



# An Iron Age hillfort on Mid Hill, Northumberland

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# SURVEY REPORT

Archaeological Investigation Report Series AI/2/2002



# AN IRON AGE HILLFORT ON MID HILL, NORTHUMBERLAND

Archaeological Investigation Report Series AI/2/2002

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#### 1. INTRODUCTION AND BACKGROUND TO THE SURVEY

Between late January and mid February 2002, English Heritage carried out an archaeological investigation of an Iron Age hillfort on Mid Hill in Northumberland. The analytical field survey was one of a number undertaken by English Heritage as 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. The investigation was intended to improve the understanding of the hillfort, both as an individual monument and as an example of the class as a whole, and to inform the conservation and management of the site (Frodsham 2000).

Mid Hill lies close to the north-eastern edge of the Cheviots, some 2km north-west of the hamlet of Hethpool, in the parish of Kirknewton and the district of Berwick upon

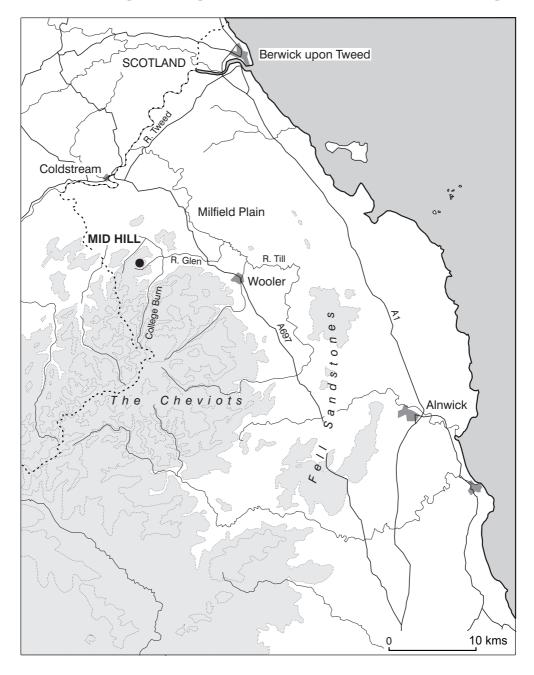


Figure 1. Location map

Tweed, centred at National Grid Reference NT 8812 2958. The hillfort is well preserved and comprises the remains of a single stone-built rampart with traces of as many as eleven circular buildings in the interior. These are of three types: most are 'ring-grooves', or foundation trenches indicative of large circular structures built in timber, and are perhaps contemporary with the construction of the defences; a few have stone foundations and are probably of Romano-British date, contemporary with the partial remodelling of the Iron Age rampart; one is of an unusual type whose date is uncertain. On the slopes to the east and west of the hillfort, cultivation terraces thought to be of prehistoric origin are overlain by ploughing of probable medieval and post-medieval date. On the fairly level ground to the north-west, a tract of probable medieval 'ridge and furrow' fields seem to have been sub-divided into narrower strips in the post-medieval period.

The hillfort is protected as a Scheduled Ancient Monument (RSM 24566) and is recorded in both the Sites and Monuments Record (SMR) for Northumberland and in the National Monuments Record (NMR) as NT 82 NE 45. The English Heritage field investigation, which covered an area of 2.70 hectares (6.67 acres), was carried out in detail (at Level 3 standard as defined in RCHME 1999, 3-4) and resulted in an analytical plan at a scale of 1:500.

#### 2. GEOLOGY, TOPOGRAPHY AND LAND USE

Like the surrounding upland massif, the rock that forms Mid Hill is andesitic granite, a hard volcanic stone which varies in colour from pale pink to deep purple, weathering to a uniform grey (Tomkeieff 1965). The rock fractures easily and has been used from prehistory onwards as a building material throughout the local area; it was the principal material used to construct the rampart of the hillfort. The soil is relatively thin on the summit of the hill and there are several natural outcrops within and immediately around the hillfort.

Mid Hill forms the highest point of one of a series of spurs that project south-eastwards from a ridge overlooking the valley of an un-named tributary of the College Burn. The hillfort on Staw Hill, which was also investigated by English Heritage as part of the 'Discovering our hillfort heritage' project, occupies the end of a similar spur 500m to the north-east (Ainsworth *et al* 2002). The hilltop reaches an altitude of 290m above sea level and commands an impressive view south-eastwards, but is overlooked by ground some 30m higher to the south-west, as Figure makes clear. To the north-west, the ground slopes gently away from the hillfort to a slight saddle that connects the spur to a broad level expanse on top of the main ridge. The other three sides of the spur slope steeply to the valley bottom. Assuming that they were in contemporary use, the hillfort would have been intervisible with prehistoric enclosures on Staw Hill, Laddie's Knowe, Little Hetha, Great Hetha, West Hill and St Gregory's Hill, the furthest of which lies less than 4kms away. It would also have been intervisible with the largest hillfort in the Cheviots, on Yeavering Bell, 6kms to the east.

With the exception of the land beyond the saddle to the north-east, the environs of the hillfort are under rough pasture, which is lightly grazed by sheep and cattle. The interior of the hillfort is tightly cropped turf, which allows the identification of very



Figure 2. View of Mid Hill from the south-west

slight earthwork traces. The English Heritage investigation indicates that the environs of the hillfort were ploughed in the post-medieval period and that some of the nearby slopes were under cultivation at a much earlier date, perhaps in the Iron Age or even earlier.

The land is privately owned, but a footpath and bridleway cross the saddle to the north-west, and plans for more open public access were under discussion at the time of the survey. There is no vehicular access onto the hill except by 4-wheel drive with the permission of the landowner.

#### 3. HISTORY OF RESEARCH

John Stockdale's map of Northumberland published in 1805 bears the annotation 'On these Hills [that is, the north-eastern Cheviots] there has been a Chain of Forts'. However, the earliest known documentary reference to the hillfort on Mid Hill in its own right is a schematic portrayal of the defences on Greenwood's (1828) Map of the County of Northumberland, which has similar depictions of most of the prehistoric 'camps' in the county. Greenwood's map was the most accurate large-scale map available prior to the publication of the Ordnance Survey's First Edition 25-inch scale mapping and would have informed the archaeological research carried out in the mid-19th century by Henry MacLauchlan. MacLauchlan, himself a former Ordnance Survey Field Officer, was commissioned by the fourth Duke of Northumberland to undertake numerous field surveys of various different types of monument in the region. He began his '... extensive researches among the old Celtic camps in the fastness of the Cheviot Hills' in the spring of 1860 and completed his investigation of the College Valley and its environs by September of the same year (Charlton and Day 1984, 25-6). MacLauchlan visited Mid Hill (which he called Middle Hill) in July and produced a plan of the hillfort at a scale of 8 chains to the inch (MacLauchlan 1867, fig 38; see Figure 3). The plan showed the perimeter as being slightly more circular than it is in reality, but depicted the entrance on the north-west. It also showed a small rectangular structure that was later recognised as being of post-medieval date and a single circular building (numbered 11 below), which the English Heritage investigation suggests to be of Romano-British date. In addition to the plan, MacLauchlan produced a succinct written description (MacLauchlan 1867, 36; 1919-22, 465-6).

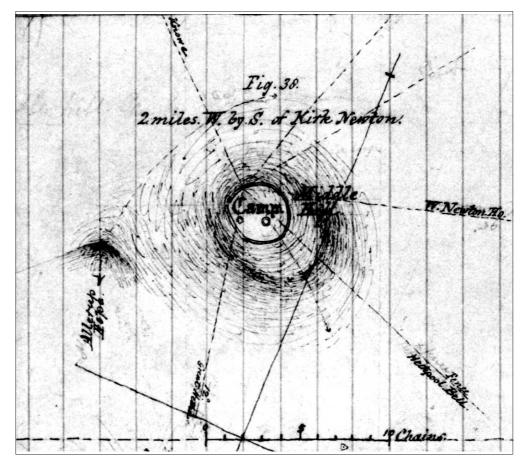


Figure 3.
Henry MacLauchlan's
plan of the hillfort,
surveyed 1860
(reproduced by
permission of His
Grace the Duke of
Northumberland)

The Ordnance Survey also recorded the site in 1860, this time producing a plan at a scale of 25 inches to the mile (1:2,500) (Ordnance Survey 1866 and Figure 4). The plan depicted the single circuit of rampart more accurately than MacLauchlan's had, but it did not mark any entrance, or any buildings in the interior. The Second Edition map, revised in 1896, added nothing to the earlier depiction of the earthworks (Ordnance Survey 1897).

The *Northumberland County History* characterised the hillfort as being on high ground, but less dependent on the topography for its protection (Hope Dodds 1935, 62). The Ordnance Survey's local correspondent on archaeological matters, Sir Walter de la Aitchison, probably the visited the site soon after the Second World War having made a study of aerial photographs taken by the RAF (NMRa). He remarked on the foundations of the rectangular building that MacLauchlan had recorded south of the north-western entrance, describing it as 'modern', but overlooked all the other traces of settlement in the interior. AHA Hogg and George Jobey both merely listed the fort's location and characterised the number and form of its defences (Hogg 1947, 155; Jobey 1965, 62). Jobey had surveyed the site rapidly in about 1960, but his plan, which identified two circular buildings (one 'ring-groove' and 'ring bank' structure, numbered 5 and 10 in Section 4.1), was never actually published (Jobey nd).

It was therefore left to the Ordnance Survey themselves to improve upon their own depiction and understanding of the monument: Eric Geary of the Archaeology Division visited the site in October 1955 and described the remains at greater length in advance of the revision of the mapping for the area (NMRa). He noted that although the circuit generally followed the contours, in places the natural slope outside the rampart had been artificially steepened to increase the size of the defences. In addition to the entrance recorded previously on the north-west, he identified a gap on the south-east as a second entrance; the English Heritage investigation suggests that this is probably a Romano-British modification. Geary also proposed that the breadth of the terminals on either side of the north-western entrance might indicate the existence of guardhouses, a theory for which there is no supporting evidence. He noted the rectangular building first recorded by MacLauchlan and concurred with Aitchison that it was probably 'modern', but mistakenly located it to the south of the south-eastern entrance, rather than the north-western one. Other than this, he too was unable to find any certain traces of settlement. He accepted that the hillfort was defensive in function, but pointed out that the position was not ideal from a military point of view, with level ground to the north-west and dead ground to the south-east. Finally, he concluded that the monument belonged to the 'native' (that is, pre-Roman) period.

Dave Smith, who examined the site in advance of map revision in July 1969, concurred with previous Ordnance Survey fieldworkers that the fort was of Iron Age, but added that a stone-founded circular building (numbered 9 below) suggested that it had been re-occupied in the Romano-British period (NMRa; Ordnance Survey 1972). The English Heritage survey has confirmed this observation. A decade later, in August 1979, Iain Sainsbury visited in advance of the next map revision at 1:10,000 scale (NMRa; Ordnance Survey 1982; Figure 5). Sainsbury was unable to identify the remains of the rectangular building first recorded by MacLauchlan, probably due to the misleading location given by Geary. However, he tentatively suggested the existence of a larger rectangular platform adjoining the exterior of the perimeter on its southern side. The English Heritage investigation concluded that this feature is the product of quarrying, a possibility which Sainsbury considered but eventually dismissed. Describing the circular stone-founded building first recorded by Smith

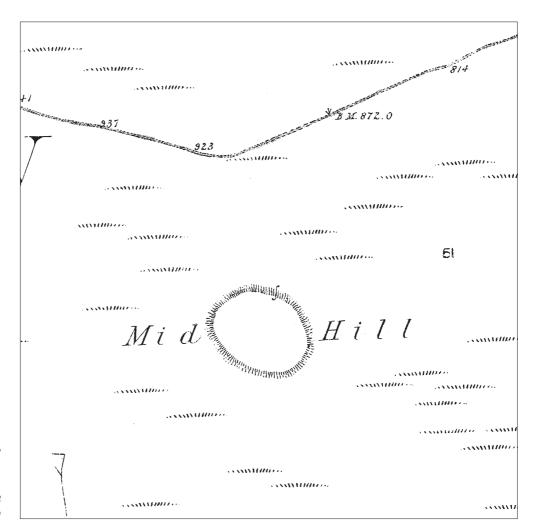


Figure 4.
Ordnance Survey
plan of the hillfort,
surveyed 1860,
reproduced from
the 1866 map

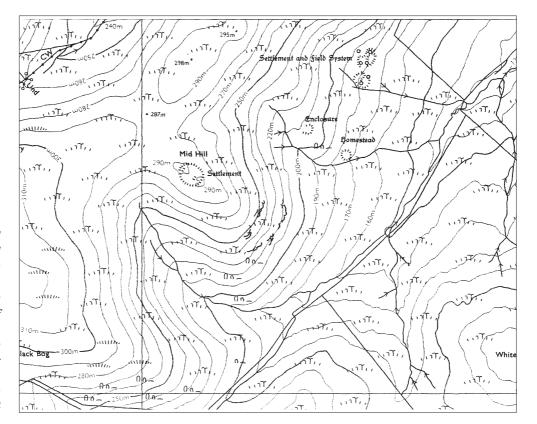


Figure 5.
Ordnance Survey plan
of the hillfort, revised
1979, reproduced
from the 1982
Ordnance Survey
1:10,000 map with the
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(numbered Building 9 below), Sainsbury commented that a segment of bank within its perimeter was apparently the product of 'later mutilation'. The English Heritage survey indicates that, on the contrary, this bank is a fragment of an earlier stone-founded building on almost the same site (numbered 8 below). Sainsbury identified one other stone-founded building: that first recorded by MacLauchlan (numbered 11 below). His description implies that he was fully aware of the existence of other slight earthworks that might relate to settlement, but his rapid examination in advance of the map revision would not have permitted any more detailed work. Nevertheless, he stopped short of Smith's conclusion that the stone-founded building remains related to Romano-British re-occupation, rather than Iron Age settlement.

Caroline Hardie of English Heritage visited the site in August 1993 and completed a more detailed description to update the Schedule of Ancient Monuments, a revision which was ratified on 29 April of the following year (English Heritage 1994). For the most part, her observations echoed the findings of previous investigators; she went further in some respects, but a number of these conclusions are questionable. She suggested that the defences were formed by a 'dump rampart', that is, a simple bank of earth and rubble without any timber or stone revetment, which would have originally differed little in appearance from what can be seen today. The more detailed survey undertaken in 2002 suggests that the rubble bank is more likely to represent the tumbled remains of a massive drystone wall. The short section of facing stones that she did record on the eastern side of the circuit almost certainly relates to the rebuilding of the perimeter in the Romano-British period, rather than to the original rampart as she implied. Her suggestion that a modern archaeological excavation trench appeared to have been dug into the rampart on the north-western side of the circuit is not implausible, given that similar investigations are identifiable on other hillforts in the locality. However, her description leaves some doubt as to which feature she had identified as the possible trench; the most likely feature may relate to the building of an adjacent Romano-British building. On the other hand, the more detailed survey undertaken in 2002 did identify a possible excavation trench apparently sited in order to examine the structure of the rampart on the north-eastern side of the perimeter. If the feature is genuinely an excavation trench, it seems most likely to have been dug in the second half of the 20th century.

In addition to supporting Iain Sainsbury's suggestion of a large building platform on the southern side of the circuit, Caroline Hardie also identified an 'open-ended' embanked enclosure adjoining the northern side of the hillfort; this idea too can be discounted. The 'disturbed ground' which suggested to her that the enclosure had served as a stock pen actually results from small-scale quarrying, probably to obtain material for the construction of the rampart. The most important outcome of Hardie's fieldwork was the conclusive demonstration of at least two phases of settlement in the interior: she correctly interpreted the relationship of Building 11 to Building 10 and noted that Buildings 8 and 9 were the product of two separate episodes of construction.

Apart from field survey, aerial photography is the only form of archaeological recording to have taken place at Mid Hill. Black and white vertical aerial photographs produced by several non-specialist sorties are held in English Heritage's National Monuments Record. The earliest, apparently taken by the RAF to judge from the characteristic north arrow superimposed onto the photographs, are dated 'Spring 1936?' (NMRb). However, another photograph evidently taken on precisely the same flight is dated 1 January 1930. It is unlikely that either date is actually correct: 1936 almost certainly represents the date when they were accessioned into the collection of

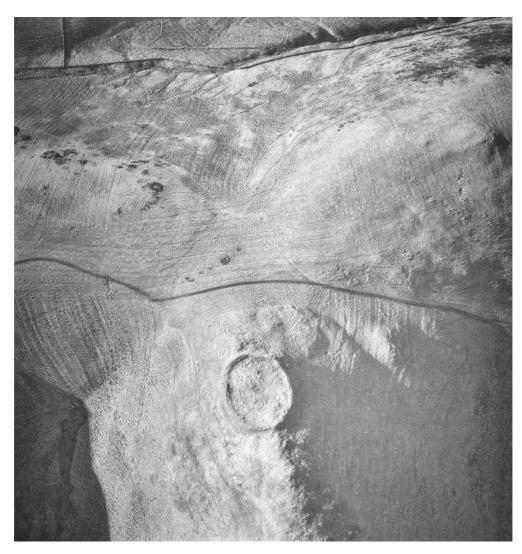


Figure 6.
Aerial photograph
of Ring Chesters
by Tim Gates,
taken 1986
(reproduced by
permission of
Tim Gates)

the Ordnance Survey's Archaeology Officer, OGS Crawford, and it is therefore probable that the sorties were flown in the late 1920s or early 1930s (information from Tim Gates). The images of Mid Hill are not especially clear, but a light dusting of snow picks out the agricultural remains to the north and east of the hillfort. A sortie flown at higher altitude by the RAF on 28 July 1948 is less useful (RAF 1948). Those taken on 9 October 1951 are more revealing, again showing many of the agricultural remains around the hillfort (RAF 1951).

More informative and attractive are the specialist oblique aerial photographs at large scale taken at various dates by Tim Gates (Gates 1974; 1986; 1997). All except the earliest images show the site under excellent lighting conditions, which clearly reveal the traces of prehistoric and later agriculture on the slopes around the hillfort. Some of the settlement remains in the interior are also visible.

The survey carried out by English Heritage in 2002 was the most detailed investigation of the site undertaken up to that date and was the first fieldwork to examine in detail the landscape context 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, particularly maps and plans.

# 4. DESCRIPTION AND INTERPRETATION OF THE EARTHWORKS

### 4.1 The Iron Age hillfort and Romano-British settlement

### The rampart

The hillfort is not located at the very tip of the spur, but so as to enclose a slight saddle between two rocky knolls that form the highest points on the promontory. This siting leaves an area of 'dead ground' beyond the defences at the tip of the spur, as Eric Geary of the Ordnance Survey first pointed out. The rampart circuit is oval in plan, but not far off circular, with internal dimensions of 64m by 49m and an internal area of 0.24ha (0.59 acres). The longer axis is aligned from north-west to south-east following the alignment of the spur and both ends of the circuit run over the two natural knolls where the underlying granite outcrops on the surface. The relationship of the rampart to these high points gives the monument a distinctive boat-shaped profile when seen against the horizon from the lower ground to the south-east. Although MacLauchlan described the plan as an 'irregular oval', the only significant irregularity - and this hardly noticeable on the ground - is the stretch at the north-western end. This has apparently been enlarged at some stage, probably in the Romano-British period, resulting in a slight bulge in the course of the earthwork at both ends of the rebuilt section.

Much of the rampart now survives as a broad bank of stone rubble, which is for the most part overgrown with grass, but there is evidence that this earthwork represents the tumbled remains of a massive drystone wall. This conclusion runs contrary to Caroline Hardie's suggestion that even in its original form the rampart was simply a rubble bank, known as a 'dump rampart' (English Heritage 1994). On average, the bank is 7.0m wide and up to 1.0m high externally, but generally less than 0.3m high internally; this difference is due to of the deliberate use of the natural slope to enhance the external height of the rampart. Around the north-west and north-east sides of the perimeter, the natural slope also seems to have been deliberately sharpened immediately outside the defences, creating a more impressive earthwork 2.0m high overall. Across the north-western end of the perimeter, which faces the relatively gentle approach from the top of the main ridge, the bank is more massive, in part because it was apparently heightened at some stage over a distance of around 45m. Other sections of the perimeter were demonstrably rebuilt in the Romano-British period (see below), but in this instance, the work is on a much larger scale and it is possible that the modification took place in the Iron Age. By contrast, the south-eastern end of the perimeter, facing towards the 'dead ground' at the tip of the spur, is of diminutive proportions, with an external face only 0.4m high. A number of well-preserved stretches of a single course of facing stones survive around the perimeter, but all these relate to the Romano-British rebuilding. However, a few larger isolated blocks, apparently surviving in situ, probably represent the original facing of the rampart. In one case, on the north-eastern side of the perimeter, two adjacent blocks appear to have been deliberately exposed by the digging of a narrow trench at right angles to the slope. Although erosion by sheep may have contributed to the extent of the feature, its regularity hints that it may originally have been dug as an archaeological excavation trench, although no such investigation has been documented. All these facing blocks stand near the foot of the outer face of the stony bank, indicating that the base of the Iron Age wall was considerably broader than its Romano-British successor. Only a single internal facing stone can be identified on the

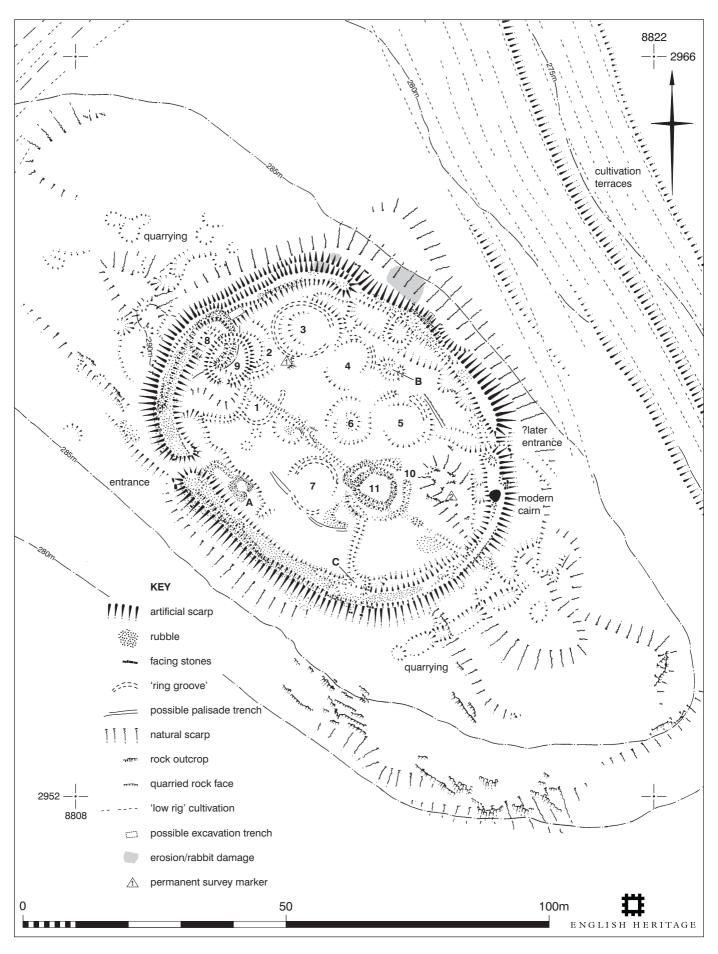


Figure 7. English Heritage plan of the hillfort and its immediate environs (reduced from the original at 1:500 scale)

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surface, but the form of the earthwork indicates that the dry stone wall may have been up to 6m wide at the base. The rubble that formed the core of the wall comprises mostly fist-sized stones and the quantity of tumbled material hints that the wall may not have maintained this breadth to its full height, which may have been at least 1.5m. Almost all the rubble, as well as the larger facing stones, appears to be unweathered fragments, as though obtained through quarrying or splitting. Some of this material may have been obtained from a ditch-like quarry hollow which can be traced intermittently as a shallow depression around much of the inner edge of the rampart. Though the depression is no more than 0.2m deep, its irregular outline suggests that it was cut into the underlying granite. Other small-scale quarrying in the vicinity of the hillfort is discussed below.

What is probably the sole original entrance, first identified by MacLauchlan in 1860, lies near the northern end of the south-western side of the perimeter (MacLauchlan 1867; 1919-22). The earthworks suggest that the entrance through the rampart was a passage about 2m wide, set at an angle to the curve of the perimeter so that it faced due west (Figure 8). No evidence for any timber structure associated with a gate can be identified on the surface, but one may be presumed to have existed. A few especially large blocks of stone apparently represent Iron Age facing stones left undisturbed on either side of the entrance and the terminals of the rampart on either side of the gap are slightly broader. In 1955, Eric Geary inferred from the breadth of the terminals that there may have been guard chambers set within the thickness of the walls, which are found in certain stone-built hillforts in the British Isles, including a few examples in the Cheviots (NMRa). In this case, however, there is no firm evidence to support the theory: a shallow rectangular depression in the midst of the southern terminal, whose outline is vaguely suggestive of a chamber, almost certainly results from stone robbing in the Romano-British period. The position of the entrance leaves only a narrow strip of level ground along which it could have been reached from the top of the ridge and the final stretch of the approach would have been directly overlooked by the rampart. A build-up of material on the slope to the



Figure 8. View of the entrance, from the south

north-west of the entrance probably marks the lower edge of a path or trackway approaching from that direction.

Eric Geary also identified an east-facing entrance, a conclusion about which his Ordnance Survey colleague Iain Sainsbury later implied some doubt, although Caroline Hardie eventually accepted the idea (NMRa; English Heritage 1994). In support of Geary's proposal, there does appear to be a slight off-set in the ends of the rampart on either side of the gap in question and a single large block of stone may represent an element of more elaborate Iron Age facing. However, the form of the earthwork may be accounted for by the relationship of the rampart to the underlying natural topography and it is not impossible that the facing stone is no larger than other examples which survive unexposed beneath the surface. There is also some positive evidence that the gap is a later breach, for what may be interpreted as a slight remnant of the original rampart continues across the gap. Nevertheless, Geary's conclusion is correct in part, for the gap was evidently used as an entrance at some point, resulting in a slightly worn trackway both outside and within the rampart. The dating evidence for the trackway too is ambiguous, for it has made no discernible impact on the earthwork remains of Building 5, which is a classic Iron Age 'ring groove' structure, implying that the track may pre-date the building. It is not impossible that more than two phases of development are represented, but on balance it seems most probable that the gap was used most intensively in the Romano-British period and that the appearance of the remains owes most to that activity.

#### Settlement remains within the hillfort

Previous investigations by the Ordnance Survey have identified the remains of four buildings in the interior (numbered 8, 9, 10 and 11 on Figure 7), one of which (Building 8) was initially thought likely to represent 'later mutilation' of Building 9 (NMRa). All four buildings are similar in construction, comprising low earth and stone banks of approximately circular plan, known as 'ring-banks', which presumably represent the collapsed remains of low turf and rubble walls. Based on this form, which has long been recognised as being characteristic of the Romano-British period, Dave Smith of the Ordnance Survey suggested in 1969 that the buildings represented a later re-occupation of the Iron Age hillfort. The English Heritage investigation has thrown up further evidence in support of this conclusion. Although Iain Sainsbury's description implies that he suspected the existence of further structures, he, along with other previous investigators, overlooked the vestigial traces of as many as seven examples of a very different type of building foundation: the 'ring-groove'. This type of building comprises a narrow trench, also of circular plan, intended to hold timber planks or uprights, and is usually considered characteristic of the earlier Iron Age. The surface remains of these trenches are seldom more than a few centimetres deep and can sometimes only be discerned as lines of lusher grass. One of the ring-grooves (Building 2) underlies two of the ring-banks, indicating that it is of earlier date; all the ring groove buildings could have been contemporary with each other and all may well be contemporary in use with the stone-built rampart. The buildings were apparently laid out in close proximity to each other so as to describe a ring and there is some evidence that they were enclosed within a palisade which surrounded the whole of the slight saddle between the two natural knolls. This enclosure may well have been a precursor of the stone-built hillfort and contemporary with the initial construction of the ring-groove buildings.

Building 1 comprises an arc of ring-groove which cannot be interpreted with certainty as part of a circular building. If it actually were such a building, it would have been around 8m in diameter, and would have stood hard up against the side of Building 2. The arc of ring groove seems to have a well-defined terminal which suggests that the doorway, assuming that one existed, would have faced north-east. If not a circular building, the curvature of the groove is reminiscent of the in-turned terminals flanking the gateways of certain palisaded settlements, such as that within the hillfort on Wether Hill, overlooking the Ingram Valley (National Grid Reference NT 013 144).

Building 2 is perhaps the most difficult of the ring-groove structures to recognise, for it is almost entirely overlain by two of the Romano-British ring-banks (Buildings 8 and 9). What can still be seen seems to represent the eastern side of a building approximately 8m in diameter, whose western side would have butted up against the inner edge of the rampart. The entrance seems to have been oriented due east, so that it would have faced almost directly onto the rear of Building 3.

Building 3, with a diameter of 11.0m and an internal area of about 95m<sup>2</sup>, is the largest ring-groove; it is also one of the most readily identifiable, since it sits within a level platform that is slightly embanked around the eastern side. There is also a slight hollowing at the centre of the building, a commonly found characteristic which suggests that the periphery of the interior may have been raised slightly above floor level. The entrance was apparently oriented very slightly south of due east.

Building 4 appears to have been about 8m in diameter. The plan of the building is indistinct and the position of the entrance is uncertain.

Building 5 was apparently almost perfectly circular and c 10m in diameter, with an entrance facing north-east by north. What may be the southern terminal of the short stretch of ring-groove that can be identified appears to be matched on the north by a narrow bank, suggesting a minor variation in the construction technique.

Building 6 was about 7m in diameter. A slight rise near its centre may represent a spread of tumbled building material resulting from the collapse of the building. Alternatively, it is possible that the ring-groove was around 2m wide, a constructional variant for which the term 'ring-trench' has been coined.

Building 7 is a relatively well-defined ring-groove 9.5m in diameter; the position of the entrance is uncertain but it may have faced due west towards the gateway. The western side of the ring-groove is contiguous with another narrow linear depression of similar appearance to the foundation slot, which may represent part of the palisade (see below).

Building 8 is a ring-bank some 7m in diameter, whose entrance faced southwards towards the entrance into the hillfort. It not only overlies the ring-groove described as Building 2, but is also cut into the foot of the rampart bank, a relationship which shows that its construction post-dates the collapse or demolition of the Iron Age rampart. This inference is confirmed by the fact that the building is apparently contemporary in origin with a stretch of bank, with neat stone facing on the exterior where it coincides with the outline of the building, which directly overlies the tumbled rampart and evidently represents a redefinition of the perimeter. This may have formed part of a small, yard-like embanked enclosure in front of the building, although it is possible that this was added when Building 9 was built. As Caroline

Hardie first recognised, Building 9 was built partially overlying Building 8 and it is the fragment of the earlier perimeter lying within the circuit of Building 9 that Iain Sainsbury erroneously interpreted as 'later mutilation' (English Heritage 1994; NMRa).

Building 9 is a well-defined ring-bank which was first identified by Dave Smith of the Ordnance Survey in 1969 (NMRa). It is slightly oval in plan with a maximum diameter of 8.0m and an internal area of  $42m^2$ . As Caroline Hardie first recognised, the foundations clearly overlie those of Building 8 and yet - curiously - the fragment of the wall-line of the earlier building survives almost intact within the interior of the later one, leading Iain Sainsbury to suspect that it resulted from later disturbance (English Heritage 1994; NMRa).

This building or its predecessor, or perhaps both, fronted onto a small embanked yard-like enclosure, with an entrance at the south-western corner. This entrance gave access into a larger enclosure defined on the south-west by a low rubble bank following the course of the Iron Age rampart and directly overlying the larger bank of tumbled rubble. Similar banks built directly on top of dilapidated hillfort ramparts in order to define the limits of Romano-British yards and paddocks have been identified at numerous other hillforts in the region and are generally thought to have carried hedges or stockades. In this case, the bank is unusually carefully constructed, with relatively long stretches of a single course of facing stones surviving *in situ* (Figure 9). On the north-east, the limit of the enclosure was defined by a much slighter bank, barely surviving as an earthwork, which almost precisely bisects the interior of the hillfort from north-west to south-east.

Building 10 is directly overlain by Building 11 and is therefore difficult to distinguish on the ground, as Caroline Hardie first observed (English Heritage 1994). In plan, however, it is clear that Building 10 was almost perfectly circular (unlike Building 11) and approximately 11m in diameter with a well-defined entrance oriented



Figure 9.
View of the rebuilt
Romano-British
perimeter at the
south-east end of
the hillfort

fractionally south of north-east. Although similar in size and plan to the ring-groove buildings, the perimeter is formed by a narrow stony bank, which is closely comparable to the remains of Building 9. There are also hints that Building 10 may have been superimposed on the vestigial bank that bisects the interior of the hillfort, which is undoubtedly of Romano-British date. A breach seems to have been created in this earlier bank immediately to the south-east of the building in order to facilitate access between the paddock in the north-eastern half of the hillfort and another small yard to the south of Building 10. Therefore, while the size and position of Building 10 in relation to the ring-grooves may give rise to the suspicion that it occupies the site of an earlier ring-groove building, what can be seen on the surface is almost certainly of Romano-British date.

Building 11 is almost rectangular in plan with an entrance facing north-east towards the breach in the eastern side of the circuit. It is fairly well-preserved and was identified first by MacLauchlan in 1860 and later by Iain Sainsbury of the Ordnance Survey, but is quite difficult to distinguish from the outline of the ring-bank of Building 10, which it directly overlies. A small rectangular annex adjoins its north-western side of the building, and the existence of this, together with the plan of the main structure, make the building difficult to date based on its appearance alone.

## Possible palisade

A narrow trench-like depression, similar in appearance to a ring-groove, can be traced extending for a few metres to the south-west and north-east of the ring-groove of Building 7, aligned at a tangent to the perimeter of the building. Another short length of a similar earthwork can be traced adjacent to the eastern side of Building 5 and, as described above, it is not impossible that the groove that has been interpreted as Building 1 represents the terminal of an in-turned entrance. It is difficult to say whether any of the features are natural or artificial and, given the very limited traces, even more difficult to reach any firm interpretation of their relationship to each other. With these *caveats*, it is not unreasonable to propose that they might represent parts of a foundation trench for a timber palisade, perhaps part of a complete circuit predating the stone-built rampart. The relationship of both earthworks to the ring-groove buildings, together with the tightly-packed distribution of the buildings, suggests that the buildings might be contemporary in origin with the putative palisade and earlier than the stone-built circuit. However, the supposed circuit of the palisade is far from complete. While the lack of surviving traces can be accounted for in some places by the extent of later quarrying and other disturbance, there are significant areas - notably the more southerly of the two rocky natural knolls - where its absence cannot be so easily explained away.

### Small-scale quarrying

In addition to the ditch-like quarry hollow immediately behind the rampart, there are a number of other areas of small-scale quarrying in the environs of the hillfort. Most of these are shallow pits whose irregular plan and negligible depth suggests that natural fractures were exploited in order to break small blocks off outcrops partially exposed on the surface. One such depression, located in the interior of the hillfort between Buildings 1 and 7, bears a superficial appearance in plan to a building platform. Outside the hillfort to the north-west, the pitted appearance of the surface suggested to Caroline Hardie the existence of a stock enclosure, a suggestion which can be firmly discounted (English Heritage 1994). The alleged 'banks' enclosing this area are in fact natural scarps reflecting steps in the underlying granite. On the



Figure 10. View of quarried outcrops to the south of the hillfort

south-west of the spur, where natural erosion of the steep slope has exposed larger outcrops, larger slabs appear to have been prised off in several places (Figure 10).

At the south-eastern end of the perimeter, a discontinuous line of elongated pits follows the foot of the rampart, separated from it by a distance of about 5m. Here alone is there any possible hint that the quarrying may have been more purposeful, for the linear pattern of the quarry hollows is suggestive in plan of an unfinished ditch running parallel to the rampart. It is conceivable that this was the intended course of a perimeter which was abandoned before completion, or, given that the rampart at this point is remarkably small, that it was dug as an additional line of defence. However, neither of these possibilities is convincing and it is far more likely that the pattern reflects the technique of extraction, whereby linear fractures in the granite were exploited. The regular patterns resulting from this technique also account for the features identified by Iain Sainsbury of the Ordnance Survey as the foundations of a large rectangular building, a suggestion later supported by Caroline Hardie of English Heritage (NMRa; English Heritage 1994). Closer examination of the alleged perimeter of the supposed building reveals that the upstanding features are ridges of natural granite left intact by the quarrying on either side.

#### 4.2 Medieval or later remains within the hillfort

The so-called 'modern' building just south of the north-west entrance (labelled A on Figure 6), which was first recorded by MacLauchlan in 1860, is the best-preserved of three small 'shielings', or shepherds' huts, in the interior. The shieling is located in the Iron Age quarry hollow, perhaps as much to gain shelter from the lee of the tumbled rampart as for proximity to the readily available building material. Although only the footings survive, well-preserved stretches of carefully constructed facing are visible, indicating that the hut had internal dimensions of 2.5m by 1.8m, with an entrance in the south-east end. At the rear end of the building, a vestigial bank suggests that there was a small pen adjoining the hut. Shielings of this type are difficult to date, partly because their use was almost certainly seasonal and short-lived and partly because, as simple utilitarian shelters, there is little in their form that is diagnostic of any particular period. However, as previous investigators have concurred, they are almost certainly of relatively recent origin, probably of late medieval or post-medieval date.

A second building (B) of similar size, but in a relatively poor state of preservation and with an entrance in its north-east side, lies close to the north-eastern side of the perimeter. A few metres to the north of this, overlying the Iron Age quarry hollow and the adjacent rampart, is what may be a similar shelter or a small pen. However, the proximity of this feature to the first building may be coincidental and there is nothing about its form that proves conclusively that it is not of Romano-British origin.

The third probable shieling (C) overlies the rampart on the south side of the perimeter at the junction of two Romano-British banks, so here too there is a slight possibility that the structure is of much earlier origin. However, the size and rectangular plan of the building, together with the fact that it appears to be associated with pit dug into Romano-British features to obtain loose stone, suggests that it is of relatively recent origin.

A small cairn of loose stones overlies the south-east side of the perimeter. The relatively unweathered condition of the stones indicates that it is not likely to have been constructed much before the 19th century.

### 4.3 Agricultural remains in the surrounding landscape

Aerial reconnaissance has revealed that the environs of Mid Hill retain widespread traces of agricultural activity, ranging from substantial cultivation terraces to very slight plough furrows. Although the faintest of these remains can be seen more clearly on aerial photographs than they can on the ground, the English Heritage field survey has detected a number of key chronological relationships that are not immediately apparent from the photographs.

Slight lynchets (that is, ledges created by ploughing along the contours) are the earliest identifiable cultivation remains. Those on the slope to the north-east of the hillfort extend for up to 150m, not quite following the contours, but crossing them obliquely at a gentle angle. They are overlain by a later episode of cultivation represented by sinuous plough furrows spaced regularly at an average distance of 3.0m apart. These generally conform to the alignment of the earlier lynchets, so that the earlier earthworks are sharpened but survive essentially intact. However, this relationship is of little use in dating the lynchets, for evidence from elsewhere indicates that the later ploughing is probably of post-medieval date (see below). The closest lynchet in this area comes to within a few metres of the foot of the rampart, but there is no definite stratigraphic relationship between the lynchet and the defences which would permit any inference to be drawn about their relative chronology. The uppermost lynchets are not pronounced, standing no more than 0.4m high, but further down the slope they become gradually larger, which hints that they may be forerunners of the more massive terraces produced by medieval cultivation, which are found elsewhere in the area.

A series of larger, or more developed, lynchets follow the extremely steep east-facing slope and the head of the valley to the south-west of Mid Hill, centred at NT 880 294 (beyond the limit of the area surveyed in detail). The largest reach a height of 2m and extend for more than 200m, though the intervening strips of ground are not level, but retain the natural slope of the hillside; in this, they differ significantly from the true cultivation terraces, that are thought to be essentially products of medieval agriculture. These lynchets can perhaps be dated slightly more accurately, for their eastern ends are overlain by broad 'ridge and furrow' cultivation, which is usually agreed to be characteristic of the medieval period, thus suggesting that the terraces are of earlier origin. The ridges run well down the steep slope at the head of the valley at right angles to the earlier terraces and have consequently almost erased them.

On the relatively level ground immediately to the north-west of the hillfort, a second expanse of broad ridge and furrow is aligned at right angles to the strips mentioned above. Here, the ridges are overlain by a later episode of ploughing comprising closely-spaced slight furrows that are identical in appearance to those that overlie the lynchets on the north-eastern slope of the hill. The furrows between the broad ridges, spaced at intervals of between 5m and 8m, are well-defined and relatively easy to identify on the ground, and the ridges remain fairly pronounced, standing to a maximum of 0.3m high. By contrast, the intervening furrows, which subdivide the broad ridges into three or four narrower strips up to 3m wide, are of negligible depth and the strips are virtually level in relation to the earlier ground surface. Tim Gates (2000, 16) has described this form of agriculture as 'poorly developed' ridge and furrow and has expressed a suspicion that it may have a pre-medieval origin. However, the relationship detected on the ground at Mid Hill, which is not immediately apparent on aerial photographs, seems to confirm both the relatively early date of the broad ridge and furrow and the late date of the narrow strips.

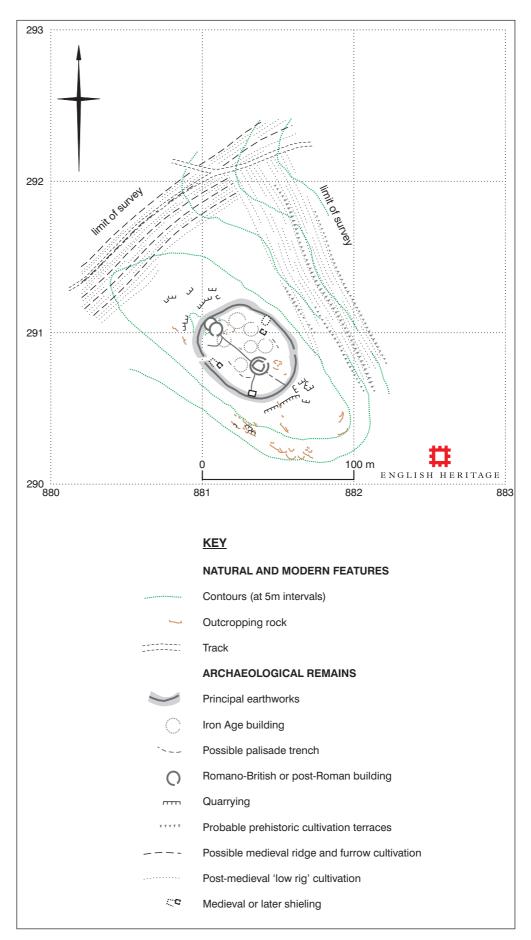


Figure 11.
English Heritage
plan of the
landscape setting
of the hillfort

Investigations in Menstrie Glen, near Stirling in central Scotland, have recovered good documentary evidence that this so-called 'low rig', similar in appearance to that at Mid Hill and in some instances also overlying broad ridge and furrow, dates to the century or so before 1760 and represents the latest phase of arable agriculture in that area (RCAHMS 2001).

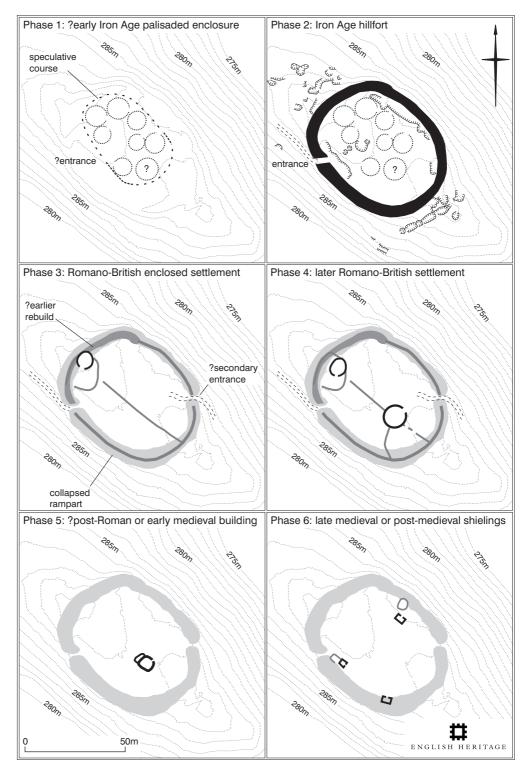


Figure 12. English Heritage interpretative plan of the development of the hillfort

#### 5. DISCUSSION

The dating of the hillfort to the Iron Age (700 BC to AD 50) is secure given the general form and location of the monument, but in the absence of excavated evidence, the precise dates of its construction and occupation must remain open to question. Amongst the most important findings of the English Heritage investigation is the conclusion that the stone-built rampart was not the product of a single constructional episode, as has been tacitly accepted by previous investigators. Rather, it evidently evolved through two, or perhaps three, phases of construction and remodeling, at least one of which lies within the Romano-British period. Of equal importance is the tentative identification of a palisaded enclosure, apparently pre-dating the stone-built hillfort and possibly contemporary in origin with as many as seven circular timber buildings lying within its perimeter. The lay-out of this possible palisaded enclosure, with its tightly-packed cluster of ring-groove buildings, has aspects in common with the palisaded settlements at nearby Ell's Knowe and Steer Rigg (respectively NT 872 278 and NT 859 254). Excavations at Ell's Knowe produced evidence of iron working and hand-made pottery dating to around the 6th or 7th centuries BC (Burgess 1979). Based on the earthwork evidence it is impossible to be certain whether the stone-built rampart immediately succeeded the timber palisade, or whether there was an interval of desertion, perhaps even lasting several centuries, between the two constructional phases. However, since all the four buildings that have been identified previously are almost certainly of Romano-British (or in one case perhaps post-Roman) origin, it may be inferred that the use of the timber buildings continued after the construction of the stone-built rampart, at which point the timber palisade may have been removed. There is as yet no unambiguous evidence for the time-scale over which these changes occurred, but if the transition from palisaded enclosure to stone-built hillfort was really an uninterrupted sequence, it may be inferred that the settlement was reasonably long-lived. Although the traces of the palisade are admittedly not extensive enough to allow certainty, circumstantial support for this theory may be found in the concentric layout of the two circuits, for the stone-built rampart seems to have respected the line of the palisade, or more probably the perimeter of the settled area. This sequence of development may account for the curious siting of the stone-built circuit, some way short of the tip of the spur, and its oval plan, when many stone-built hillforts in the region are virtually circular. Excavations at Hownam Rings, in Roxburghshire, revealed that successive palisaded enclosures were replaced in the 2nd century BC by a single stone-built circuit, which was in turn replaced by a larger multivallate hillfort in the late 1st century BC (Piggott 1948). This so-called 'Hownam sequence' was for long widely accepted as a standard model for the interpretation of hillforts in the Borders and may be applicable to Mid Hill. Yet very few other hillforts in the region have been excavated and dated accurately, either on artifactual evidence or by scientific dating techniques. Excavations of hillforts at Broxmouth and Dryburn Bridge in south-eastern Scotland have revealed that the developmental sequence of the defences was not such a straightforward evolutionary progression as the Hownam sequence would suggest (Hill 1982; Triscott 1982). Although the model is perhaps therefore ripe for revision, and the potential for a wider spectrum of variation more widely accepted, it is still generally agreed that many hillforts were constructed from the 6th century BC onwards, often replacing earlier palisaded enclosures (Jobey 1965, 23-4; Gates 1983, fig 14; Burgess 1984, 159-64). Based on the earthwork evidence, the development of the example on Mid Hill seems to be comparable to that of the hillfort on Wether Hill, which overlooks the Ingram Valley 18kms to the south-east. Excavations at that site which is the only one in the region to be subjected to intensive research in recent years - have as yet been unable to recover samples for scientific dating from the palisade

within the ramparts. However, analytical survey of the earthworks has demonstrated that the palisade trench is stratigraphically earlier than quarries associated with the inner stone-built rampart, whose construction has been radiocarbon dated to somewhere between the 3rd and 1st centuries BC (Topping and McOmish 2000, 8).

The term 'hillfort', when used in the context of central and southern England, normally carries connotations of a defensive capability. Enclosures such as that on Mid Hill unquestionably occupy commanding topographic situations and the siting of the gateway above the steep natural slope is a common characteristic which seems to have been intended to constrict the approach. However, it is worth remarking that most of the interior of the hillfort would have been visible from the higher ground to the south-west, even allowing for the former existence of a substantial rampart, as Figure 2 makes clear. It has been pointed out that, even allowing for the possibility of a very different defensive logic in the Iron Age, this must constitute a weakness in strategic terms (Bowden and McOmish 1987; 1989). Furthermore, as several previous investigators have pointed out, the siting of the stone-built circuit does not make the best use of the topography of Mid Hill. From a defensive point of view, siting the hillfort on ground that is marginally higher, rather than at the tip of the spur, leaves the approach from the south-east, via the tip of the spur, as a broad 'blind spot', a weakness which must have been immediately apparent. Remarkably, the rampart on this defensively weak south-east sector is of negligible height, with little sign that it can ever have stood to truly defensible proportions. This makes a striking contrast with the impressive size of the rampart on the north-west, the direction that offers the easiest natural approach to the hillfort and its entrance. The inescapable conclusion is that the function of the rampart was more about impressing the approaching visitor than about defending against a well-planned or prolonged attack. This conclusion finds parallels at other hillforts in the region: for example, the outer ramparts of nearby Ring Chesters are far larger on the sector overlooking the low ground to the north than they are on the sector facing towards the level approach from the south (Oswald et al 2002, 39). Along similar lines, the near-circular stone-built circuit on West Hill, overlooking Kirknewton, is sited so that it tips across the contours, making it more visible from the low-lying ground to the north-west (Oswald et al 2000, 53).

The discovery of the previously unrecognised settlement remains in the interior of the hillfort is also a significant advance in the understanding of the monument, for the ring-groove buildings are likely to be contemporary with one or more of the Iron Age phases of the defences. Certain hillforts, such as that on Wether Hill overlooking the Ingram Valley or that on Hayhope Knowe in Roxburghshire, contain numerous traces of early ring-groove buildings within palisaded enclosures, which allow a fairly clear impression of the nature and extent of the Iron Age occupation of the interior (McOmish 1999, fig 1; Feachem 1966, fig 2). However, such examples are relatively rare, for in many cases, later activity, including Romano-British re-occupation, has virtually erased the surface evidence of occupation in the prehistoric period. At Mid Hill, the extent and intensity of Romano-British and later activity seem to have been very limited and, in the light of the detailed survey undertaken in 2002, the picture of the Iron Age settlement remains can now be compared directly with the remarkably intact sites mentioned above. With an area of 95m<sup>2</sup>, the interior of the largest ring-groove building, Building 3, is impressively spacious by comparison with the stone-built Romano-British buildings. Though it is perhaps unwise to accept that all the circular timber buildings were houses or were constructed to the same standard, the term 'hut', which has conventionally been used to describe this fairly sophisticated form of vernacular architecture, is inappropriate and misleading. The

overall pattern of the settlement on Mid Hill is particularly interesting. At first impression, the large circular buildings seem to cluster around a more open central space, accessed via a gateway on the west, both in the timber palisade phase and the stone-built rampart phase. Central spaces are an occasional feature of palisaded settlements in the region, but in this instance it becomes clear on closer consideration that not all the doorways seem to have faced onto this central area and that the apparent 'communal space' may be largely the product of later quarrying in the midst of the cluster of buildings. The same impression emerges from a close consideration of the inter-relationships of some of the individual buildings: for example, assuming the two were contemporary, the doorway of Building 2 seems to have faced directly onto the rear of Building 3. The spatial independence of individual buildings and the apparent lack of concern for orientation towards communal spaces is typical of the patterns of the majority of Iron Age settlements throughout Britain, but a characteristic which differs strikingly from rural settlements of the Romano-British period (Oswald 1997, 89-91).

The appearance of the landscape around Mid Hill and the nature of its exploitation in the Iron Age are difficult to determine. Although the fieldwork has recorded traces of prehistoric cultivation that may be contemporary in origin or use with the occupation of the hillfort, there is as yet no hard evidence to support this hypothesis, as in almost all other instances. Perhaps the most significant discovery in this context is the recognition of what seems to be a low bank running straight across the saddle mid-way between the hillforts on Mid Hill and Staw Hill (National Grid Reference NT 8818 3002 to NT 8825 2989). The location of the earthwork with respect to the two intervisible hillforts is suggestive of a cross-ridge dyke or similar boundary, perhaps defining the limit of the grazing land associated with each settlement. A cross-ridge dyke in a similar topographic location has been recorded near the hillfort on nearby Great Hetha, 2.2 km to the south, and the isolation of this example in relation to other agricultural remains suggests that it is very likely to be contemporary with the occupation of the hillfort (Pearson and Lax 2001, 21 and fig 10). Excavation of a comparable earthwork in a similar topographic situation below Wether Hill has suggested that it was built towards the end of the 3rd century BC, contemporary with the occupation of the nearby hillfort and that it was perhaps maintained into the 5th century AD (University of Durham 1998, v-vi; Topping and McOmish 2000, 8). However, in the case of the cross-ridge dyke between Mid Hill and Staw Hill, its dating must remain speculative, both because the earthwork has been so degraded by medieval and later ploughing that its identification is far from secure, and because both hillforts were evidently re-occupied in the Romano-British period (Ainsworth et al 2002).

Partly as a result of the 'Discovering our hillfort heritage' project, it is increasingly clear that in the Cheviots, the re-occupation of Iron Age hillforts in the Romano-British period and the redefinition of their perimeters were common occurrences. In this context, the re-use of the hillfort on Mid Hill can be regarded as entirely typical. However, many Romano-British re-occupations resulted in a complex settlement pattern comprising numerous small houses sharing yards and compounds within the perimeter, a layout suggestive of unplanned organic growth. By contrast, the settlement in the hillfort on Mid Hill is exceptional for the apparent degree of planning. The interior is almost precisely bisected by a straight bank, which presumably carried a fence or hedgeline, and the two circular buildings, each with their adjoining yard and a separate entrance into their respective halves of the interior, appear to have mirrored each other. Similarly, the rebuilding of the perimeter using rubble from the tumbled remains of the Iron Age rampart was carried

out unusually carefully. At most other sites the low, stone-revetted banks that defined the perimeters of the Romano-British settlements seem to have acted merely as crude foundations for hedges or timber palisades, which may have served to contain livestock or exclude wild predators such as wolves. At Mid Hill, the use of facing-stones is extensive and carefully executed, leading Caroline Hardie to misinterpret certain stretches as parts of the original well-built Iron Age rampart (English Heritage 1994).

It is worth singling out aspects of two individual buildings for comment. Firstly, the preservation, apparently virtually intact, of a segment of the wall of Building 8 within Building 9 is very curious and may have implications for how we should understand the use of this small Romano-British settlement as a whole. It is difficult to conceive how the earlier earthwork could be so well preserved if the occupation of the later building was at all intensive or prolonged, yet Building 9 does not give any impression of having been crudely constructed as a temporary shelter. The subdivision of the interior of the hillfort into yards and paddocks accompanying the houses is suggestive of the management of livestock. Elsewhere in the area, for example on the slopes around Torleehouse to the south-east of West Hill, Romano-British trackways fan out as they reach the high ground, hinting that livestock may regularly have been driven away from the centres of settlement and arable agriculture to reach open upland pastures (Oswald et al 2000, 36). This may have taken place on an annual cycle for the duration of the summer months, a practice known as 'transhumance'. None of the Romano-British settlements within the hillforts in the upper reaches of the College Valley are associated with the complex networks of field boundaries and trackways that are found on the fringes of the low-lying Milfield Plain, both at West Hill and the adjacent St Gregory's Hill, which both overlook Kirknewton (Oswald and McOmish 2002). Therefore, the environs of Mid Hill and other tracts of the uplands may well have been used as common upland pasture in the Romano-British period. Small settlements like those on Mid Hill may have been occupied regularly, but only seasonally, allowing those responsible for the livestock to live in some comfort for a few months each year. The hypothesis of intermittent occupation of the buildings for fairly short periods may account for the condition of the earthworks in question.

The second building worthy of comment is Building 11. The fact that it directly overlies Building 10, which may in turn overlie an earlier ring-groove, may be fortuitous and perhaps reflects nothing more than convenience. What is striking in this instance is the unusual plan of Building 11, which is close to being rectangular, but has little in common with the medieval or later shepherds' huts. It is tempting to interpret this unusual building as a distinct type, which can perhaps be assigned to the ill-defined transition between the Romano-British and medieval periods. However, as Tim Gates (2000, 18) has commented, the nature of this transition remains a closed book; without further investigation, speculation about the date of this anomalous building must remain unfounded.

#### 6. METHODOLOGY

The field investigation was carried out by Alastair Oswald and David McOmish. The entire survey was carried out using a Trimble dual frequency Global Positioning Satellite (GPS) system. The base receiver was set up on the summit on permanent survey station ST01 and two receivers (Trimble 4700 and 4800 models) were used to record the remains, working independently in real-time kinematic mode. The co-ordinates of the base receiver were initially calibrated to the National Grid (OSGB36) using Trimble Geomatics software, based on the position of the receiver relative to Ordnance Survey active GPS stations at Carlisle, Glasgow, Edinburgh and Newcastle, following an occupation of four hours. In addition to permanent survey station ST01, a second marker (ST02) was established, intervisible with the first, to allow future work with conventional survey equipment. The positions of both stations are marked by brass rivets set into rock outcrops. Their positions are indicated on the 1:500 scale plans and further details are recorded in Appendix 2. The resulting plan was plotted at 1:500 scale and 1:2,500 scale via Key Terrafirma, AutoCAD 2000i and Coreldraw 8 software.

A number of digital photographs taken by Alastair Oswald and David McOmish are held on disk as part of the project archive. The hand drawn archive plan and CAD-based drawings were prepared by Alastair Oswald. The report was researched and written by Alastair Oswald, 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 45).

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#### 8. BIBLIOGRAPHY

Ainsworth, S, Oswald, A and Pearson, T 2002 'An Iron Age hillfort on Staw Hill, Northumberland'. English Heritage Archaeological Investigation Report Series AI/17/2002

Bowden, M and McOmish, D 1987 'The required barrier'. Scottish Archaeological Review 4, 76-84

Bowden, M and McOmish, D 1989 'Little boxes: more about hillforts'. *Scottish Archaeological Review* **6**, 12-16

Burgess, CB 1979 'Excavations at Ell's Knowe, Northumberland'. Durham: University of Durham and University of Newcastle-upon-Tyne Archaeological Reports for 1978

Burgess, CB 1984 'The prehistoric settlement of Northumberland: a speculative survey' in Miket, R and Burgess, CB (eds) *Between and Beyond the Walls: Essays on the Prehistory and History of North Britain in Honour of George Jobey*, 126-75. Edinburgh: John Donald

Charlton, B and Day, J 1984 'Henry MacLauchlan: surveyor and field archaeologist' 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*. Edinburgh, John Donald

English Heritage 1994 Unpublished revision of Scheduling information for RSM: 24566 (11-AUG-1993)

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

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

Gates, T 1983 'Unenclosed settlements in Northumberland' in Chapman, JC and Mytum, HC (eds) *Settlement in North Britain 1000 BC - AD 1000: Papers presented to George Jobey, Newcastle-upon-Tyne, December 1982* (British Archaeological Reports, British Series 118), 103-48. Oxford: British Archaeological Reports

Gates, T 1974 Aerial photographs NMR ref: NT 8829/2-3 (1974)

Gates, T 1986 Aerial photographs NMR ref: NT 8829/4-9 (19-MAR-1986)

Gates, T 1997 Aerial photographs 16644 (15-APR-1997)

Gates, T 2000 'The Archaeology of the College Valley Estate: an Air Photographic Survey'. Unpublished report produced for the Northumberland National Park as part of the 'Discovering our hillfort heritage' project

Greenwood, C 1828 Map of the County of Northumberland, from an actual survey made in the years 1827 and 1828. London: privately printed

Hill, PH 1982 'Broxmouth hillfort excavations, 1977-8: an interim report' in Harding, DW *Later Prehistoric settlement in south-east Scotland*, University of Edinburgh Department of Archaeology Occasional Papers 8, 141-88. Edinburgh: Edinburgh University

Hogg, AHA 1947 'A new list of native sites in Northumberland'. *Proceedings of the Society of Antiquaries of Newcastle* **11.4**, 140-79

Hope Dodds, M (ed) 1935 Northumberland County History, vol 14. Newcastle: Andrew Reid

Jobey, G nd Undated manuscript plan, held in the Black Gate Museum (ref:MP 4.61)

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

MacLauchlan, HH 1867 'Notes not included in the memoirs already published on Roman roads in Northumberland'. Privately published document held in the private collection of the Duke of Northumberland

MacLauchlan, HH 1919-22 'Notes on camps in the parishes of Branxton, Carham, Ford, Kirknewton, and Wooler, in Northumberland'. *History of the Berwick Naturalists Club* **24**, 451-70

McOmish, D 1999 'Wether Hill and Cheviots hillforts' in Frodsham, P, Topping, P and Cowley, D (eds) 'We were always chasing time': papers presented to Keith Blood (Northern Archaeology 17/18), 113-21

NMRa Ordnance Survey record card for NT 82 SE 24, held in the National Monuments Record

NMRb Unsourced 'M series' aerial photographs taken late 1920s or early 1930s held in the NMR refs: NT 8729/2 CCC 9147/M 438 and NT 8829/1 CCC 9147/M442

Ordnance Survey 1866 First Edition 25-inch map sheet Northumberland XVIII.4 (surveyed 1860)

Ordnance Survey 1897 Second Edition 25-inch map sheet Northumberland XVIII.4 (revised 1896)

Ordnance Survey 1972 1:2,500 sheet NT 8829/8929, surveyed 1971

Ordnance Survey 1982 1:10,000 scale map sheet NT 82 NE, surveyed 1980

Oswald, A 1997 'A doorway on the past: practical and mystic concerns in the orientation of roundhouse doorways' in Gwilt, A and Haselgrove, C (eds) *Reconstructing Iron Age Societies* (Oxbow Monograph 71), 87-95. Oxford: Oxbow Books

Oswald, A, Jecock, M and Ainsworth, S 2000 'An Iron Age hillfort and its environs on West Hill, Northumberland'. English Heritage Archaeological Investigation Report Series AI/12/2000

Oswald, A and McOmish, D 2002 'An Iron Age hillfort and its environs on St Gregory's Hill, Northumberland'. English Heritage Archaeological Investigation Report Series AI/1/2002

Oswald, A, Pearson, T, and Ainsworth, S 2002 'Ring Chesters, Northumberland: an Iron Age hillfort and its environs'. English Heritage Archaeological Investigation Report Series AI/3/2002

Pearson and Lax 2001 'An Iron Age hillfort on Great Hetha, Northumberland'. English Heritage Archaeological Investigation Report Series AI/3/2001

Piggott, CM 1948 'Excavations at Hownam Rings, Roxburghshire, 1948' *Proceedings of the Society of Antiquaries of Scotland* **82**, 193-225

RAF 1948 Aerial photographs held in the National Monuments Record: 541/A/437, frames 3213-4 (28-JUL-1948)

RAF 1951 Aerial photographs held in the National Monuments Record: 540/611 frames 3401 and 4407 (09-OCT-1951)

RCAHMS 2001 'Well shelterd & watered': Menstrie Glen, a farming landscape near Stirling. Edinburgh: RCAHMS

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

Tomkeieff, SI 1965 Cheviot Hills (Geologists Association Guides No. 37)

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)

Triscott, J 1982 'Excavations at dryburn Bridge' in Harding, DW *Later Prehistoric* settlement in south-east Scotland, University of Edinburgh Department of Archaeology Occasional Papers 8, 117-24. Edinburgh: Edinburgh University

University of Durham (Archaeological Services) 1998 'The Ingram Valley and Upper Breamish Valley Landscape Project'. Unpublished report

APPENDIX 1.
TABLE OF NMR NUMBERS LINKED TO THE SURVEY

Iron Age hillfort and Romano-British settlement	NT 8812 2958	NT 82 NE 45
Possible prehistoric cross-ridge dyke	NT 8825 2989 - NT 8818 3002	NT 82 NE 119
Possible prehistoric lynchets	NT 8818 2965	NT 82 NE 120
Possible prehistoric lynchets	NT 880 294	NT 82 NE 121
Medieval and later ridge and furrow cultivation	NT 880 297	NT 82 NE 122
Post-medieval stock pens and structures	NT 88111 29578	NT 82 NE 118

## APPENDIX 2. DETAILS OF PERMANENT MARKERS



# SURVEY STATION INFORMATION ENGLISH HERITAGE

SITE NAME	Mid Hill hillfort, Northumberland		
Station number	ST 01	Status	Permanent
Type of Mark	Brass rivet in rock outcrop	NMR number	NT 82 NE 45
Date of Survey	01-FEB-2002	SAM number	24566
Office of origin	York	Surveyors	AO; DMcO
OS National Grid	Eastings	Northings	Height
	388121.396	629603.409	291.920



View from south-east



# SURVEY STATION INFORMATION ENGLISH HERITAGE

SITE NAME	Mid Hill hillfort, Northumberland		
Station number	ST 02	Status	Permanent
Type of Mark	Brass rivet in rock outcrop	NMR number	NT 82 NE 45
Date of Survey	01-FEB-2002	SAM number	24566
Office of origin	York	Surveyors	AO; DMcO
OS National Grid	Eastings	Northings	Height
	388152.654	629577.802	292.030



View from south-east, with ST01 in background