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A Late Iron Age and Romano-British settlement at Black Plantation, Richmond, North Yorkshire

Mitchell Pollington and Marcus Jecock

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1. INTRODUCTION AND BACKGROUND TO THE SURVEY

In January and February 2005, an archaeological investigation and analytical field survey was undertaken by English Heritage in part of Black Plantation, near Richmond, North Yorkshire (Figure 1). This is an area of managed woodland, centred at National Grid Reference NZ 157 041, and is owned by the Zetland Estate based nearby at Aske Hall. In the last three years around 16.5 hectares (41 acres) of this woodland have been felled, exposing a range of archaeological features. These include circular stone structures, boundary banks and stone spreads.

The survey was requested by Eric Branse-Instone, the Heritage Protection Adviser for the English Heritage Northern Territory, who has identified the archaeology here as being potentially of national importance. The process of scheduling the archaeological remains is about to begin, but the wooded nature of the landscape provides few fixed points on which to accurately establish a boundary for the designated area. A detailed analytical survey of the site has therefore helped to establish the area to be designated, while also giving a clearer, more detailed, understanding of the site. The survey will also assist the English Heritage regional casework team with the long-term management of the archaeological remains, once they have been scheduled.

The area of cleared woodland has been surveyed in detail using Global Positioning System (GPS) satellite surveying equipment. Where tree cover prevented the use of the GPS, a Total Station EDM was used. Full documentary research and cartographic analysis of the area has also been undertaken. The survey was carried out in detail as a Level 3 survey (as defined in RCHME 1999).

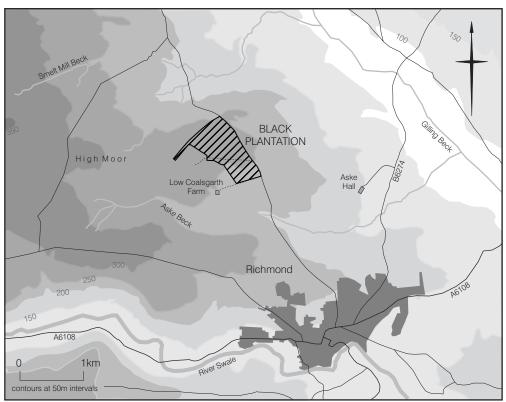


Figure 1
The location of Black
Plantation

2. GEOLOGY, TOPOGRAPHY AND MODERN LAND USE

Black Plantation consists of an area of approximately 56.5 hectares (140 acres) of coniferous woodland, 2km north of Richmond, close to the eastern end of Swaledale. The Plantation is located at around 260m above Ordnance Datum, just outside the northern boundary of the Yorkshire Dales National Park. It is situated on the edge of the carboniferous limestone which rises up into the Pennines to the west, with bands of sandstone cutting across the area (Institute of Geological Sciences 1970).

The plantation sits on a spur of land which slopes downwards to the east, towards Gilling Beck (see Figure 1). It is an undulating landscape of ridges of higher ground cut through by shallow valleys. The visible archaeology is located on two such ridges within the cleared area, partly surrounded by lower lying areas of marsh and poorly drained ground (see Figure 3). This area was felled about three years ago, and subsequently free-range pigs were kept on it (see Figure 2). These have slowed down the regeneration of undergrowth with the result that the archaeological features are still visible on the surface. After the pigs were removed,

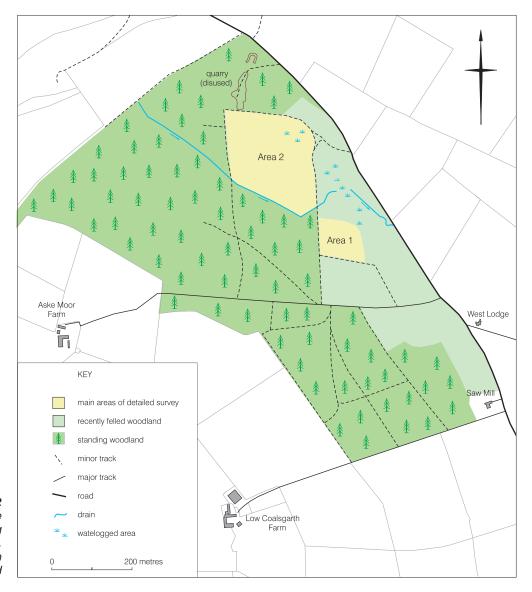


Figure 2
Plan showing the
extent of the standing
and felled woodland,
and the two main
areas surveyed

the area was replanted with coniferous trees in 2004, using hand planting methods instead of heavy machinery; this has helped to minimise damage to the archaeological remains. The Plantation is crossed by a network of metalled tracks, suitable for vehicles and large machinery for the management and felling of the trees.

Part of the northern side of Black Plantation has been used for stone quarrying, although the quarry is now disused. Further small areas of quarrying have also been identified in the south-eastern part of the felled woodland. The woodland also provides the location for a number of recreational activities, operated by private contractors. Regular pheasant shoots pass through the plantation, and an area on its western side is now used for paintball games, operated by Adrenalin (North Yorkshire) Ltd.

3. PREVIOUS RESEARCH

The archaeological remains in Black Plantation were first brought to the attention of the North Yorkshire County Archaeologist by the tenant farmer of Low Coalsgarth farm, Mr Tommy Thompson. After the trees were felled, and pigs had been grazed on the cleared area of land, Mr Thompson discovered a number of circular stone features, while a friend of his found half a beehive quern. He reported these to the County Archaeologist, and after a site visit the details were recorded in the North Yorkshire County Council Sites and Monuments Record (SMR) (see Appendix 2).

Rapid field reconnaissance was carried out in April 2004, by members of the English Heritage Archaeological Survey and Investigation Team, based in York. During this visit lengths of probable field boundaries were identified together with small stone structures. Two additional circular structures, which survive as earthworks within the forest outside of the main concentration of features, were also located.

There has been no previous detailed investigation of the archaeological remains in Black Plantation. No archaeological features have been surveyed by the Ordnance Survey, and there were no records relating to the site in the National Monuments Record, prior to the 2005 survey.

4. HISTORICAL BACKGROUND

The earliest map of the area of Black Plantation is undated, but appears, on stylistic grounds, to have been produced in the late 17th or early 18th century (NYRO ZNK M1/1 (MIC 2120)). It shows that the majority of the plantation was originally part of Aske Common, an area of open pasture. It is first depicted as woodland on a map of 1761, which marks it as 'Part of Ask Moor Planted' (Jackson 1761). It is within this area of the current plantation that the visible archaeology has been identified. The south-eastern section of the plantation appears to have been formed from another block of land, and is depicted separately as 'Part of Coals Garth Great Pasture Planted' (Jackson 1761). This south-eastern block of land therefore laid within an area that had already been partly enclosed by the time the earliest map had been published in the late 17th or early 18th century (NYRO ZNK M1/1 (MIC 2120). Black Plantation appears, therefore, to have been formed largely by the enclosure of common pasture, with the addition of land from pasture that had previously been enclosed, and probably improved, during the first half of the 18th century.

The area is first called 'Black Plantation' on a map of 1813 (Bradley 1813), by which time it is shown as a single block of woodland. It was similarly depicted on the First Edition Ordnance Survey map published in 1857. Later Ordnance Survey maps have shown areas of clearance within the Plantation (Ordnance Survey 1928; 1957), but the recently cleared area has always been depicted as standing woodland. However, it is likely that it has been felled at least once since the First Edition Ordnance Survey map was surveyed between 1854 and 1856 (Ordnance Survey 1857).

5. DESCRIPTION AND INTERPRETATION

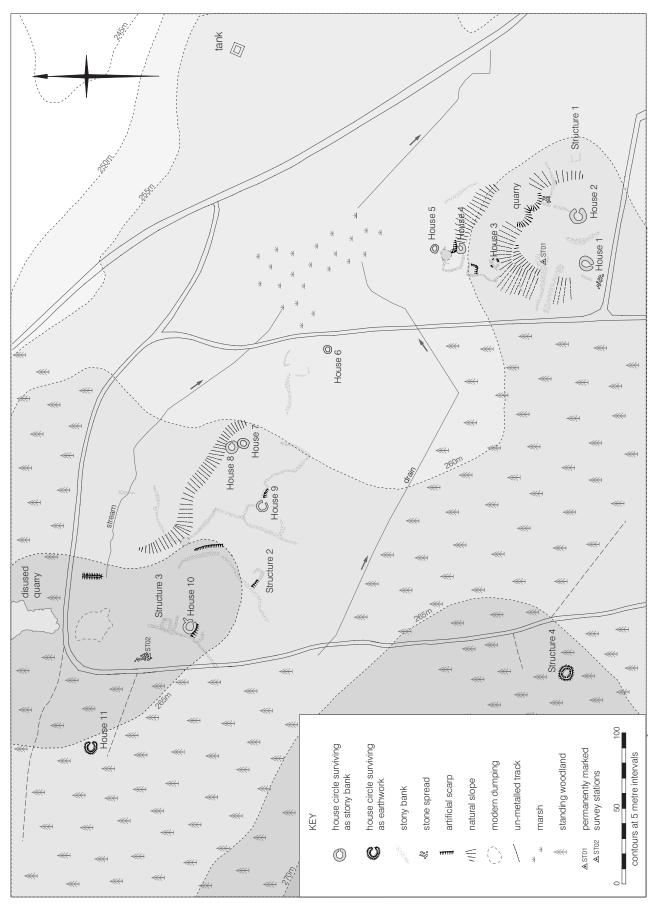
The archaeological features within the cleared areas of Black Plantation are characterised by the remains of eleven circular structures, which for the purpose of this report have been called house sites. Unless otherwise stated, the external diameter of these house structures have been given below. They range in diameter from approximately 5m to 10m and many have clearly definable entrances which tend to face eastwards. The walls are defined by stony banks, surviving to between 1m to 2m wide. In places there is evidence for the original form of the construction of the walls; large flat stones, laid on their sides create the outer and inner faces, with the space between them filled with a core of smaller stones. The houses sit within a landscape partly divided by a number of long curvilinear banks which appear to define a series of fields, and small enclosures. Smaller rectangular structures abut these banks, the shape of which perhaps indicates a Romano-British influence. As well as stone structures there are also a number of artificial platforms cut into the natural slope, which possibly formed yards and building platforms. The layout and structure of these features indicates a probable Late Iron Age or Romano-British date (see Section 6).

The archaeological remains are concentrated in two separate areas, which for the purposes of the report are called Areas 1 and 2. These are broadly defined by natural ridges of high ground in the felled area (see Figures 2 and 3). Now that the pigs have been removed and the area replanted the undergrowth has started to grow, especially in Area 1. It is possible that here there may be archaeological features which have already become obscured, and have therefore not been surveyed. Two further structures have also been discovered in the standing woodland, but, apart from these, there is a lack of other archaeological remains visible on the surface beyond Areas 1 and 2. However, it is probable that any remains surviving within the standing woodland are obscured by thick undergrowth.

If there were archaeological features in the low-lying marshy parts of the site, particularly to the north of Area 1, then it is possible that they have been covered by the build up of natural deposits or by eroded material washed down from the slopes above. It is also possible that archaeological remains were destroyed when the drain was cut which runs along the valley bottom (see Section 5.2.3). However, if this part of the site was waterlogged during the Late Iron Age then occupation may have been confined to the higher ridges of land.

Area 1 is located on the south-eastern side of the cleared woodland, and is defined by a ridge of high ground which slopes gently downwards on its southern and eastern sides. On its northern side the gradient of the slope is steeper, dropping more sharply, before levelling out onto two flat shelves of land above an area of marsh. The natural steepness of the topography here has been accentuated by small scale quarrying into the slope (see Section 5.2.1). Five circular house structures are situated in Area 1. These are all of similar form and are surrounded by small enclosures and probable livestock pens.

Area 2 is situated on the north-western side of the cleared woodland, and is separated from Area 1 by a shallow valley. On its western and south-western sides the land falls gradually,



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extending into woodland; to the northeast the ridge drops more steeply into another small valley, along which a small stream flows. Five houses are situated in Area 2; they are of a similar size and most have clearly defined entrances facing east or south-east.

5.1 Prehistoric and Romano British features

5.1.1 Area 1 (see Figure 4)

House 1 is located in the south-western corner of Area 1, on a south-facing slope. It is about 9.5m in diameter and survives as a low stony spread with no clear structure. It appears to have an entrance on its southern side. To the west of House 1 there is a short section of bank which has a northeast to southwest orientation. Beyond the southern end of the bank there is a spread of large stones close to the modern track. These have no particular arrangement and may have been dumped here after being cleared from the line of the track during its construction (see Section 5.2.2).

House 2 is situated about 22m to the east of House 1 and is of a similar size and construction - around 10m in diameter, with an entrance facing east. The wall structure is visible on the southern side of the house. Here, large stones have been placed vertically to form the internal and external wall faces, and smaller stones form the core (see Figure 5).

To the northwest of Houses 1 and 2 are two stony banks, which run parallel to each other up the western slope of the ridge. They are each about 3m to 5m wide, have an approximate west to east orientation, and extend for about 30m. They appear to form an entrance way or droveway onto the top of the ridge and into the area occupied by the houses.

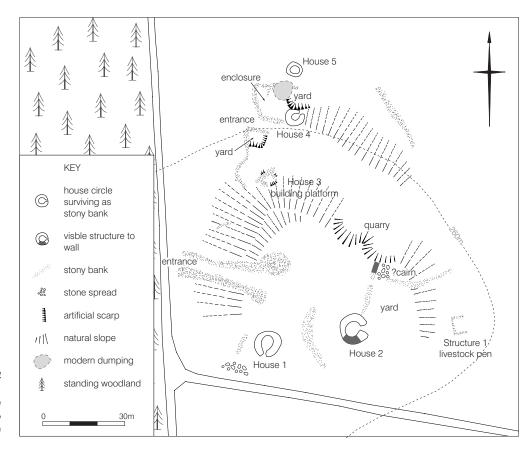


Figure 4
Plan of Area 1
(enlarged from
English Heritage
1:2 500 scale survey)

There is a further stretch of bank about 0.3m to 0.5m high and 2.5m to 4m wide, between Houses 1 and 2. It extends roughly north to south for some 22m along a curving course. It is situated at approximately an equal distance from both the houses, suggesting that there was a deliberate division of space between the two houses, and that therefore these features are broadly contemporary with each other. The bank may have also influenced the position of the entrance to House 1. This faces south, unlike the one in House 2 which faces east (as do the entrances to the majority of the houses in Black Plantation). This orientation could have been for purely practical reasons. Had the entrance in House 1 faced east there would have been limited space between it and the bank, whereas to the south there was ample space. This could have provided an area for a yard directly outside the entrance, an arangement which would have been similar to that at House 2.

Another stony bank is aligned north to south to the immediate north of House 2, with a small gap along its length that appears to be the result of erosion. The ground level on the eastern side of this bank is lower than on its western side, suggesting that there had been a build up of deposits behind the bank, perhaps due to the effects of ancient cultivation. At its northern end its original construction has been exposed. Large stones, which have been set into the ground on their sides, create an inner and outer wall face which has been filled with a central core of smaller stones, similar to that seen in House 2 (see above). However, despite the similarity of construction type, it has not been possible to identify a direct stratigraphic relationship between the bank and the house. At its northern end the bank has been truncated by later quarrying (Figure 6; see Section 5.2.1). A further bank extends eastwards at a right angle to this bank, and curves down the eastern slope of the natural ridge. Close to where these two banks meet they appear to cut across a mound made up of large stones, which may be a cairn. The latter clearly pre-dates the two banks, and it is possible that the banks were purposely aligned onto this earlier feature. The mound may be a large clearance cairn or perhaps even the remains of a Bronze Age burial mound. Indeed, its position on the northern edge of the ridge, with the ground sloping steeply downwards to its north and east, may have made it a prominent feature in the surrounding landscape.

A small rectilinear structure (Structure 1) is located at the bottom of the eastern slope of the natural ridge. It is defined by a low stone bank on three sides, but on the fourth (eastern side), it appears now to be open. The walls, about 0.9m wide, seem to have been constructed of small stones. The slightness of its construction suggests that this was an insubstantial structure, perhaps simply a small shelter for livestock.

On the northern edge of the ridge a platform has been cut into the natural slope. This has been formed by sharpening the slope to create a flat, sub-circular area, approximately 5m in diameter. Its similarity in size to the surviving stone house circles suggests that this is a former building platform (House 3). It may have originally held a stone structure, but if so no evidence of this survives on the ground. Alternatively the house may have been of timber construction. A short section of stony bank, about 6m long and 1m wide, overlies this platform.

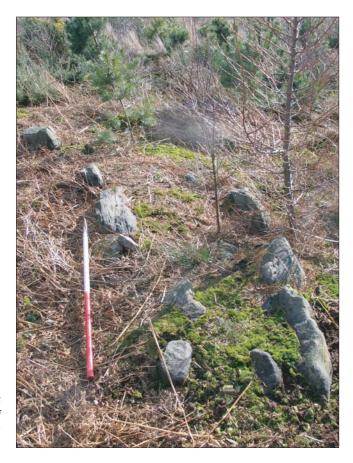


Figure 5 Form of construction in wall of House 2

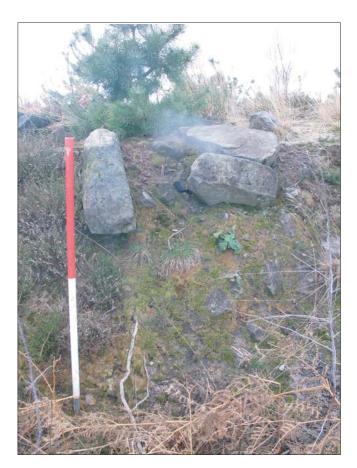


Figure 6 Section through the bank north of House 2 (truncated by quarry scoop)

House 4 sits on the edge of the higher of the two shelves of ground described at the start of this section. At about 6.5m in diameter it is smaller than Houses 1 and 2, and much of its structure is currently obscured by thick undergrowth. It has an entrance on the northeastern side, which opens out directly onto a small area of flat ground below. This area appears to have been defined on its southern and western sides by the sharpening of the natural slope to create an artificial scarp, perhaps forming a small yard in front of the house.

A number of stony banks and artificial scarps, probably the remnants of small enclosures and animal pens, surround House 4. To the southwest a stretch of bank extends from near House 3, down the northern slope of the ridge, turning through 90 degrees at its northern end, and terminates near House 4. Within the angle formed is an area of flatter ground defined by the bank on two sides and by the sharpening of the natural slope on its southern and eastern sides; this may be the remains of a small rectangular enclosure or perhaps a yard. A larger enclosure, formed by banks on three sides, and an artificial scarp on its western side, is situated to the north of this feature; House 4 is located at the south-east corner of this enclosure. The space between the two enclosures appears to have been an entrance way or droveway. It has not been possible to determine a definite stratigraphic relationship between House 4 and the surrounding enclosures, although as the banks appear to respect the position of the house it seems likely that they are broadly contemporary in date. Indeed, this house, together with the enclosure and yard in front, seem to represent a single unit.

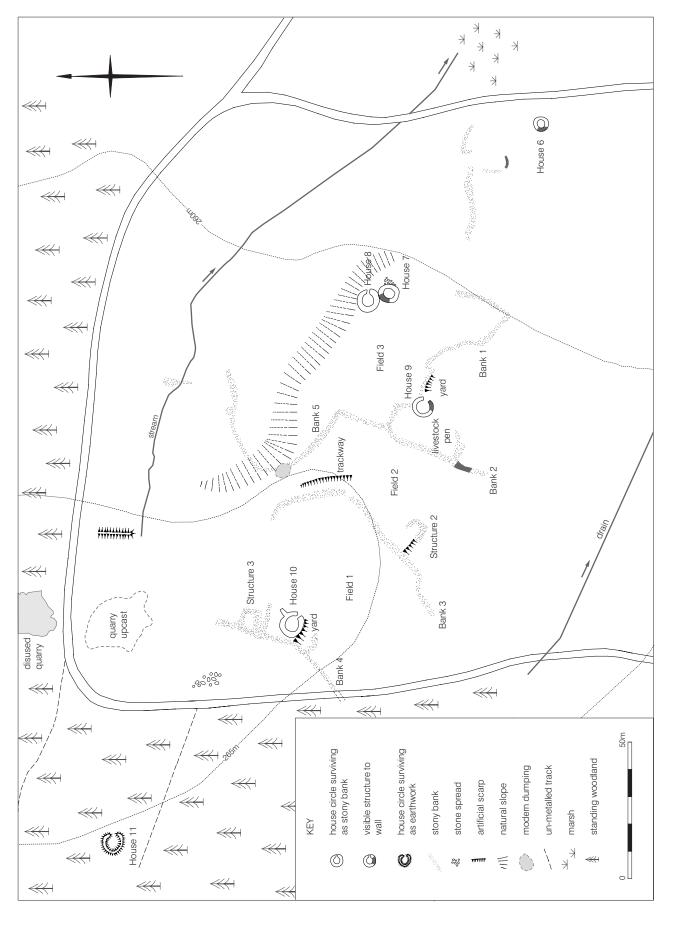
House 5 is situated immediately to the north of House 4, and is positioned on the lower of the two shelves of land. It is around 5.5m in diameter and there is no visible entrance. Approximately 30m to the south-east there is a bank about 25m long and 2.5m wide, which has a southeast to northwest orientation. It is lower in height than the banks described above, and has been constructed from larger stones. The lack of surrounding features, and relationship to other remains, make it impossible to establish a date for this bank, although it is likely to be contemporary with the other features on the site.

5.1.2 Area 2 (see Figure 7)

House 6 is situated close to the modern track which borders the eastern edge of Area 2. It is about 5m in diameter and has no apparent entrance, although part of its wall is obscured by dense undergrowth. In the north-west corner of the house the wall structure has been exposed and is similar to that found in House 2 (see Section 5.1.1).

To the north of House 6 a number of fragmentary sections of bank have been identified. These are largely visible as spreads of stone, but a small section of bank close to House 6 appears to have a definite structure. It is similar to that of House 2 and House 6, and consists of an inner and outer face of large stones with a core of smaller stones between, giving an overall width of around 1m (Figure 8).

Both Houses 7 and 8 are about 75m to the north-west of House 6. The walls of these appear to abut each other, although it is not possible to identify a stratigraphic relationship between the two from the surface remains alone. House 7 is approximately 8m in diameter. On its



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Figure 8
The structure
of the bank to
the north of
House 6



Figure 9 The wall structure of House 7

eastern side the wall merges with a large spread of stone which obscures its line. No clear entrance has been identified, but this may be concealed by the stone spread. In the north-western part of the house the method of construction used for the wall is visible. It is interesting that this differs from that seen in Houses 2 and 6 (see above). At House 7 large stones have been placed vertically into the ground to create a wall. However, instead of a central core of smaller stones, the core, like the wall faces, is made up of similar large stones placed on their sides, forming a wall about 1m wide (Figure 9). The height of the wall here varies, from 0.75m on the inner side, to 0.2m on the outside face. This difference in height may have been caused by the natural build up of deposits outside the house, as the ground slopes downwards to the east. However, it is also possible that this is due to the house having been constructed on an artificial platform, cut into the side of the natural slope, as at House 3.

House 8, adjoining House 7 immediately to its north, is relatively less well preserved and survives as a wide spread of stones. It is approximately 8m in diameter, with an entrance on its eastern side. It sits on the edge of a natural ridge which descends steeply to the north into a shallow valley.

House 9 lies about 35m southwest of Houses 7 and 8, and is approximately 7.5m in diameter with an entrance facing east. The structure of the wall of the house is clearly visible southwest of the entrance, and is similar to that seen in Houses 2 and 6. There is an area of lower ground immediately to the east of House 9, which is defined on its northern edge by an artificial scarp. This may be a small yard in front of the house, similar to that found outside the doorway of House 4 (see above). The house is surrounded on two sides by long lengths of stony banks. The one to the immediate north and east follows a sinuous course (Bank 1), while that to the southwest has a much straighter line (Bank 2). A shorter



Figure 10 Structure of part of the southern end of Bank 2

section of bank, at a right angle to Bank 2, forms the southern edge of a roughly rectangular enclosure, possibly a livestock pen or garden plot, to the west of the house.

The method of construction used to build the southern end of Bank 2 is clearly visible. Large flat stones have been placed horizontally to form a number of courses which are reminiscent of a dry-stone wall (Figure 10). This differs from the other lengths of bank in Area 2 that survive only as stony spreads and low banks. It is possible that this stretch may be a later addition, or evidence of later re-building or repair.

The remains of a rectangular structure survive about 38m to the west of House 9, close to Bank 3 (Structure 2). This is made up of low stony banks, approximately 2m wide, on three sides but open to the northwest. It may have formed a small livestock pen or animal shelter.

House 10 is situated near the western edge of Area 2, close to the track that separates the cleared area from the standing woodland. It is about 9m in diameter with walls approximately 2m wide, and an entrance facing southeast. The walls on the northern side of the house survive internally to a height of about 0.75m, but externally to a height of just 0.3m, where deposits may have built up behind it on the downward slop of the ridge. It is, however, possible that this difference in ground level is due to the house having been constructed on a platform dug into the natural slope of the ridge (see Houses 3 and 7 above). The house is located close to the side of a stony bank (Bank 4) which has a southwest to northeast orientation and above a small area of flat low ground to its south. This area is defined by an artificial scarp on its northern side, and by a short section of stony bank on its southern edge. This may have acted as a small yard below House 10, similar to those seen outside of Houses 4 and 8 (see above). Another short section of bank lies to the north of House 10 and extends east from Bank 4 at a right angle, perhaps forming the northern boundary of an enclosure which surrounded House 10.

Structure 3 is a rectangular feature made up of stony banks, approximately 3m wide and 0.75m high, which abuts the northern end of Bank 4. The surviving banks are of a similar form and height to those of Bank 4, and appear to be contemporary. Their size suggests that this is the remains of a small building, but this is difficult to establish solely from the ground evidence and it could simply be the remains of a livestock pen.

Only the slight remains of archaeological features have been identified in the shallow valley to the north of the main concentration of features in Area 2. A small concentration of stones, which is cut through by a small stream, may be the remains of a section of bank or wall. Approximately 50m to the west of this feature is an earthen bank which is orientated north to south, and is about 13.5m long and 3m wide. It has a straight course, and does not appear to be formed by stone, as are the other banks discussed above. It is likely that this is a later feature, possibly connected with either the forestry work, or the disused quarry to its north. In this part of Area 2 there has been much disturbance from the quarry workings, which has created a large dump of stone upcast situated at the area's north-west corner.

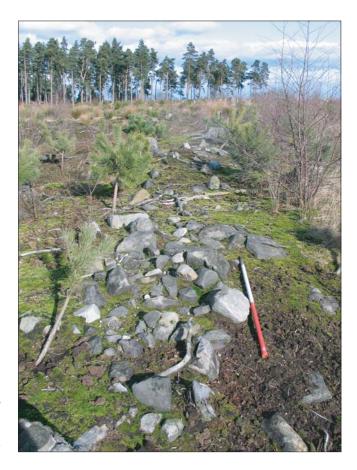


Figure 11
The central
stretch of Bank
3 looking
northeast

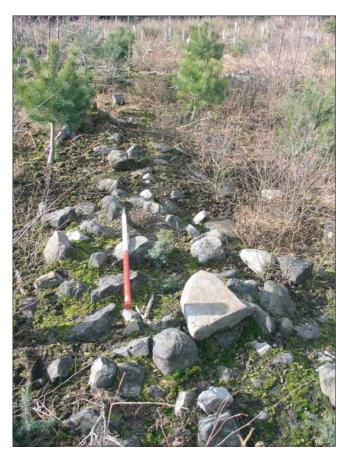


Figure 12 The northern stretch of Bank 4 looking north

5.1.3 Fields

As well as the evidence for houses and small enclosures, Area 2 seems also to be divided into a number of fields, defined by curvilinear stony banks (see Figures 11 and 12). Between these banks there is a general paucity of archaeological features and naturally occurring surface stone. Three such possible fields have been identified.

The principal boundaries of Fields 1 and 2 are Banks 2, 3 and 4. They have a south-west to north-west alignment and are approximately parallel to each other. In part they seem to have been laid out with respect to the natural topography of the ridge (see Figures 3 and 7). The banks enclose areas of flat ground on top of the ridge, and seem to form roughly rectangular fields. Banks 1 and 5 enclose another field, Field 3, in which Houses 7 and 8 are located at its north-eastern corner; they sit on the side of the steep natural slope which defines the field's northern edge. The area enclosed by the boundary of Field 3 is irregular in shape. Within Field 1, and the majority of Field 3, there is an almost complete lack of surface stone of any size, unlike other areas on the ridge where stone is plentiful on the surface. It is possible that these largely stone-free areas were cleared of stone during ploughing. This suggests that as well as livestock management, as seen in the evidence for animal pens, there may also have been cultivation associated with the settlement. It is likely that at least one of these fields originally continued further to the southwest, as the south-western section of Bank 4 appears to continue under the road on the western side of Area 2. However, it has not been possible to identify further traces of this bank within the woodland to the west.

There is also evidence of a trackway heading into Field 2. This survives as a linear hollow which is parallel to the northern part of Bank 3 (see Figure 7).

5.1.4 Outlying Structures

House 11 is situated beyond the cleared area, within the standing woodland to the northwest of Area 2. It is about 8.5m in diameter with a wall approximately 2m wide, which has survived to a height of between 0.5m and 0.75m. It appears to survive as an earthwork, but this may be no more than leaf mould covering an underlying stony bank. It sits on a west-facing slope, with an entrance on its up-slope eastern side. The position of this entrance seems impractical as it would allow surface water to flow down hill into the house. The fact that this house, and many of the other houses on the site have east or south-east facing entrances may, therefore, be due to more than practical considerations (see Section 6).

Structure 4 lies furthest from the main settlement areas, and is located at about 180m to the southwest of Area 2; it survives as an earthwork within the woodland. It is around 10m in diameter, and is formed by a bank about 2.5m wide and 0.5m high. Although its dimensions are similar to those of the houses found in Areas 1 and 2, it lacks any apparent stone within its banks or sign of an obvious entrance. However, its form suggests that it may be a similar structure to the house sites described above, and it is possible that any entrance may have been obscured by later erosion or the effect of tree roots. Another possibility however, is that this is the remains of an earlier ring cairn, which would date to the Bronze Age. Indeed, the

possible cairn identified in Area 1 (see Section 5.1), may also provide further evidence for Bronze Age occupation in the area.

5.2 Later features

5.2.1 Quarrying

A disused quarry is located within the standing woodland at the northern edge of Black Plantation, to the north of Area 2. It has not been surveyed by English Heritage but its outline has been taken from Ordnance Survey digital mapping (Ordnance Survey 2004). It is first depicted on the Ordnance Survey First Edition map published in 1857, as a 'Sandstone Quarry'. It continued to function into the late 19th century, with subsequent map depictions showing how it expanded, including the dumping of upcast which forms a large mound to its south (see Figure 7). By the early 20th century the quarry seems to have gone out of use, and by 1914 it is marked as 'Old Quarry' (Ordnance Survey 1913-14).

There is further evidence of small scale quarrying on the northern side of Area 1. Here two rectangular quarry scoops have been cut into the side of the natural slope. The small scale of the quarrying may suggest that the stone was used on the estate, perhaps for the construction of field walls. It is not possible to establish a date for this quarrying because it is not shown on any of the maps. The western quarry scoop cuts through the stony bank which runs north to south from House 2 (see Section 5.1), exposing the structure of the bank in section (Figure 6).

5.2.2 Tracks

The earliest track depicted on Black Plantation is the east to west track which connects the road to Richmond with Aske Moor Farm, to its west (Ordnance Survey 1857). However, it is likely that many more informal tracks crossed the Plantation at this time. These would have been necessary to gain access to the quarry on its northern edge that was in operation by the mid-19th century (see above), as well as to allow for the management of the woodland itself. By the late 19th century more formalised routes had been laid out, extending east to west across the Plantation's northern edge, which presumably serviced the quarry. By the time of the First World War a more complex network of tracks had been established, which remained in use until at least the late 1950s (Ordnance Survey 1913-1914; 1957). The construction of these may account for the stone spreads close to the roads in the southwest corner of Area 1 and the north-west corner of Area 2. During this time two tracks ran across the ridge of land on which the archaeology in Area 1 is concentrated (Ordnance Survey 1913-1914; 1957). However, there is now no evidence for these tracks on the surface, and it is therefore unlikely that they were ever metalled. They were presumably just small informal tracks, whose courses would have avoided large concentrations of stone; they are therefore unlikely to have caused serious damage to the archaeological remains. By the early 1970s the tracks that crossed Area 1 appear to have been abandoned, and the current network of tracks established (Ordnance Survey 1971-1972). There is no map depiction of tracks crossing Area 2, although it appears that the track which defines the western edge of Area 2 overlies the south-western end of Bank 4.

5.2.3 Drainage

A large drain, about 2m wide, extends from the northwest, forming the southern boundary of Area 2 at the bottom of the natural ridge, and then turns north-east into an area of marsh situated to the north of Area 1. It appears to have been constructed in the late 19th century, and is first depicted on the Ordnance Survey map published in 1893. Where the area of marsh exists today there was a further section of drain that descended the slope to the south-east. It appears to have become largely silted up during the 20th century.

6. DISCUSSION

A range of unenclosed settlements, dating to the Late Iron Age and Romano-British periods, have been identified across the Yorkshire Dales (Challis and Harding 1975; Horne and MacLeod 1995 and 2004). These generally comprise a number of circular houses surviving as stone spreads, often associated with field systems and smaller enclosures. Much of the dateable material for these settlements points to a Romano-British date, with second and third century evidence coming from Malham and Ingleton, and third century evidence from Grassington (Challis and Harding 1975, 139). However, many sites appear to have earlier phases of occupation, and it is likely that a large proportion of the settlements have their origin in the Late Iron Age, with occupation continuing well into the Romano-British period. Excavation of the settlement at Healaugh, in Swaledale, has provided evidence of pre-Roman occupation, with Late Iron Age timber houses being re-built in stone during the early Romano-British period (Fleming 1998, 151). Indeed, this is a pattern that has been seen in a range of sites across northern England (Clack and Gosling 1975, 27).

The archaeological evidence from Black Plantation suggests a similar Late Iron Age and Romano-British date for the settlement, with earlier timber structures giving way to a later phase of stone built houses. The timber houses were constructed on platforms cut into the natural slope of the land. One such building platform, House 3, is excavated into the side of the natural ridge which defines Area 1, and is of similar dimensions to the remains of the stone-built houses. This platform is overlaid by a stony bank, of similar construction to those associated with the stone houses. The abandonment of the earlier timber houses may, therefore, have made way for the realignment of the boundary banks, which in the case of House 3, overlie the building platform.

There is limited evidence for the form of construction of the walls that make up the houses. Most of the walls survive as stone spreads, but sections that have survived more intact give an insight into the original form of the structure. The most common type of construction, found in a range of walls and banks across the site, consists of placing large, relatively flat stones, vertically into the ground to form inner and outer faces, with smaller stones and earth used to create a central core of material. Examples of this type of construction have been identified on a number of Late Iron Age sites in the southern Yorkshire Dales, at Wedber Brow, Malham (Raistrick 1939, 117), and through excavation of the settlement at Healaugh, Swaledale (Fleming 1998, 151).

There is evidence that the settlement operated a mixed economy; largely pastoral but including areas of arable cultivation. A number of fields have been identified, defined by curvilinear banks, and their interiors characterised by a lack of surface stone. This suggests that these areas had been cleared to allow for arable cultivation. However, these fields differ in form from the larger coaxial field systems found in other areas in and around the Yorkshire Dales, such as those identified in Wharfedale, Lunedale and Swaledale (Horne and Macleod 1995; Jecock 1998; Laurie 1985), although the full extent of the field system in Black

Plantation may no longer be visible on the surface. Coaxial field systems imply a planned division of the landscape, whereas the remains at Black Plantation suggest a more piecemeal development, perhaps into marginal land. The presence of a number of small enclosures and pens attest to the management of animals. Small yards, consisting of flat areas of land, have been cut into the natural slope of the ground immediately below a number of the stone houses (Houses 4, 9 and 10). These yards would probably have acted as small pens, designed to keep the animals close to the house, but below the level of the entrance to prevent the waste from the animals, or the animals themselves, from entering the houses. Examples of flat areas cut into slopes in front of, or adjacent to, Late Iron Age houses have been found on a range sites in the north of England (Jobey 1964).

The orientation of the entrances to the houses may also be significant. Seven of the houses at Black Plantation have clearly identifiable entrances, six of which face eastwards or south-eastwards. This pattern of orientation is common in Iron Age houses, and it has been suggested that this may be due to a number of factors. The influence of practical environmental and climatic factors, such as prevailing south-westerly winds, may be one consideration, although it has also been suggested that there may be a social or symbolic significance to their orientations (Guilbert 1975; Oswald 1997). Indeed, the localised functional limitations of these orientations are highlighted in House 11 - this has an entrance on its eastern side which, rather impractically, faces up-slope.

The survival of the archaeological features on the site can be explained by the later use of the landscape. Until the mid-18th century the area of Black Plantation was the open pasture of Aske Common. This had probably remained unimproved and unenclosed pasture since the end of the Romano-British period, which would have caused little threat to the archaeological remains. When large parts of the pasture were enclosed in the 18th century, much of the surrounding land appears to have been improved, and cleared of surface stone. The remains of the settlement in Black Plantation have survived due to the fact that after enclosure the land here was given over to forestry, preventing them being damaged by agricultural activities, and obscuring, and therefore preserving, the archaeological features.

7. METHODOLOGY

The original reconnaissance of the site for this survey was undertaken in April 2004 by Mitchell Pollington, Christopher Dunn and Eric Branse-Instone, accompanied by Mr Tommy Thompson. The archaeological fieldwork itself was carried out in January and February 2005 by Mitchell Pollington and Marcus Jecock, together with Trevor Pearson. The survey was undertaken using a Trimble dual frequency Global Positioning System (GPS), with two rover receivers working in real-time kinematic mode. As well as this, certain features were recorded using a Total Station EDM. Two of the survey stations (ST01 and ST02) were permanently marked with brass rivets (see Figure 3 and Appendix 3 for location and details). Site photographs were taken using a compact digital camera (image size 5 million pixels).

The report was researched and written by Mitchell Pollington. Illustrations were prepared by Mitchell Pollington with advice from Philip Sinton and Trevor Pearson. The report as a whole was commented on by Trevor Pearson and Marcus Jecock, and edited by Christopher Dunn, Team Leader, Archaeological Survey and Investigation Team, North.

8. ACKNOWLEDGEMENTS

English Heritage is grateful for the assistance of Tommy Thompson of Low Coalsgarth Farm for his help in identifying features on the site, the staff of the North Yorkshire Record Office, in Northallerton, for their help with the documentary research, and to the Earl of Ronaldshay and his staff at the Zetland Estate for giving permission to carryout the survey on the estate land.

The plans in this report incorporate small elements of Ordnance Survey data and are reproduced here with their permission under licence number GD03085G.

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APPENDIX 1

A survey archive consisting of the field survey and supporting background material, such as the Project Design, has been deposited in the NMR, Swindon, under Collections reference AF00159, where it is available for public consultation on request. The digital plans are retained at the English Heritage York office, and are publicly available on request.

APPENDIX 2

Table of National Monuments Record (NMR), and North Yorkshire Council Sites and Monuments Record numbers linked to the site.

Site Name	County	District	Parish	
Black Plantation	North Yorkshire	Richmond	Aske	

Name	NMR no.	SMR no.	NGR
Late Iron Age and Romano-British settlement in Black Plantation	NZ 10 SE 288	NYM 23552	NZ 157 041
Possible Bronze Age ring cairn	NZ 10 SE 289		NZ 1551 0403



SURVEY STATION INFORMATION

SITE NAME	Black Plantation		
Station number	ST01	Status	xxxxxxxxx
Type of mark	Brass rivet	NMR number	NZ 10 SE 288
Date of survey	Jan/Feb 2005	SAM/RSM no.	xxxxxxxx
Office of origin	York	Surveyors	MP, MJ, TP
OS National Grid	Eastings	Northings	Height
NZ 1573 0404	415731.83	504044.70	260.171



Figure 13
The location of permanent survey station ST01



SURVEY STATION INFORMATION

SITE NAME	Black Plantation		
Station number	ST02	Status	xxxxxxxxx
Type of mark	Brass rivet	NMR number	NZ 10 SE 288
Date of survey	Jan/Feb 2005	SAM/RSM no.	xxxxxxxx
Office of origin	York	Surveyors	MP, MJ, TP
OS National Grid	Eastings	Northings	Height
NZ 1553 0431	415529.74	504307.15	262.772



Figure 14
The location of permanent survey station ST02