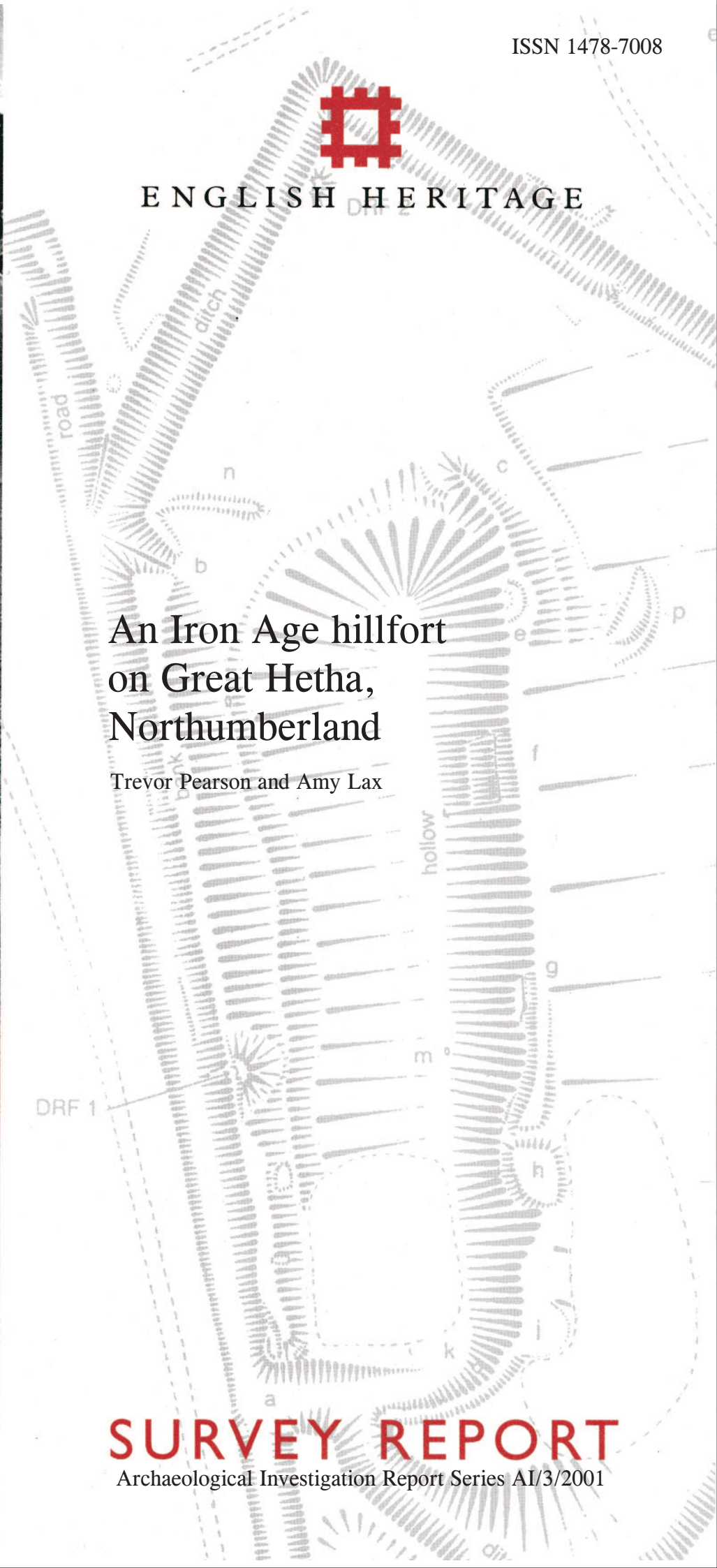




ENGLISH HERITAGE

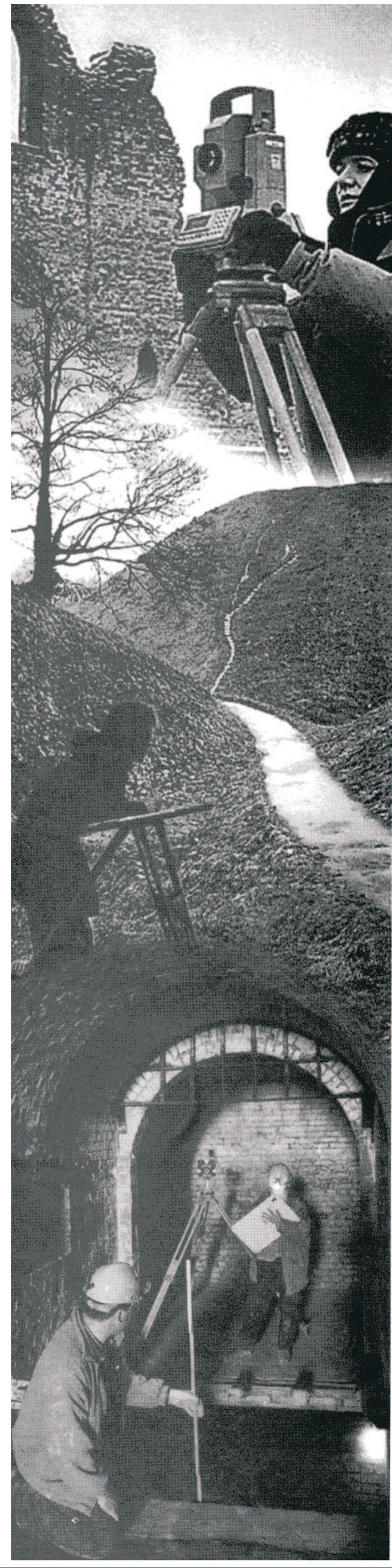
An Iron Age hillfort
on Great Hetha,
Northumberland

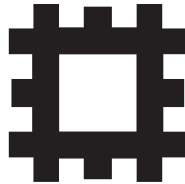
Trevor Pearson and Amy Lax



SURVEY REPORT

Archaeological Investigation Report Series AI/3/2001





**AN IRON AGE HILL FORT
ON GREAT HETHA,
NORTHUMBERLAND**

Archaeological Investigation Report Series AI/3/2001

NMR No: NT 82 NE 47

NGR: NT 8856 2740

RSM: 24605

Surveyed August 2000

Surveyed by Trevor Pearson and Amy Lax

Report by Trevor Pearson

Drawings by Trevor Pearson

Photographs by Trevor Pearson and

Stewart Ainsworth

English Heritage 2001

ISSN 1478-7008

York Office: 37 Tanner Row, York YO1 6WP

Tel: 01904 601901 *Fax:* 01904 601998

National Monuments Record Centre, Great Western Village, Kemble Drive, Swindon. SN2 2GZ
Tel: 01793 414700 *Fax:* 01793 414707 *World Wide Web:* <http://www.english-heritage.org.uk>

CONTENTS

1. INTRODUCTION	1
2. GEOLOGY, TOPOGRAPHY AND LAND USE	3
3. HISTORY OF RESEARCH	5
4. DESCRIPTION AND INTERPRETATION	8
4.1 The univallate hillfort-Phase 1	8
4.2 The univallate hillfort-Phase 2	11
4.3 The bivallate hillfort-Phase 3	13
4.4 Hillfort occupation	18
4.5 Later activity	19
4.6 The exterior of the hillfort	21
5. DISCUSSION	23
5.1 The hillfort	23
5.2 The environs of the hillfort	28
6. METHODOLOGY	29
7. ACKNOWLEDGEMENTS	30
8. BIBLIOGRAPHY	31
APPENDIX 1: Table of NMR numbers linked to the survey	33
APPENDIX 2: Locations of permanent survey stations	34

LIST OF ILLUSTRATIONS

1. <i>Location map</i>	1
2. <i>Oblique aerial photograph of the enclosure from the north (© Tim Gates 1996)</i>	3
3. <i>MacLauchlan's survey of 1860 (reproduced by permission of His Grace the Duke of Northumberland)</i>	5
4. <i>Plan of the hillfort surveyed by George Jobey (Jobey 1965, 42)</i>	6
5. <i>English Heritage plan of the hillfort (reduced from 1:500 scale original)</i>	9
6. <i>Interpretative plan of the hillfort</i>	10
7. <i>Digital terrain model of the hillfort viewed from the west</i>	14
8. <i>View looking west of the south side of the hillfort showing the outer rampart (left) and the more massive remains of the inner rampart (right)</i>	15
9. <i>The external face of the inner rampart wall on the south side of the hillfort (for location see Figure 6: no. 7)</i>	16
10. <i>English Heritage plan of the hillfort and its immediate environs (reduced from 1:500 scale original)</i>	20
11. <i>Interpretative plans showing the development of the hillfort</i>	24

1. INTRODUCTION

In August 2000, English Heritage carried out a field investigation of a prehistoric hillfort and its environs situated on the summit of Great Hetha, overlooking the College Valley in the northern Cheviots. The analytical field survey formed part of the Northumberland National Park Authority's project entitled 'Discovering our hillfort heritage', funded jointly by the European Union through the European Agricultural Guidance and Guarantee Fund, the Heritage Lottery Fund through the Tweed Forum initiative, English Heritage and the Northumberland National Park Authority. Great Hetha lies within the Northumberland National Park, just over 1km south-west of the village of Hethpool in the parish of Kirknewton and district of Berwick upon Tweed (Figure 1). The hillfort, which was the focus of the survey, is centred on National Grid Reference NT 8856 2740. The analytical field survey was one of a number intended to improve the understanding of Iron Age hillforts and comparable enclosures within the National Park and to inform their conservation and management (Frodsham 2000).

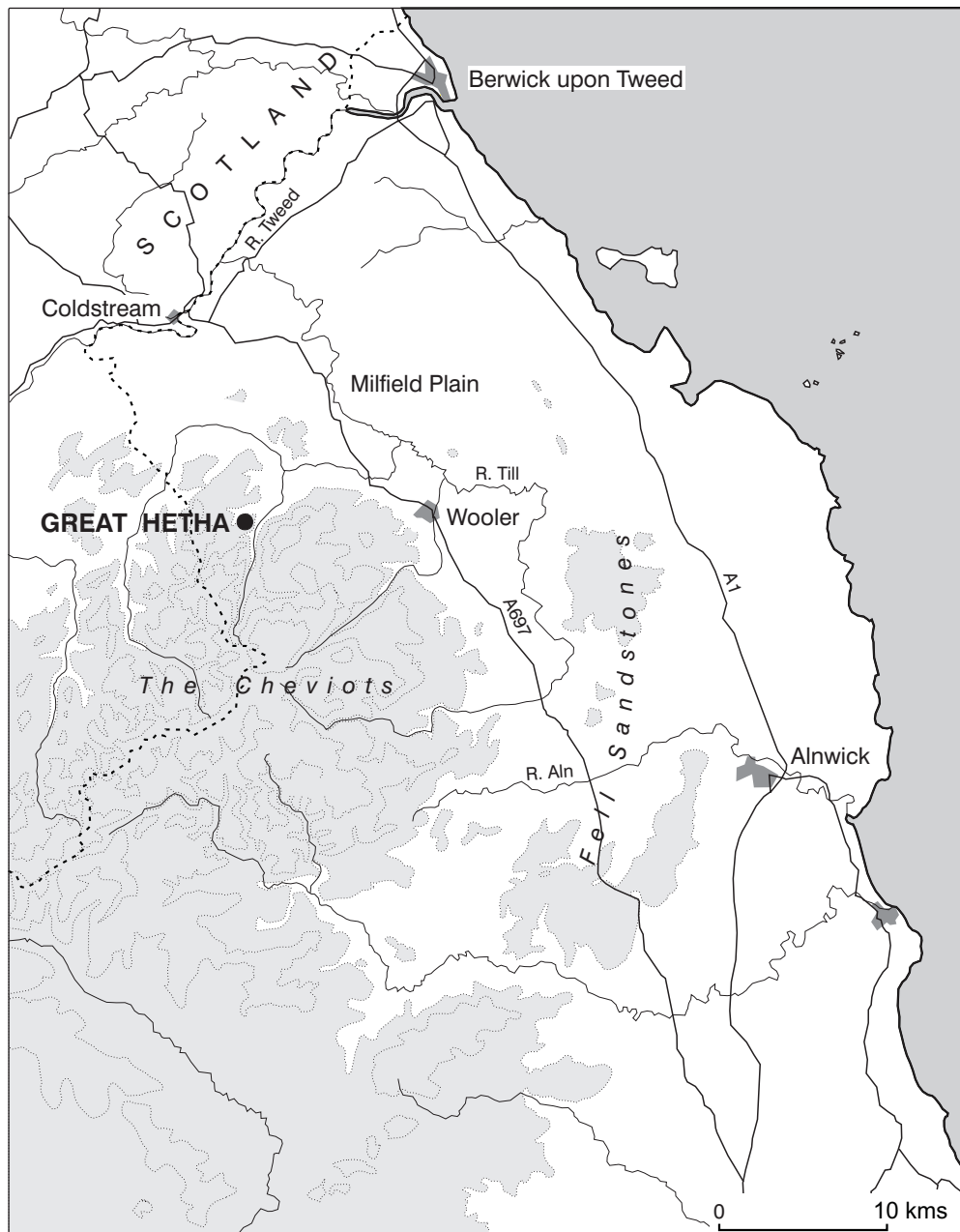


Figure 1.
Location map

Great Hetha rises to a height of 344m above Ordnance Datum (OD) and the summit is completely encircled by the defences of the hillfort, which comprise two banks of stone rubble, the inner being more prominent than the outer. At the north-east, the outer rampart follows the contours of the hill, but the inner rampart cuts across the summit resulting in a wide gap between the two defences. The outer rampart encloses an area of 0.8ha (1.9 acres) and it appears to overlie the remains of an earlier enclosure. The inner rampart encloses an area of 0.4ha (1 acre) and contains nine circular hut platforms of probable Iron Age date. Within the space between the ramparts at the north-east are the rubble foundations of a more recent shelter and adjacent animal pen. There is extensive evidence of quarrying inside and around the hillfort and some 130m to the west of the fort there is preserved a denuded bank, which may be a prehistoric cross-ridge dyke. The hillfort is protected as a Scheduled Ancient Monument (RSM 24605) and is recorded in the National Monuments Record (NMR) as NT 82 NE 47.

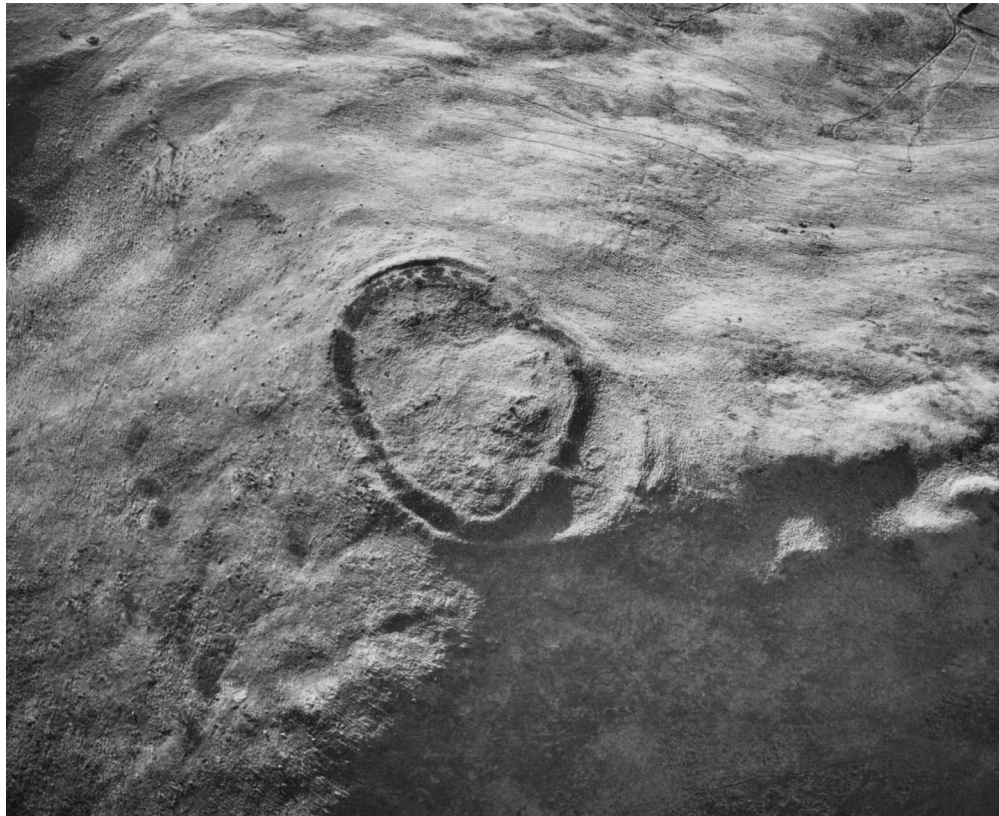
The survey was at 1:500 scale and extended over an area of 8ha (19.7 acres), encompassing the fort and its immediate environs. The field investigation was carried out at Level 3 standard (as defined in RCHME 1999, 3-4) and evidence was found for the development of the hillfort and an earlier enclosure, the character of occupation within the fort and the construction of the defences.

2. GEOLOGY, TOPOGRAPHY AND LAND USE

Great Hetha is one of the highest summits on the west side of the valley of the Collee Burn and is formed from andesite, a hard volcanic rock that changes from a deep pink colour to pale grey when weathered. The surface of the hill is covered with a thin mantle of soil that supports a covering of sparse grass with areas of bracken and heather on the lower slopes. There is a forestry plantation at the base of the hill on the north-east side.

The crown of the hill is relatively level with a slight terrace on the east side just below the crest (Figure 2). The south and east sides of the hill fall steeply down to the floors of the Collee Valley and that of its tributary, the Trowup Burn some 200m below. The north side of the hill drops 150m from the top of Great Hetha to the lesser summit of Little Hetha, and beyond it to the floor of the Hetha Burn valley, but the gentlest descent is on the west. Three natural terraces interrupt the slope on this side of the hill before it levels out onto a broad, flat-topped ridge some 30m below the summit. The ridge extends for a further 500m south-west and then drops down to the head of the Hetha Burn valley. The natural route onto the top of Great Hetha is along this ridge followed by the relatively short ascent of the west side of the hill to the summit.

The hillfort has a wide arc of view along the Collee Valley, from the foot of 'The Bell' 2kms to the north to the confluence of the Lambden and Collee Burns 3kms to the south. The higher hills on the opposite side of the valley block any view into the heart of the Cheviot massif. The hillfort has open views to the north-east where the sea can be glimpsed beyond a series of lesser summits fringing Glendale and the Millfield Plain. Northwards, a range of hills marking the northern edge of the Cheviots hides the Scottish lowlands and south-westwards, the view is restricted by the higher summits of Loft Hill and Madam Law just over 1km away. The hilltop is



*Figure 2.
Oblique aerial
photograph of the
enclosure from the north
(© Tim Gates 1996)*

rough pasture grazed by sheep and although there is no public access to the summit, it is criss-crossed by several tracks used mainly by shepherds. The nearest village is the small hamlet of Hethpool in the College Valley, just over 1km to the north-east of the hillfort.

Great Hetha is only one of several hillforts overlooking the College Valley, many of which can be observed from the fort. The nearest is the fort occupying the lesser summit of Little Hetha, lower down the north side of the hill whilst on the next summit to the south, across the Trowup Burn, is the smaller fortification of Sinkside, now hidden from Great Hetha amid forestry plantations. The hillfort of Ring Chesters is intervisible with Great Hetha on a summit of approximately the same height 2kms to the north-west, whilst the west side of the hillfort on Yeavinger Bell is visible 4.5kms to the north-east. There are several settlements of probable Iron Age or Romano-British date overlooking the Hetha burn to the west of the hillfort and the Hethpool stone circle, of probable Late Neolithic or Early Bronze Age date, is below the north-east side of the hill, on the floor of the College Valley.

3. HISTORY OF RESEARCH

The earliest detailed description and plan of the hillfort are those prepared by the Victorian surveyor and field archaeologist Henry MacLauchlan, who visited the site in June 1860. He described the hillfort as a double-ramparted camp with staggered entrances on the west and north (in actual fact they are orientated north-west and north-east respectively) and observed that the north-west entrance is located at a natural hollow in the hillside (MacLauchlan 1867, 37-8). He drew attention to the way the two ramparts diverge on the north-east side, the outer rampart encompassing a relatively level shelf immediately below the summit. He described three structures in the interior of the hillfort, beginning with the foundations of a circular dwelling inside the north-west entrance, which he speculated could have been a guardhouse. MacLauchlan also noted the circular foundations of a possible beacon on the inner rampart adjacent to the north-east entrance and finally, in the space between the two ramparts on the north-east of the fort, he mentions the remains of an oval dwelling with a circular inner compartment. All three features appear on MacLauchlan's survey (Figure 3), the last one highlighted with the label of 'Dwelling', but their plan depiction adds nothing to the written description (MacLauchlan 1860). The ramparts are shown somewhat schematically as narrow banks of equal width. At the north-west entrance MacLauchlan shows the gap in the inner rampart blocked by a bank curving into the interior of the fort.

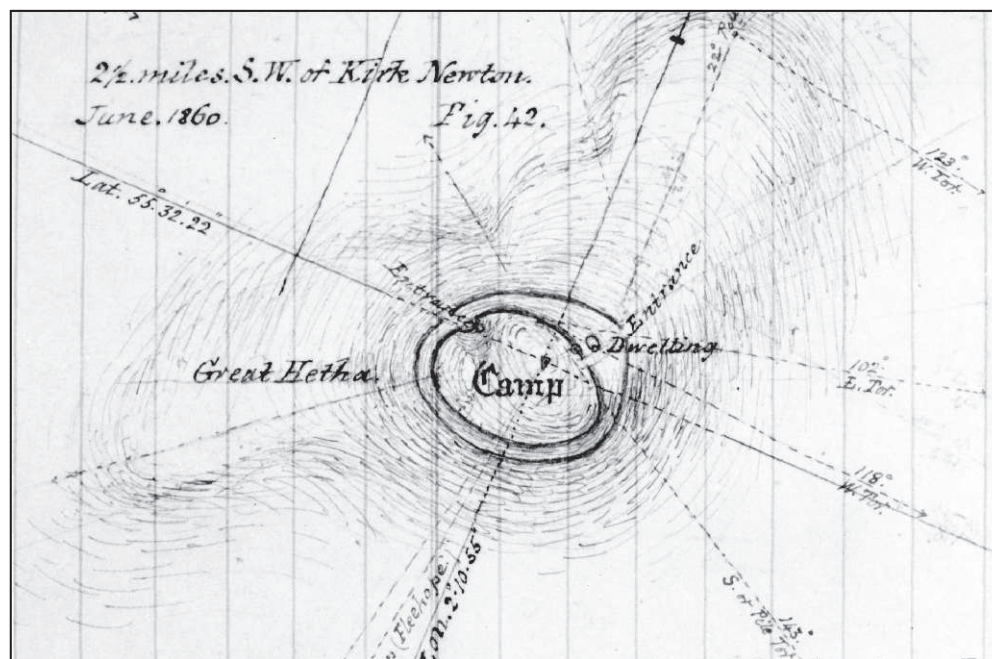


Figure 3.
MacLauchlan's
survey of 1860
(reproduced by
permission of His
Grace the Duke of
Northumberland)

The first edition 1:2500 scale Ordnance Survey map surveyed in 1860 adds little new information to that recorded by MacLauchlan. A trigonometrical station is depicted on the summit of the hill in a position which probably equates to one of the two surviving cairns and the relative strength of the ramparts are depicted more clearly than by MacLauchlan (Ordnance Survey 1864). Whereas MacLauchlan shows the defences as two solid lines of equal width, on the Ordnance survey plan the inner rampart clearly emerges wider and stronger than the outer. Nothing was added to the depiction of the monument on the second edition Ordnance Survey map of 1897 (Ordnance Survey 1897).

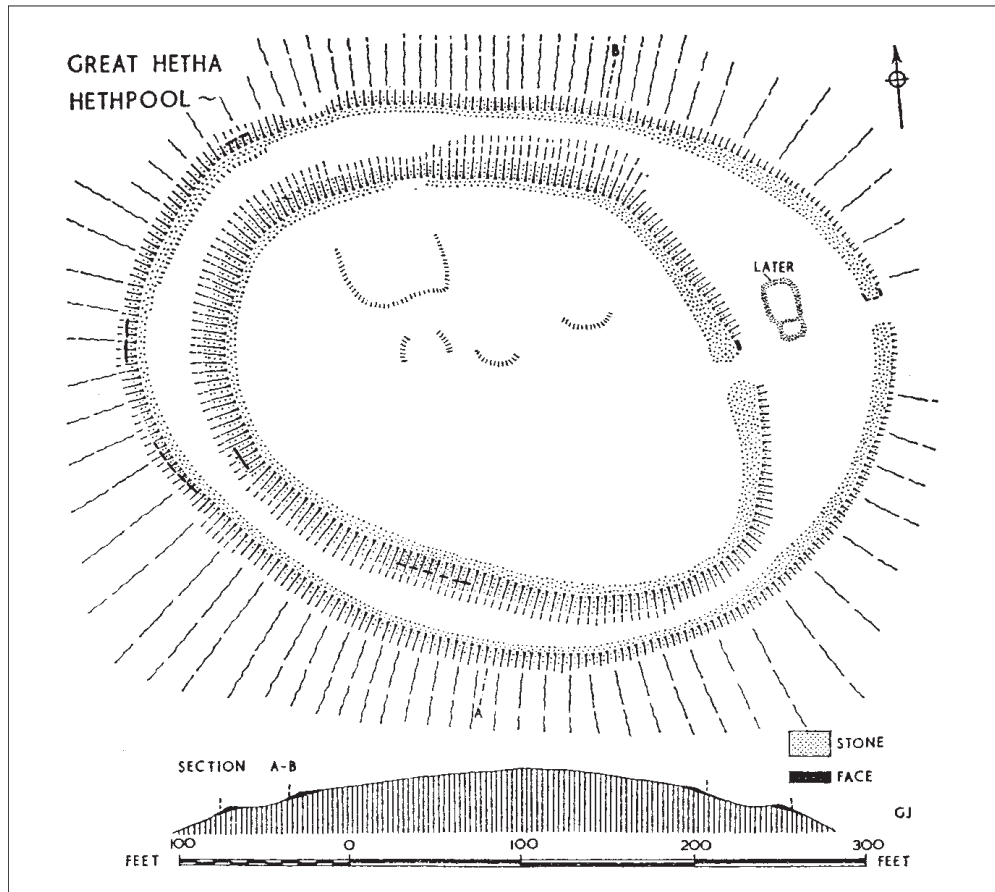


Figure 4.
Plan of the
hillfort surveyed
by George Jobey
(Jobey 1965, 42)

Following on from MacLauchlan, the only other detailed description of the hillfort is that compiled in October 1955 by Eric Geary of the Ordnance Survey (NMR No. NT 82 NW 11 - Authority 3). He paid more attention to the construction of the ramparts than MacLauchlan, noticing that they partly resulted from cutting back the natural slope and that the inner rampart preserved evidence of having had a stone wall. He agreed with MacLauchlan that there was an entrance on the north-west side of the hillfort marked by an in-turn on the inner rampart, but could find no trace of MacLauchlan's circular guardhouse inside the entrance. He was confident that the gap through the outer rampart on the north-east side of the hillfort was also an original entrance possessing 'traces of revetting' but was less confident that there was an entrance through the inner rampart at this point. He found no trace of the beacon referred to at the north-east entrance and interpreted the nearby structure, described as a dwelling by MacLauchlan, as an enclosure with an adjacent oval hut.

George Jobey published a plan (Figure 4) and brief description of the hillfort in 1965 in his overview of hillforts in Northumberland (Jobey 1965, 42-3). He made the general point that where hillfort ramparts diverge, as they do on the east side of Great Hetha hillfort, it may indicate the presence of a fold or corral for stock. He appears to have rejected the opinion of previous fieldworkers that the hillfort had two entrances by only showing the north-east entrance on his published plan. However, he does show the two ramparts narrowing at approximately the point where earlier plans show the north-west entrance and a gap is shown in the band of stone on the inside of the inner rampart. Jobey also shows several stretches of wall face in the body of both ramparts and a face defining the north side of the entrance through the outer rampart. On the inside of the hillfort, the only definite structure on Jobey's plan is the oval dwelling first depicted by MacLauchlan and which Jobey simply labels as 'later'. He also shows several curvilinear scarps within the inner rampart without offering an interpretation.

Although no further work is known to have taken place at Great Hetha between 1955 and the English Heritage survey, archaeological research has taken place in the immediate environs of the hillfort in the intervening years. In the period between 1969 and 1972, Colin Burgess excavated the earthwork remains of a settlement on the lower slopes of the hill around 370m north-west of the hillfort. The site appeared to have been occupied as early as the Bronze Age with the main period of activity occurring in the Romano-British period when there were up to ten round, stone-built huts situated on terraces within a stone-walled enclosure (Burgess 1970; 1984, 168-9). The site was later re-occupied in the medieval period with the construction of a rectilinear building and refurbishment of part of the enclosure wall. Between 1976 and 1977 an archaeological survey of the hillfort of Little Hetha on the north side of the hill recorded that the site had been extensively disturbed by stone robbing and quarrying, though sufficient earthworks survived to indicate the site possessed three concentric ramparts (Topping 1999). At the same time, survey work recorded a series of possible prehistoric cultivation terraces on the north and west sides of Great Hetha, following the contours of the hill and extending up the slope to a height around 80m below that of the hillfort (Topping 1981a, 17).

The English Heritage survey carried out in 2000, and the subject of this report, was the most thorough and extensive survey of the hillfort and its environs up to that date. It is the first to find convincing evidence of settlement within the hillfort and to investigate the immediate environs of the hillfort, noting extensive evidence of quarrying on the lower slopes of the hill presumably contemporary with the construction of the hillfort. The documentary research undertaken as part of the survey was limited to a review of the secondary sources and readily available primary sources.

4. DESCRIPTION AND INTERPRETATION (Figures 5, 6 and 7)

Summary

The hillfort itself almost certainly dates from the Iron Age, based largely on the form and topographic setting of the monument, although this has yet to be established through excavation. The field investigation discovered that the hillfort has three identifiable phases of development. The earliest phase, part of the perimeter of which is visible immediately to the north-east and south-west of the fort, underlies the fort's outer rampart. There is little evidence with which to date this earliest phase although an Iron Age date is probable. The second phase almost entirely occupies the site of the earlier phase and appears to consist of just the outer rampart with entrances on the north-east and north-west sides. The survey found no reason to discount the existence of the north-west entrance as George Jobey evidently did by not showing it on his published plan (Jobey 1965, 42). In the third phase, the hillfort was subsequently strengthened by the construction of the more massive inner rampart, although at the same time the defended area was reduced on the north-east by the alignment of the new rampart up to 30m inside the perimeter of the existing defences. There is no evidence for an entrance through the inner rampart at the north-east: this implies that the ground in between the two ramparts was effectively lost to the occupied area of the hillfort, the only way in being on the north-west in line with the opening through the outer rampart. The inner rampart survives as a massive spread of rubble with virtually no covering of grass.

Nine circular hut platforms were identified within the inner rampart but none were found in the gap between the two ramparts on the north-east side, although this is the largest area of level ground in the hillfort. There are extensive traces of surface quarries and worked outcrops within the inner rampart and further quarried outcrops occur outside the hillfort, particularly on the north-east slope. Since there are no other stone-built structures in the vicinity, the majority of this quarrying probably took place in the Iron Age in connection with the construction of the hillfort defences. A small shelter and adjacent enclosure between the two ramparts on the north-east side are later in date and probably indicate the abandoned hillfort was used for penning livestock. The blocking of the north-west entrance and the construction of a slight bank on the crest of the inner rampart (which only survives intermittently) further suggest this re-use of the interior. Other than this, the ramparts appear to have suffered only minor disturbance caused by building a small shelter and cairns. Apart from the evidence of quarrying, the only feature noted outside the hillfort was the remains of a slight bank 130m to the west that may be a prehistoric cross-ridge dyke.

4.1 The univallate hillfort-Phase 1

The earliest enclosure on this hilltop appears to have been roughly oval shaped and aligned north-east to south-west following the orientation of the summit. The visible remains of this enclosure are defined by the two crescentic scarps that run out from under the base of the outer rampart and arc outside the north-east and south-west ends of the fort. Both scarps project up to 5m forward of the line of the outer rampart and are up to 1m high but are subtle and hard to detect compared to the more upstanding earthworks of the second and third phases. The rest of the perimeter appears to underlie the outer rampart but this relationship is only clearly visible on the east side of the hillfort where the scarp runs for a distance of 50m southwards along the base of the rampart. The maximum (inferred) internal dimensions of this early enclosure are

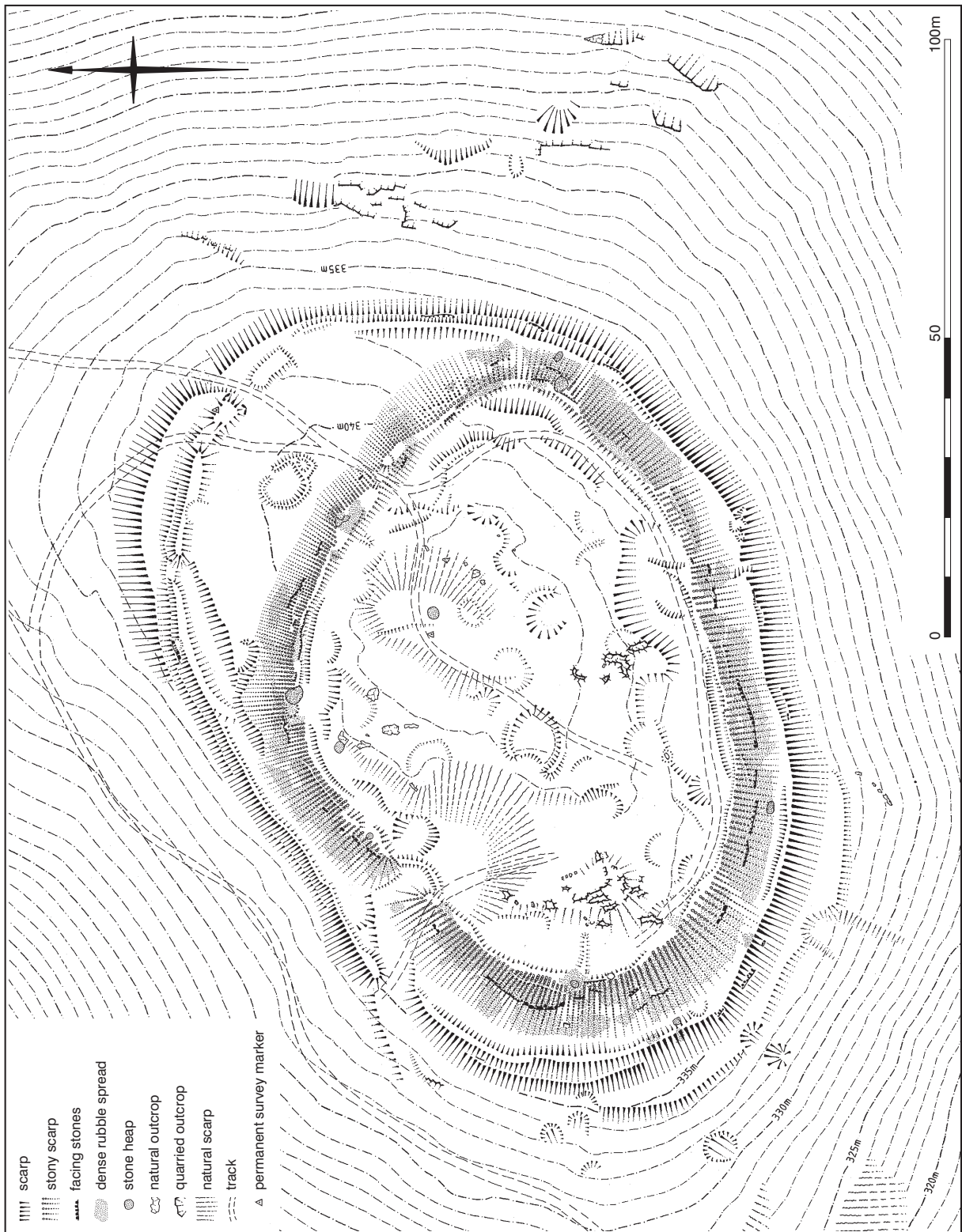


Figure 5. English Heritage plan of the hillfort (reduced from 1:500 scale original)

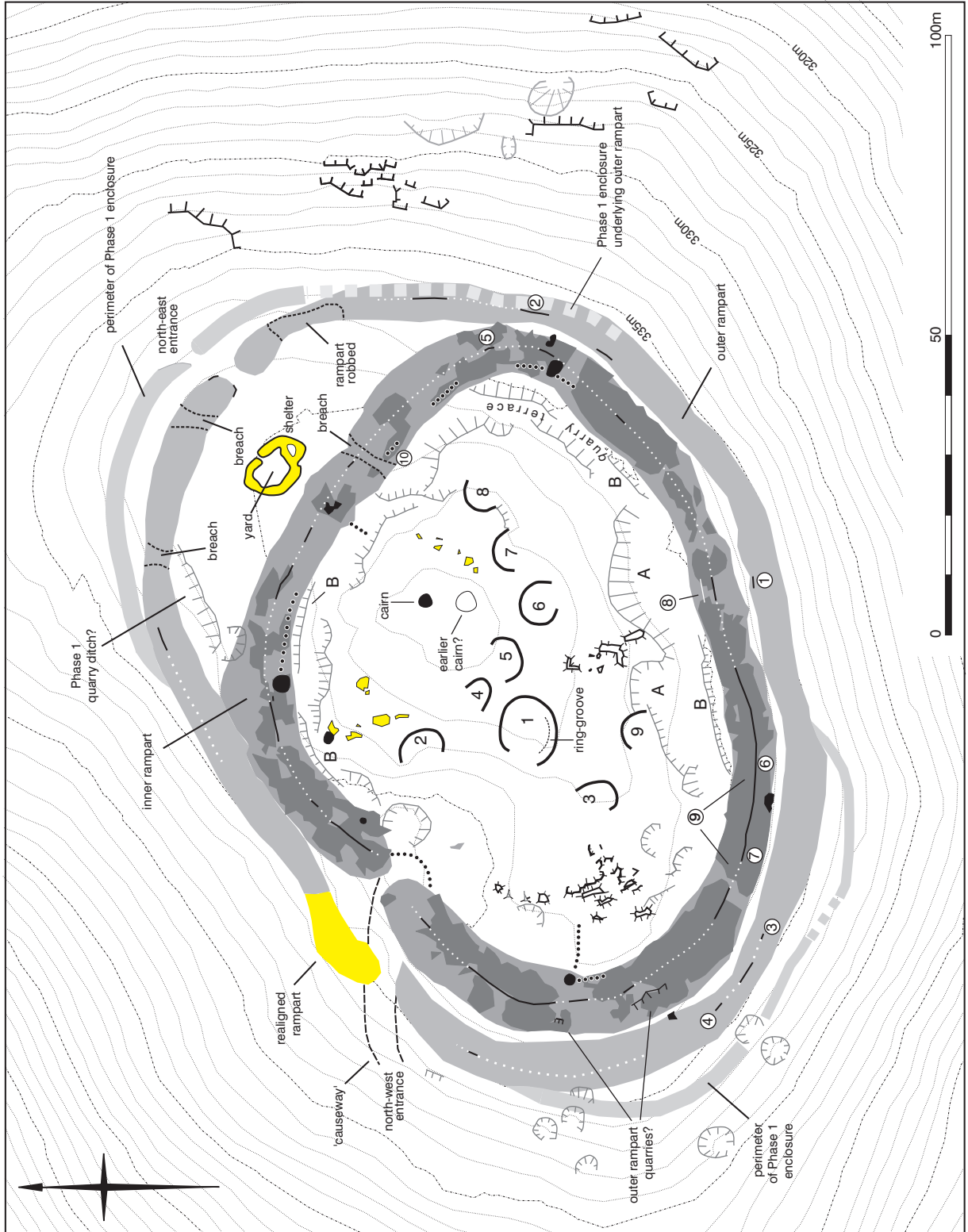


Figure 6. Interpretative plan of the hillfort

therefore around 145m x 95m with an area of 1.1ha (2.7 acres), the summit of the hill falling at the approximate centre. The perimeter of the enclosure mostly respects a natural break of slope where the steep sides of the hill begin to level off onto the summit. As a result, the perimeter follows a fairly level course, the east side being only about 2m higher than the west, but this slight west-facing tilt is not at all apparent on the ground.

The south-west scarp is strongest where it faces west overlooking the approach to the hillfort's north-west entrance, and this might have been re-cut to create the effect of a rampart during the later phases of the hillfort. The same scarp is also cut by several shallow quarry scoops that are probably contemporary with the construction of one or both of the later stone ramparts demonstrating that the scarp pre-dates the second and third phases of the hillfort.

There may have been an entrance into the enclosure on the north-west in line with that into the later hillfort (see below) but all evidence has been lost due to the remodelling of the passageway during the life of the fort. The evidence for an entrance on the north-east side however is clearer because the perimeter of the enclosure deliberately turns inwards to define the north side of the 4m wide passage. The opposite side is not as clear, whilst the ground in between is unmodified natural slope with no sign of wear suggesting the entrance did not experience prolonged use. The ground immediately outside the entrance slopes away steeply to the north-east and east (Figure 2) and therefore the only practical line of approach is obliquely from the north which suggests the entrance may have been sited with defence in mind. Although the purpose of the enclosure otherwise remains obscure, the apparent need to protect the entrance is slight evidence that site was primarily defensive and it is not unreasonable to speculate that a bank or palisade would probably have topped the perimeter. Although no direct evidence of either was found, it is possible that a 20m long stretch of quarry ditch on the north of the hillfort belongs to this phase, suggesting that material may have been quarried to construct a bank. The quarry ditch is up to 0.4m deep and runs alongside the back of the Phase 2 outer rampart. However, despite this proximity, its alignment more closely reflects that of the Phase 1 perimeter scarp: also at the north, the outer rampart appears to run across the line of the ditch. Though the ditch does not emerge on the opposite side, it nevertheless suggests that the quarry ditch is earlier than the rampart. Both this relationship and its alignment suggest that it is therefore associated with Phase 1.

4.2 The univallate hillfort-Phase 2

The second phase of the hillfort is marked by the outer of the two upstanding ramparts. The rampart consists of a stone bank, now mostly covered in grass, which represents the collapsed remains of a drystone wall, the outer face of which is visible as an intermittent line of foundations. Around most of the circuit the wall is aligned on top of the scarp defining the perimeter of the earlier enclosure (described above). This relationship demonstrates that the outer rampart post-dates the earlier enclosure though the two share broadly the same plan and orientation. The Phase 2 hillfort encloses an area of 0.8 ha (1.9 acres) and is slightly shorter than the earlier enclosure lengthways at 135m because the rampart turns inside the perimeter of the enclosure on the north-east and south-west sides.

The outer face of the rampart is greatest on the south and west sides where it is around 2.5m high declining to between 1.5-2.0m on the north side and on the south-west, and is weakest on the north-east with a height of between 0.3m and 0.5m. In part, the lack

of height of the north-east section is because the defence is not aligned on top of the Phase 1 perimeter. On the south-west of the hillfort, where the outer rampart wall and the earlier scarp also diverge, the slope below the wall was cut back to maintain the external height of the rampart, suggesting a desire to reinforce the defence, or increase the display aspect on this side. There is no evidence of an outer wall face on the north-east suggesting this section might have been a bank of simple dump construction rather than a faced stone wall. There may have been a timber palisade on the crest to make it an effective barrier. The minimal height of the bank is likely to result from later robbing although there is the alternative possibility that it was never finished. The survey discounted this because there is no evidence of the kind of discrete dumps of material which would have been left if construction had come to an abrupt halt. Also, later robbing is the best interpretation of why virtually nothing of the bank survives immediately to the south of the north-east entrance. No evidence of robbing on this scale was found anywhere else around the outer rampart.

The outer face of the wall survives as intermittent foundations about 1-1.5m below the crest of the rampart. There are no comparable foundations on the inside of the rampart suggesting the internal face of the wall was not raised to any great height. Therefore, assuming the wall had a level top and was not much more than 0.5m high on the inside, the exterior probably did not exceed 2.0m in height. Adding this figure to the height of the underlying scarp then it is not unreasonable to suggest that the outer face of the rampart would have been around 3-3.5m high around most of the circuit, apart from on the north-east where there would have been just the wall. The width can be estimated with a fair degree of confidence at about 3-4m, this being the distance between the outer wall face and the crest of the rampart. Despite the overall height of the rampart, the minimal inside face would have left the defenders largely unprotected and therefore it is possible that a timber palisade originally surmounted the wall, although no physical evidence of this was found. A foundation of small square blocks on the crest of the rampart (Figure 6: no. 1), may have provided the base for such a timber palisade. However, the vegetation obscures the relationship between these stones and the underlying bank and so it is not certain if the footings are an original part of the outer rampart or post-date the collapse of the wall.

In places where the core of the wall has been exposed by erosion it appears to be mostly formed from small fist-sized stones. There is probably also a significant soil fraction explaining why the collapsed wall supports a healthy covering of grass. If this interpretation is correct, it suggests the material forming the core of the wall could have come from shallow surface scoops which is perhaps why there are no deep quarry features in close proximity to the outer defence to compare with those around the inside of the inner rampart (see 4.3). The only quarry trench noted in this position was on the north side of the hillfort where a 0.4m deep cut runs alongside the back of the outer rampart for a distance of 20m but as was discussed above, this may belong to the Phase 1 defences. It is also possible that material was robbed from the Phase 1 defences if, as seems probable, a bank surmounted the perimeter scarp. Also, at the west end of the hillfort, several small quarried outcrops are visible, partially buried below the later tumble of the inner defences. They could be contemporary with the construction of the outer defences as quarrying of rock exposures probably took place to get sufficient stones of the right size and shape to construct the outer face of the wall. This stonework ranges from small, roughly squared blocks to much larger flat slabs that clearly can only have been split from rock exposures. At the base of the wall, the flatter slabs are used in the manner of header and stretchers since they are either laid with their long axis parallel with the wall face or at right angles to it. On the south-east side of the fort, the foundations include a flat slab over 1m in length

laid along the line of the wall (Figure 6: no. 2) and on the south side two slabs overlying each other preserve a fragment of the original drystone wall face (Figure 6: no.3). Slabs laid longways along the wall face probably produced a less stable structure than when they were used as headers and were firmly embedded in the core as is the case on the south-west side (Figure 6: no. 4).

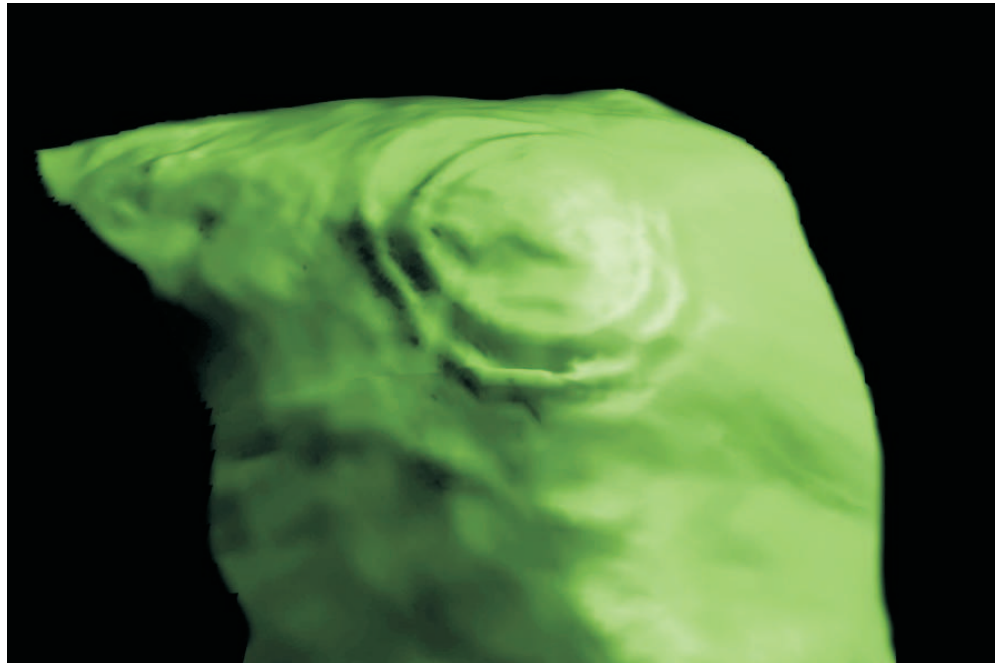
The north-east entrance in the outer rampart is a 3m wide opening in line with the entrance into the earlier enclosure. It is defined by the rounded and slightly wider terminals of the rampart, which may have been revetted as two short lengths of kerbstones survive at the base of the rampart on the north side of the passageway. There is little evidence of wear at the entrance other than a slight scarp that continues the inward curve of the slope defining the north side of the Phase 1 entrance. To the west of this entrance are two further gaps in the rampart, but both of these appear to be later breaches, and are most probably associated with the later re-use of the hillfort as a stock enclosure (see 4.5).

The north-west entrance is more readily accessible than the north-east, as it faces towards the saddle on the west side of the hill; this was probably the main route used to approach the hillfort in this second phase. It also has the advantage of a broad natural hollow on the inside which would have afforded more room for movement immediately within the entrance and permitted an easier ascent into the interior. The entrance is 5m wide and is defined on the south-west by a clear in-turn of the rampart, whilst on the north-east the bank widens to form a rounded terminal. With these clearly defined sides and with no evidence that the rampart ever continued across the gap, there is no evidence to discount this as an entrance as Jobey evidently did by not showing it on his published plan (Jobey 1965, 42). A 20m stretch of rampart on the north-east side of the entrance appears to have been realigned as it makes a distinct change in angle outwards from the line of the defences. This offsetting helps to define the oblique approach to the later, north-west entrance through the inner rampart and therefore the realignment is likely to have occurred when that rampart was added to the defences during Phase 3. It is probable that in its original form, as part of the univallate hillfort, the two sides of the entrance were in line although there is now no evidence surviving of the original alignment of the rampart on the north-east side. This re-alignment of the outer rampart to accommodate the entrance to the later inner enclosure is the strongest evidence that the outer defences pre-date the inner and also demonstrates that the univallate perimeter was incorporated into the defences of the bivallate hillfort.

4.3 The bivallate hillfort-Phase 3

The development of bivallate defences in Phase 3 brought about a significant contraction in the defended area as the new, inner rampart excluded the eastern end of the univallate fort. This was done by aligning the rampart along a slight ridge on the east side of the summit, and though this gave the rampart strength it effectively reduced the defended area to 0.4ha (1 acre) with maximum internal dimensions of 100m east-west x 70m north-south. Despite rising onto the crown of the hill, the east side of the inner defences is no more than 3m higher than the west. Since there was no entrance on the east side of the inner rampart, the level, crescent-shaped piece of ground stretching beyond it up to the outer rampart was effectively isolated from the core of the hillfort; the only way to it being by a circuitous route from the north-west inner entrance along the gap between the Phase 2 and 3 ramparts. Given the difficulty of access, the area would probably have been of little practical use, even as a livestock corral.

Figure 7.
Digital terrain
model of the
hillfort viewed
from the west



Where the inner and outer ramparts are contiguous (Figure 8) the Phase 2 rampart shows no signs of robbing and could have retained a defensive role. This is particularly demonstrated by re-alignment of the north-west entrance through the outer rampart described earlier which was to accommodate the oblique angle of approach to the inner entrance. However, the strength of the hillfort would have been severely compromised on the north-east by the comparative weakness of the outer rampart and by the 30m gap between it and the inner rampart. Also there is no evidence that the inner and outer ramparts closed at the north-east and north-west corners where the two defences diverge, thereby leaving the outer rampart vulnerable to being outflanked. Given these points, it is possible that the retention of the outer rampart in Phase 3 was less connected with defence as with creating a display of strength to the west which, as has already been discussed, was probably the main direction of approach to the hillfort.

The rubble bank of the inner rampart represents the collapsed remains of a stone wall and is virtually continuous around the entire inner circuit, though the amount of stone in the make-up does vary quite noticeably. The stone rubble consists of angular, fist-sized stones and smaller pieces of splintered rock from the core of the collapsed wall, inter-mixed with roughly squared blocks and slabs which are more likely to be displaced facing stones. An intermittent line of *in-situ* facing stones indicates the position of the outside edge of the wall which is also picked out by a slight break of slope where no stone footings survive. The greatest quantity of stone is on the west and south-west side of the hillfort suggesting the bank was more massively constructed where it faced towards the probable main approach route via the saddle. In this section, the rampart is up to 4m high and the outer wall face is around 1.5-2m below the crest, the slope below having been created by artificially steepening the hillside. Elsewhere around the circuit there is generally less quantity of stone and in places the spread of stone is thin enough to afford glimpses of underlying vegetation. On the north, south-east and east sides the rampart declines to a height of around 2.5m and the outer wall face is generally 1-1.5m below the crest.

The inner face probably ran along the crest of the rampart and although a few fragments of wall footings survive in this position, there is the distinct possibility that

most are later than the hillfort and post-date the collapse of the wall, as will be discussed in more detail below. The thickness of the wall prior to its collapse can be estimated with reasonable confidence at around 3-4m, this being the distance between the surviving sections of the outer wall face and the crest of the rampart. The distance increases to 7m for a short section on the east side but some of this additional width might be due to later slippage of the wall face down the slope of the rampart. As with the wall on the crest of the outer rampart, assuming an internal height of only 0.5m and a level top, the outer face of the inner wall could have been around 2.5m high on the west and south-west and around 1.5-2m around the rest of the circuit. The suggestion that it was higher at the west and south-west is justified by the greater quantity of stone occurring in this sector of the rampart. With the addition of the underlying slope, the overall height of the rampart would have been a maximum of 4.5m on the east and south-east sides and about 3m around the rest of the circuit.

There are more sections of wall foundations visible within the rubble make up of the inner rampart than was the case with the outer rampart. Many of these stretches are also longer and far better preserved and hence give more of an insight into the construction of the wall face. Flatter slabs were used more frequently than boulders or smaller stones for the foundation course, and most were laid with their long edge facing outwards in the manner of a stretcher. However, some slabs appear to have been roughly trimmed into a wedge shape for use as header stones, as on the east side of the hillfort (Figure 6: no. 5). Here the thin end of a wedge-shaped stone remains where it would have been firmly embedded in the core of the bank.

In several sections, further flat slabs rest on top of the foundations to make a second course as for example on the east of the hillfort where the resulting wall face is 0.5m high (Figure 6: no. 5). Occasionally flat slabs are laid on their edges, presumably to give the foundation course slightly more height as on the south side (Figure 6: no. 6), though this must have compromised the overall stability of the wall. The best



*Figure 8.
View looking west of
the south side of the
hillfort showing the
outer rampart (left)
and the more massive
remains of the inner
rampart (right)*

*Figure 9.
The external face of
the inner rampart
wall on the south
side of the hillfort
(for location see
Figure 6: no. 7)*



preserved section, which is on the south side of the hillfort, stands to a height of 0.7m and comprises three courses of closely interlocked square shaped blocks rather than flat slabs (Figure 6: no. 7; and Figure 9).

The rubble core mostly appears as an unconsolidated jumble, though on the south side of the hillfort there is a distinct kerb of roughly laid blocks about 1m inside the outer face of the wall which here is clearly defined by two courses of flat slabs (Figure 6: no. 8). Logically the kerb must have been within the core of the wall because it is at the same relative height as the outer wall face and therefore would not have been exposed at the surface. Instead, therefore, the kerb of stones must represent a structure within the wall reflecting the fact that stones were not thrown together haphazardly to make the core but were carefully placed in rows and built up in courses. Laying out the stones in this way would have given the wall greater internal strength than if the core had been just a loose jumble of rocks and would have gone some way to counteract the tendency of the wall to slip down the underlying slope. Similarly, on the south-west corner of the hillfort (Figure 6: no. 9), several lines of stones are visible in the exposed core of the wall stepping up the slope of the rampart above the line of the outer wall face. None look like the foundations for a wall face and it is possible therefore that they similarly represent construction lines within the core.

Short stretches of wall foundation occur intermittently around the crest of the rampart. Its thickness can be estimated at between 1-1.5m since in places the lines of both the inner and outer faces survive. The stones used in the foundation of this wall are generally much smaller than those employed in the outer face and nowhere does a second course of stonework survive. On the east side of the hillfort (Figure 6: no. 10), the stones appear to be set into a shallow rock-cut trench but elsewhere they appear to just rest on the ground surface. There is no evidence that these wall foundations are the same date as the inner rampart, and in all probability they

post-date the collapse of the inner rampart wall and are connected with the use of the abandoned fort for the coralling of livestock in the post-medieval period (see 4.5).

Within the inner defences most of the quarrying is directly associated with the construction of the Phase 3 hillfort and appears to have taken place within 10m of the top of the rampart. This zone of quarrying is evident on all but the west side of the hillfort and in places the natural slope has been dug away sufficiently to create a distinct terrace. This is most notable at the east end where a series of broad quarry faces up to 1.0m high combine to create a 10m wide terrace at the rear of the inner rampart. A much wider terrace on the south side of the inner rampart is partially a natural break of slope but it has been accentuated by cutting into the hillside creating a sinuous quarry face up to 1.2m high (labelled A on figure 6). On the north and north-east sides the terrace is less well defined and formed by a discontinuous series of shallow scoops and hollows mostly within 5m of the crest of the inner rampart.

The proximity of the quarrying to the inner line of defences is strong evidence that it took place in the Iron Age to provide material for the construction of the inner rampart wall. Less certainly of Iron Age date are a series of steep-sided cuts that run parallel with the inside edge of the inner rampart and are no more than 2m back from its crest (labelled B on Figure 6). The longest and deepest of these features is on the south side of the hillfort interior where the cut edge is up to 0.5m deep and 22m long. Around 25m to the east there is a second shallower cut on the south side, whilst two further straight-sided cuts are visible on the north side of the hillfort. The eastern of these two features appears to cut through the tumble at the rear of the inner rampart indicating it post-dates the collapse of the wall. It may be a quarry trench to provide material for the adjacent slight stone wall on the crest of the rampart which also appears to post-date the collapse of the inner rampart bank. The same could explain the other sections of long, straight quarry edges although there are no wall footings associated with these.

Several rock outcrops inside the inner rampart were also extensively worked although which of the ramparts the material was used in is impossible to ascertain. The most intensive exploitation occurred on the west side where a series of rock exposures over an area of 25m x 15m have been split, fractured and reduced almost to ground level. The ground between the exposures is pitted and uneven suggesting quarrying has been continuous across the area. A small area of exposures on the south side of the interior shows similar evidence of quarrying and the ground around is likewise pitted. Although other exposures are visible on the north and west sides of the hillfort interior, they show no clear evidence of having been worked since they have naturally rounded profiles.

There is one definite entrance through the inner rampart. It is on the north-west side of the hillfort and is offset 5m to the east of the Phase 1/2 entrance through the outer rampart. It was discussed above that the creation of this oblique line of approach appears to have led to the realignment of the rampart on the north-east side of the outer entrance. The angled route through the two ramparts is emphasised by a north-facing scarp that runs between the outer and inner entrances and continues for a further 15m outside the hillfort before fading into the natural slope. The feature appears to have been a deliberate attempt to define a 'causeway' into the interior of the bivallate hillfort and is therefore probably Iron Age in date. The offsetting of the entrance gaps also allows the outer entrance to be more effectively protected by the inner rampart immediately to the east. Rounded terminals defined by stone tumble mark the entrance passageway, which is 3m wide and slightly in-turned. The entrance

is blocked by a curving, 0.4m high, stony bank. It is far less substantial than the inner rampart and is connected with the re-use of the interior for coralling livestock after the abandonment of the hillfort. The north-east entrance depicted by George Jobey (Jobey 1965, 42) is a later breach and is discussed below (see 4.5).

4.4 Hillfort occupation

The only possible Iron Age structure previously recorded in the interior of the hillfort was the 'guardhouse' immediately inside the north-west entrance (MacLauchlan 1867, 38). An oval-shaped scoop in approximately the position of the 'guardhouse' shown on MacLauchlan's plan (see Figure 3) appears to be the remains of a quarry hollow and therefore the suggestion of a 'guardhouse' at this entrance can be dismissed.

Discounting the 'guardhouse', the sites of nine probable timber huts have been identified inside the inner rampart, most represented by circular platforms slightly scooped into the hillside. Structures 1-4 form a group arranged around the top of the natural hollow inside the north-west entrance and these huts would have dominated the view of anyone coming into the hillfort from this direction. Four other huts (Structures 5-8) occupy a natural terrace on the south-east side of the hillfort whilst Structure 9, overlooking a quarried area, is the most southerly hut site.

Structure 1 is the best preserved and largest of the hut sites and occupies the crest of the slope overlooking the north-west entrance. It is defined by a circular platform 7.5m in diameter, the east side of which is cut into the natural slope to a maximum depth of 0.2m. The north and south sides are picked out by a curving stony bank up to 0.3m high but the platform is open to the west where the front edge is cut into by a slight erosion scar. On the west side of the platform, immediately inside the bank is the arc of a 'ring-groove' some 0.05m wide and up to 0.05m deep, mainly evident as a stripe of greener grass. The groove does not continue as a surface feature around the entire platform, but it is reasonably certain that it marks the setting for a timber hut, indicating that the structure must have occupied virtually the entire platform. The 5m wide break between the banks on the west side of the platform is a strong indication that the hut probably faced west towards the north-west entrance into the hillfort.

Structure 2 also occupies a prominent site on the crest of the natural hollow overlooking the north-west entrance. A 0.2m high scarp defines the perimeter of a sub-circular platform up to 7m in diameter. The platform is open to the west, facing towards the hillfort entrance suggesting the hut probably faced in this direction.

Structure 3 is 10m to the south of the hollow but would still have been visible from the north-west entrance. The east half of the hut platform is defined by a curving scarp up to 0.3m deep and 5m in diameter. The west half of the platform has left no visible traces.

Structure 4 is close to Structure 1 and has the same open view towards the north-west entrance but is less certainly a hut platform as it is only 3m in diameter. It is a level area defined on three sides by a scarp cut into the slope up to the summit of the hill and is open to the west facing towards the north-west entrance.

Structure 5 is defined by a slight circular depression up to 7m in diameter and 0.2m deep on the south-west slope of the summit. The platform is open to the north, which may indicate that the hut faced in this direction towards the north-west entrance.

Structure 6 is a 5m diameter circular platform defined by a curving scarp cut into the hillside to a maximum depth of 0.2m. The platform is open to the south suggesting the hut faced in this direction: its east side is marked by a 6m length of minimal bank.

The north sides of both Structures 7 and 8 share a common sinuous scarp, which may have originated as the edge of a quarry. It begins less than 2m to the east of Structure 6 and curves to define the back edge of a possible south-facing hut platform (Structure 7) about 4m in diameter and 0.2m deep. Some 5m further west the same scarp curves to form the back of a second possible hut platform (Structure 8) around 5m in diameter and 0.3m deep and again open to the south.

Structure 9 is a circular platform around 5m in diameter and cut some 0.2m into the base of the hillside. It is open to the south suggesting the hut faced in this direction. With quarry faces to its east and south there is the slight possibility that this is not a hut platform but a continuation of the quarrying.

No evidence of Iron Age occupation was noted in the area between the two ramparts on the east side of the hillfort, which is surprising given that this is the largest area of level ground on the hilltop. The conclusion to be drawn from this is that the main period of identifiable occupation represented by the nine hut sites occurred in the third phase of the hillfort when the inner circuit provided the main defence and the east side of the univallate fort was abandoned.

4.5 Later activity

As all previous surveys have noted, there are the quite distinct remains of a small shelter and adjacent yard in the level area between the inner and outer ramparts on the north-east side of the fort. The roughly oval shelter is on the south-east side of the yard and is defined by a stony, flat-topped bank up to 0.3m high. It is 4m x 3m and the outside face of the bank on the west side of the shelter incorporates a crude wall face formed by three roughly squared stones. Above the level of this wall, the sides of the shelter were probably of turf construction and have left no visible trace.

The perimeter of the yard is built off the north side of the shelter and is a stony bank up to 0.2m high on the outside, though slightly deeper on the inside suggesting erosion has taken place through the penning of livestock in the yard. On the north-east there is a 1m wide gap in the perimeter with one large stone set into the bank on either side. There can be little doubt that this is the original entrance into the yard. The small size of the shelter indicates this is more likely to be a seasonal shieling than permanently occupied habitation.

There is a range of evidence for the use of the ground inside the inner rampart after the abandonment of the hillfort. Mention has already been made of several short stretches of lightly-constructed stone foundations following the crest of the inner rampart which appear to post date the collapse of the inner rampart bank, and of the quarry trenches which are possibly associated. This evidence, along with the remains of a stony bank blocking the north-west entrance also described above, suggests that the interior of the hillfort might have been re-used as a livestock enclosure, the various foundations and the bank representing the base of a timber fence. The small scale of the works does not support the alternative possibility that these features represent an attempt to refortify the site. The blocking of the north-west entrance probably went with the opening up of a new entrance on the north-east side of the inner rampart where a 3m wide gap has clearly been made through the collapsed

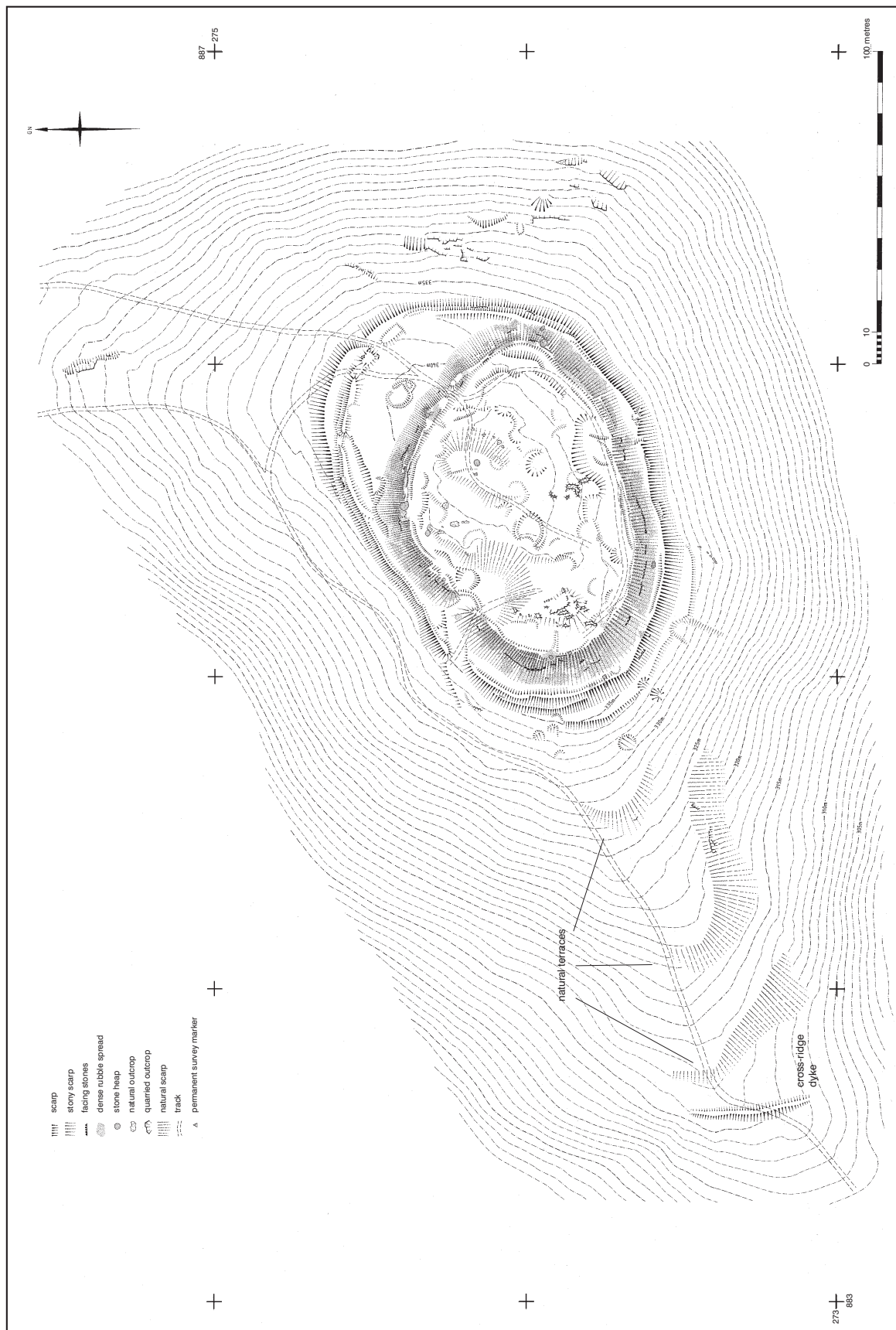


Figure 10. English Heritage plan of the hillfort and its immediate environs (reduced from 1:500 scale original)

bank. This is firmly discounted as an original Iron Age entrance and its close proximity to the shelter suggests it was made to link the shelter to the inner rampart pen, establishing the two are likely to be contemporary.

Although it is possible the interior of the hillfort was transformed into one large livestock enclosure, there is also slight evidence of livestock pens built off the inner rampart. Some 25m to the south of the blocked north-west entrance, a minimal stony bank runs 10m from the top of the inner rampart to the base of a quarried outcrop. This might have defined the edge of an animal pen occupying the level ground back towards the blocked hillfort entrance. A minimal bank at right angles to the crest of the inner rampart on the opposite side of the hillfort might indicate a further livestock pen.

The inner rampart has suffered minor damage from the heaping up of stones at several points into cairns. The largest area of damage is on the north apex of the inner rampart where a 5m stretch along the crest has been mostly cleared of stone, the larger pieces only going into the adjacent 1.5m high mound. The deliberate selection and piling up of larger stones may have been for construction work off the site or it might have been for building the perimeter of the suggested animal pen. It is notable that one stretch of foundations defining the pen begins immediately to the east of this mound and several other foundations have similar mounds close by. Stone must also have been taken from the inner rampart to make the insubstantial cairn on the summit. A 0.2m high mound 5m to its south may represent the base of an earlier summit cairn. One of this two cairns probably marks the site of the trigonometrical station marked on the first and second edition Ordnance survey maps (Ordnance Survey 1864 and 1897).

4.6 The exterior of the hillfort (Figure 10)

Some 130m west of the hillfort, and 25m below the level of the outer rampart, are the solitary remains of a low bank. The west, downhill face of the bank is up to 0.4m high but only 0.1m on the opposite side. The feature is 40m long and is aligned north-south directly across the ridge defining the natural route of approach to the hillfort from the west. At either end, the bank disappears into the steepening slope of the hillside below the ridge and there is no evidence that it continued any further. It is too insubstantial to have had any defensive function and with no evidence of any other banks in the vicinity or any sign of cultivation, it is unlikely to be a field boundary. It is therefore best interpreted as a territorial boundary or cross-ridge dyke that by linking the north and south sides of the hill divided off the summit from the lower ground to the west. With no other evidence of activity in the vicinity, it is probably contemporary with the hillfort.

Quarrying outside the fort seems to have been most intensive on the east where a line of outcrops between 2m and 15m below the outer rampart has been exploited. The exposed faces are around 1-1.5m high and have a sharp angular appearance contrasting with the rounded profile of naturally weathered outcrops elsewhere on the hilltop. With no drystone walls in the vicinity it is reasonably certain that this quarrying took place to provide material for the construction of the hillfort defences, presumably providing some of the larger flat slabs used in the construction of the rampart faces.

Small outcrops on the sides of the two of the natural terraces on the west side of the hillfort have also been quarried but here the worked faces are no more than 0.5m high

and cannot have provided anything more than small fragments of rock. Closer to the outer rampart on this same side, are several sub-circular scoops up to 0.5m deep, which represent surface digging for stone, presumably for rampart construction. It has already been mentioned that several hollows cut into the perimeter of the first phase enclosure on this side of the fort. Finally, an isolated outcrop 0.5m high and 70m to the north of the hillfort has also been worked for stone.

5. DISCUSSION (Figure 11)

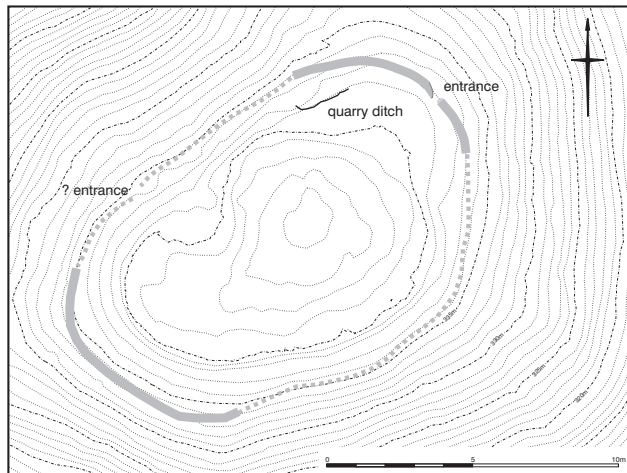
5.1 The hillfort

An important result of this field investigation is the discovery that the hillfort has three identifiable phases of development and that all three are likely to fall within the Iron Age, based on their form and topographic setting. The most enigmatic is the first phase and with only two short lengths of perimeter visible, it is clearly difficult to arrive at any firm conclusions as to the date and purpose of the enclosure. That it is the earliest phase in the development of the site is demonstrated by the fact that the scarp is clearly overlain by the bank of the outer rampart on the east side of the hillfort. Furthermore, several quarry hollows from the construction of the stone ramparts cut the scarp on the south-west side of the hillfort demonstrating that the scarp must be earlier than the ramparts. Similarly, the quarry ditch on the north of the hillfort, which may have been for the construction of a bank on top of the enclosure scarp, appears to be overlain by the outer rampart bank. This indicates that the outer rampart post-dates the quarry ditch and therefore reinforces the likelihood that the enclosure is the first phase.

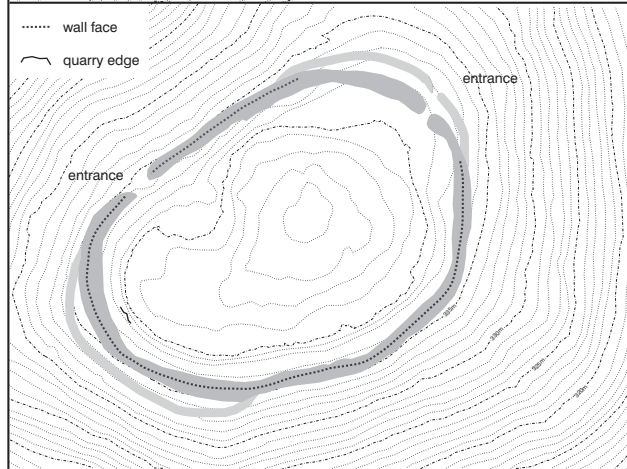
There is the slight possibility that the Phase 1 enclosure could be as early as the Neolithic, and there are the remains of a possible Neolithic or Early Bronze Age stone circle in the valley bottom on the south side of the hill (Topping 1981b). However, the close plan relationship between the first phase enclosure and the subsequent phases of the hillfort hints at a degree of continuity, as does the fact that the first and second phases share a common point of access on the north-east. On balance, an Iron Age date for the first phase of the hillfort is the most likely as is the likelihood of it being a short-lived precursor to the Phase 2 rampart.

As to the function of the enclosure, the possibility of a defensive role is suggested by the way the north-east entrance faces out towards a steep slope. This makes no practical sense if the enclosure was primarily for livestock but the position does strengthen the entrance by restricting access to an angled approach from the north. This is a slight indication that the enclosure itself might have been sited primarily for defence. With the addition of a timber palisade along the crest of the perimeter scarp, it could have made a defensible enclosure surmounting the hilltop. Admittedly no evidence of a palisade was identified at Great Hetha, but it is worth noting that a recent English Heritage survey suggests there was a timber precursor to the nearby stone-built hillfort on West Hill, 3kms to the north-east (Oswald *et al.* 2000, 10). Recent excavations have established the same sequence at the fort at Wether Hill in the Ingram Valley (Topping and McOmish 2000). Such a sequence was first identified more than fifty years ago by Stuart Piggot through his excavations of the stone-built hillfort at Hownam Rings in Roxburghshire and three examples were known from Northumberland by the mid 1960s (Jobey 1965, 23-4).

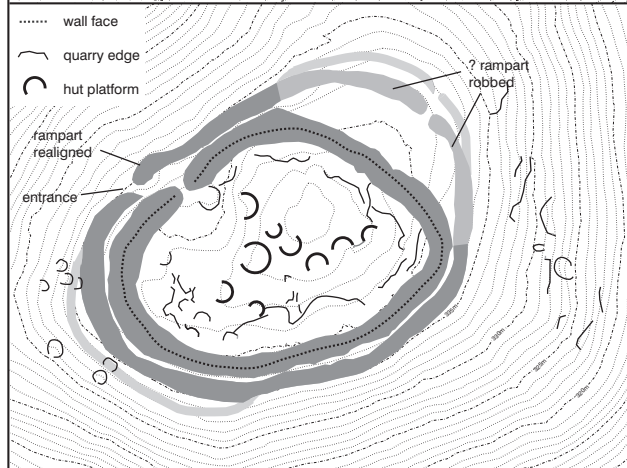
Although there is no unambiguous evidence for the relative dates of the inner and outer ramparts, the field investigation indicates that the outer is the earlier of the two and was closely aligned on the Phase 1 perimeter with entrances on the north-east and north-west. The divergence of the Phase 2 rampart from the earlier perimeter on the north-east and south-west remains unexplained although a slight increase in natural strength would have resulted from aligning the new rampart a short distance up slope. The surviving remains suggest that the Phase 2 rampart could have been as much as 3-3.5m high around most of the circuit with the top formed by a drystone wall. The exception was on the north-east where there appears to have been a comparatively



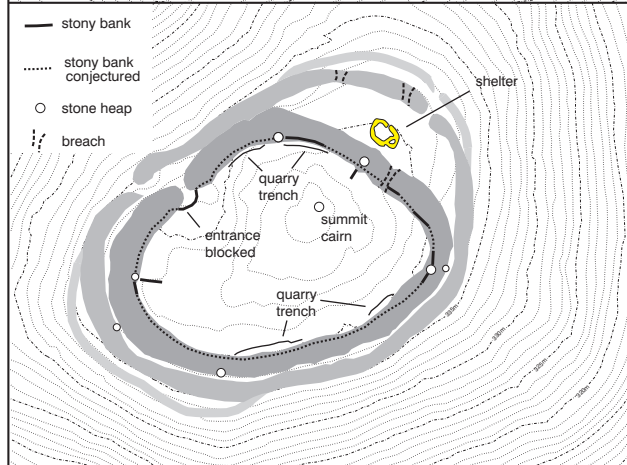
Phase 1



Phase 2



Phase 3



Post Iron Age features

Figure 11.
Interpretative
plans showing the
development of
the hillfort

insubstantial bank with no evidence of a drystone wall. This stretch may have been considered less important because it was on the opposite side of the hillfort to the saddle and therefore hidden from what was probably the main route of approach. Similar concerns certainly appear to have influenced the construction of the inner rampart in Phase 3, as will be discussed below.

That the inner rampart post-dates the outer is demonstrated by the layout of the north-west entrance which, although inexplicably not depicted on Jobey's plan, is clearly an original feature of the hillfort and not a later breach. Here the outer rampart on one side appears to have been realigned slightly further out in order to accommodate the oblique passageway into the hillfort created by the offsetting of the inner entrance. That the inner rampart post-dates the outer is also the logic of the entrance arrangements on the north-east side of the hillfort. Here, the absence of an original entrance through the inner rampart to match that through the outer suggests the north-east outer entrance was abandoned when the inner rampart was constructed. The reverse chronology makes no sense. If the outer rampart was later than the inner, this would have involved making an outer entrance into a part of the hillfort that was effectively isolated from the interior. Further evidence of sequence comes from the apparent robbing of the north-east outer rampart. The survey rejected the possibility that the reduced height of the outer defences on the north-east is because they are unfinished, in favour of it being evidence of robbing. Although some stone may have been taken to make the nearby shieling, this would not account for all of the robbing which, south of the north-east entrance, has been so extensive as to almost totally removed the rampart bank. The most likely context for robbing on this scale would have been to provide material for the construction or refurbishment of the inner rampart. The robbing establishes that the inner rampart post-dates the outer and that the section of outer rampart on the north-east was not retained as part of the hillfort defences in Phase 3. Although it is possible that the area behind the robbed bank could have been used for coralling livestock in the Phase 3, perhaps with a stockade on the crest of the bank, the poor access to the area from the interior would have restricted this use in practice.

Around the rest of the perimeter, there is no evidence for the robbing of the outer rampart which, on the contrary, appears to have been retained as part of the hillfort defences. However, the strength of the hillfort would have been severely compromised by the comparative weakness of the outer rampart on the north-east and the failure to create a barrier between the two defences on the north-east and north-west corners of the inner rampart. The incorporation of all, except the north-east section of the outer rampart in the Phase 3 defences, may therefore demonstrate less concern about defence, but more emphasis on displaying strength towards the main route of approach to the hillfort from the west.

The surviving evidence for occupation appears to be related to the third phase since all the hut sites identified by the survey are within the inner rampart. None were found on the north-east between the inner and outer defences even though it is the most level part of the hillfort. Also, it is noticeable that whereas four of the hut sites are arranged around the crest of the natural hollow overlooking the north-west entrance, none are positioned with a direct view towards the north-east entrance of the Phase 2 hillfort. This observation reinforces the suggestion that the huts belong to the bivallate phase of the hillfort.

The hut platforms in the interior of Great Hetha have not been noted by previous fieldworkers but are of a type which occurs widely in other neighbouring Iron Age

hillforts, such as at the Yeavinger Bell site (RCHME 1998) and at Glead's Cleugh, 6.5kms to the east of Great Hetha. Although few have been excavated, they are widely accepted as marking the sites of circular timber huts, however, the only indication of a building at Great Hetha is the single example of a 'ring-groove' (Structure 1) that probably marks the perimeter of a timber roundhouse. Crucially for dating, none of the hut sites at Great Hetha are defined by the kind of stony banks which occur on the excavated settlement at the north-west foot of the hill and were dated to the Romano-British period (Burgess 1984, 167-9). Consequently there is no evidence that the hillfort was occupied in the Romano-British period, unlike at some recently surveyed hillforts in the region such as West Hill, (Oswald *et al.* 2000, 17-19). Nevertheless, until proved otherwise by excavation, there is still the remote possibility that the construction of the inner rampart and associated huts post-date the Iron Age. As Richard Feachem pointed out, it is possible that Iron Age hillforts in the north of Britain were being improved or repaired as late as the seventh century AD (Feachem 1966, 85) and the tradition of constructing timber roundhouses could have persisted into the same period (Cramp 1995, 28).

Location

The site's dominant location on the summit of Great Hetha combined with the strength of its ramparts makes this one of the best defended prehistoric settlements in the north-east Cheviots and the term 'hillfort' is therefore an apt description. The enclosure and the first phase of the hillfort were laid out concentrically around the summit of the hill whilst the addition of the inner rampart interrupted the symmetry by encroaching on the crown of the hill. At West Hill the recent English Heritage survey observed that the hillfort dips markedly to the north, apparently to increase the visibility of the fort from the valley bottom below (Oswald *et al.* 2000, 53). No such tilt is apparent at Great Hetha although the natural topography was used to emphasise the view westwards towards the saddle (and the probable main route of approach). The defences were more massively constructed on this side and the impression of strength was enhanced by the tier of three natural terraces below which give the impression of multiple ramparts when viewed from the saddle below, an effect which was probably not lost on the fort-builders. Although there is no evidence that the terraces were adapted to appear rampart-like, it is possible they were surmounted by timber stockades that have left no surface remains.

Construction

Of the two lines of hillfort defences, the inner rampart was clearly stronger than the outer. This is not to say the outer rampart was weak since the estimated dimensions of the outer rampart wall at 3-4m wide and 2m high is comparable with the defences at West Hill (Oswald *et al.* 2000, 10-11) and the width of the inner bank recently excavated at Wether Hill (Topping and McOmish 2000, 6). The inner rampart wall may have been up to 2.5m high externally but the estimated width of 4-5m increasing to a possible 7m on the west made it far wider than that on the crest of the outer rampart. Both the inner and outer rampart walls clearly possessed an outer face comparable to the better-preserved external wall at the neighbouring enclosure at Sinkside, 1km to the south, where the tightly interlocking but roughly coursed face stands to over a metre in height for a considerable distance. Given the size of the inner rampart at Great Hetha, there must be doubts as to whether such a comparatively lightly constructed external wall face could have successfully counteracted the outward thrust of the core material behind it. The 'stacking lines' noted in places within the rubble core may have helped stabilise the wall in a similar manner to the

single-course transverse wall revealed in a section through the inner rampart at Wether Hill (Topping *et al.* 2000, 7). It is also worth considering that the inner rampart wall, (perhaps more so than the narrower outer rampart wall), might have had a stepped profile to decrease the risk of it collapsing forwards, as is evident with the inner rampart of the hillfort at Brough Law in the Ingram Valley (Jobey 1965, 40-41).

Post Iron Age use

The relative remoteness of the site appears to have largely spared it from damage through stone robbing, the focus of which locally appears to have been the defences of Little Hetha hillfort as it is more readily accessible at the north foot of the hill (Topping 1999). Here survey work has established that large sections of the innermost two ramparts have been reduced by stone robbing, presumably to obtain material in the medieval and post-medieval periods for constructing buildings and field walls and for surfacing tracks. At Great Hetha, the removal of stones from the collapsed walls appears to have been largely confined to the construction of slight banks and a shelter during a period when the site was used for penning livestock. Therefore, probably only a minimal amount of stone has left the site, if any at all. The shelter occupies the level area between the two ramparts on the north-east of the site and from its small size and attached pen is probably a seasonal shieling providing accommodation for a single herdsman.

On present evidence it is probable that the shelter is connected with the evident re-use of the area within the inner rampart for keeping livestock. This involved the blocking of the north-west entrance by a slight stony bank, the opening of a breach through the rampart on the north-east side near the shelter and raising further sections of bank on the crest of the collapsed rampart. An almost exact parallel re-use of an earlier hillfort occurs at the recently surveyed site at Fawcett Shank, 4.5kms to the south (Oswald 2000), where a curving bank similarly blocks an original entrance. There are also several pens and shieling-like structures. Several linear quarry trenches immediately behind the rampart may have been dug to get stone for the construction of these banks and the proximity of stone heaps to several of the banks suggests locations where selected stones were piled before being employed in construction. Presumably these banks were the foundations for wooden fences as by themselves they would not have been sufficient to control the movement of livestock. The presence of two slight banks at right angles to the inner rampart suggests the interior of the hillfort could have been sub-divided between several pens. The two breaches on the north-east of the outer rampart may have been made at this time to assist in the passage of livestock up to the shelter and the pens within the inner rampart. It is impossible to date this episode more securely than that it must pre-date McLauchlan's visit of 1860 since both the shelter and the blocking of the north-west entrance are shown on his plan (Figure 3). Although survey evidence indicates that other hillforts in the region were used for coralling livestock in the Romano-British period (Pearson *et al.* 2001, 46-7), the form of the shelter at Great Hetha is not typical of structures of that period. Romano-British buildings in the Cheviots are generally thought to have been stone-walled roundhouses with a much wider diameter than the shelter. The shelter is therefore more likely to be medieval or post-medieval in date and comparable to many other shielings recorded in the Cheviots (RCHME 1970). McLauchlan's identification of a possible beacon on the summit, although now no longer evident, indicates visits were made to the site for purposes other than animal husbandry, and more recently, walkers have probably been responsible for constructing the summit cairn.

5.2 The environs of the hillfort

There is no evidence that the upper slopes of Great Hetha were brought into cultivation when the hillfort was occupied although cultivation terraces of probable Iron Age date occur lower down the slope to the north and north-west (Topping 2000). The only feature within the surveyed area that might be contemporary with either the hillfort or the earlier enclosure is the low bank that crosses the saddle on the west side of the hill. This straddled what is interpreted as the main line of approach to the hillfort although no evidence for an entrance gap through the bank was noted. Outlying banks have been noted in association with several hillforts in the border region and these may have had a defensive function since they commonly have external ditches (RCAHMS 1967, 27). Such an interpretation of the bank at Great Hetha seems unlikely given that the earthwork could be outflanked relatively easily and that it does not appear to have had an external ditch. A land boundary with no real defensive role therefore appears a more likely interpretation and, with no other settlement in the vicinity, it is most likely to be contemporary with the hillfort, although with which phase is unclear.

6. METHODOLOGY

The field investigation was carried out by Trevor Pearson and Amy Lax with assistance from Al Oswald and Stewart Ainsworth. Bernard Thomason assisted with the initial control survey. A number of digital photographs taken by Stewart Ainsworth and Trevor Pearson are held on disk as part of the project archive.

The hillfort and its immediate surroundings was surveyed using Trimble 4800 and 4700 dual frequency Global Positioning Satellite (GPS) systems related to a permanently marked base station on site. The base station had previously been established using the GPS equipment and related to the National Grid (OSGB36) through a transformation programme which calculated its position relative to three Ordnance survey trigonometrical pillars. These were located on the summit of Blackchester Hill, 17.3kms to the south-east at NGR NU 00379 10250, Whitton Hill, 6.5kms to the north-east at NGR NT 92809 34584, and Linton Hill, 11.5kms to the west at NGR NT 78735 27954. Both the stations of the baseline traverse were permanently marked using brass rivets, and their National Grid references were calculated on the basis of the GPS data. Their positions are indicated on the 1:500 plans and in Appendix 2. Sufficient data points were taken with the GPS systems to contour the immediate vicinity of the hillfort at 1m intervals. The resulting plan was produced from the GPS data using Key Terra-Firma and AutoCad software and output at a scale of 1:500. The plot was checked in the field and further detail added to it by means of conventional graphical techniques using hand tapes.

The report was written and illustrated by Trevor Pearson using Corel Draw and Corel Ventura software and edited by Stewart Ainsworth. The site archive has been deposited in English Heritage's National Monuments Record, Great Western Village, Kemble Drive, Swindon SN2 2GZ to where applications for copyright should be made (reference number NT 82 NE 47).

© English Heritage 2001

7. ACKNOWLEDGEMENTS

English Heritage would like to thank Paul Frodsham of the Northumberland National Park for commissioning the field investigation and Iain Hedley for facilitating the project. Tim Gates gave permission to reproduce his aerial photograph, and the Duke of Northumberland gave permission to reproduce MacLauchlan's plan of the earthworks.

English Heritage is especially grateful to the tenant of Great Hetha, Mr Elliot and to Mr Matheson of College Valley Estates for allowing access to the site and for their interest in the survey work.

8. BIBLIOGRAPHY

Burgess, CB 1970 'Excavations at the scooped settlement Hetha Burn I, Hethpool, Northumberland' in *Transactions of the Architectural and Archaeological Society of Durham and Northumberland (new series) 2*, 1-26

Burgess, C 1984 'The prehistoric settlement of Northumberland: a speculative survey' in Miket, R and Burgess, C (eds) *Between and beyond the walls: Essays on the prehistory and history of North Britain in honour of George Jobey*, 126-175

Cramp, R 1995 'The making of Oswald's Northumbria' in Stancliffe, C and Cambridge, E *Oswald: Northumbrian king to European Saint*. Paul Watkins: Stamford

Feachem, R 1966 'The hill-forts of Northern Britain' in Rivet, ALF (ed) *The Iron Age in Northern Britain*. Edinburgh: Edinburgh University Press. 59-87

Frodsham, P 2000 'Discovering our Hillfort Heritage' in Northumberland County Council *Archaeology in Northumberland*, 18-9. Northumberland County Council

Gates, T 1996 Aerial photograph held in the National Monuments Record: NT8827/7 frame 4 (19-MAR-96)

Jobey, G 1965 'Hillforts and settlements in Northumberland'. *Archaeologia Aeliana* (4th series) 43, 21-64

MacLauchlan, HH 1860 Plan of Great Hetha dated June 1860. Original held in the private collection of the Duke of Northumberland (copyright reserved). Photographic copy in NMR: Negative number 105/Z/12

MacLauchlan, HH 1867 *Notes not included in the memoirs already published on Roman roads in Northumberland* London: Privately published

Ordnance Survey 1864 First Edition 25-inch map sheet Northumberland XVIII.12 (surveyed 1860)

Ordnance Survey 1897 Second Edition 25-inch sheet Northumberland XVIII.12 (revised 1896)

Oswald, A. 2000 *An Iron Age hillfort on Fawcett Shank, Northumberland* English Heritage Survey Report

Oswald, A, Jecock, M and Ainsworth, S 2000 *An Iron Age hillfort and its environs on West Hill, Northumberland* English Heritage Survey Report

Pearson, T, Lax, A and Ainsworth, S 2001 *An Iron Age hillfort and its environs on Castle Hill, Alnham, Northumberland* English Heritage Survey Report

RCAHMS 1967 *Peebleshire* Vol 1. Edinburgh: HMSO

RCHME 1970 *Shielings and Bastles* London, HMSO

RCHME 1998 *Yeavinger Bell, Berwick upon Tweed, Northumberland*

RCHME 1999 *Recording Archaeological Field Monuments: A Descriptive Specification*. Swindon: Swindon Press

Topping, P 1981a 'The prehistoric field systems of the College Valley, North Northumberland' in *Northern Archaeology* Vol. 2 part1, 14-33

Topping, P 1981b 'Hethpool stone circle' in *Northern Archaeology* Vol.2 part2, 3-10

Topping, P 1999 'A survey of Little Hetha hillfort, Northumberland' in Frodsham, P, Topping, P, and Cowley, D, (eds) *We were always chasing time: papers presented to Keith Blood* Northern Archaeology 17/18, 123-127

Topping, P and McOmish, D 2000 'Excavations at Wether Hill, Northumberland, 1999: final interim report' *NAG News: the newsletter of the Northumberland Archaeological Group* May 2000

APPENDIX 1. Table of NMR numbers linked to the survey

Iron Age hillfort	NT 8856 2740	NT 82 NE 47
Shieling	NT 8859 2743	NT 82 NE 109
Cross-ridge dyke	NT 8835 2733	NT 82 NE 110

APPENDIX 2: Locations of permanent survey stations



SURVEY STATION INFORMATION

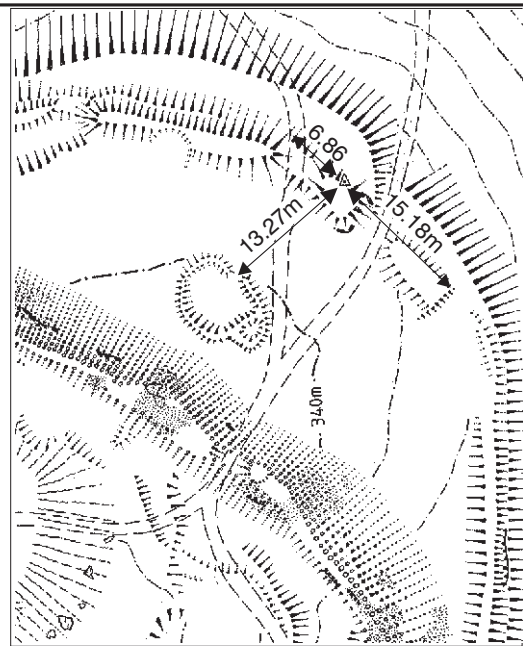
ENGLISH HERITAGE

SITE NAME	Great Hetha, Northumberland		
Station number	ST 01	Status	Permanent
Type of Mark	Brass rivet in rock	NMR number	NT 82 NE 47
Date of Survey	4-JUL-2000	Sam number	
Office of origin	York	RSM number	24605
Surveyor(s)	AO; SA; BT	Neg number	

Co-ordinate Scheme	Eastings	Northings	Height
OS National Grid	388 602.371	627 452.268	339.735
Divorced Site Grid			



View of STN1 looking north-east



SURVEY STATION INFORMATION

SITE NAME	Great Hetha, Northumberland		
Station number	ST 02	Status	Permanent
Type of Mark	Brass rivet in rock	NMR number	NT 82 NE 47
Date of Survey	4-JUL-2000	Sam number	
Office of origin	York	RSM number	24605
Surveyor(s)	AO; SA; BT	Neg number	

Co-ordinate Scheme	Eastings	Northings	Height
OS National Grid	388 564.642	627 416.249	344.981
Divorced Site Grid			



View of STN2 looking north-east with STN1 in background with tripod over.

