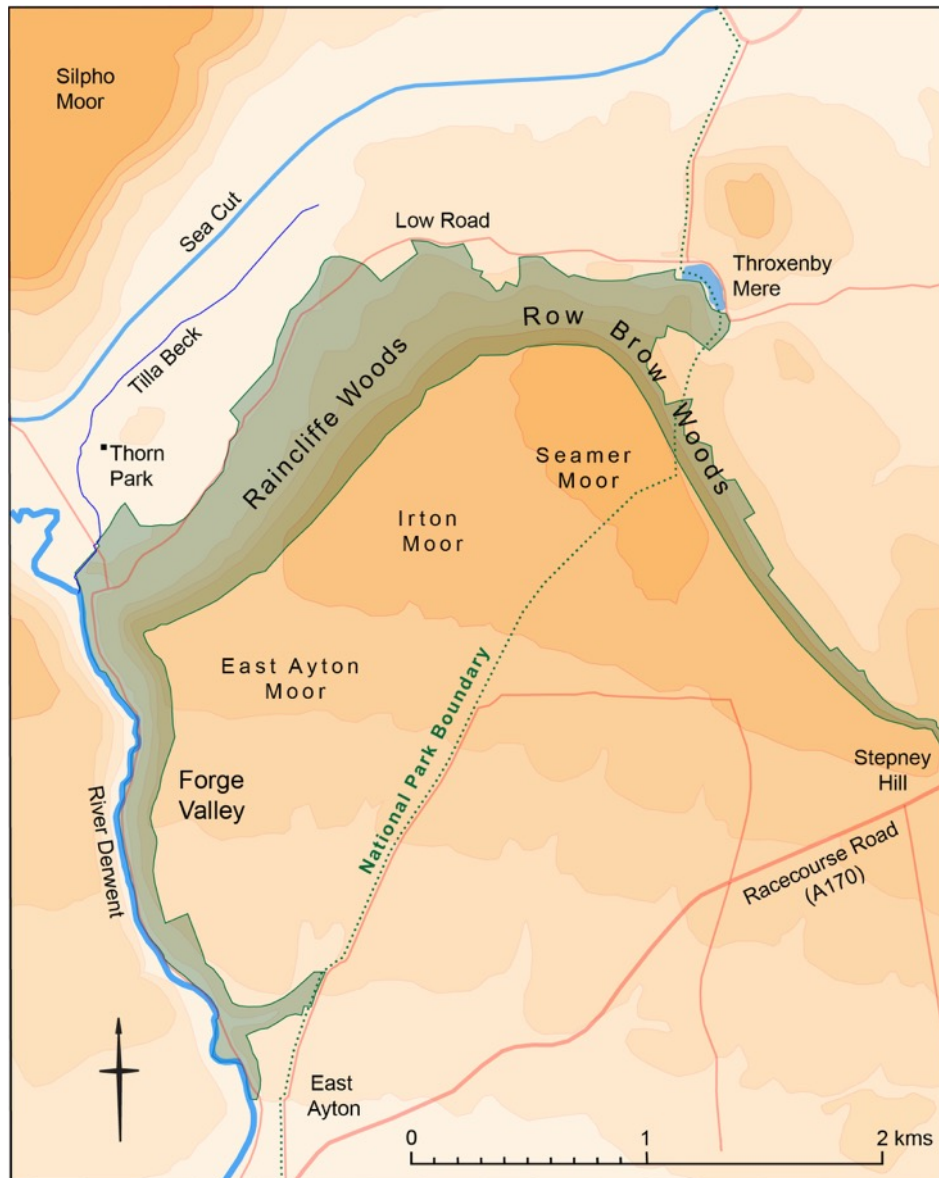


Figure 2. Location map with places mentioned in the text.

which Thorn Park is probably on the site of a medieval deer park. The Low Road at the bottom of the hillside starts from Throxenby Mere in the east and runs along the edge of the woods as far as Forge Valley and is the only surfaced road through the woods. This route is also sometimes referred to as Lady Edith's Drive (see Section 4.8). Further east the hillside turns away from the Sea Cut valley to face north-east across the coastal plain towards Scarborough and here Raincliffe gives way to Row Brow Woods. Further east along the hillside Row Brow Woods becomes narrower due to the encroachment of agricultural land at the foot of the hill. The woods end at Stepney Hill which is the limit of the survey in this direction.

The hill is part of a chain called the Tabular Hills which extend from the Castle Headland at Scarborough for nearly 40 miles inland forming a division between the Vale of Pickering on the south and the upland plateau of the North York Moors. The Tabular Hills are formed from beds of mostly limestone and gritstone rock dating to the Upper Jurassic period and support good farming land on the lower slopes fringing the Vale of Pickering but have less fertile soils towards the flat hill tops which were mostly moorland until the expansion of agriculture in the 20th century.

There is a distinct spring line in Raincliffe on the steep north face of the hill where a change in the geology occurs between the underlying Oxford Clay and the Lower Calcareous Grit which caps the hill. The streams issuing from these springs have cut numerous narrow channels down the north-west and north-east faces of the hill. Also on the north-west side, the foot of the hill is covered by deposits of glacial sand and gravel which form a series of mounds and ridges in the valley bottom. These deposits give way to glacial boulder clay below the north-east side of the hill and here the drainage gathers to create a sheet of water called Throxenby Mere.

The woods cover an area of about 190ha. They are a mixture of broadleaf and coniferous planting of which about a third is classified by Natural England as 'ancient and semi-natural woodland' and the remainder as 'ancient replanted woodland' which includes areas of conifer planted in the last century. The conifer planting is mostly found in Raincliffe Woods while the adjacent Row Brow Woods to the east and Forge Valley Woods to the west are predominantly broadleaf trees. Because of the varied flora and fauna, Forge Valley Woods and some of the broadleaf woodland in Raincliffe Woods have been designated as a Site of Special Scientific Interest by Natural England. In addition the whole of Forge Valley Woods and a section of Raincliffe Woods just below the hilltop are also a National Nature Reserve. Forge Valley, Raincliffe and the west end of Row Brow Woods fall within the North York Moors National Park while the remainder of Row Brow Woods is in the Scarborough Borough Council area.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

East Ayton, Irton and Seamer Moors are rich in prehistoric remains, particularly Bronze Age burial mounds or 'tumuli' around 3500 years old and several linear boundaries comprising lines of parallel banks and ditches. These were constructed around 3,000 years ago in the late Bronze Age, probably as land boundaries (Spratt 1989a). Although no settlements have yet been located associated with the boundaries, it is likely that they were sited on the more fertile lower slopes along the north edge of the Vale of Pickering in broadly the same location as the present villages. The prehistoric burial mounds and boundaries were first mapped in detail by the Ordnance Survey in the 19th century (Ordnance Survey 1854) but many sites were levelled after the moor top became farmland in the 20th century. Several burial mounds still survive as earthworks and there is one substantial length of linear boundary remaining called the Skell Dykes which extends for 600m downslope from the edge of Raincliffe, but originally continued much further south (Figure 3).

Several of the tumuli were excavated in the 19th and 20th centuries and a dig also took place in 1924 on a prominent natural hill on Seamer Moor called Seamer Beacon (Simpson 1997). This unearthed part of a ditch encircling the hilltop which the excavator speculated might be Roman, perhaps encircling a watch-tower or beacon. More recently, in 2008-9 the SAHS excavated part of a prehistoric Iron Age ditched enclosure on Seamer Moor (Hall and Hinchliffe 2013) and nearby, in 2012 the SAHS investigated a section of a linear boundary called the Row Brow Dyke which was found to have originated as an alignment of deep pits in the late Bronze Age (Pearson and Hall, 2013).

The recorded history of the area begins with the Domesday Survey of 1086. The present-day villages of East Ayton, Irton and Seamer are recorded in the survey along with a lost settlement of Hillgrips (which appears as a name on large-scale Ordnance Survey maps about half a mile to the north-east of East Ayton) and a settlement called Thorpefield which was probably situated near Irton (Faull and Stinson 1986, entries 13N 9-12). It is not known when the Hillgrips and Thorpefield settlements disappeared. By 1086, the Percy family had taken possession of the villages of Seamer, Irton and East Ayton as well as many other adjacent settlements and the same family held on to these estates throughout the Middle Ages establishing their local seat at Seamer with a manor house next to the parish church, which itself dates back to the 12th century (McGeown 2015).

The Domesday Survey records areas of woodland in the entries for East Ayton, Seamer and the lost settlement of Hillgrips. In the Survey, the area of woodland belonging to East Ayton is 9 furlongs by 9 furlongs (just over a mile by a mile) which is approximately the same as the length of the woods in Forge Valley and Raincliffe that fall within the historic boundary of East Ayton township. The woodland belonging to Hillgrips and Seamer in 1086 each measured 3 furlongs by 2 furlongs (about 660 yards by 440 yards) therefore much smaller than that belonging to East Ayton. If the Hillgrips and Seamer woods were side by side then it indicates a belt of woodland about 1300 yards long by 400 yards wide which broadly equates to the length of Row Brow Woods within Seamer township from the boundary with East Ayton township in the west as far as the Rowbrow Road in the east (see below section 4.2 Route 13) which conceivably could have marked the eastern limit of the woods at the period of the Domesday Survey.

Though the wooded area recorded in the Domesday Survey may be roughly the same as Forge Valley, Raincliffe and Row Brow Woods, the character was probably quite different to what we see today. The woods are described as woodland pasture in the Domesday Book which probably means they were shared with grazing animals, most probably swine which

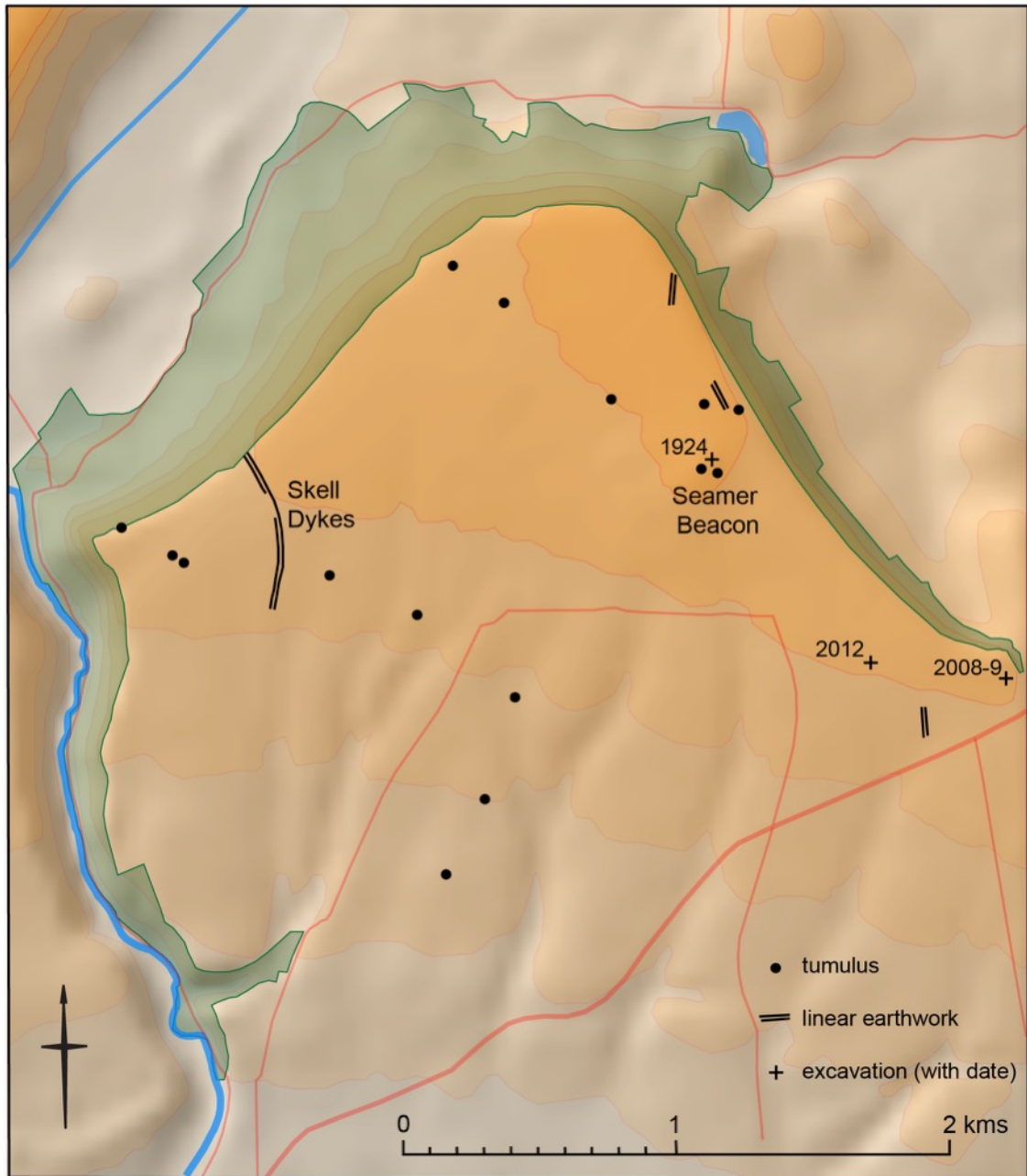


Figure 3. Map showing visible prehistoric remains and the location of archaeological excavations mentioned in the text.

could feed on acorns and beech nuts (Brooks 1966, 34-5). Most likely pockets of trees were intermixed with more open areas of scrub and bushes which may explain the derivation of the name Row Brow as the Row element may derive from 'ruh' meaning 'rough ground' (Smith 1928, 97).

From the early 12th century onwards much of the region, including Row Brow and Raincliffe formed part of the Royal forest of Pickering which restricted what local villagers could use the woods for including hunting game, gathering wood for fuel and felling timber for building unless they were given permission from the king. In 1252 Elena Percy, the widow of William Percy, Lord of the manor of Seamer received Royal approval to allow her to take whatever she needed from the woods of Raincliff and Rowhowe (presumably Row Brow) and other woods within the Royal Forest for the duration of her life (Martin 1911, 181). In 1267 Henry III

transferred Pickering Forest to the Duchy of Lancaster (Rimington 1971, 6) and in the 14th century Raincliffe was one of many locations in the forest where deer were illegally hunted by residents of Seamer and on one occasion by individuals from the garrison of Scarborough Castle. In 1334 Henry Percy attempted to assert his right to exploit the woods including the freedom to hunt foxes, hares, cats and badgers and to set up forges and dig for minerals (Page 1923, 486).

There are references to various individuals felling trees in Raincliffe and Row Brow in the middle of the 16th century after ownership had passed from the Percy family to the Crown in 1537 (McGeown 2015, 64-5). In 1538 'Rayn Clyf' was listed as a place where timber could be acquired for repairs to Scarborough Castle (Rowntree 1931, 164) and from the Middle Ages onwards, the growing town of Scarborough probably obtained much of the timber it needed for house construction and harbour repairs from the woods of Raincliffe and Row Brow.

In 1735 the woods were purchased by William Osborne, the Duke of Leeds as part of the Seamer Estate and in the same year he appointed John Mackay 'mathematician' to undertake a detailed survey of the estate to assess its value (Londesborough Estate Records DDLO Box 9a). The survey gives an insight into how actively the Duke proposed to manage the woods during this period to increase the profits from his newly acquired estate. For example John Mackay calculated that 21 acres out of a total of 300 acres in Raincliffe Woods could be felled annually on a 14 year cycle delivering an annual sum of four pounds an acre. Mackay also mentions the construction of a 6 foot high stone wall 3230 yards long cutting across East Ayton Moor to preserve the woods from encroachment by sheep and cattle. Included within the woods protected by the wall was a forge under the management of Mr Lee. The following year Mr Lee was given responsibility to 'take care of the woods' and to prosecute trespassers after the freeholders of Ayton, clearly incensed by the loss of grazing on the moor top due to the construction of the wall, pulled sections down to allow cattle and sheep to roam freely in the woods as they must have done before. The forge was situated next to the River Derwent towards the north end of the valley to which it gives its name but it seems to have fallen out of use towards the end of the 18th century. Tuke tells us that in 1800 "At Ayton....are furnaces and forges for casting and working run and malleable iron" (Tuke 1800, 313) though it is described as a neglected iron foundry in 1787 (Schofield 1787, 143).

In 1772 the Duke of Leeds accounts record a payment of £21 10s 10 1/2d for peeling and chopping bark and this was presumably to supply the tanning industry where tannic acid used to process leather was extracted from the chopped bark (Londesborough Estate Records DDLO Box 9a). In the middle of the 19th century there was a large tannery less than two miles away at Falsgrave and if this establishment was in operation by the 1770s it could well be where the bark from the woods was taken.

By the later 18th century the woods were also becoming a popular destination for sightseeing trips by the well to do visitors to the spa at Scarborough. The first Scarborough guidebook of 1787 advised visitors to take the road along the bottom of the hill on horseback 'on account of deep and miry spots, which are cut in by the heavy laden wood carriages' (Schofield 1787, 143).

The Seamer estate was sold to a London banker, Joseph Dennison in 1790 whose family continued to hold the Seamer estate and manage the woods for over a hundred years until 1908. Seamer and Irton Moors were enclosed in 1810 and East Ayton Moor in 1768. Teesdale's one inch to the mile map of Yorkshire published in 1828 (Teesdale 1828) shows Raincliffe and Forge Valley Woods covering much the same area as today but there is a good deal of open ground on the north-east side of the hill indicating Row Brow Woods was not as



Figure 4. Section of Teesdale's 1828 map of Yorkshire. While Raincliffe is heavily wooded a large part of Row Brow is shown as open ground.



Figure 5. A territorial army camp on the site of the former racecourse on Seamer Moor in the 1930s.

extensive then as it is today (Figure 4). The same map also shows that moorland extended nearly half way down the south side of the hill from Raincliffe and Row Brow at this date. Albert Denison, the first Lord Londesborough was a keen amateur archaeologist and excavated several burial mounds in the vicinity. The second Lord Londesborough, William Denison, created several rides and drives through the woods and named them after his female relatives. He also gave his support to the construction of a racecourse on Seamer Moor in 1867. The course had a roughly oval plan with a grandstand and other buildings on the side nearest the woods. This revived the tradition of holding race meetings on the moor top which had begun in the middle of the 18th century but ceased in 1789 (McGeown 2015, 105). The site of the original racecourse is shown on Figures 4 and 13. The racecourse fell out of use at the start of the 20th century and the site was then used from time to time for military manoeuvres by local militia and territorial regiments up until the Second World War (Figure 5). The Seamer Estate was sold in 1908 and the woods were acquired by a timber merchant who felled a large area in Raincliffe Woods then in 1926 the woods were purchased by Scarborough Corporation. There was a working sawmill for many years in Raincliffe Woods but this had gone when, in 2015, Scarborough Borough Council passed responsibility for the management of the woods to the Raincliffe Wood Community Enterprise.

4. THE ARCHAEOLOGICAL SURVEY

The project conformed to Historic England's Level 1 specification for field survey where the aim is to produce a basic archaeological record 'supplemented by the minimum of information needed to identify the archaeological site's location, possible date and type' (Historic England 2017, 33). The field team worked systematically through the woods examining a discrete area on each visit. Features of potential archaeological interest encountered during the fieldwork and which were not already adequately portrayed on Ordnance Survey maps were surveyed at 1:10,000 scale using a Trimble Juno 5B GPS receiver. This device is capable of locating a position to an accuracy within Ordnance Survey National Grid of around 2-5m in real-time using navigation signals broadcast by the American GPS satellite constellation. Digital versions of historic Ordnance Survey maps were also loaded on to the Trimble Juno for visual reference during the field work. Features were mapped as points, lines or polygons and a basic textual description of each feature surveyed was entered into a linked database on the Trimble Juno using K-mobile software. Photographs were taken whenever possible but some features are so overgrown that there was felt to be no point photographing them. The fieldwork took the team of up to eight people around 17 days to complete over a 21 month period.

At the end of each day's fieldwork, the survey and associated database were downloaded to a PC and stored in QGIS Geographical Information System (GIS) software where it was analysed alongside other data sets and a range of digital maps. Of particular importance is the 1m resolution Lidar height data supplied by the Environment Agency which, though it does not quite cover the entire study area, was used to create 3D digital maps of the ground surface using the GIS software thus revealing features of both topographical and archaeological interest. The results of the GIS analysis have played a large part in developing some of the ideas contained in this report. Also the historic maps database maintained by the National Library of Scotland was used extensively in the background research (<http://maps.nls.uk/>).

Very little was known before the start of the survey about the archaeology of the woods. Many of the features that survive just within the woods on the top of the hill have been noted before and within the woods Historic England's public on-line database (<https://www.pastscape.org.uk>) records only two sites:

- Historic England Monument No. 1569352 - the site of a possible glass production centre indicated by the name 'Glasshouse Spring' in Raincliffe Woods. The SAHS survey of the area found no structural remains to indicate the manufacturing of glass and it is possible that the 'Glass' element of the name is derived from 'Glas' - a reference possibly to the water having a blue/green hue (Smith 1928, 132-3).
- Historic England Monument No. 80032 - the continuation downslope in Row Brow Woods of a possible prehistoric linear boundary that crosses Seamer Moor and is known as the Row Brow Dyke. As will be discussed below, the prehistoric date of the section of earthwork in the woods is questionable, though it has statutory protection as a scheduled ancient monument.

The present survey has added enormously to the record of features surviving in the woods. A catalogue of features has been archived as part of the GIS project on which the following description and discussion of the archaeology is based.

4.1 Prehistoric remains (Figure 6)

Probably the earliest visible feature surviving in the woods is a Bronze Age tumulus or burial mound around 3500 years old situated on the crest of the slope where Raincliffe meets the north end of Forge Valley (Figure 6 point A and Figure 7). It is protected as a scheduled ancient monument (Historic England Monument no. 65099) but a hollow on top of the mound indicates it has been dug into in the past though no record survives of what was found. The base of the burial mound on the side nearest to the hill top has been cut away by what may be trial workings for a quarry (see section 4.5).

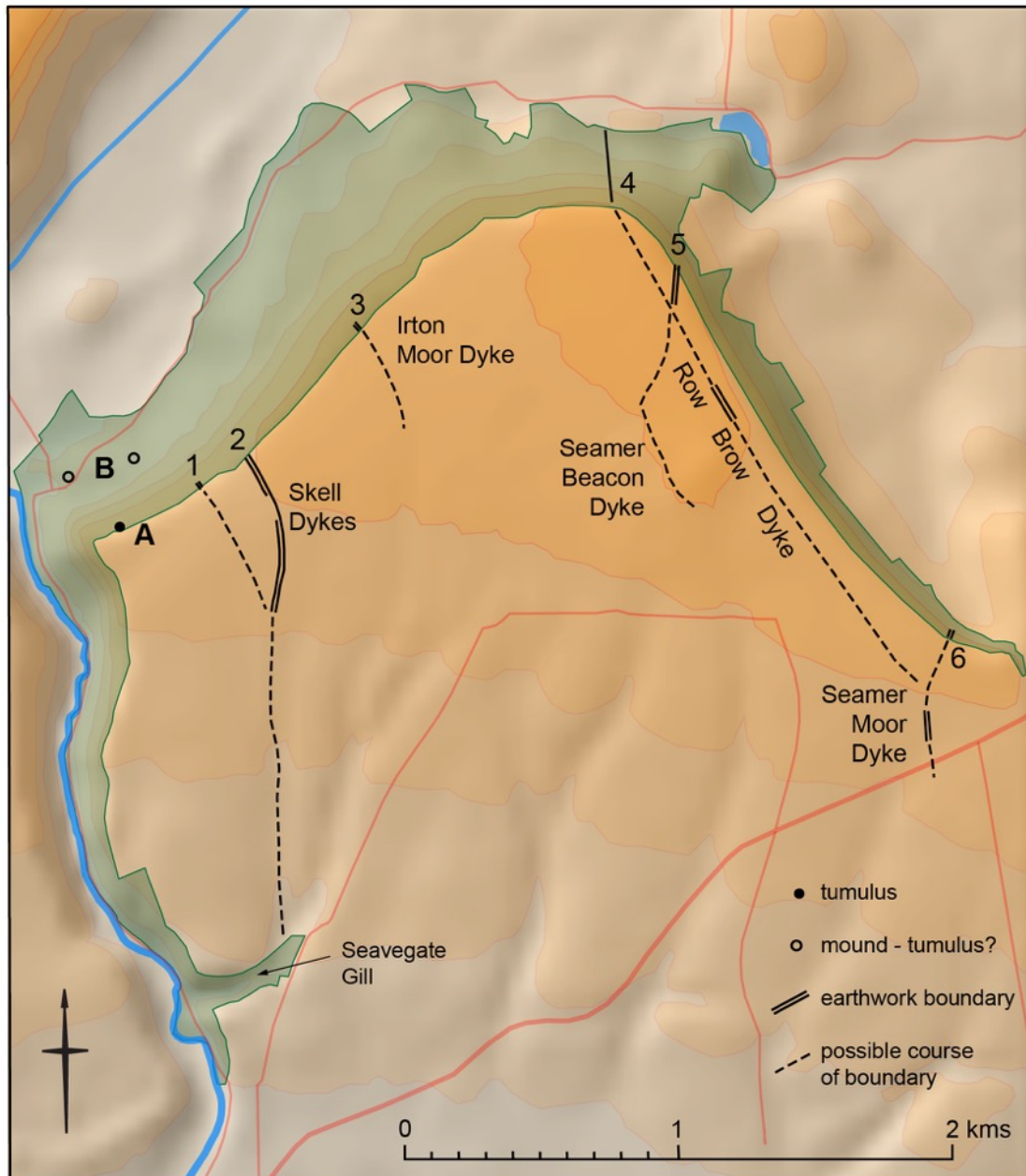


Figure 6. Map of prehistoric remains. Points A-B and 1-6 are mentioned in the text.



Figure 7. The Bronze Age burial mound on the edge of Raincliffe Woods viewed from the south.

In the woods at the foot of the hill are two small circular mounds about 300m apart that are each roughly the same size and shape as a Bronze Age tumulus (Figure 6 point B). This is probably just coincidence and these two features are more likely to be natural accumulations of the glacial sand and gravel deposits that cover this part of the valley floor.

At intervals along the crest of the escarpment in both Raincliffe and Row Brow Woods are sections of six linear earthworks. They are the remnants of a system of late Bronze Age boundaries that once presumably extended downhill to the edge of the Vale to delineate separate territories or estates in much the same way as later parish boundaries. Apart from the short lengths of earthworks surviving along the edge of the escarpment these boundaries have been levelled by ploughing and are either totally destroyed or only visible as cropmarks. The one exception is the Skell Dykes which still survives as an earthwork for 600m south from the edge of the escarpment across East Ayton Moor. These fragments of earthwork are very important survivals giving us details of the original form of the boundaries which have been lost elsewhere on the moor top.

From west to east they are:

1. An unnamed dyke which comprises two ditches with an intermediate bank about ten metres long. It survives as a cropmark further south and appears to join to the Skell Dykes.
2. The Skell Dykes are the best preserved of the prehistoric boundaries. They start in the trees at the top of the slope and comprise two parallel ditches with an intermediate bank. The line of the east ditch carries on down the slope as a hollow way through Raincliffe Woods. In the opposite direction, the earthworks continue southwards across East Ayton Moor as far as the lane leading to Osborne Lodge. Cropmark evidence indicates Skell Dykes continued south of the lane, where a ditch by the side of a public footpath may be a remnant of part of the dykes and indicate that the boundary originally continued as far as the valley called Seavegate Gill (see section 4.2 below and Figure 15).

3. The Irton Moor Dyke survives for about 20m as a double ditch with intermediate bank in the trees at the top of the slope. Historic mapping and crop mark evidence indicate it extended south for at least 600m and in the medieval period the boundary between the townships of East Ayton and Irton was aligned along it.
4. The Row Brow Dyke is shown on Ordnance Survey mapping crossing Seamer Moor aligned roughly parallel with the top of the hillside though it has now been mostly levelled by ploughing. A section was excavated by the SAHS in 2012 (see Figure 3) and found to comprise a series of conjoined pits while 800m to the north-west a short length still survives in the form of a substantial flat-topped bank near to Seamer Beacon. Where it reaches the top of the escarpment, the dyke turns to run directly down the hillside as a single narrow ditch with a sharp, v-shaped profile continuing almost to the bottom of the slope. There is the possibility that what is considered to be a single feature (Spratt 1989, 62) is of several periods which would account for why the form changes on Seamer Moor from a ditch formed by conjoined hollows to a flat-topped bank near Seamer Beacon and then changes again to a single v-shaped ditch running straight down the hillside which is markedly different to the other dykes described here which all stop at the top of the slope.
5. The Seamer Beacon Dyke survives for about 100m in a small belt of trees back from the edge of Row Brow Woods and consists of two ditches with an intermediate bank. Although the earthwork evidence is not definite, it is likely that at the top of the hillside the west of the two ditches of the Seamer Beacon Dyke marked the start of a route down the hillside called Shield's Trod (see section 4.2 - Route 12).
6. The Seamer Moor Dyke survives as a 50m length of double ditch and bank at the top of the hill side. Further south it meets the Row Brow Dyke which has been claimed to be the later in date of the two (Spratt 1989, 62).

4.2 Hollow Ways and Tracks

A significant feature of both Raincliffe and Row Brow Woods are the number of hollow ways that exist on the steeper slopes where the persistent use of certain routes has worn deep cuttings into the hillside. Several sections of hollow way are more than two metres deep but away from the steeper slopes the continuation of these routes are harder to trace because they are not so deeply eroded and have left only the shallow impression of a track on the ground surface. The team recorded numerous lengths of hollow way and track in addition to those shown on Ordnance Survey mapping (Figure 8). Taken together the evidence indicates a number of distinct routes crossing the woods. Several hollow ways run very close to each other and even intercut in places, indicating where a particular route has shifted direction slightly over time (Figure 9). Of all the historic features surviving in the woods, the hollow ways are probably some of the oldest and give us a link to a vastly different landscape where today's peaceful wooded slopes were once busy with the regular movement of people, livestock and perhaps even wheeled vehicles up and down the slope.

Forge Valley

The east side of Forge Valley is generally far too steep to cross easily so there are fewer routes of any age here compared to Raincliffe and Row Brow. However, there are two declivities in the hill side which create natural routes between the valley floor and the hill top. The first (**Route 1**) uses a side valley called Seavegate Gill as a convenient way onto the hill top. The modern route along Seavegate Gill is an engineered path terraced some way up the north slope of the valley but traces of what looks like a possible hollow way lower down suggest the original route followed the valley floor. The second route on the east side of Forge Valley is just over 300m to

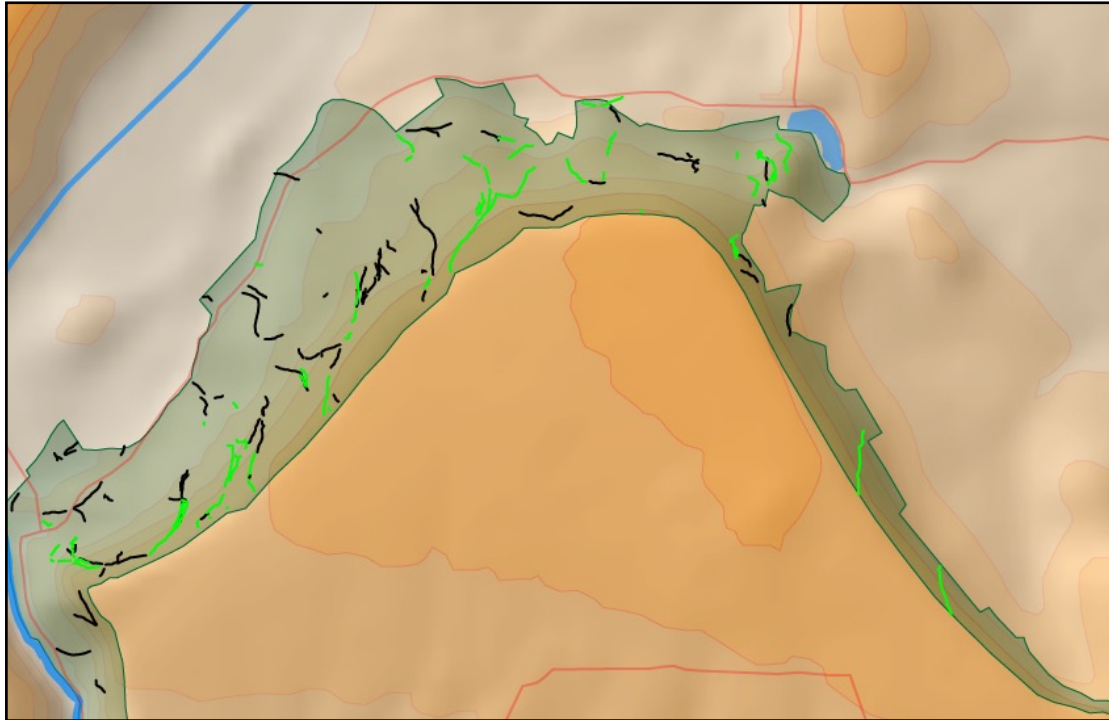


Figure 8. Map of the different sections of hollow way (green) and track (black) recorded by the survey.

the north of Seavegate Gill and is named as 'Greengate' on the 1850s 1:10560 Ordnance survey map (**Route 2**). It follows another declivity in the valley side which considerably lessens the gradient of the slope and provided a second natural route from the valley floor on to East Ayton Moor. Other tracks on the east side of Forge Valley appear to be connected with the various quarries found on the hillside and with access to the forge that existed in the valley bottom and are described briefly later on in this report (see section 4.5).

The greatest number of routes and the deepest hollow ways are on the north-west side of the hill in Raincliffe Woods. From the north end of Forge Valley eastwards to the boundary between East Ayton and Seamer townships where Row Brow Woods begin, six different routes were identified suggesting movement up and down the slope was the most intense in this area (Routes 3-8). About half way down the slope a change in the geology from Oxford Clay to the underlying Calcareous Sandstone of the Osgodby Formation makes a broad and level shelf or step in the profile of the hill which can be traced along the hillside for over a mile through Raincliffe Woods eastwards into Row Brow Woods. Significantly most of the routes from the hill top appear to end at this shelf. While this may be because ground conditions make it harder to trace remnants of the routes continuing down the hillside below the shelf it may also mean that the routes turned to run along the shelf following broadly the same line as an existing track called the Middle Road. There are fewer routes of any note in Row Brow Woods from the East Ayton boundary to Racecourse Road (Routes 9 - 13) which presumably indicates less movement of people and livestock between the top and bottom of the slope along this section of the hillside.

Raincliffe

Routes 3 and 4 begin at the same point on the crest of the escarpment their junction forming a distinct hollow resembling a small quarry cutting the top of the slope. The routes are marked on Ordnance Survey mapping as two single footpaths heading in opposite directions down the slope but on the ground it is much more complex with several deep hollow ways in

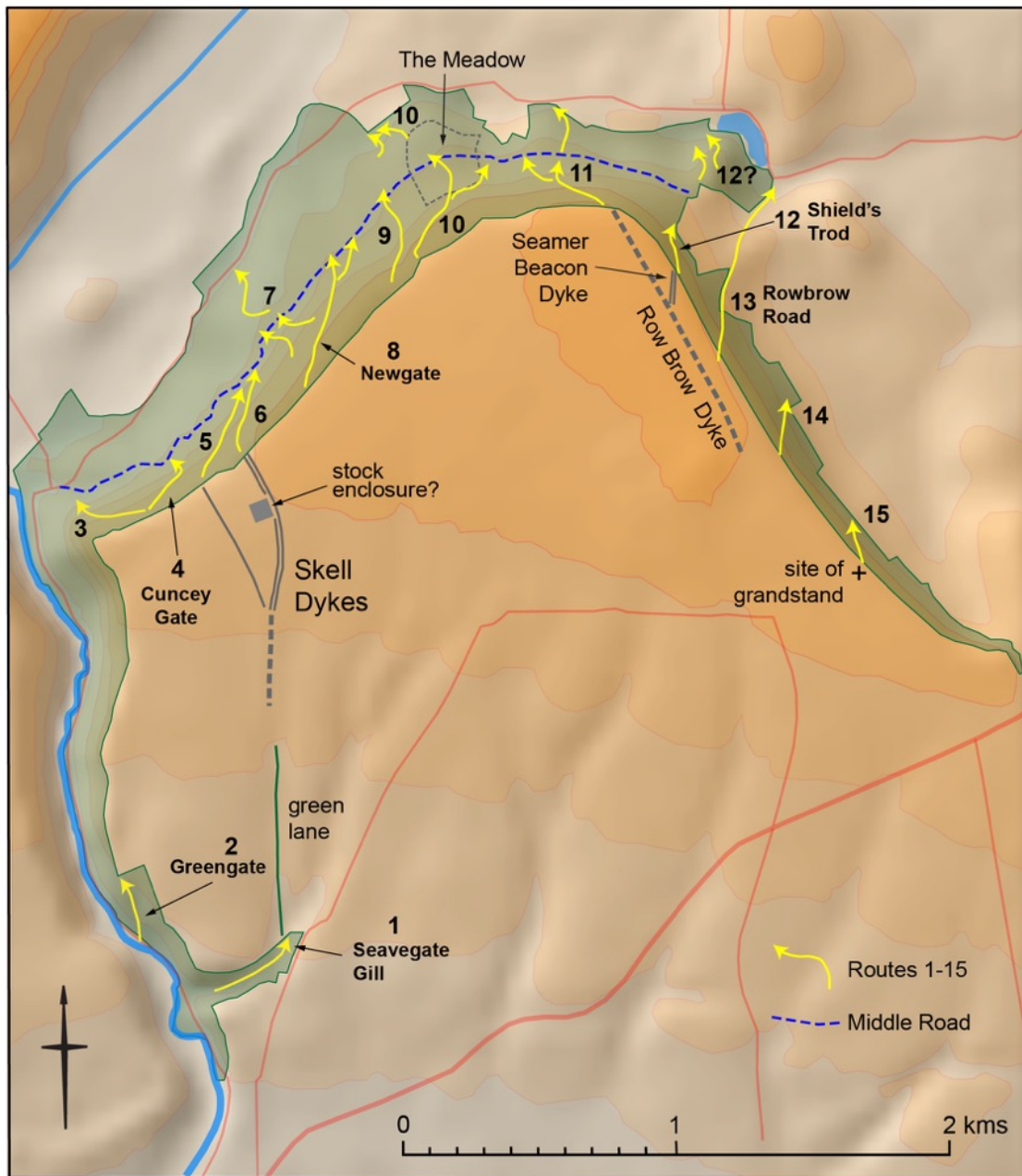


Figure 9. Map of the routes indicated by the survey evidence.

evidence parallel to both paths (Figure 10). **Route 3** follows a westerly direction diagonally down the steepest part of the slope, taking a line of least resistance before turning sharply to the north and on to the natural shelf described above. Two artificial steps or platforms were noted in the base of one of the hollow ways indicating the re-use after it had fallen out of use as a route. **Route 4** follows the opposite alignment down the hillside to Route 3 and the path here is called 'Cuncey Gate' on Ordnance Survey mapping which could well be the 'Cuntosti' mentioned in the 13th century as part of the route leading from Hackness to Seamer (Martin 1911, 141-2) and which probably means 'steep cow path'. The 'ku' element in the local dialect means cow (Cowling 1915, 50) and the 'sti' element means steep path. The Cunsey Gate is formed from three deep parallel hollow ways (Figure 11) and so the name and the physical remains are both important clues that as far back as the 13th century the route was being used to move livestock up and down this part of the hillside as well as by travellers heading to and from Hackness. The hollow ways make a clear turn to the north on to the natural shelf

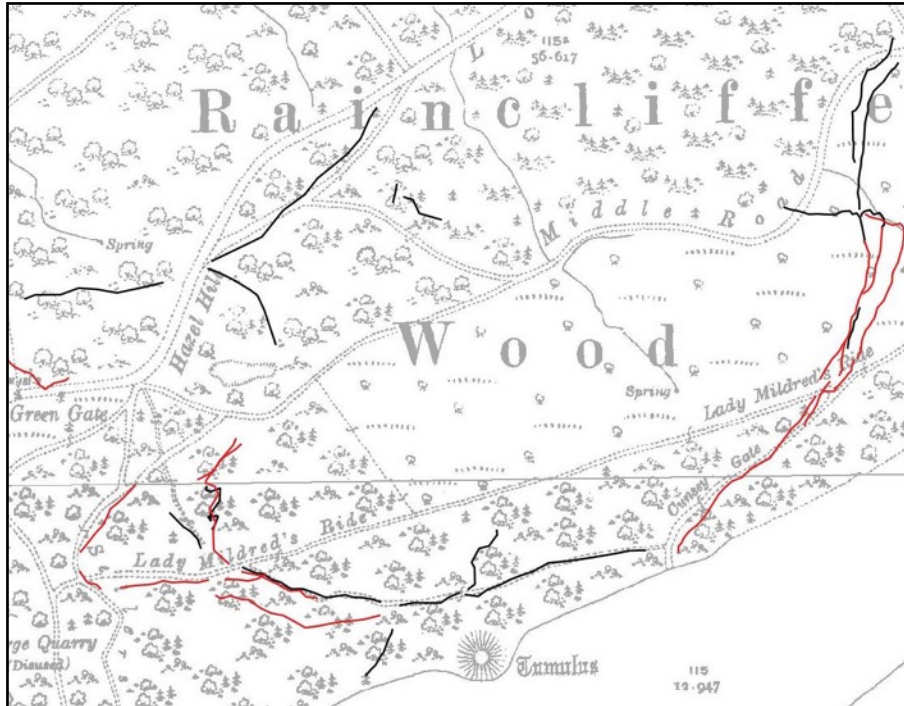


Figure 10. Survey plan of the various tracks (coloured black) and hollow ways (coloured red) forming Routes 3 and 4. Base map reproduced with permission of the National Library of Scotland.



Figure 11. View of the hollow ways forming the lower part of the Cunsey Gate (Route 4). This route is documented in the 13th century.

where they fade from sight. Further to the east, Routes 5 and 6 each begin by continuing the line of a ditch of two of the prehistoric territorial boundaries that end at the top of the hill.

Route 6 utilises the east ditch of the prominent late Bronze Age earthwork called the Skell Dykes while **Route 5** to the west uses a much more minor boundary that apart from the short section surviving on the edge of the escarpment is now only traceable from the air as a cropmark heading south-east to join with the Skell Dykes. These relationships suggest the

boundary ditches were used as convenient routes from the south up to the crest of the hill, presumably after they had lost their original importance as late-prehistoric 'estate' boundaries. Routes 5 and 6 merge below the steepest part of the escarpment and may have continued below the natural shelf as several short lengths of track were recorded on the lower slope of the hill below the Middle Road.

Route 7 comprises several discontinuous lengths of track and two short lengths of hollow way which start some distance below the crest of the hill and continue down the slope and across the natural shelf on a curving, north-easterly alignment. Lower sections of track suggest Route 7 continued to the foot of the slope to where the Low Road (Lady Edith's Drive) is now, though the final length is cut by a small quarry on the edge of the road which therefore must be later. It is possible that this route originally led from Route 8 but any connection between the two is no longer recognisable on the ground. **Route 8** starts at the crest of the escarpment immediately adjacent to a small disused quarry called the Newgate Quarry on historic Ordnance Survey mapping. The same quarry cuts across the line of a short length of track at the crest of the escarpment which presumably was the original starting point of this route before it descended the escarpment and indicates that the route predates the digging of the quarry. The route descends the escarpment obliquely in a northerly direction forming a deep hollow way labelled as 'Newgate' and 'Newgate Road' on Ordnance Survey mapping. Where the ground starts to level off onto the natural shelf, the main alignment is joined by a number of minor tracks perpetuating the northerly alignment. These tracks start on the north adjacent to a pair of platforms with which they could be contemporary. **Route 9** starts at the crest of the escarpment and heads northwards down the slope. As it approaches the natural shelf and the Middle Road it divides and almost immediately after disappears as a surface feature.

Row Brow

Route 10 starts at the crest of the escarpment as a hollow way heading north-east obliquely down the escarpment. Significantly this section of the route formed the boundary between East Ayton and Seamer townships on the 1810 Seamer and Irton Enclosure Award map which could indicate it was already a prominent feature when the township was established, probably well before the Norman Conquest as discussed below. Where the route meets the natural shelf, several short shallow hollow ways lead more directly north away from the main alignment and cross into the open ground of The Meadow. Several short lengths of track continue this alignment beyond The Meadow down to the foot of the hill. Further to the east, **Route 11** begins at the point that the Row Brow Dyke which crosses the top of Seamer Moor meets the edge of the escarpment. Here the Row Brow Dyke changes alignment and form and goes straight down the hill side as a single rock-cut ditch which, as was discussed above, may be a different feature to the section of Row Brow Dyke that crosses the hill top. In fact the hollow way forming the start of Route 11 is on the same alignment as the dyke crossing the hill top and therefore it is possible that the start of the hollow way marks the real end of the Row Brow Dyke. As with Routes 5 and 6 described above, this could be another example of the re-use of a prehistoric boundary as a convenient route for livestock across the moor which then continues on down the hillside forming a hollow way. Several short sections of hollow way and track below the Middle Road may be evidence that Route 11 continued to the bottom of the hillside.

Route 12, called Shield's Trod on Ordnance Survey maps, begins where the prehistoric boundary called the Seamer Beacon Dyke meets the top of the hill. The boundary still survives as an earthwork close to the edge of the escarpment and it seems likely that Shield's Trod perpetuates the line of the Seamer Beacon Dyke again suggesting the boundary was re-used as a route across the moor to the escarpment edge. The top of the modern footpath down the hillside is on a slightly different alignment and cuts across the beginning of the



Figure 12. A hollow way near Throxenby Mere which may be the continuation of Route 12 (Shield's Trod) to the bottom of the hillside.

original hollow way. Further down the hillside the route splits into several hollow ways as the gradient flattens out onto the natural shelf. Beyond the shelf, there is a cluster of deep hollow ways on the lower slope immediately above Throxenby Mere and although there is no physical connection between Shield's Trod and these lower hollow ways, it is possible they represent the continuation of the same route down to the foot of the escarpment (Figure 12).

Route 13 is called Rowbrow Road on Ordnance Survey maps and historically was the main route from the south over Seamer Moor and down the slope of Row Brow northwards to Scalby and Throxenby. It is the only route shown crossing the moor on Jeffreys one inch to the mile map of Yorkshire (Jeffreys 1771) which indicates its historic importance (Figure 13). This route is a single deeply incised hollow way with exposed rock on the bottom but which at times is virtually impassable because of mud and running water. Presumably the reason why there are not several hollow ways here is because it was always easier to follow this alignment than to try and bypass it on what is a very steep slope. In several places where bare rock is exposed at the base of the hollow way, there are distinct grooves in the rock surface which have either been worn down by cart wheels (or possibly sleds) or deliberately cut to prevent cart wheels slipping. The 1854 1:1056 Ordnance Survey map shows two wells about 100m apart towards the uphill end of Rowbrow Road and were presumably to sustain travellers as there are no springs or streams along this section of the hill side - a further indication perhaps of the importance of the route. Nothing can be seen of either well today



Figure 13. A section of Thomas Jeffreys' map of Yorkshire published in 1771 showing Rowbrow Road (Route 13) crossing Seamer Moor and Row Brow (Jeffreys 1771).

although the survey did note a small hollow by the west side of the Rowbrow Road in roughly the same position as the southern of the two wells shown in 1854.

The survey recorded two more routes in the length of woodland between Rowbrow Road and the end of the woods and the survey area at Stepney (**Route 14** and **Route 15**). Both routes consist of a single hollow way which becomes more of a terraced track towards the bottom of the slope which in this section of the hillside is not nearly as high as further to the west. There is a quarry near to Route 15 at the top of the escarpment and it may be that Route 15 served the quarry. Conveniently, this route emerges at the top of the slope near the site of the grandstand of the former racecourse but with no footpath leading to it from the town it was probably little used by racegoers.

Discussion

The hollow ways surviving in Raincliffe and Row Brow Woods point towards a period of prolonged and repeated movement up and down the hillside by people and livestock which needs to be understood in relation to the wider landscape. The important medieval reference in the Percy Chartulary to the 'Cuntesti' path in Raincliffe not only establishes that the route known in more recent times as Cunsey Gate was there in the 13th century but the derivation of the name as 'steep cow path' fits well with the idea that this and the other routes were used to move livestock, particularly cattle. When looking at hollow ways in Raincliffe and Row Brow, even though they are long abandoned and overgrown it is easy to imagine files of cattle being driven down them to pastures at the bottom of the hill in the Derwent and Sea Cut valleys.

The evidence of livestock movement presented by the hollow ways and tracks fits well with what we know about how the land was divided up into separate townships from the medieval period onwards. In the Middle Ages a township was the extent of the land that went with each village and from which each settlement derived much of its income. Although township

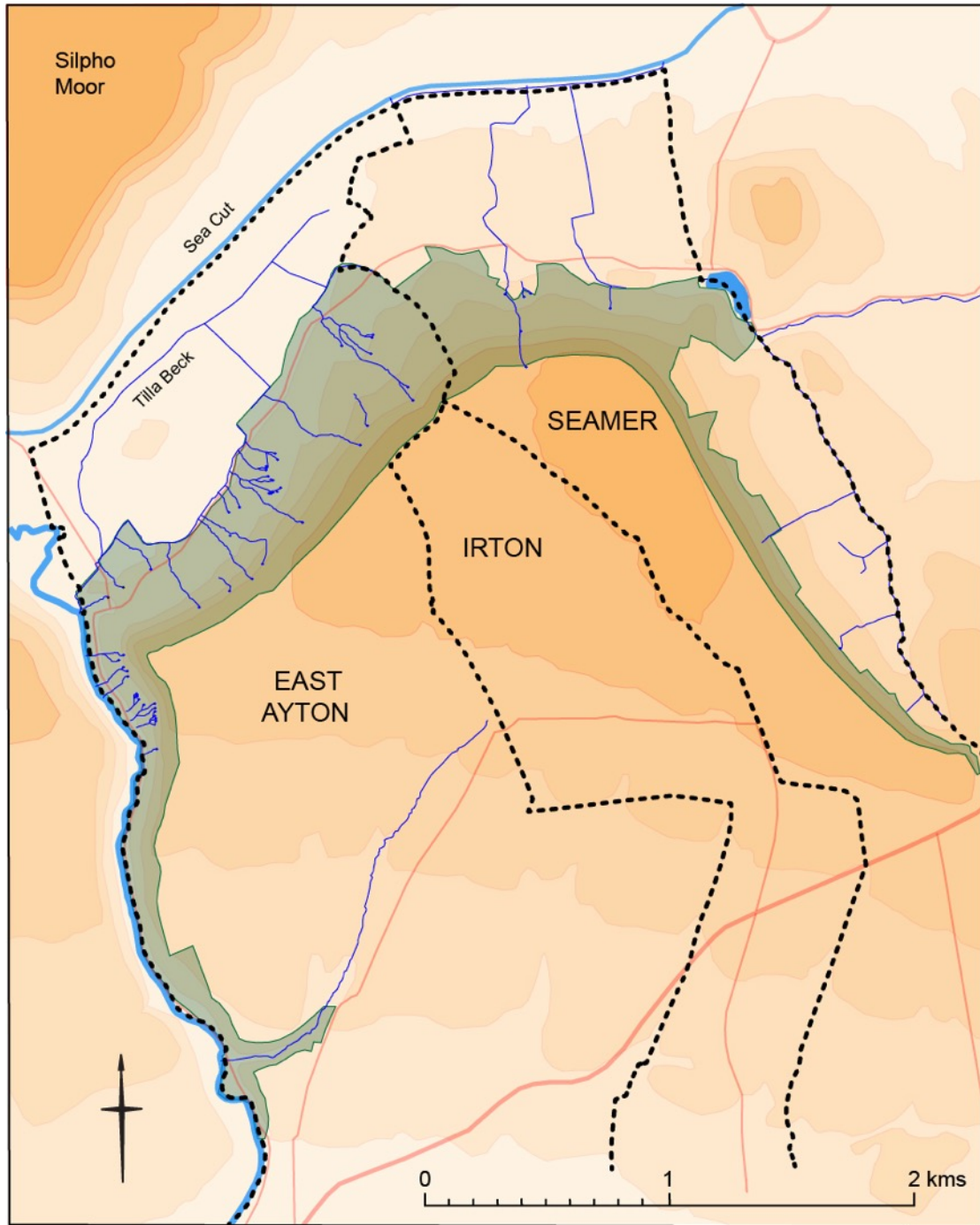


Figure 14. A map of the northern extent of the township boundaries of East Ayton, Irtton and Seamer showing their relationship to the natural drainage pattern and the Sea Cut valley.

boundaries were not mapped accurately until the 19th century, studies elsewhere in North Yorkshire indicate that these boundaries are long-lived features that were there in the medieval period and could well date back even further in time, long before the Norman Conquest (Wrathmell 2012, 163). Therefore it is significant when looking at the extent of the townships of East Ayton and Seamer that they extended from the middle of the Vale of Pickering in the south, northwards across Raincliffe and Row Brow to the far edge of the Sea Cut valley. Irtton township ended on the north at the top of the escarpment (Figure 14). Clearly Raincliffe and Row Brow and the valley floor beyond was important to Seamer and East Ayton

and the most likely reason for this is that the valley provided well-watered grazing to supplement that found in the south of both townships along the edge of the Vale of Pickering. The township boundaries can therefore be seen as a formalisation of grazing rights that could date back to well before the Norman Conquest.

In the bottom of the Sea Cut valley, the division between the two townships follows the natural watershed. The west half of the Sea Cut valley fell within East Ayton township and here the streams flow off Raincliffe to form the Tilla Beck which itself flows westwards into the River Derwent. The east end of the valley was part of Seamer township and is watered by streams that gather in the valley bottom to flow in the opposite direction eastwards into the natural precursor of the Sea Cut. This relationship between the township boundaries and the natural drainage pattern shows a close affinity with the landscape and presumably had the practical benefit that it avoided competition between the two settlements over access to water for their respective flocks and herds.

With a picture now firmly in place of livestock belonging to Seamer and East Ayton being regularly taken up onto the high ground and then down Raincliffe and Row Brow to graze the valleys beyond, it is possible to see how this might have impacted on the wider landscape. A number of dry shallow-sided valleys which rise up the south side of East Ayton, Irton and Seamer Moors along with Seavegate Gill and Greengate on the east side of Forge Valley provide natural routes along which livestock could be moved from the pastures bordering the Vale of Pickering up onto the hilltop. The observation that some of the ditches of the late prehistoric boundaries continue as hollow ways down Raincliffe and Row Brow suggests the ditches themselves were brought into use as ready-made embanked drove ways along which the livestock could be easily herded. Indeed, about 100m of the west side of the Skell Dykes has been levelled with the addition of a rectangular enclosure on this side of the earthwork now only visible as a cropmark. This enclosure could be a point where livestock were corralled before being driven along the droveway formed by the surviving east ditch of the Skell Dykes (Figure 9). Although the Skell Dykes have vanished as an earthwork lower down the slope, it seems more than a coincidence that there is a 'green lane' on the same alignment which therefore could perpetuate the original course of the dykes. If this observation is valid, then it



Figure 15. The 'green lane' near Seavegate Gill which may perpetuate the course of the Skell Dykes.

adds strength to the idea that the dykes came to be used as a route. On the south, the green lane starts at Seavegate Gill, which itself is a natural route out of Forge Valley (Route 1).

It is possible that the regular movement of livestock in the way outlined above may have come to an end with the establishment of several farms below Raincliffe and Row Brow in the 18th century and with the enclosure of Seamer and East Ayton townships in the 18th and early 19th centuries to create the field pattern that largely survives today. The change in the way the land was managed meant livestock no longer moved up and down the slope as they had done for generations past leaving their old worn-down routes to the much gentler tread of the rambler.

4.3 Platforms

The survey recorded 37 platforms cut into the hillside at intervals from the north end of Forge Valley Woods, through Raincliffe Woods and into Row Brow Woods (Figure 16). They have roughly the same morphology comprising a sub-circular area of levelled ground measuring about 5-6m in diameter. Most appear to have been deliberately constructed by cutting into the

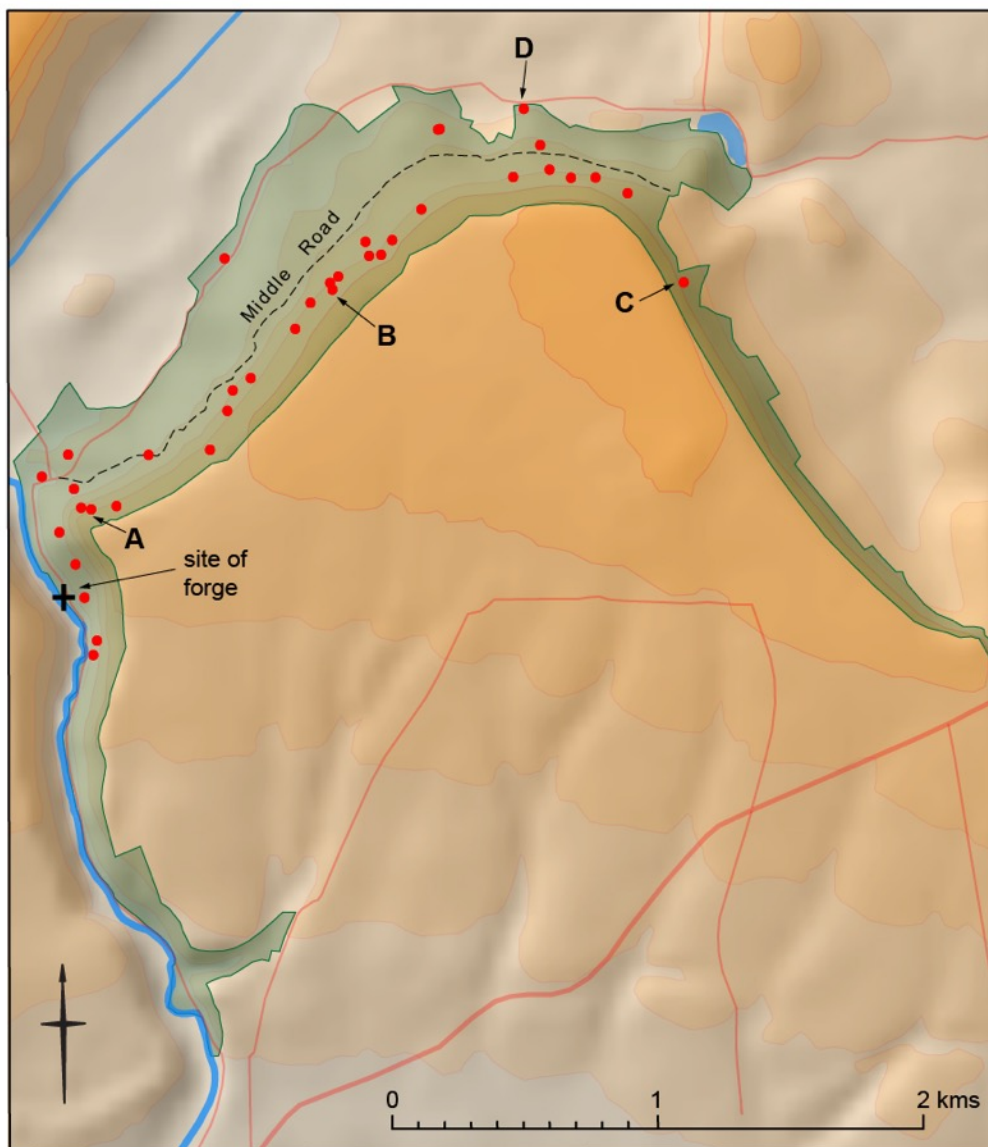


Figure 16. Map showing the distribution of platforms recorded by the survey (red dots). Points A-D are mentioned in the text.

uphill side and utilising the resultant spoil to create a level platform on the downhill side. Several may be natural in origin due to slippage or where springs have cut back into the hillside. Others could be infilled quarry scoops. None of the platforms showed any evidence of structures but several have tracks leading to them suggesting they were regularly visited and are near running water.

The majority of the platforms are situated in Raincliffe Woods close to the bottom of the steepest part of the hillside at the point it levels out onto the natural shelf created by a change in the underlying geology. Only a few platforms were noted below the shelf which may indicate a preference for the higher slopes or it might be that they are harder to spot on the more overgrown and slightly gentler lower sections of hillside.

One interpretation of the platforms is that they were for charcoal burning given the existence of a forge in Forge Valley in the 18th century. Wood would be stacked on the platforms to dry before being heaped into a large bonfire which was left to burn for several days in order to reduce the wood to charcoal needed to fuel the furnace at the forge. The siting of the platforms tucked below the steepest part of the hill could have been to give the bonfires some protection from the worst of the elements in order to maintain a controlled burn and to give some shelter to the charcoal burners who would have lived on site to tend the bonfire over the days it was burning. The siting of the platforms also meant that they are all relatively close to the Middle Road which provided a fairly level route westwards through Row Brow and Raincliffe Woods to bring the wood to the platforms and to take the charcoal away to the forge. Analysis of the surface soil on a prominent platform in Raincliffe Woods near the north end of Forge Valley (Figure 17) has shown the presence of burnt charcoal (John Dean pers. comm.) and the future sampling of other platforms will help to clarify their use. Nearby several platforms were noted in the base of one of the hollow ways (Route 3). If these are charcoal burning platforms then it suggests this particular hollow way had gone out of use by the time the forge was active in the 18th century (Figure 16 point A).

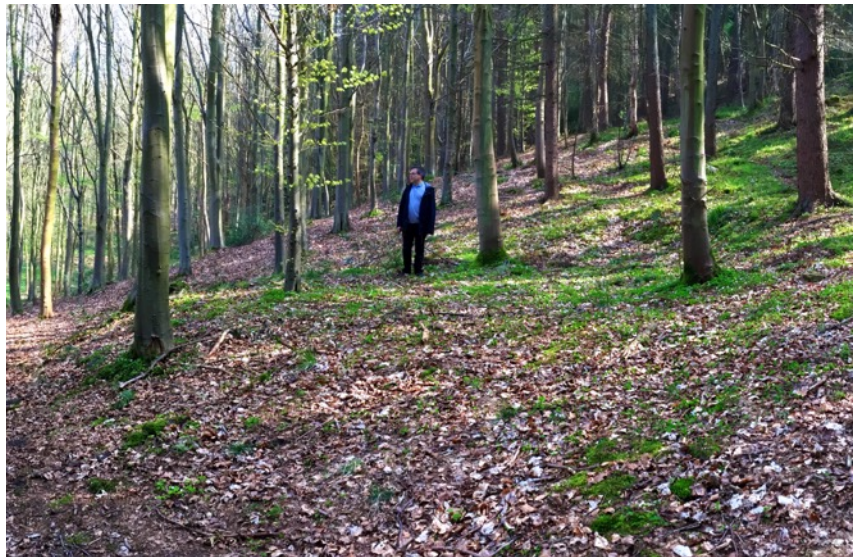


Figure 17. A platform in Raincliffe Woods near the north end of Forge Valley showing the prominent cut at the back (right) and the front edge (left) built out of the underlying slope. Soil analysis of this platform has demonstrated the presence of burnt charcoal.

While charcoal burning seems the most likely explanation, platforms could have been constructed at any date to make dry footings for temporary shelters, for example to accommodate those engaged in chopping and peeling bark as mentioned in the Duke of Leeds' accounts in 1772 (Londesborough Estate Records DDLA Box 9a). A pair of adjacent platforms in close proximity to a hollow way called the Newgate (Route 8) stands out as possibly different as a number of minor tracks head towards them perhaps indicating that livestock was brought to this site (Figure 16 point B). A platform with a diameter of over 10m in Row Brow Woods is far larger than the other platforms recorded by the survey and it is over 600m from its nearest neighbour to the west (Figure 16 point C). It is situated just below a hollow way system called Shield's Trod (Route 12) and rather than a charcoal burning platform, it may be the site of a structure - indeed the 'Shield' element of the route name may be a corruption of Shieling meaning a temporary shelter. Alternatively it might be the remnant of a quarry as there are other quarries nearby. One platform close to the Low Road (Lady Edith's Drive) at the so called Dog Bark Bend car park has concrete slabs around the edge so is clearly the site of a recent structure (Figure 16 point D).

4.4 Medieval and later boundaries and enclosures (Figure 18)

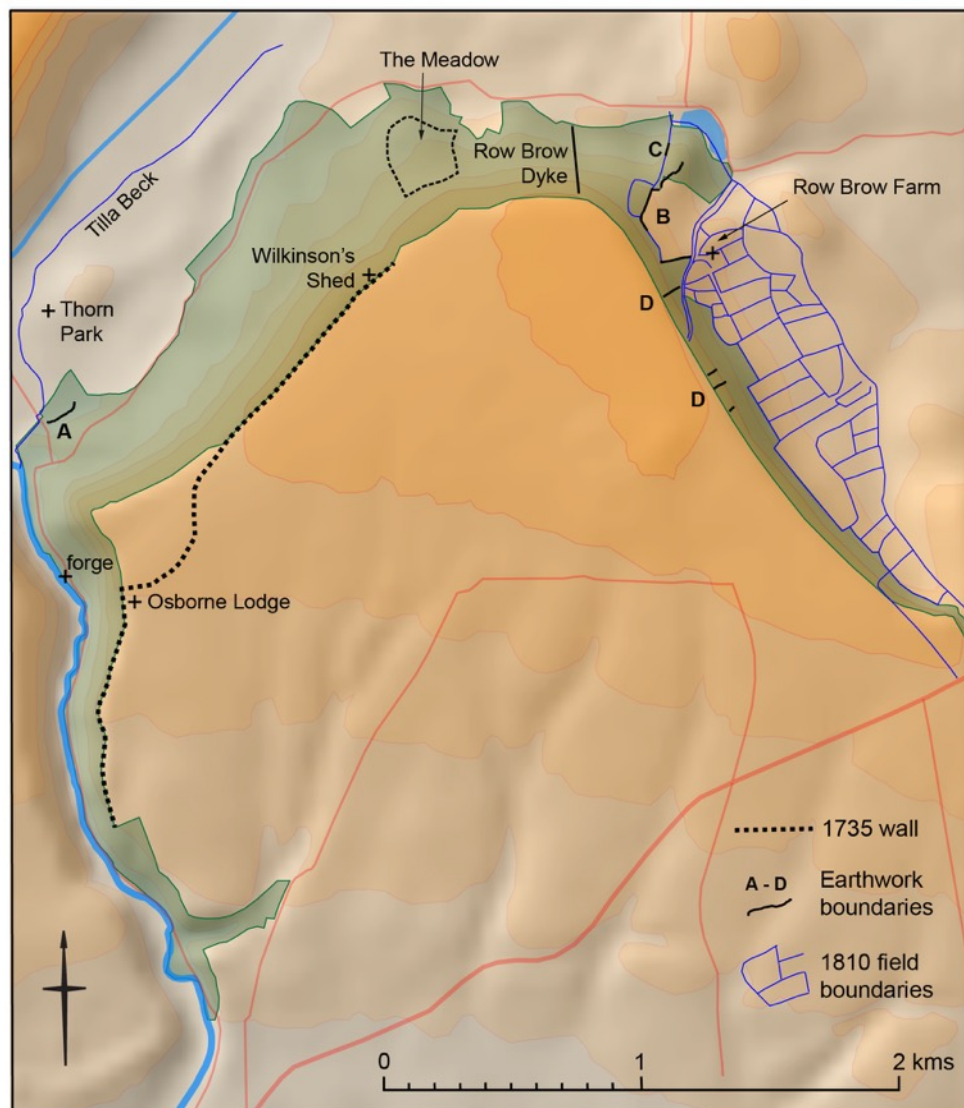


Figure 18. Map showing boundaries and enclosures. Points A-D are mentioned in the text.



Figure 19. The ditch in Raincliffe Woods that could be the south boundary of the medieval Thorn Park.

Thorn Park

The Percy Chartulary contains a reference to a park at Raincliffe belonging to Richard de Percy (Martin 1911, 116-7). The document is undated but as Richard died in 1244, it must date to earlier in the 13th century and indicate the existence of an enclosed part of the wood under the direct control of the Percy family, most probably where deer were raised for consumption at their manor house in Seamer. From the brief description of the location of the park - near to where the Tilla Beck joins the River Derwent - it is likely that the farm called Thorn Park is on the site of the park (McGeown 2015, 30-1). The farm stands in an elevated position above the floor of the Sea Cut valley towards its west end with the Tilla Beck curving around the north and west sides which could have marked the park boundary on these sides. It is also close to the 'Cuntesti' the documented medieval route from Seamer north to Hackness (Route 4). In the 1735 survey of the Seamer Estate for the Duke of Leeds (Londesborough Estate records DDLA Box 9a), among the fields recorded at Thorn Park Farm are three called Low, Middle and Upper Lawns, the first two being under pasture and the third recorded as arable. The Lawn name could derive from 'launds' meaning an enclosure kept as pasture where livestock could graze freely and in connection with a deer park, could indicate an area where deer were kept to be hunted.

Around 200m to the south of Thorn Park farm on the edge of Raincliffe Woods there is a 200m long ditch aligned east - west with a bank on the north side (Figure 18 point A) which could be a surviving part of the perimeter of the medieval park near the point where it met the Tilla Beck (Figure 19). Here too the survey also found slight traces of two tracks approaching the possible park boundary from the east. The tracks join close to the boundary indicating there may have been an entrance into the park at this point.

The Meadow

There is no documentary evidence for any other medieval parks within either Raincliffe or Row Brow Woods but it is worth considering the origins of a long-lived area of open ground in Row Brow Woods now called 'The Meadow'. The area is shown on the 1810 Seamer and Irton Enclosure Award map so is at least 200 years old and could date back much further (Rawson 1810). It is situated on the east side of the boundary between East Ayton and

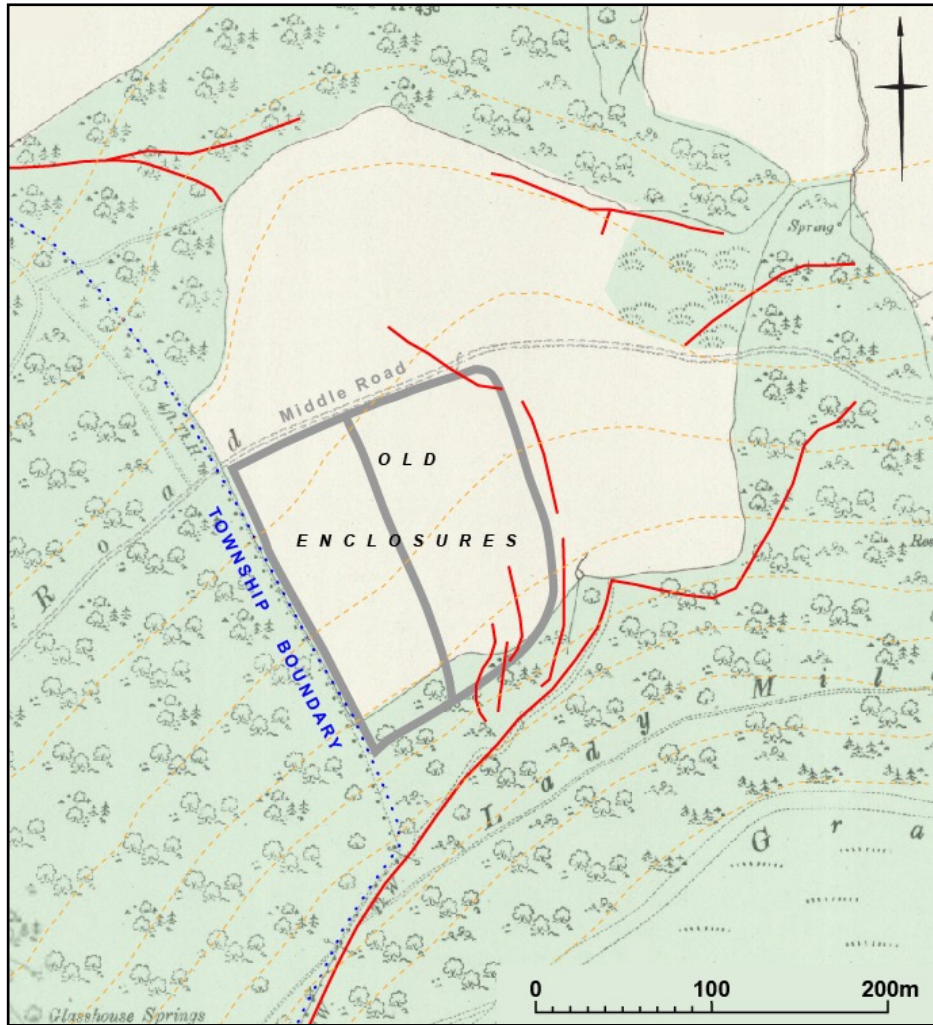


Figure 20. Map showing the layout of two enclosures within 'the Meadow' on the 1810 map of Seamer and Irton (Rawson 1810). The red lines show the alignment of hollow ways and tracks recorded by the SAHS survey in this area. Base map reproduced with permission of the National Library of Scotland.

Seamer townships (which here partially survives as a short section of bank and ditch) just to the north of the track called the Middle Road. The 1810 map shows two old enclosures within the Meadow of which no trace now survives on the ground (Figure 20). However the SAHS survey noted two short sections of hollow way that lead into the mapped extent of the east enclosure (Route 10) while a third hollow way (which is shown as a track on the 1810 map and was therefore presumably still in use) curves around the east side respecting the plot boundary. Based on the proximity of the plots to the hollow ways and the Middle Road - all probably in use in the medieval period - it is possible that the two enclosures date back to the medieval period as well, perhaps functioning as animal pens.

Row Brow Fields

In Row Brow on the hillside above Throxenby Mere are lengths of ditch and bank which define the original north-west, west and south sides of a large field of rough pasture (Figure 18 point B). The encroachment of trees along these sides of the field means the present field edge is some distance inside the surviving stretches of bank and ditch. Where the north-west and west sides meet, the bank and ditch overlie a shallow length of hollow way belonging to the route called Shield's Trod (Route 12). This observation establishes that the field was established after



Figure 21. The wall constructed by the Duke of Leeds in 1735 across East Ayton Moor.

this particular section of hollow way had fallen out of use. The 1810 Seamer and Irton Enclosure map also shows that at that date the field extended much further to the north and west than even the earthwork boundary to reach the bottom of the hill at Throxenby Mere, although the mere is not marked on the map. The SAHS survey identified a shallow ditch surviving along part of what would have been the west side of the larger 1810 field (Figure 18 point C).

We cannot be sure, but it is possible that this field, and the others shown on the 1810 map to the south-east along the foot of Row Brow (outlined in yellow on Figure 18), were originally part of the woods and are where the trees have been felled and not replaced in order to give more land for agriculture. Several of the fields shown on the map are quite irregular in size and shape and look like where small areas have been cleared of trees on an ad-hoc basis along the foot of the slope while other fields have a rectangular shape suggesting a more planned system of woodland clearance. The most likely period when these fields were created is after the establishment of the two farms at the foot of Row Brow (Row Farm and Row Brow Farm) to give them more grazing land, perhaps in the 18th century. For the most part, the field pattern mapped at the foot of Row Brow in 1810 no longer survives. The small irregular fields have been combined while further to the south-east, Woodlands Cemetery has obliterated the field pattern.

Stone Wall - East Ayton Moor

The Duke of Leeds ordered the construction of a stone wall across East Ayton Moor in 1735 shortly after he acquired the Seamer Estate in order to keep livestock from wandering into Raincliffe Woods (Figure 18). The wall still stands for the most part as an impressive landscape feature (Figure 21). It starts on the north at the point where the East Ayton township boundary meets the top of Raincliffe. Near here the ruins of a small enclosure with high stone walls called Wilkinson's Shed is on the line of the wall and may be contemporary with its construction although no mention is made of it in the 1735 document. This enclosure has an opening on the south side facing on to East Ayton Moor and was presumably for livestock brought in from the moor. From this point the wall follows a broadly south-west direction between fields until it meets the top of Forge Valley close to Osborne Lodge. The wall then continues south along the top of the valley for about 800m ending about 100m to the north of Wallis Quarry. The surviving wall is very close in length to the 3230 yards

recorded in 1735 but at no point does the wall attain the height of six foot as stated in the 1735 document. A printed bill from 1736 circulated to try and identify individuals who had thrown down parts of the newly-constructed wall mentions the provision of gaps to allow for the local hunt to pass through. Several narrow breaks still exist along the line of the wall.

Ditch segments

At a number of locations in Row Brow Woods the survey identified straight sections of ditch aligned directly down the slope (Figure 18 point D). Their common form and alignment suggests they are broadly contemporary and may indicate an effort to subdivide the hillside into distinct areas to establish rights over the ground. Because the ditches are so straight this could be evidence that it probably occurred when the hillside was less wooded than today, though when remains unanswered.

As was mentioned above, the longest section of straight ditch in Row Brow Woods has been interpreted in the past as a continuation of the Row Brow Dyke. This is questionable and more likely, given that there are these other lengths of straight ditch elsewhere along Row Brow, is that this section of ditch is part of the same effort to subdivide the hill side.

4.5 Quarries

Of the many quarries to be found in the woods most are quite small and are shown on large scale Ordnance Survey maps of the 19th and 20th centuries and probably date back no more than a couple of hundred years (Figure 22).

Many small quarries are situated along the crest of the hilltop throughout Raincliffe, Row Brow and Forge Valley Woods to work the calcareous grit stone which is not much use for building but could have been used in field walls and for surfacing work and to provide lime for burning to improve the quality of agricultural land or to make mortar. Lime mortar was noted in the walls of the enclosure called Wilkinson's Shed on the edge of Raincliffe and could have been supplied from a lime kiln nearby. The 1854 1:10560 Ordnance survey map shows a number of limekilns around the edge of the woods and in the fields above East Ayton including one close to the top of Rowbrow Road (Route 13) although no trace now survives above ground. There are also a number of small quarries and shallow pits towards the bottom of the slope in Raincliffe Woods and are where sand or gravel has been extracted from the glacial deposits along the valley floor.

From south to north in Forge Valley are three larger quarries - The White Quarry and Wallis Quarry at the foot of the slope and the Whetstone Quarry at the crest. The White Quarry is adjacent to the side valley called Seavegate Gill so stone from here could have been taken in two directions - along the track up Seavegate Gill on to East Ayton Moor as well as south along Forge Valley to East Ayton village. Wallis Quarry has a substantial terrace of spoil on the downhill side of the rock face and a chute marked on historic Ordnance Survey mapping is still visible cutting down the side of this terrace. This was presumably the means by which debris was disposed of or stone was sent down to the valley floor to be loaded on to wagons on the road side. The Whetstone Quarry at the north end of Forge Valley extends for over 100m along the top of the hillside (Figure 23). A track leading up to the quarry from near the valley floor looks to have been engineered probably as a ramp to bring stone down from the quarry. A further much-narrower overgrown terraced track survives on the uphill side and may be the earlier route called Sellers Trod. A third route heads north away from the top of the quarry just below the crest of the escarpment and may be where stone was taken away at an early stage in the formation of the quarry. As Forge Valley turns east into Raincliffe there is a ledge about 2m deep and over 100m long cut just below the crest which looks like possible trial workings to test

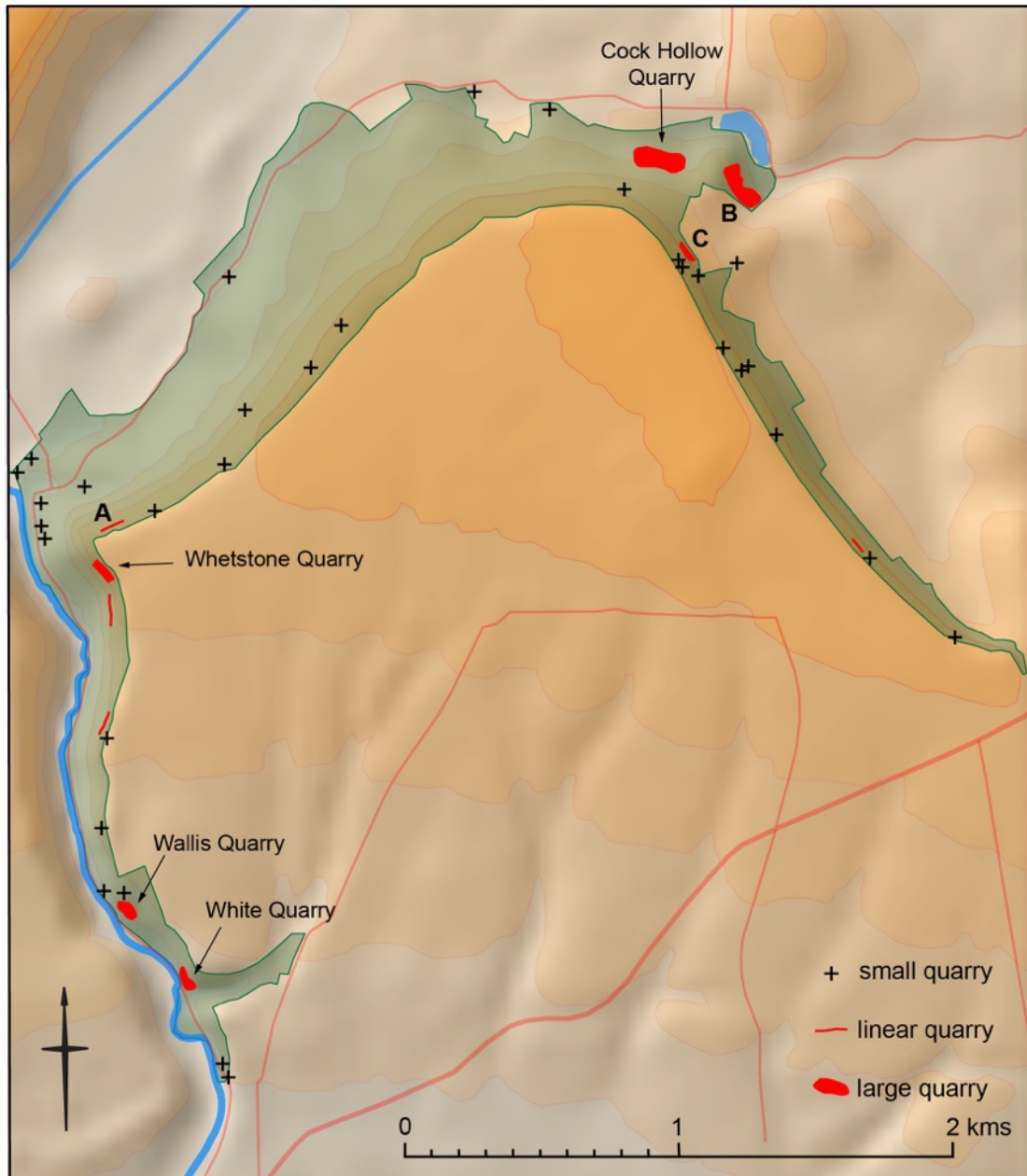


Figure 22. Map showing the distribution of quarries. Points A-C are mentioned in the text.

the quality of the stone immediately around the hillside from the Whetstone Quarry (Figure 22 point A). The ledge cuts into the bottom of the north-west side of the Bronze Age burial mound situated immediately above the slope. There is a similar ledge just below the crest of the hillside in Forge Valley to the south of the Whetstone Quarry.

Two extensive areas of quarrying exist in Row Brow Woods near to Throxenby Mere. They are both situated immediately below the natural shelf in the hillside in order to work the calcareous sandstones of the Osgodby Formation (formerly called Kellaways Rock) which are below the Oxford Clay and provide good building stone (Fox-Strangways 1892, 466). Fox-Strangways mentions Kellaways rock being quarried in Row Brow as well as other locations in the vicinity (Fox-Strangways 1880, 13) and almost certainly this is a reference to the Cock Hollow Quarry marked on Ordnance Survey mapping. The second large quarry about 200m to the west exploits the same rock formation but is very overgrown and has not been noted before.



Figure 23. Part of the Whetstone Quarry above Forge Valley.



Figure 24. Cock Hollow Quarry.

The Cock Hollow Quarry

This quarry is a well-known landmark in Row Brow Woods situated next to a popular footpath from Throxenby Mere (Figure 24). The quarry face depicted on the 1854 1:10560 Ordnance Survey map is around 100m to the west and is now overgrown. This suggests that this part of the quarry was active in the second half of the 19th century and from that time onwards the workings moved from west to east ending where the exposed rock face is visible today. Close examination of this face found several small holes suggesting that gunpowder was used to dislodge the rock (Strang pers. comm.).

Down hill from the worked face is a distinct terrace formed from a combination of cutting back into the hillside and from the build up of rock debris below the workings. This forms the base for a track labelled the Cock Hollow Road on historic mapping which forms a broad loop connecting the workings with the two separate points along the Low Road at the base of the hill (Lady Edith's Drive). The track was presumably engineered as a one-way system to get



Figure 25. Stone setting in the base of a footpath immediately to the west of Cock Hollow Quarry.

wagons up to the workings along one side of the loop to collect the quarried stone and down again via the other side. Heading away from the east arm of the loop is a narrow track following the contours of the slope which may also have been connected with the quarrying or could be an earlier route disrupted by the workings. The survey also recorded the remains of a stone setting or ramp on the slope immediately to the west of the exposed rock face which may have been where stone was dragged up slope to be taken away along the Middle Road (Figure 25). Down hill from the main workings the ground is pitted with a number of overgrown hollows which looks like less-organised surface digging for stone and could well predate the main workings on the slope above. It may be these diggings that gave rise to the name Cock Hollow as the 'cock' element may derive from the Old English 'cocc' meaning a heap - a reference, perhaps, to piles of waste stone littering the ground which would have resulted from the surface diggings.

The second extensive area of quarrying is in a similar topographic and geological setting to Cock Hollow quarry, that is just below the natural shelf in the hillside (Figure 22 point B). This quarry consists of a line of four broad curving cuts into the hillside each 3-4m high totalling about 60m in length separated by narrow spines of intact hillside. There are no exposed rock faces or features associated with the quarrying and overall the workings look weathered and overgrown suggesting they are much older than the Cock Hollow quarry.

Further to the east in Row Brow Woods three overgrown curving quarry faces exist above the level of the natural shelf and therefore dug into the Oxford Clay beds (Figure 22 Point C). They are characterised by a line of curving cuts into the slope around 2-3m high and one face has distinct mound of quarry debris on the downslope side. Near here is the large 10m diameter platform described earlier and one possibility is that it is another quarry area.

4.6 Water management

The survey did not record natural springs and streams as these are shown on Ordnance Survey mapping and the stream channels stand out clearly on the digital surface model created from the Lidar data. Although more survey work needs to be done to provide a comprehensive record, some features were mapped where there was evidence of a spring head having been enhanced by levelling around it or where artificial channels had been dug to improve the drainage as, for example, at one point towards the bottom of the hill in Raincliffe Woods. Here several narrow ditches appear to form a bypass channel taking water out of the stream flowing from the so called 'Glasshouse spring' returning it lower down the slope. The ditches do not appear to be of any great date and may be intended to hold water back from draining on to the immediately adjacent section of the Low Road (Lady Edith's Drive). A small reservoir is shown on Ordnance Survey mapping next to a stream cutting down the side of Row Brow and heading towards the farm, now a hotel, called Ox Pasture Hall. The reservoir still exists and was presumably built to secure a supply for the farm.

Arguably the most obvious evidence of water management in the area is Throxenby Mere which as we see it today appears to be an artificial lake created by the dam at the south end which now carries a track and picnic tables. The lake occupies a natural hollow between the bottom of Row Brow and the hill to the north and west historically called Newby and Throxenby Moor so was probably always a marshy area and may even at times had standing water. This site may be the 'Crumbcarr' meaning 'marsh in the bend' mentioned in this vicinity in a document of 1377 (Martin 1911, 486). The 'bend' element may reflect the way the bottom of Row Brow turns quite sharply at this point. The mere is not shown on the 1810 Irton and Seamer Enclosure Award map nor is it depicted as a body of water on the 1854 1:10560 scale Ordnance Survey map although a plot of ground in the correct area is labelled 'Throxenby Mere'. The next edition of the same map published in 1885 quite clearly shows the mere as it is today which is much broader than the plot of ground depicted in 1854. The conclusion must be that the modern Throxenby Mere was created during the time between these two maps - so in the 1860s or 1870s. The person most likely responsible is William Denison, the second Lord Londesborough, who is known to have created Lady Edith's Drive which links the mere eastwards to Scalby Road (see below). A big hunting enthusiast, it is perhaps likely that he created the mere primarily to attract wildfowl for his shooting parties.

4.7 The Forge

The forge in Forge Valley was situated towards the north end of the valley on the east side of the River Derwent. The history of the site is little known despite its impact on the landscape of the woods with the evidence already put forward for the existence of a number of charcoal burning platforms providing fuel. There is the 14th century reference mentioned earlier to the then lord of Seamer, Henry Percy, asserting his right to set up forges and dig for minerals (Page 1923, 486) but there is no evidence that this marks the beginning of iron working in Forge Valley. The forge was certainly active in the 18th century because, as was noted earlier, the forge is referred to when the Duke of Leeds ordered the construction of the stone wall across East Ayton Moor to protect Raincliffe Woods. In the 1750s the forge was one of the industrial sites visited by the Swedish traveller and industrial spy R.R. Angerstein who gives a detailed account of the site, noting two refinery hearths and a 'chafery' hearth and that the buildings and ponds were made of stone (Berg 2001, 229-30). Far from being dependent on local resources, Angerstein states that the forge used pig iron brought from America and coal from Newcastle, commenting also that the local woods are sufficient to provide timber for the two refinery hearths. He also indicates that the forge had been operating for 24 years which dates the beginning to the early 1730s.



Figure 26. The forge in 1798 from a drawing by J. Hornsey.

The forge seems to have gone out of use by the end of the 18th century and is described as neglected in a 1787 guide to Scarborough (Schofield 1787, 143). The building had disappeared by the time the Ordnance Survey first mapped the area so we know very little about its layout. A row of cottages was constructed on part of the site which became a popular stop for tourists passing through the valley 'where you can get a capital tea, with farmhouse cakes, cream &c' (Ward & Lock 1881, 42). There is an engraving of the forge dated 1798 based on a drawing by J. Hornsey (Figure 26) although the view does not look much like the actual location and a good deal of artistic licence could have been used in the depiction.

The site of the forge has been totally transformed by the creation of a car park though pieces of iron slag can still be found along the river bank. On the steep hillside to the east of the site, a network of channels captures water issuing out of the hillside and directs the flow into a



Figure 27. The forge in 1892 from the Ordnance Survey 1:2500 scale map. Map reproduced with permission of the National Library of Scotland.

single channel towards the site of the forge. The network is clearly shown on the 1:2500 scale Ordnance Survey map of 1892 (Figure 27) where the channel is shown crossing under the road and ending in a pool some distance from the River Derwent. It is conceivable this network of drains was connected with the operation of the forge and the water it provided was used to power an overshot water wheel. However this would also have required an intermediate reservoir on the slope above to store a head of water to use to power the wheel at times when the springs on the hillside ran dry but no such evidence of a reservoir exists on the ground or on the Ordnance Survey map. It is conceivable that the pond shown on the map is the remnant of a header pond for an undershot wheel which took water from the River Derwent with a supplementary supply provided by the flow from the hill slope to the east. A manuscript map of Hutton Buscel and West Ayton township dating from 1798 (displayed in Hutton Buscel Village Hall) shows just such a channel leading from the River Derwent to a pond on approximately the same site as the pond shown on the Ordnance Survey map with a channel leading back into the River Derwent.

4.8 The Nineteenth and Twentieth centuries

Lord Londesborough's Rides

A recent addition to the landscape is the network of routes created by the second Lord Londesborough after he acquired the title in 1860 and which bear the names of some of his close female relatives (Figure 28). Lady Edith's Drive is named after Lord Londesborough's wife, Lady Mildred's Ride and Lady Ida's Ride after two of his daughters and Lady Grace's Ride after his daughter in law (Brierley 1928, 9).

Lady Edith's Drive was built at the expense of Lord Londesborough and opened as a carriage drive on 10 August 1864 between Scalby Road and Throxenby Mere (Brierley 1928, 9). Later the pre-existing route west from Throxenby Mere to Forge Valley also came to be known as Lady Edith's Drive and was a popular carriage drive though it should properly be referred to by its original name of Low Road. Anyone using this route through the woods had to pay a toll to Lord Londesborough at the west end of Low Road where there was a toll booth (Brierley 1928, 10-11) (Figure 29).

Lady Mildred's Ride begins at the north end of Forge Valley from where it climbs almost to the top of the hillside and then turns east following the contour of the slope just below the crest of the hill. It ends on the east close to the former site of the racecourse grandstand. For most of its length Lady Mildred's Ride is little more than a narrow ledge (Figure 30). It might be natural in origin in places created by a step in the bedrock but in other sections it shows clear evidence of engineering with a slight embankment evident on the downslope side constructed to keep the route level where it traverses some of the more precipitous slopes. Sections of it are still in frequent use as a footpath with wooden steps and lengths of boardwalk while other sections are overgrown and almost impassable. It seems unlikely due to the narrowness of the route and the difficulty of the terrain that it crosses that it could ever have been used as a ride or indeed much used even as a footpath. The 1:10560 scale map published in 1895 names Lady Mildred's Ride as Lord Londesborough's Ride, even though by the date the map was surveyed in 1891-2 Lady Mildred would have been around 20 years old. This suggests that the ride was named in her honour to recognise that she had reached her 'majority' - in other words 21 years of age.

Lady Grace's Ride begins in Forge Valley utilising an earlier route marked on the 1854 1:10560 scale Ordnance Survey map as Greengate (see section 4.2 Route 2) to climb the hill side next to Wallis's Quarry and to then follow along the crest of the slope. At a point near Osborne Lodge it cuts across the fields to meet the top of Raincliffe and then follows

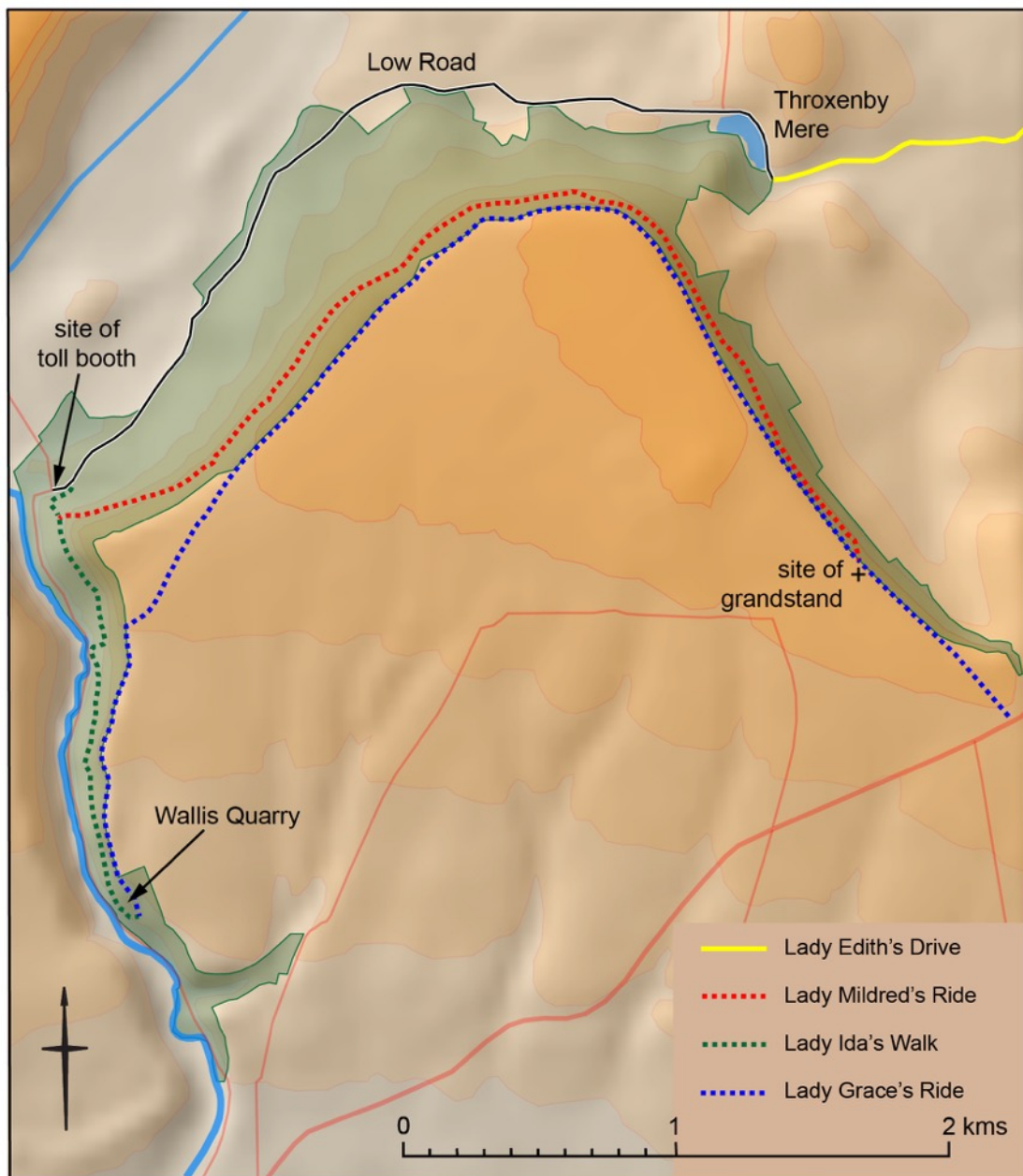


Figure 28. Map of the routes created by the second Lord Londesborough around 1860.

the crest of the escarpment eastwards along the crest of Raincliffe and Row Brow to the racecourse grandstand and possibly onwards as far as Stepney Hill. The route is still in use as a footpath though the alignment has been changed where it crosses the fields between Forge Valley and Raincliffe.

Lady Ida's Walk is confined to the east side of Forge Valley and is still in use as a footpath. It begins at Wallis's Quarry some distance above the floor of the valley where it presumably originally connected with Lady Grace's Ride. From here it follows a fairly level path along the contours of the slope to the north end of the valley where it joined to the start of Lady Mildred's Ride. The existing path cuts through the remnants of spoil heaps associated with Wallis's Quarry indicating the route probably post-dates the end of the quarry operations.



Figure 29. The entrance to the Low Road from Forge Valley around 1900 and here called by its other name - Lady Edith's Drive. Note the toll booth partly hidden behind the tree.



Figure 30. View along Lady Mildred's Ride in Raincliffe Woods near to Forge Valley.

As Lady Edith's Drive opened in 1864 it is likely that the other routes were created at around the same date - that is soon after the second Lord Londesborough inherited the estate in 1860. In creating these rides Lord Londesborough probably intended nothing more than to publicly commemorate close members of his family. As late as the 1920s a signpost could still be seen in the woods bearing the name 'Lady Mildred's Ride' (Brierley 1928, 10). It does not necessarily follow that these Ladies made much use of the routes that bear their names, and in

the case of Lady Mildred's Ride, this seems extremely unlikely given the difficulty of the path. It also seems unlikely that the routes were made for the public to enjoy. While Lady Edith's Drive was opened to the public by permission of Lord Londesborough, Shaw's guidebook published in 1874 advised visitors 'not to stray too far into the wood, as the game is strictly preserved here by Lord Londesborough' (Shaw 1874, 37) and there can be little doubt that he valued the woods more for shooting game than for their scenic beauty or public amenity (Binns 2002, 187). Nevertheless whatever reason Lord Londesborough had for creating these routes, they have proved of lasting benefit to those who enjoy the woods today.

Minor Features

Of the various minor features recorded during the survey, of particular note is firstly, on the edge of Row Brow Woods, the field team discovered a spread of broken pottery and bottles. These lie just within the trees near the site of the grandstand of the former racecourse, and so may well represent an accumulation of rubbish dumped there during race meetings. There are a couple of shallow holes dug into the spread which is probably where people in recent years have been searching for collectable artefacts.

Secondly, in Raincliffe Woods less than 100m down slope from the Middle Road and about 150m west of the track called 'Newgate Road' (see section 4.2 Route 8), the field team located the site of a possible structure comprising an overgrown stony bank at OS. Grid Reference 499326, 488336 (Figure 31). This is in the same location as a small square structure shown on the 1:2500 scale Ordnance Survey map published in 1912 and which shows a track leading to it from the Middle Road. No visible evidence of the track survives. The purpose of the structure is unknown though was presumably a small shelter or workshop. The survey also located the remains of a second structure just over 70m to the north defined by an overgrown L-shaped bank of stone rubble at OS. Grid Reference 499326, 488410. This is not depicted on Ordnance Survey maps but again presumably indicates the site of a small building.



Figure 31. Two team members stand at either end of the structure shown on the 1912 1:2500 scale Ordnance Survey map at OS. Grid Reference 499326, 488336 and which now only survives as a stony bank.

5. SUMMARY OF THE RESULTS

The Scarborough Archaeological and Historical Society survey has provided the first systematic record of archaeology preserved within Forge Valley, Raincliffe and Row Brow Woods. From this work and the background documentary and cartographic research undertaken alongside the fieldwork, we now have a better understanding of the range of features preserved in the woodland, the factors influencing their location (Figure 32) and have been able to develop a broad picture of how the landscape has developed.

The survey has drawn attention to the important group of prehistoric earthworks surviving along the edge of the escarpment in Raincliffe and Row Brow Woods. As well as the Bronze Age burial mound, the survey has shown that the terminals of a once extensive system of Late Bronze Age territorial boundaries still survive as earthworks along the top of the slope, most obscured by trees and undergrowth. The fieldwork has cast doubt on the prehistoric date of that part of the Row Brow Dyke which descends the hillside. It is markedly different in form to the Row Brow Dyke on the hill top adjacent and probably much more recent.

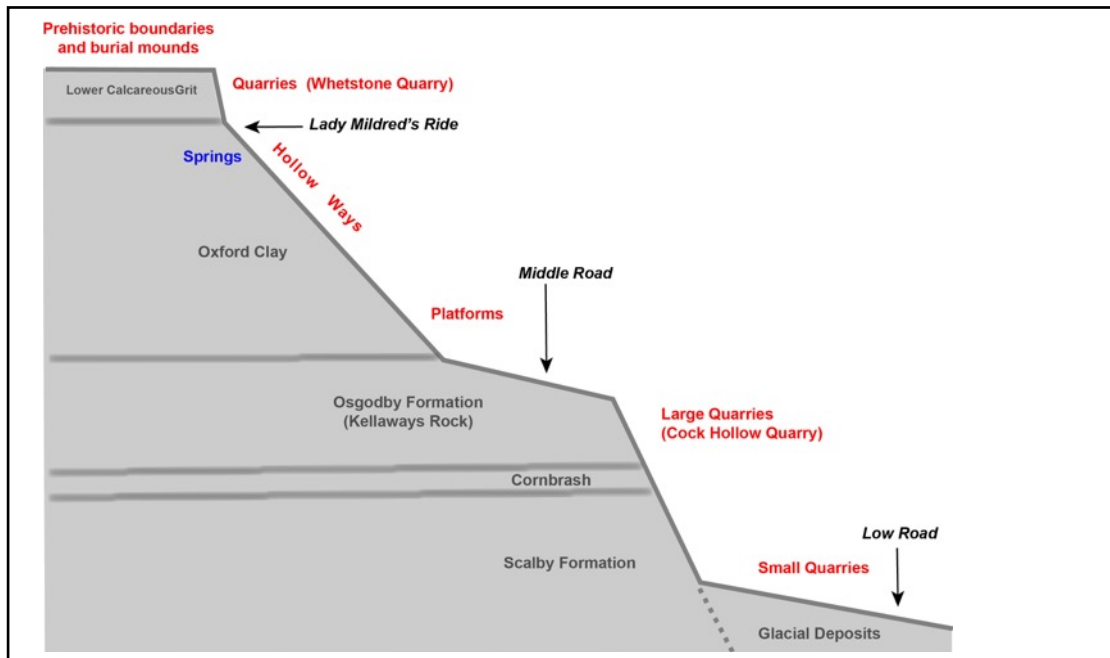


Figure 32. Schematic profile across Raincliffe and Row Brow showing the general location of different categories of archaeological feature in relation to the geology and natural topography. Note the distinct step in the profile of the slope where the Middle Road and most of the platforms are situated.

An important discovery has been the number of hollow ways and tracks surviving in Rowbrow and Raincliffe Woods and we have argued that these routes are evidence of a pastoral economy where livestock were being moved at regular intervals between the high ground of the moor tops and the lowland pastures along the Derwent and Sea Cut valleys. It is conceivable that this economic pattern existed as far back as the Late Bronze Age and that some of the routes we have defined were contemporary with the territories represented by the linear boundaries. One strong candidate route to be this old is the various hollow ways that form the Cunsey Gate in Raincliffe Woods which begins on the hill top mid-way between the Skell Dyes on the east and Forge Valley on the west, so right in the centre of the putative Late Bronze Age territory defined by these two features.

While the prehistoric origin of any of the routes is far from definite, we can be more certain that a good proportion of the routes we have encountered in Raincliffe and Row Brow date back at least to the medieval period. This is because the township boundaries of the medieval settlements of East Ayton and Seamer extend northwards beyond Row Brow and Raincliffe to encompass the valley beyond. The regular movement of livestock up and down the slope between the pastures here and the pastures further south along the margins of the Vale of Pickering must explain the origin of many of the routes evident in the woods.

Without conducting a far more extensive survey, there seem to be more hollow ways in Raincliffe and Row Brow than almost anywhere else along the north edge of the Tabular Hills. There are complexes of hollow ways for example on the edge of Troutsdale to the north of Snainton, and where the road from Spaunton descends to Lastingham but these are isolated examples whereas in Raincliffe, routes with deep hollow ways are far more numerous. The explanation must be that nowhere else along the Tabular Hills was there so much good pasturage available so close to the edge of the hills as there is here with the Sea Cut and Derwent valleys. Consequently nowhere else along the Tabular Hills witnessed quite the same numbers of livestock being moved up and down the escarpment as at Raincliffe and Row Brow.

It also appears that the ditches of several of the prehistoric territorial boundaries were brought into use as ready-made drove ways which is an observation that has been made before of other boundaries on the Tabular Hills (Spratt 1989, 14). It is important however to mention that we think this was a secondary use after these features had lost their significance as boundaries. It would not have made sense to use the ditches to move livestock while the boundary was still recognised as a division between territories as this would have posed an enormous and unnecessary risk of animals straying easily on to someone else's land. In support of the idea that the boundary ditches became droveways is the cropmark evidence for an enclosure abutting the west side of the Skell Dykes at a point where the west side of the dykes have been removed. Our interpretation is that the enclosure was for corralling livestock brought along the remaining east ditch of the Skell Dykes, using it as a ready-made droveway. There are several examples on the Tabular Hills nearby where small medieval farms are sited immediately adjacent to late prehistoric boundaries as with the cropmark enclosure next to Skell Dykes. A medieval sheep farm just north of Ebberston called Malton Cote was sited adjacent to the Scamridge Dykes and a farm called Wydale Cote north of Snainton indicates the probable site of another medieval farm, this time next to the Cockmoor Dykes. The possibility in both these cases, as with the enclosure next to the Skell Dykes, is that they were sited to make use of the prehistoric boundary ditches as ready-made drove ways.

The best evidence we have been able to put forward for the date of the woods is to observe that they broadly match the area of woodland pasture stated as belonging to the villages of East Ayton, Seamer and the lost settlement of Hillgrips in 1086 in the Domesday Book. On this evidence they must be at least a thousand years old. We can also suggest that at this time and probably stretching back earlier, the woods were not as densely tree-covered as they are today. For one thing it would have been difficult for so many routes to develop down the slopes of Raincliffe and Row Brow if there was a dense cover of trees to negotiate. More specifically, the siting of the Bronze Age burial mound on the crest of the slope where Raincliffe meets the north end of Forge Valley suggests it was meant to be seen from below but is now almost invisible among the trees, suggesting that the hillside was more open in prehistory than today.

Other than the probable medieval deer park at what is now Thorn Park Farm, there does not appear to be much evidence surviving from the several centuries when the woods were part of the medieval Forest of Pickering. In more recent centuries, it seems to be the case that Raincliffe Woods and Row Brow Woods have been exploited differently. This is because:

- Row Brow Woods witnessed more large-scale quarrying than Raincliffe Woods as evidenced by the extensive remains of the Cock Hollow quarry and the further large, overgrown quarry faces a short distance further to the east above Throxenby Mere.
- Small fields, possibly 18th century in date, encroach on Row Brow Woods extending some distance up the slope but in contrast, the woodland margin in Raincliffe actually extends beyond the bottom of the hillside and on to the valley floor. Clearly the encroachment of fields on the lower margins of Raincliffe Woods was resisted.
- The evidence of Teesdale's 1828 map of Yorkshire that the section of what is now Row Brow Woods between the Rowbrow Road (Route 13) and Stepney was clear of trees in the early 19th century suggests wholesale felling had occurred. In contrast the extent of Raincliffe Woods today appears broadly the same on Teesdale's map.
- The straight ditches found cutting down the hillside in Row Brow Woods, (including that which has previously been interpreted as a continuation of the Row Brow Dyke), although undated, suggest an effort to subdivide these woods into distinct parcels of land. There is no evidence of any comparable subdivisions in Raincliffe Woods.

The implication is that Raincliffe Woods have been managed differently to Row Brow Woods in the past two-three centuries. Compared to Raincliffe, Row Brow appears to have been exploited more intensively with evidence for large-scale quarrying, the encroachment of fields and of attempts to subdivide the slope. A difference in how the two areas were managed is first documented as far back as the 18th century when the Duke of Leeds took action in 1735 to help preserve Forge Valley and Raincliffe Woods (but not Row Brow Woods) by building a wall across East Ayton Moor and along the top of Forge Valley.

As a result of the survey, we are now able to see the impact the 18th century forge had on the wider landscape of the woods with the discovery of a number of platforms. Some of these, if not all, will be charcoal burning platforms and therefore probably contemporary with the forge. It is also likely that some of the tracks in use today were maintained during the 18th century to convey the charcoal to the forge while in Forge Valley itself, the drainage pattern seems to have been adapted to control the flow of water off the east side of the valley immediately above the forge site. However, we still don't know much about the layout of the forge complex or the history of the site. Judging from the description of R. R. Angerstein (Berg 2001, 229-30) it seems to have been of some importance and of more than local significance.

While quarrying was probably still taking place in the woods well into 19th century, most particularly at the Cock Hollow quarry in Row Brow, soon after the middle of the century the second Lord Londesborough created a number of rides and drives. While the network still largely survives on the ground, the motives behind the creation of these routes still eludes us. Did Lord Londesborough intend to make the woods into a private park with a network of rides and paths for his family and guests to enjoy? There is no evidence on the ground that he created any other features that might be expected in a private country park at this time such as areas where carriages could stop for guests to admire the view or 'eye-catchers' such as water cascades or follies. His main interest in the woods was to use them for hunting and

shooting and in creating the named rides he probably intended nothing more than to permanently commemorate his family in the landscape.

While the project has shed new light on the history and archaeology of the woods, it was very much a preliminary reconnaissance. The team has not investigated any of the features encountered in any detail or undertaken exhaustive background research. This may mean that some of the descriptions and interpretations contained in this report will be overturned if more detailed investigation were to take place. Areas for further research on the ground could include:

- Surveying some parts of the wood in more detail and at a larger scale to show, for example, the form of the surviving sections of prehistoric territorial boundaries on the edge of the escarpment or the relationship between platforms, tracks and a water supply. The forge area could also be surveyed at large scale to make a plan of what survives.
- Soil sample analysis of a selection of platforms to determine their use and identify those that were used for charcoal burning.
- Excavation could be targeted at some of the features revealed by the fieldwork - such as one of the charcoal burning platforms to establish the scale and extent of the bonfire and the presence of any ancillary structures such as temporary shelters used by those watching the burn.
- Make a detailed record of the woodland flora to shed new light on how the woods have been managed in the recent past.

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