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**Ironhouse Bastle,
Otterburn Training Area, Northumberland**

Archaeological Topographical Survey

March 2008



Report No. 1796

C L I E N T

Landmarc Support Services Limited

**Ironhouse Bastle,
Otterburn Training Area,
Northumberland**

Archaeological Topographical Survey



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Report Information

Client: Landmarc Support Services Limited
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NE17 1NX
Report Type: Archaeological Topographical Survey
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represented: ?Late medieval, Post Medieval,
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1 Introduction

Archaeological Services WYAS (ASWYAS) was commissioned by Landmarc Support Services Limited to undertake an archaeological topographical survey of the remains of Ironhouse Bastle and associated features on the Otterburn Training Area, Northumberland. The site of Ironhouse Bastle is a designated Scheduled Monument (no. 20912).

Site location

The Ironhouse Bastle site is situated around 4.5km to the north of the village of Elsdon, and 1.5km to the north-west of the hamlet of Billsmoor Park, centered at NY 9337 9831 at about 250m above OD. The site lies on the side of a small valley to the south of a narrow stream called Watty's Sike, 100m to the west of Heely Dod Road. It is located in the parish of Hepple, within the Northumberland National Park and the Otterburn Training Area.

Geology, Soils and Land-use

The survey area consists of rough pasture, with some natural outcrops of stone, although the eastern end of the valley has lightly wooded sides. It is possible that the length of grass cover, together with patches of reeds within waterlogged areas, may obscure less prominent archaeological surface remains (Plate 1).

The survey area is surrounded by a modern barbed-wire fence which encloses an approximately triangular field. The surrounding area consists of open moorland and rough pasture to the west, crossed by numerous small streams, and with intermittent tracts of forestry plantation (Plate 2). To the south-east of Heely Dod Road the land is largely improved pasture, in which are situated the farms of High Shaw and The Raw (see Figs 2 and 3).

The underlying geology of the survey area comprises Tournaisian and Viséan Carboniferous Limestone (BGS 2001). This is overlain by slowly permeable seasonally waterlogged fine loamy and fine loamy over clayey soils (Soil Survey of England and Wales 1980).

Methodology

Topographical survey

The survey area covers the extent of the Ironhouse designated Scheduled Monument (no. 20912; see Appendix 1 and Fig. 2). Associated archaeological remains identified on the site were also surveyed where they fell within a fenced off area marked as a Highly Sensitive Area (HSA) by Defence Estates. No surveying was undertaken outside of this area due to military exercises underway at the time.

The survey was carried between the 3rd and 7th of December 2007 using a Trimble Geodimeter 5600 total station, to the standard of an English Heritage Level 3 survey (English Heritage 2007). Seven semi-permanent survey stations were established around the site, the

locations and heights of which are listed in Appendix 2 (see Fig. 4). The survey data was processed using GeoSite 5 and AutoCAD 2007 software.

Information sources

The Northumberland Archives, Woodhorn were consulted for historic mapping and documentary sources. Further information on previous archaeological work was obtained from the Northumberland National Park Authority, the Northumberland Sites and Monuments Record and the holdings of Defence Estates at Otterburn HQ.

2 Archaeological and historical background

Previous research

There are a number of 18th and 19th-century antiquarian sources that provide general references to the history of bastles and other buildings in the border area of Northumberland (e.g. Hutchinson 1776; Hodgson 1840; Bain 1894). However, the earliest detailed archaeological study of the area was produced by David Dippie Dixon in his *Upper Coquetdale, Northumberland: its history, traditions, folk-lore and scenery* (Dixon 1903). A series of pencil sketch drawings of Ironhouse Bastle, and the nearby High Shaw Bastle and The Raw Bastle, by an unknown artist, of possible early 20th-century date, are held in the Northumberland Archives, Woodhorn (see Fig. 14; ref. SANT/BEQ/21/4/3/12/1).

Little detailed archaeological research on bastles was carried out until the late 1960s, when the Royal Commission on Historical Monuments (England) undertook a survey of known sites. This recorded and described about 70 bastles, including Ironhouse Bastle (Ramm *et al.* 1970, 88). Subsequent research, in particular that undertaken by Peter Ryder, has now increased the number of identified sites to over 200 (Ryder 1990; see Fig. 7) and further added to the understanding of the form and development of this building type (Ryder 1992 and 2004).

A number of detailed archaeological topographical surveys of bastles were carried out by the former Royal Commission on the Historical Monuments of England in the late 1980s and 1990s, at three sites in the Tasset Valley; Black Middens, Boghead Bastle and Shilla Hill Bastle (Bowden 1987; Lax 1997; Chandler 1997) a synthesis of the results of which was published in 1999 (Lax 1999).

An aerial photographic survey of the Otterburn Training Area, including the area around Ironhouse Bastle, was carried out in the mid-1990s (Gates 1996). This identified a number of relict field boundaries and tracts of ridge and furrow ploughing (see Fig. 2).

Bastle Houses

Bastle Houses are defended farmhouses found in a relatively confined geographical area along the border between England and Scotland. They are located primarily in

Northumberland, but with examples in Cumbria and to the north of the border (Ramm *et al.* 74-79; Ward 1990). The name 'bastle' probably derives from the French 'bastille'. The term was in use in the 16th and 17th centuries, but at this time was used to describe various forms of building type, including medieval 'pele' towers and other defended structures. The modern use of 'bastle' was largely defined by the Royal Commission on Historical Monuments (England) in the 1960s, and applies only to the specific building type described here (McDowall and Mercer 1970, 61; Ryder 1990, 2).

The characteristic form of a typical bastle is of a rectangular two storey building, about 12m long by 7m wide, constructed of large stone blocks with the gaps in-filled with smaller stones and mortar. A ground floor byre was accessed via a gable-end door which could be secured from the inside by two drawbars which were housed in tunnels in the walls on either side of the door. A trapdoor, or in some cases a small staircase, allowed access to the upper floor for the person securing the door. The byre was poorly lit with no windows, and ventilated by a number of small slit-vents in the walls. The living space was above the byre and was accessed by a first floor door, generally in one of the long sides of the building; this would have been served by a ladder or wooden stair, which could have been removed from above in times of danger. The upper floor was supported by either thick wooden beams or a stone vault, and would have been lit by small windows and slit-vents. The living space would have contained a fireplace, generally located at the gable-end furthest from the door, and often had cupboards built into the walls.

Bastles appear to have their origin in the late 16th and early 17th centuries when feuding, cattle thieving and banditry were rife in the remote border areas. In 1555 an Act of Parliament was passed making it compulsory for everyone living within 20 miles of the border to construct or maintain defences against such activity (Dodds 1999, 17). However, most of the known examples of bastles are probably slightly later in date and were constructed after 1600 (Ryder 2004, 265). Despite their defensive character, bastles were essentially farmhouses with generally little architectural decoration (Ryder 1990, 4), and they did not necessarily indicate a higher social status than their neighbours (McDowall and Mercer 1970, 65). As well as defensive requirements, it has been suggested that economic factors may have influenced the construction of bastles. Low land values during the late 16th and early 17th centuries may have offered opportunities for greater returns on commercial stock rearing, with absentee landlords perhaps removing previous tenant farmers from their land and constructing bastles for incoming sheep farmers (Frodsham 2004, 105).

Ironhouse Bastle

The earliest possible record of a settlement at Ironhouse comes from an *inquisition post mortem* dating to 1398 (Headley 2004, 311). This describes land named as *Hernehousefeld*, with *herne* being a medieval form for 'iron', and indeed the area around Ironhouse contains the remains of numerous bloomery slag heaps (Headley 2004, 311-312). The remains of medieval ridge and furrow ploughing also surround the site.

Although there is no precise dating evidence for the construction of Ironhouse Bastle, evidence from similar sites suggest a date in the early 17th century (McDowell and Mercer 1970, 61; Ryder 1990, 1). It appears to have formed part of a group of bastles constructed in the area about the same time, including High Shaw Bastle, 250m to the east, and The Raw Bastle, 1km to the south-east (see Fig. 2).

The earliest cartographic evidence for Ironhouse Bastle is the Elsdon enclosure map of 1731 (Fig. 8; Robertson 1731). This shows a single building on the site named as 'Iron Houfe' situated at the north-eastern corner of a field marked as 'Ancient Ground', perhaps due to the remains of medieval ridge and furrow ploughing still extant across the area. This field's northern edge appears to have been defined by Watty's Sike, which was called 'Watt Strother Syke' at the time (Robertson 1731). A large area of land stretching to the west of Ironhouse is named as 'Iron Houfe Allotment' on the enclosure map, and another building is also shown situated to the west on Heely Dod (Robertson 1731).

The Elsdon tithe map of 1840 shows two buildings at Ironhouse (Fig. 9; Ankle 1840), with a rectangular building shown to the west and a smaller square building marked to its east. Comparison of this map with the First Edition Ordnance Survey map of 1866 shows that the larger building marked on the tithe map may not be the bastle, but is more likely a building adjacent to the bastle's western side; the smaller square building may have been used later as a sheep pen. However, the small scale of the map means it lacks detail, and smaller structures and boundaries would have been excluded. At this time Ironhouse and the land to its south were in the same ownership as High Shaw Bastle. They are recorded as one entry in the Tithe Award, and were both owned by a Nicholas Maughan, with Ironhouse being occupied by a Thomas Snaith at this time (Ankle 1840; see also Hodgson 1840, 152).

By the 1860s it appears that Ironhouse Bastle was no longer occupied. The First Edition Ordnance Survey map, surveyed in 1863, names the site as 'Peel (In Ruins)' (Fig. 10; Ordnance Survey 1866). This depicts the bastle as a roofless structure, with another similar sized building adjoining its western side and two square enclosures to the west of this. A smaller square structure is shown at the bastle's eastern end from which runs a boundary towards the south-east, which turns north-east over Watty's Sike, and continues to the north. A large rectilinear enclosure is shown to the south of this group of structures. The First Edition Ordnance Survey map also marks 'Iron Well' to the north-west of Ironhouse (Ordnance Survey 1866).

The Second Edition Ordnance Survey map, revised in 1896, shows little change in the general plan of the structures at Ironhouse, and it is still marked as 'Peel (In Ruins)' (Fig. 11; Ordnance Survey 1897). However, it is probable that, although the bastle itself was in a ruinous state at this time, the buildings and structures on the site still served an agricultural function. Indeed, the small enclosure at the bastle's eastern end is marked as a sheepfold and the building adjacent to the western end of the bastle is still depicted as a roofed structure, and was perhaps in use as a storage barn or sheep byre.

By the 1920s a number of new north-south boundaries had been constructed connecting the rectilinear enclosure to the south with the building range to the north, and the sheepfold at its eastern end (Fig. 12; Ordnance Survey 1922). This created two new enclosures, connected by a narrow enclosure down which sheep may have been herded, perhaps for shearing.

3 Survey description

The site consists of a range of buildings aligned approximately east to west, with a series of associated enclosures and pens to the south and south-east (see Fig. 4). The most prominent remains are those of Ironhouse Bastle itself, which has walls surviving to above first floor level, with the remains of further buildings and structures surviving as earth covered banks, wall foundations and stone scatters.

Buildings

Ironhouse Bastle

Ironhouse Bastle measures 13.3m long by 6.8m wide, and forms a slightly lopsided rectangle in plan, with a doorway in the eastern gable end (see Figs 4 and 5). The walls are constructed of large roughly coursed blocks, on a foundation of large boulders that can be clearly seen on its northern side (see Plate 4). The quoins at the buildings corners are of cut rectangular blocks, about 0.4m high. The walls are about 1.3m thick, and survive to a maximum height of approximately 4.5m on the northern side and the eastern gable end, and to about 4m high at the western gable-end (Plate 3-6). The wall of the southern side of the building survives only to a height of about 2.2m (Plates 7 and 8). The doorway to the ground floor byre, in the eastern gable end, is 1.67m high and 0.77m wide externally widening to 1.17m internally. The doorway is capped with a chamfered lintel with a relieving arch above (Plate 5; see Fig. 14). Two shallow depressions in the lintel may have held some form of fixture over the doorway. Circular depressions to the inside-right of doorway and on the bottom of the lintel would have held a harr-hung door (Plate 9). This would have been secured from the inside by two drawbars, which were housed in tunnels within the walls on either side of the doorway, each about 1.2m in length and about 0.14m square (Plates 10 and 11). Two small indentations, about 7cm long by 2cm wide may have been catches for a door latch for everyday use. A recess about 0.18m wide by 0.55 long, on the northern side of the doorway wall, could have been used as a small cupboard. A rectangular recess on the external wall to the north of the doorway may be a later addition, as it would have allowed access to the tunnel which held one of the drawbars (see Plate 5). The byre would have been ventilated by small slit-vents situated at the bottom of the western gable-end wall and in the southern wall (Plates 12 and 13). A small rectangular gap in the northern wall may also have acted as a vent.

There is a break in the south-western corner of the bastle wall about 0.4m wide, where it appears that the stone work has been deliberately removed (Plate 14). It is unclear whether

this was a functional part of the building, originally forming a slit-vent or possibly a drain for the byre, or if this break was made a later date. On the northern side of the bastle one of the large foundation stones has also apparently been deliberately removed (see Plate 4).

The first floor of the bastle would have been supported by a timber floor and a number of beam slots, varying in width between 0.2m to 0.3m, are visible on the internal side of the northern wall of the bastle (Plate 15). A flat stone projecting from the inside of the western wall may have supported a hearth, and an indent in the northern end of the same wall could have acted as a cupboard space (Plate 16). There is a possible triangular slit-vent in the upper part of the western gable-end wall, but no evidence of first floor windows survive.

The inside of the bastle is now filled with stone building debris, although this appears to have been partially cleared at some time to allow access around it.

Western building range

Abutting the western end of Ironhouse Bastle are the remains of a building (House 1) (see Figs 4 and 5; Plate 17). This is shown on the First Edition Ordnance Survey map of 1866 as the only roofed structure surviving on the site by that time, and was probably the latest house to be occupied at Ironhouse (see Fig. 10; Ordnance Survey 1866). House 1 measures 6m wide by 9m long, and is defined on its southern side by a wall about 0.75m wide and 1.2m high, of worked stone. It is not clear if the north-western wall, and part of the northern wall, still partially survive as they are obscured by stone building debris, although most of the northern wall is no longer visible on the ground. The remains of a blocked doorway, about 1m wide is situated in the southern wall, at the south-eastern corner of House 1, indicating different phases of use or re-use of the building (Plate 18). To the west of House 1 is a further length of wall, orientated approximately on the same alignment as House 1, but with no apparent visible structural connection to it. However, the building's depiction on the First Edition Ordnance Survey map of 1866, showing its length and relationship with the enclosure to the west, suggests that this wall formed part of at least one phase of House 1's use (see Fig. 10; Ordnance Survey 1866).

To the east of House 1 are the remains of two further structures, which are shown as small enclosures or pens on the First Edition Ordnance Survey map of 1866 (see Fig. 10). The easternmost of the two is rectilinear in plan, about 4.5m wide and 5m long, with stone spreads defining its northern and southern sides, possibly obscuring any *in situ* walling beneath. Its eastern side is defined by the length of wall that may have formed the western wall of House 1 (see above). The angle that this wall appears to cut across the structure suggests that House 1 itself was constructed over its eastern end at a later date. The westernmost structure is 5m wide and 9m long, and is defined to the south by a stone spread, to the north and west by a bank about 1.5m wide and 0.5m high and to the east by a length of stone wall approximately 0.75m wide and 0.5m high. A break in the south-west corner may be an entrance.

Eastern building range

To the immediate east of Ironhouse Bastle are the remains of a linear range of buildings surviving as extant sections of walling, turf-covered walls, earthworks and stone scatters (see Figs 4 and 6; Plate 19). These are aligned approximately north-west to south-east, with the individual buildings built onto stepped platforms, sloping gradually downwards towards the south-east. The northern side of the five buildings nearest to the bastle are defined by a common length of stone wall, suggesting that they originated in a single phase of construction. This wall survives to a height of 1.5m and is approximately 1m wide. There is a slight change in its alignment about 12m along its length from the bastle, turning towards the south-east, but this appears to reflect the wall following the natural topography of the valley side, rather than a difference in building phase.

The nearest building to the bastle measures about 6.3m by 5m and is defined by stone walls surviving to a height of 1.5m (Plate 20). There is no clear wall structure surviving on its western side, although the substantial spreads of stone building debris which fill the interior may obscure further remains. This structure is shown on the First Edition Ordnance Survey map of 1866, but by 1896 was being used as a sheepfold (see Figs. 10 and 11; Ordnance Survey 1866; 1897). This may account for the height of the surviving walls which could have been rebuilt over earlier building foundations to hold the sheep. To the east of this are the remains of two further rectangular buildings, defined by turf covered walling between 1m and 1.75m wide and about 0.5m high. The westernmost is 5m wide and 6.5m long with an entrance at the south-west corner; the other measures 6.5m wide and 6.2m long, with an entrance at the south-east corner. A break at the northern end of the wall dividing the two buildings may be a doorway between the two.

Adjacent to these appears to be a larger building, possibly the remains of a house (House 2) (Plate 21). This measures 16m by 6.5m and is divided into two rooms accessed via doorways leading off of a central corridor. The westernmost room is approximately square, measuring 4.5m by 4.4m, and the easternmost room is slightly larger, measuring 4.5m by 5.5m. The remains of the house are defined by turf covered stone walls with surviving lengths of wall structure visible in places. These are about 1m wide, and survive to a height of between 0.2m and 0.5m. The house's south-eastern wall is a right-angled continuation of the main northern wall. Stone building debris fills much of the interior of the building.

To the south-east of House 2 are the remains of two further buildings on the same alignment, but without the shared northern wall. The westernmost building is 4.4m wide and 6m long. It is defined on one side by the south-eastern wall of House 2, on its northern side by a slight north-eastward facing scarp, and on its southern and eastern sides by turf covered walls about 1.75m wide and 0.5m high. It has an entrance in the south-western corner. To the south-east is a slightly larger building, 6.2m wide by 6.4m long. A ruinous section of stone wall and stone scatters define its northern side. Its south-eastern and south-western sides are defined

by turf covered walls, between 0.8m and 1.8m wide, surviving to a height of 0.5m, with visible lengths of wall structure in places.

Other buildings

About 10m to the south of the eastern building range are two rectangular building platforms situated next to each other, and orientated north to south (see Figs 4 and 6). The more northerly of the two is approximately 4m long and 2.5m wide. It is defined by an L-shaped bank about 2m wide and 0.5m high, which is aligned at a right-angle from a length of turf covered wall which runs north-west to south-east for 30m from the eastern side of Enclosure 2. The platform is defined on its western side by a slight length of westerly facing scarp, about 0.3m high.

The southern building platform is about 6m long and 4.5m wide, and is defined on its eastern side by a bank approximately 2m wide, which sits on the top of a well defined easterly facing scarp. A narrow break in the bank separates it from a more substantial length of bank which defines the building platform's southern side and is about 2.5m wide and 0.3m high. Its western side is defined by a slight westerly facing scarp.

Enclosures and fields

Enclosure 1

A large rectilinear enclosure (Enclosure 1), approximately 20m wide by 32m long, is situated 11m to the south of Ironhouse Bastle (see Fig. 4; Plate 22). It is defined on its western and southern sides by turf covered walls, 1.75 m wide, surviving to a height of about 1m, which are cut through by a number of later breaks. On its eastern side it is defined by a sharp eastward facing scarp about 0.5m high, with a slight back scarp visible along its northern end. The northern side of the enclosure is defined by a ruinous section of stone wall, approximately 0.5m high on the interior of the enclosure and 1.25m high on its exterior side, where the ground level is lower. Enclosure 1 appears to have an entrance on its western side, and perhaps at its north-western corner. It is shown on the First Edition Ordnance Survey map, surveyed in 1863 (see Fig. 10; Ordnance Survey 1866)

Enclosure 2

Another enclosure (Enclosure 2) is defined by the northern boundary of Enclosure 1 to the south and by a slight east-facing scarp and stone spread to the west (see Figs 4 and 5; Plate 23). On its eastern side it is defined by a length of stone wall, 1m wide and 0.8m high. The stratigraphic relationship between Enclosure 1 and Enclosure 2 is unclear, although the western wall of Enclosure 2 appears to abut the north-eastern corner of Enclosure 1. This length of wall is of a different construction to the northern boundary of Enclosure 1, suggesting it is a later addition. The eastern and western boundaries of Enclosure 2 are also not marked on the Ordnance Survey mapping until the early 1920s (see Fig. 12; Ordnance Survey 1922).

Enclosure 3

At the south-eastern end of the site is another irregular shaped enclosure measuring approximately 12m by 20m (Enclosure 3) (see Fig. 4). It is defined by turf covered walls about 1.75m wide, varying between 0.3m and 0.5m high, with wall structure visible on its western side. It has two entrances, on its northern and southern sides, approximately 0.8m wide, with another possible entrance at its northern corner, which may have provided access to a further enclosure to the north-east (Enclosure 4).

Enclosure 4

Another enclosure is situated on a terrace of lower ground on the valley side (Enclosure 4) (see Fig. 4; Plate 24). It is defined on its southern side by an artificially steepened scarp, between 1m and 1.5m high, and on its northern side by a steep natural slope descending north-eastwards to Watty's Syke. At its south-eastern end Enclosure 4 is defined by a substantial length of bank, about 1.5m high on its southern side, 4.5m wide and 8m long. The north-western side of Enclosure 4 is defined by another small section of bank which sits above a slight scarp between the lower ground of Enclosure 4 and the higher ground to the north-west.

Field boundaries

The ends of a number of large field boundaries were recorded at the north-western and south-eastern corners of the survey area surviving as turf covered walls or earth banks, approximately 2m to 2.5m wide and about 0.75m high (see Fig. 4). A stone scatter on the north-eastern side of the survey area also appears to be the end of a field boundary. These continue as earthworks, or can be seen from aerial photographs, defining larger fields in the surrounding area (see Fig. 2). Another possible boundary ditch, defining the southern side of the settlement area at Ironhouse can be seen on aerial photographs, running south-east from the corner of Enclosure 1, turning south for approximately 20m and to the east for a further 45, before turning north again for a further 7m (see Fig. 4). This could not be identified on the ground at the time of survey, possibly due to the height of the grass and reed cover over the area.

Ridge and furrow

The remains of medieval ridge and furrow ploughing can be seen on the northern side of the valley of Watty's Sike, outside of the survey area, aligned approximately north-south (see Fig. 2). Further tracts of ridge and furrow can be seen on aerial photographs within the survey area, and have previously been plotted (Gates 1996), but could not be identified at the time of survey due to the height of the grass cover.

Other structures

Possible stack stands

Two sub-circular platforms have been identified in the survey area (see Fig. 4). One is situated to the south of the eastern building range measuring about 3.5m by 4.5m, and 0.3m high, and abuts the line of the wall which runs south-east from Enclosure 2 (see Fig. 6). Another lies to the west of Enclosure 3, and measures 3.5m by 4m, and is 0.5m high. The function of these is unclear, although they could be the remains of stack stands, platforms on which to pile winter fodder for animals. These are found throughout Northumberland, but are generally larger in size and surrounded by a bank and ditch to protect the fodder from other animals (Ramm *et al.* 1970, 54).

Well

A well is situated to the west of the bastle, 2m to the south of House 1 (see Figs. 4 and 5). It is about 1.5m in diameter and appears to have originally been surrounded by a number of large stones. It is now largely filled by stone and vegetation.

Sheep-dip

The remains of a probable 20th-century sheep-dip are situated 8m to the north-west of Ironhouse Bastle. This comprises a rectangular tank, 1m wide and 3m long, constructed of brick and concrete, with a ramp at its western end, and with two areas of concrete hard-standing adjacent to it (see Figs. 4 and 5; Plate 25).

5 Discussion

In size and plan Ironhouse Bastle shares many of the characteristics of a 'typical' Northumberland bastle house. It also contains many of the features associated with this building class, such as a gable-end door with drawbar tunnels in the walls, slit-vents in the byre, first floor cupboards and a stone slab to support a hearth. Apart from the chamfered lintel, however, no decorative architectural detailing survives on the building. The fact that the upper floor was supported by timber beams, probably holding stone flags, is a marked difference from the form of the two closest bastles to Ironhouse; High Shaw Bastle and The Raw Bastle. These both have vaulted stone-roofed byres supporting the upper storey, suggesting a different builder, or period of construction.

Ironhouse Bastle was in a ruinous state by the mid-19th century, when it was already roofless. The poor condition of the upper parts of the first floor walls, and the southern wall, may be due to the collapse or deliberate demolition of the roof and first floor beams around this time, subsequently weakening the remaining structure. The apparently deliberate piling of stone building debris in the centre of the bastle indicates that there has been some clearance, and perhaps removal, of stone from the site at some time. The surviving structure remains largely in the form described in the late 1960s and early 1990s (Ramm *et al.* 1970;

Ryder 1990), and there appears to have been no substantial deterioration in the condition of the building from this time. The possibly early 20th-century sketch of the interior of the eastern gable-end of Ironhouse Bastle, although perhaps not completely accurate in its depiction, shows the structure in a similar state to its present condition. This suggests that there has been little deterioration to that part of the building over the course of the last century.

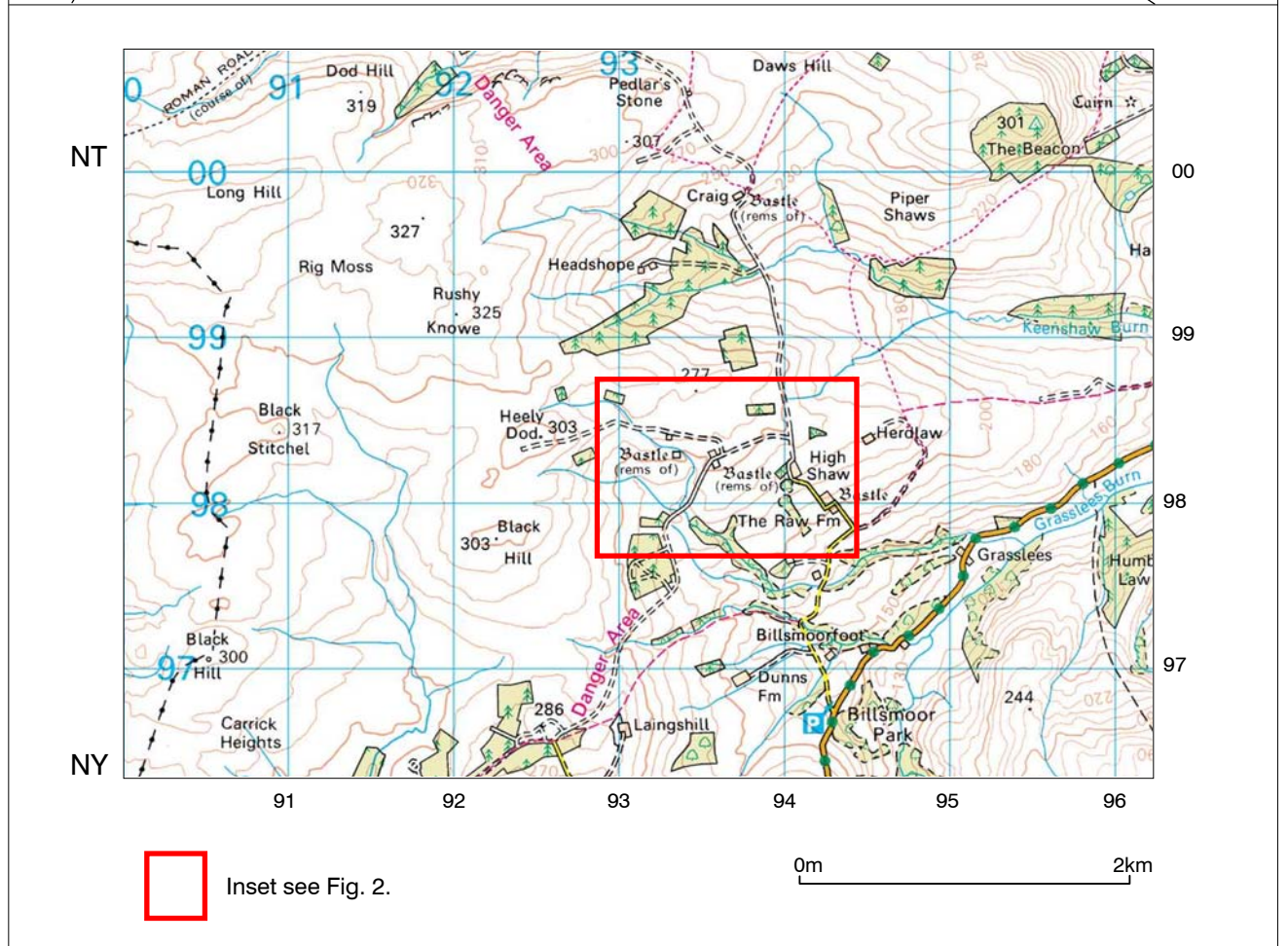
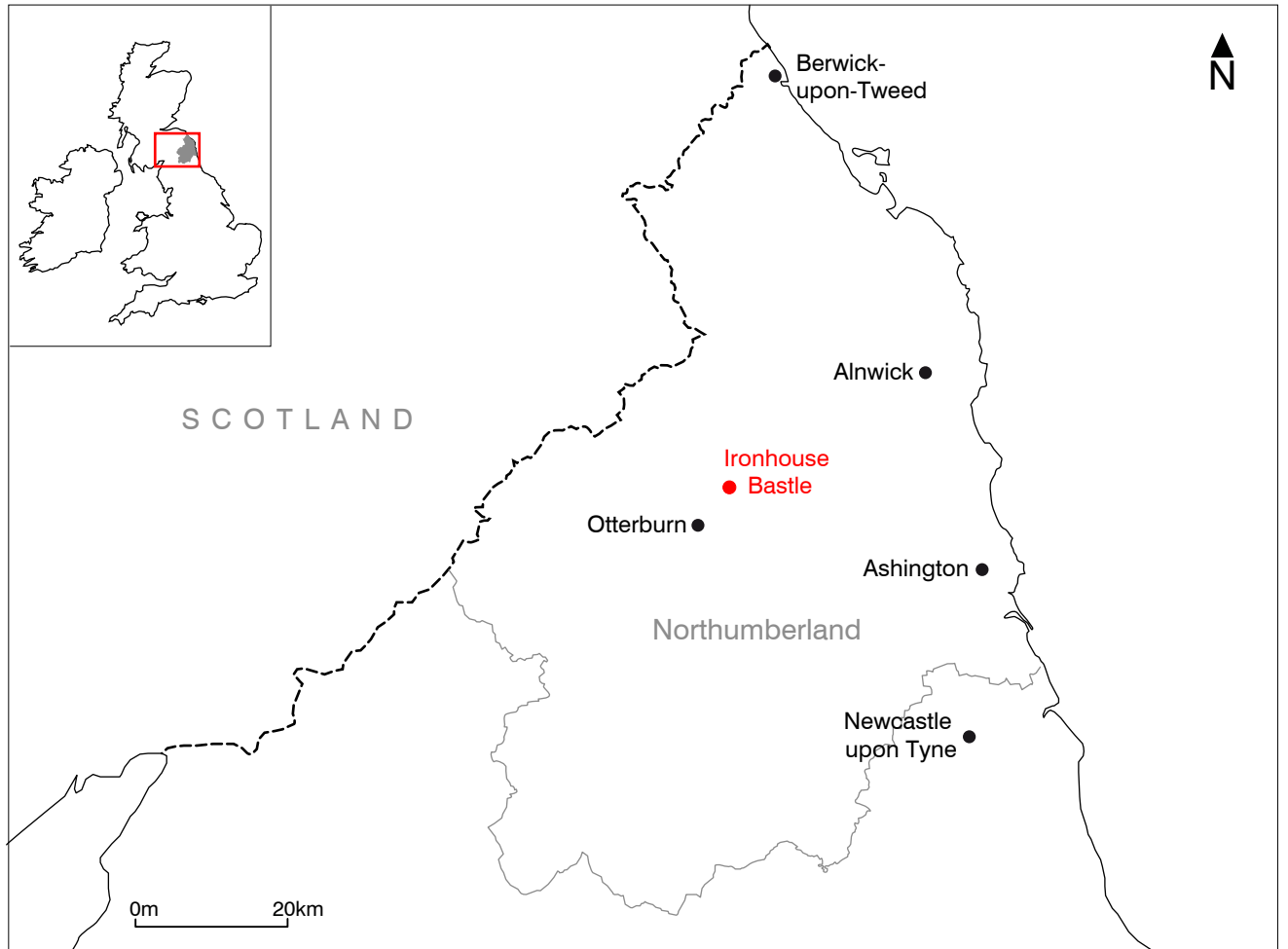
Although it is the largest extant structure on the site, and most architecturally significant building, Ironhouse Bastle represents just one part of a more complex pattern of settlement and activity. Indeed, it is not clear if the construction of Ironhouse Bastle marked the first phase of the settlement's development, or whether it represented a temporary break in the local building tradition, as a reaction to a relatively short period of instability in the border areas. The relationship between bastle houses and adjacent or associated structures at similar sites has not previously been examined in detail; stratigraphic relationships may be established by detailed surveys of remains, but no archaeological excavation has been undertaken to provide firm dating evidence for such relationships.

If the association of *hirnehousefeld* with the Ironhouse site is correct, then there may have been occupation on the site since at least the late 14th century. The remains of ridge and furrow surviving in the surrounding area shows that there was certainly intensive medieval cultivation being carried out nearby. These areas of cultivation appear to respect the edge of the southern side of the settlement, suggesting that these were contemporary with a phase of occupation on the site. It is therefore possible that some of the features still visible on the ground represent the remains of structures and buildings that are late medieval in date, or at least pre-date the construction of the bastle itself.

The eastern range of buildings at Ironhouse probably includes the remains of at least one dwelling (House 2) together with byres and outbuildings, probably all originating in a single phase of construction. In size and plan these buildings could be equated with late medieval shielings, or other small upland dwellings found in Northumberland. Such a comparison is however complicated by the linear ranges of 18th and 19th-century buildings associated with other bastles, such as Sinderhope Shield (Ryder 1992), which also share similarities in form. However, the eastern building range at Ironhouse is not depicted on any mapping, at least that surviving from the mid-18th century onwards, and an earlier date for these buildings is perhaps more likely.

House 1, abutting the western side of the Ironhouse Bastle is clearly a later addition. Its walls are nearly half the thickness of those of the bastle and it has a ground floor door on its long side, indicating more stable times. It is also substantially larger than the buildings in the eastern range. The cartographic evidence indicates that this building was the last roofed structure on the site by the mid-19th century, and was probably the last house to be occupied here.

Although permanent occupation at Ironhouse ended in the mid-19th century, the site appears to have continued in use for agricultural purposes into the 20th century. By the 1920s, new boundaries seem to have been constructed to the south of the bastle, presumably to manage sheep, and the remains of a 20th century sheep-dip survive on the site.



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Fig. 1. Site location

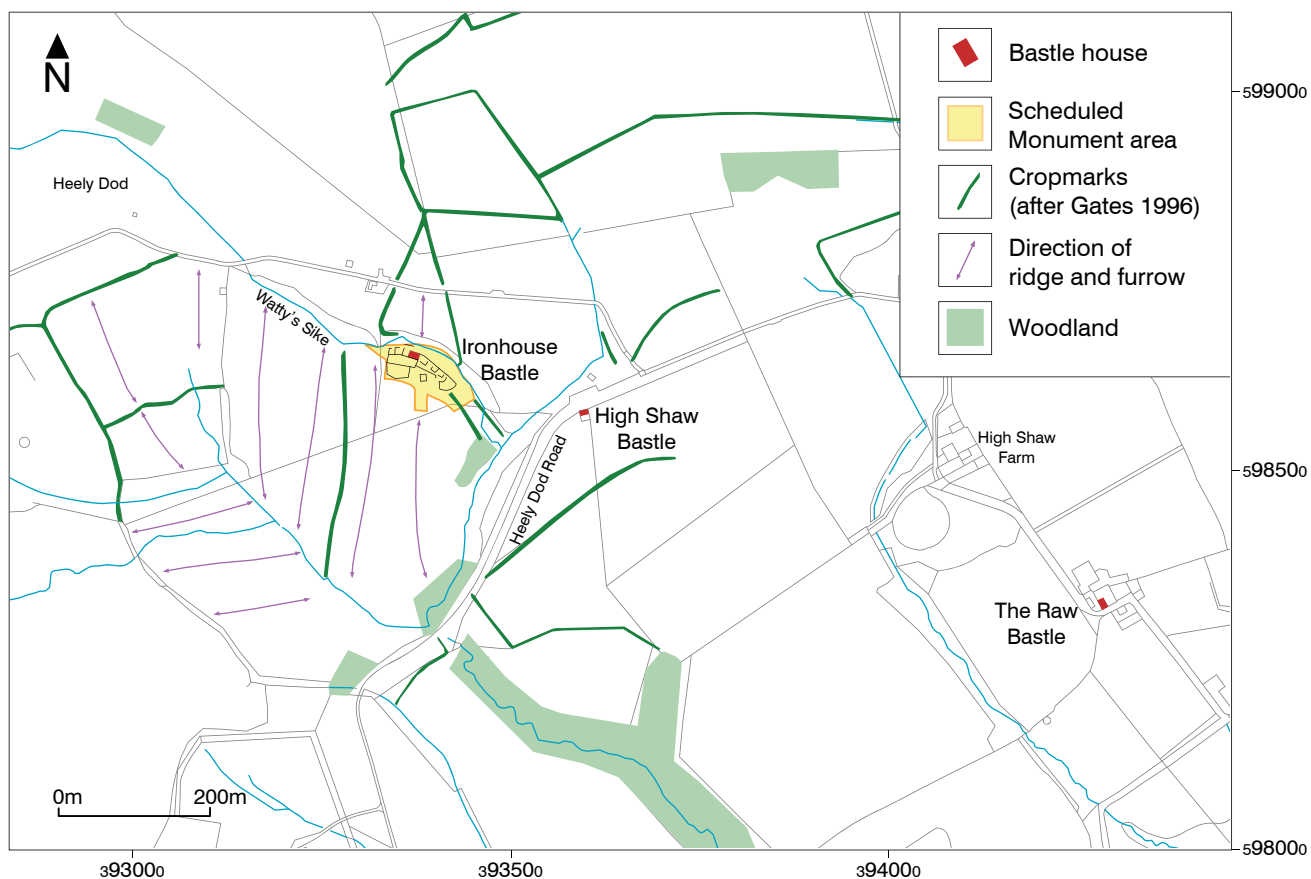


Fig. 2. The landscape surrounding Ironhouse Bastle, showing the scheduled monument area, identified cropmarks and other nearby bastles



Fig. 3. Vertical aerial photograph of the area around Ironhouse Bastle

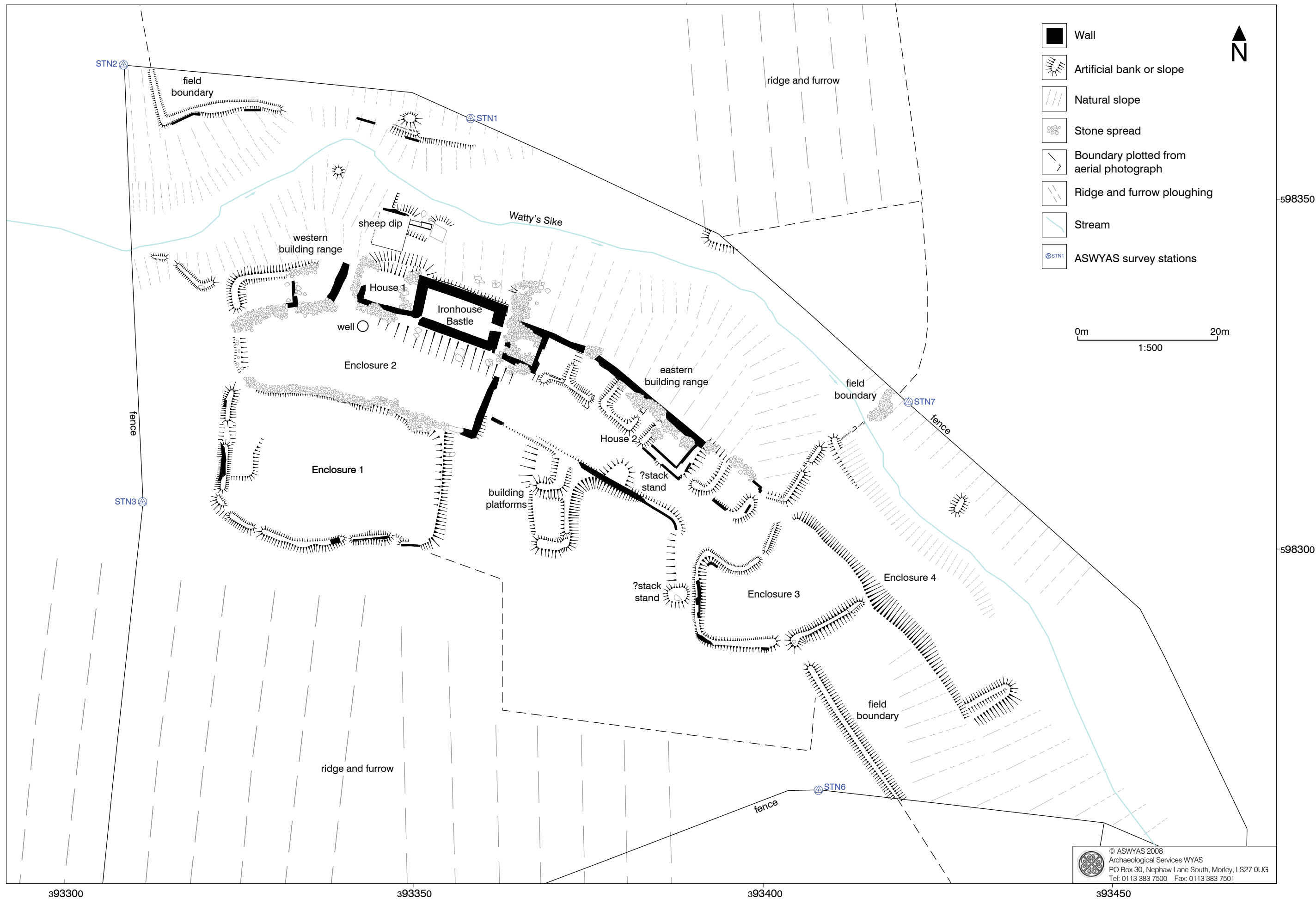


Fig. 4. ASWYAS survey of Ironhouse Bastle and associated archaeological remains (1:500 scale)

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 Archaeological Services WYAS
 PO Box 30, Nephaw Lane South, Morley, LS27 0UG
 Tel: 0113 383 7500 Fax: 0113 383 7501

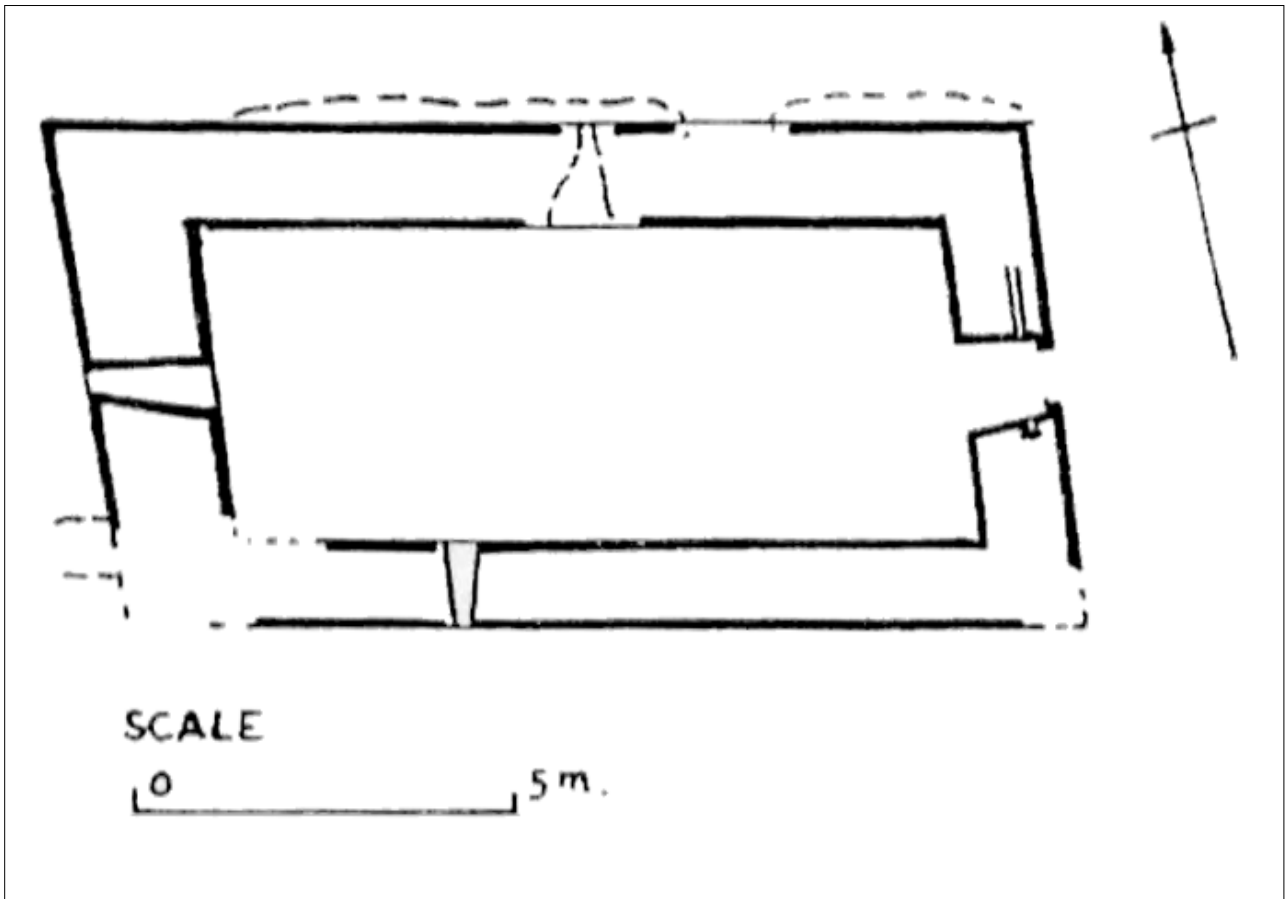


Fig. 7. Plan of Ironhouse Bastle at 1:100 scale (from Ryder 1990)

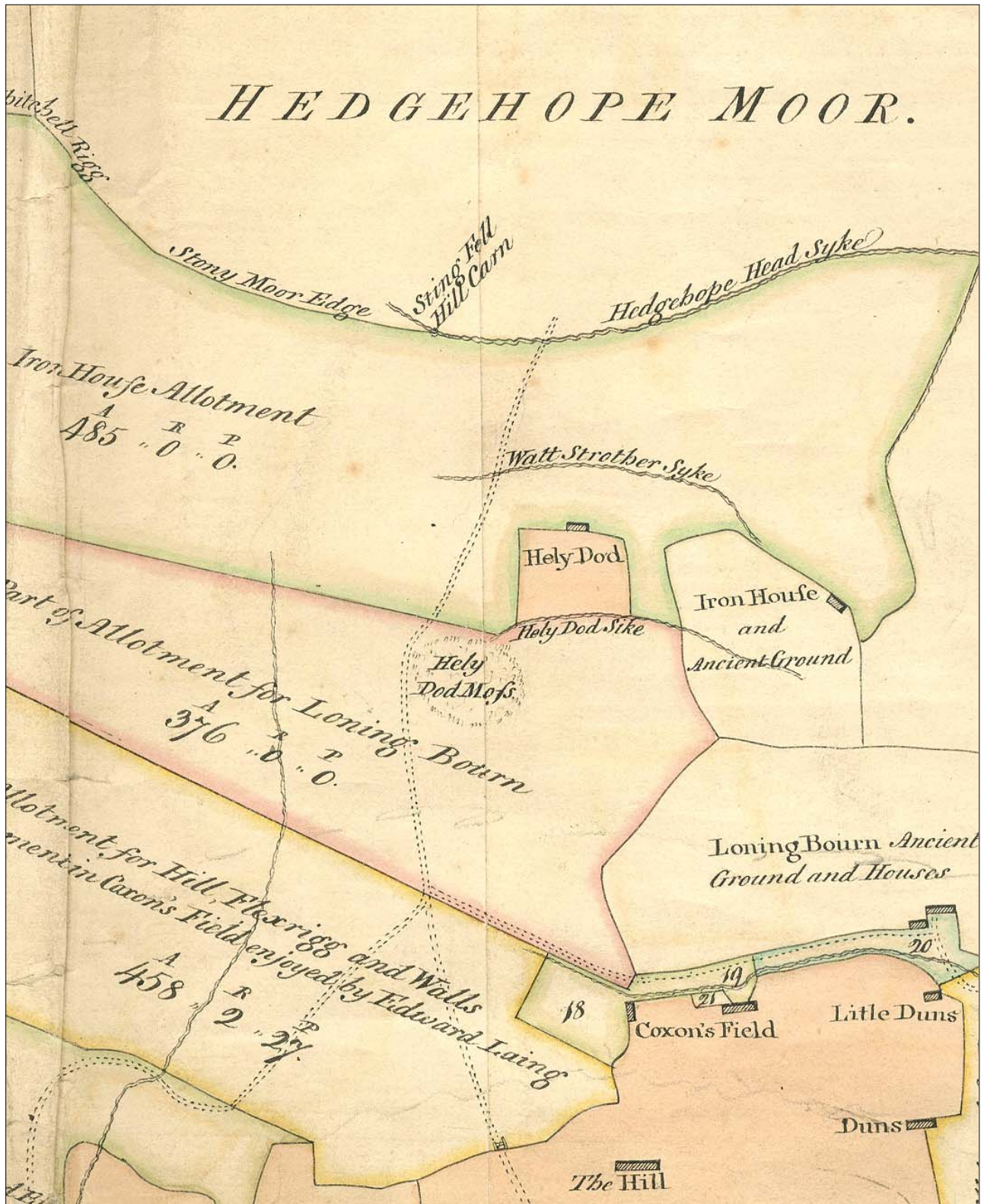


Fig. 8. Extract from the Elsdon enclosure map of 1731 (Northumberland Archives, Woodhorn, ref. QRD 3/1)

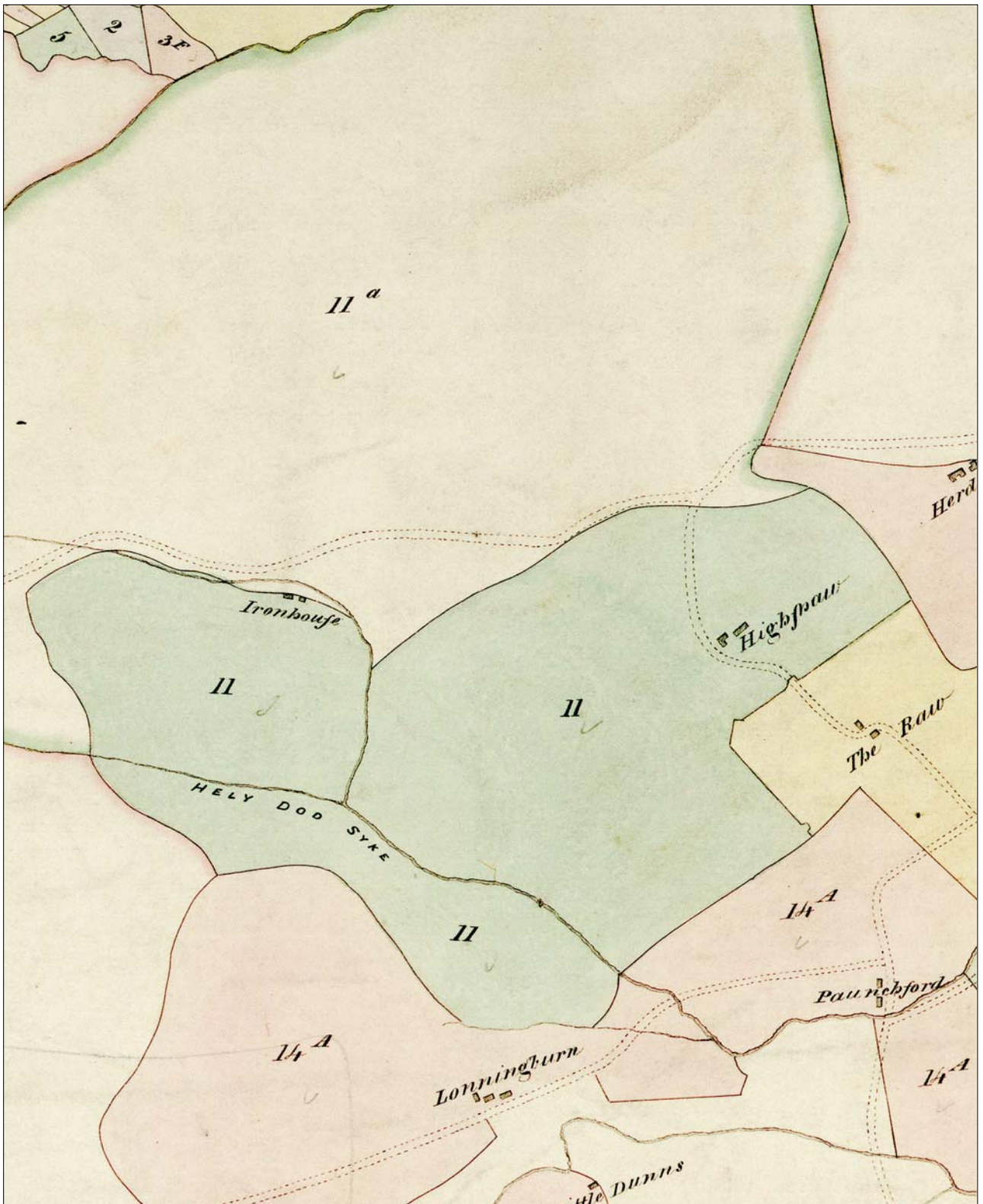


Fig. 9. Extract from the Elsdon tithe map of 1840 (Northumberland Archives, Woodhorn, ref. DT 164m Pt 6)

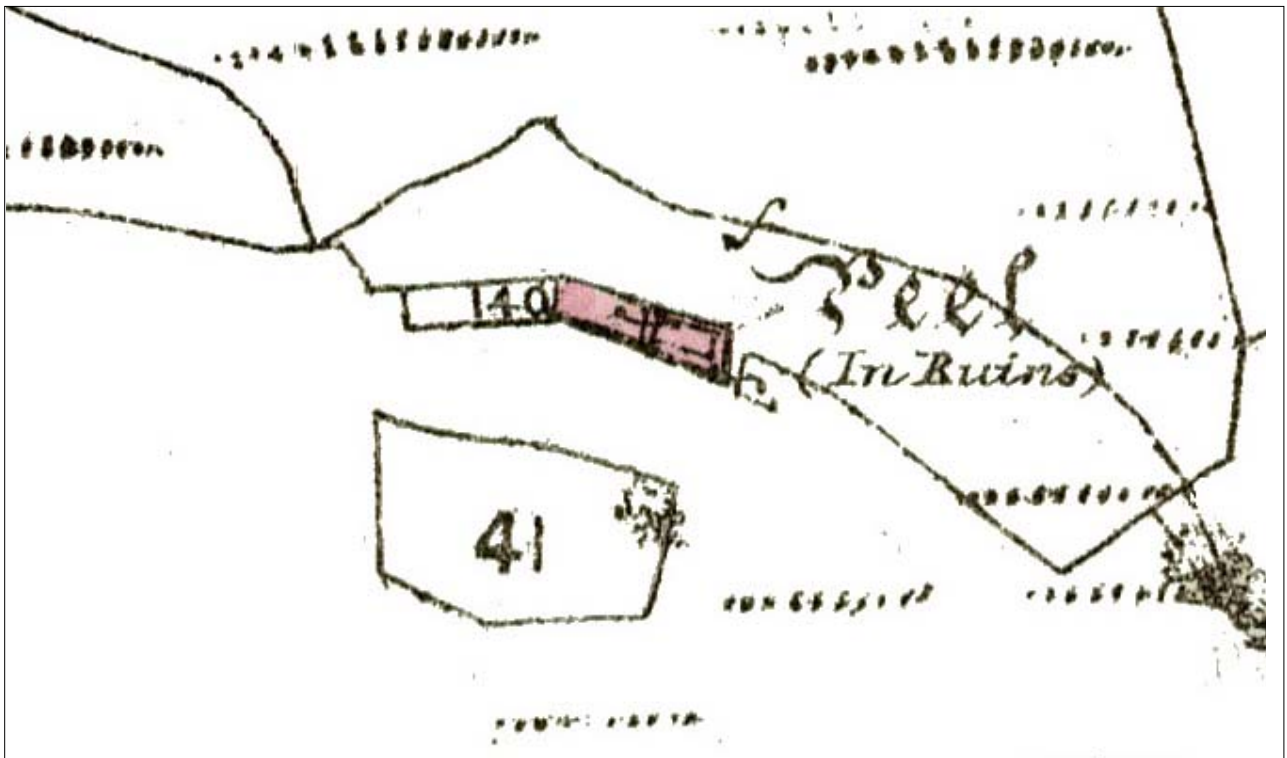


Fig. 10. Extract from the First Edition Ordnance Survey 25 inch map of 1866 (Northumberland Archives, Woodhorn)

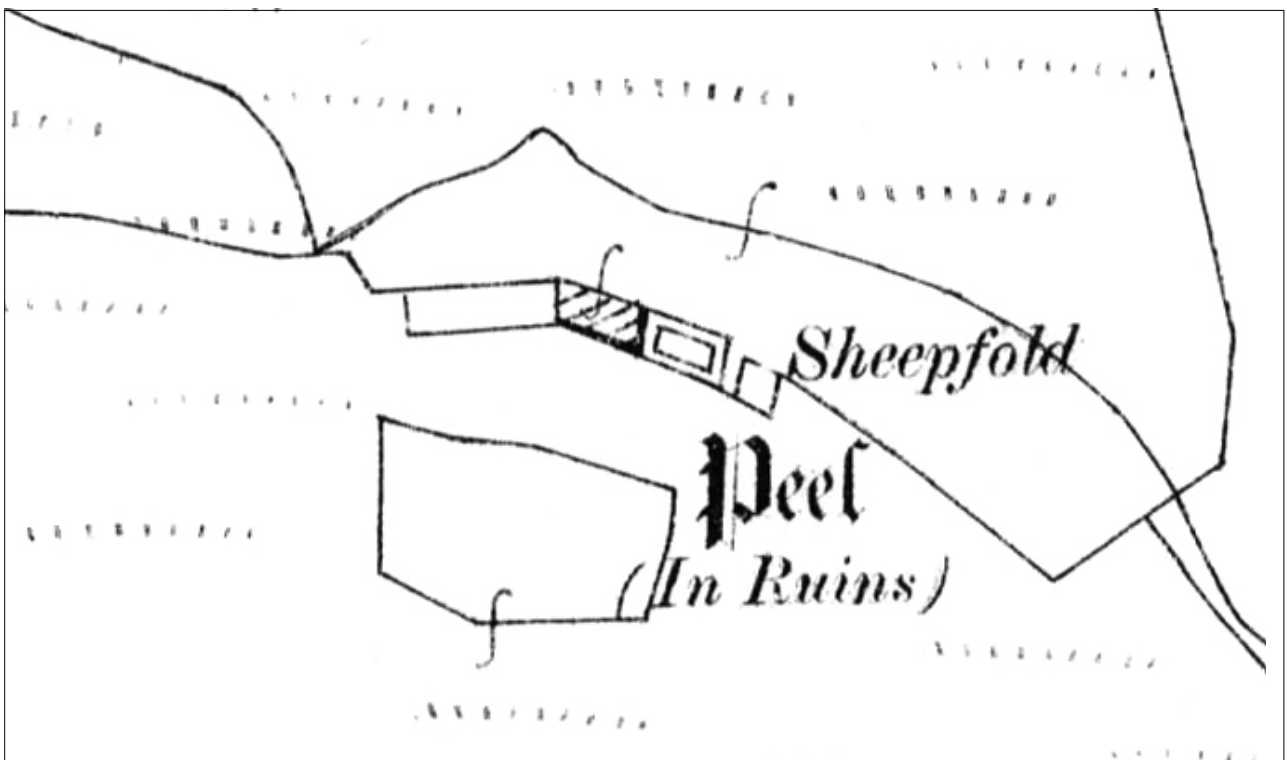


Fig. 11. Extract from the Ordnance Survey 25 inch map of 1897 (Northumberland Archives, Woodhorn)

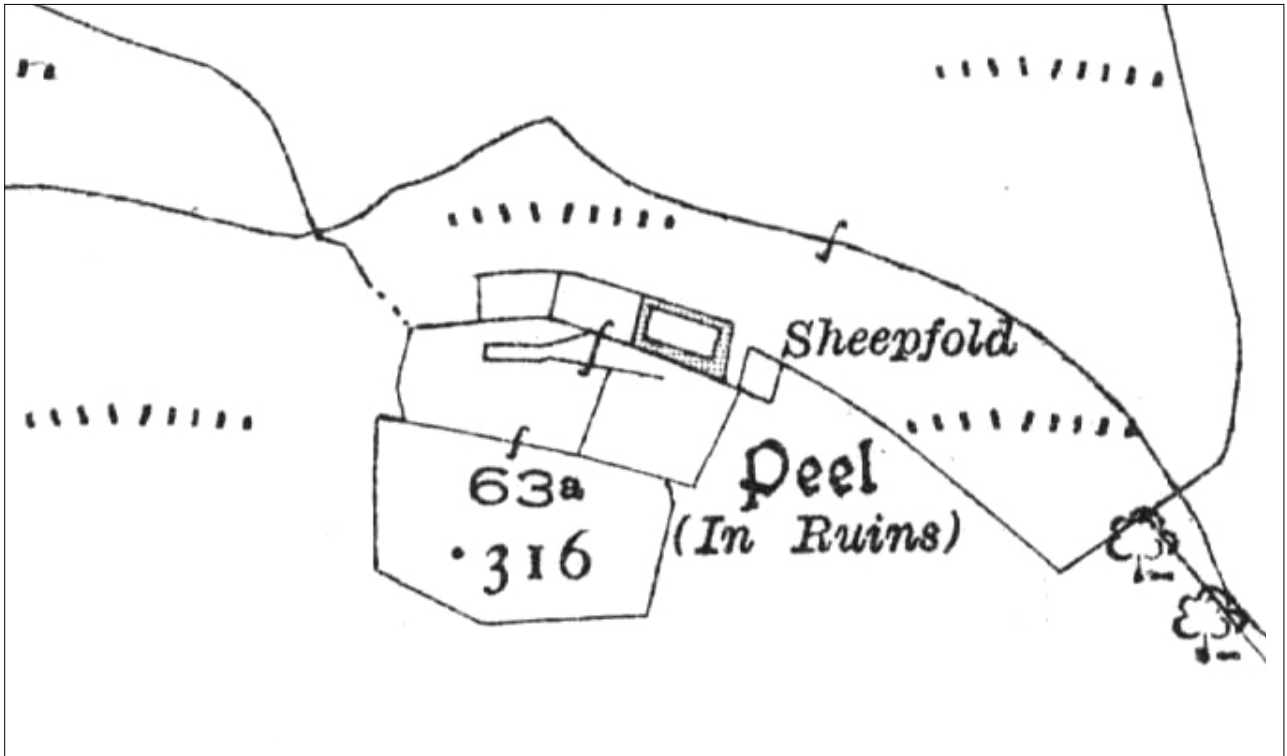


Fig. 12. Extract from the Ordnance Survey 25 inch map of 1922 (Northumberland Archives, Woodhorn)

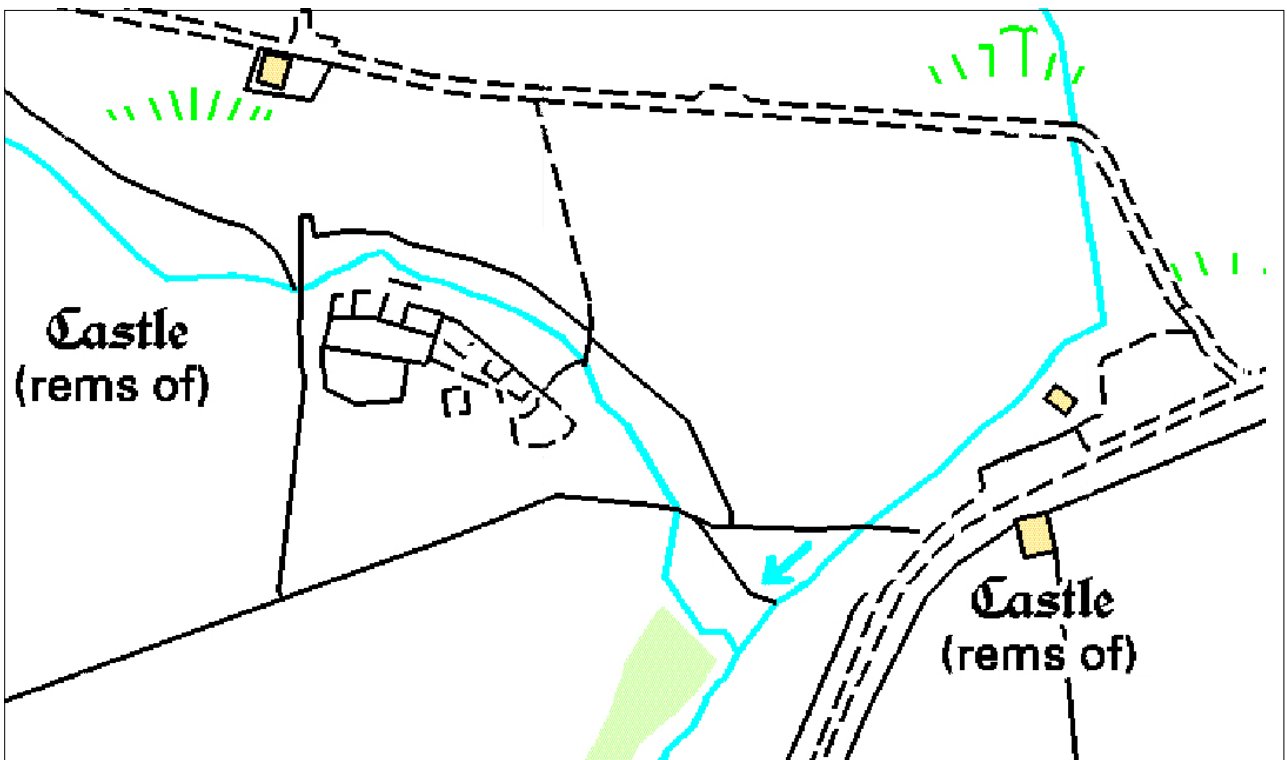


Fig. 13. Extract from the modern Ordnance Survey 1:10000 scale map of 2007, showing Ironhouse Bastle, and High Shaw Bastle to the right, marked as 'Castle'

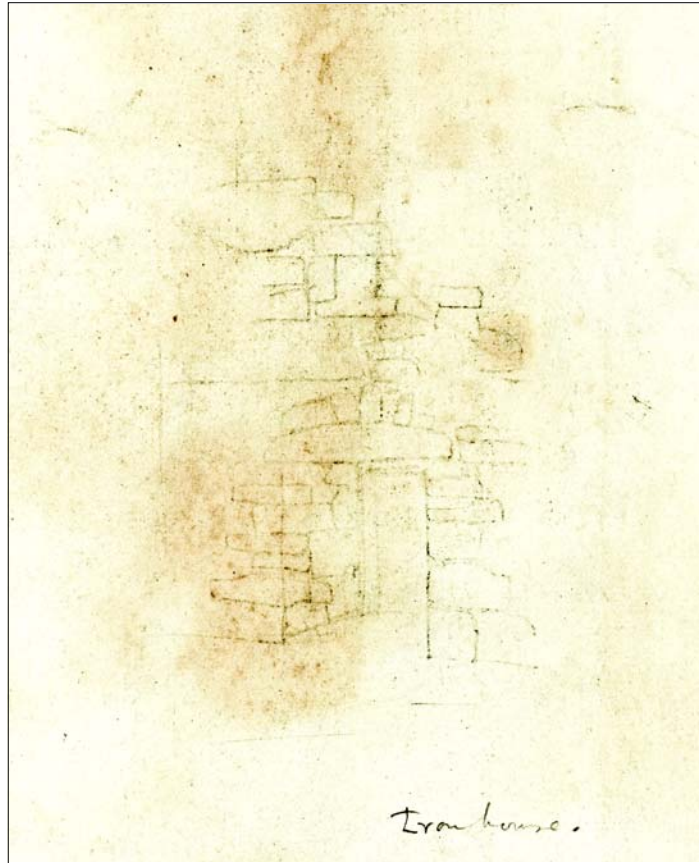


Fig. 14. Pencil sketch of the interior of the doorway of Ironhouse Bastle, held at the Northumberland archives and probably dating to the early 20th century (ref. SANT/BEQ/21/4/3/12/1). Below is a photograph of the interior of the doorway of the bastle at the time of the survey



Plate 1. Ironhouse Bastle and part of the survey area, looking north-east



Plate 2. Ironhouse Bastle with the eastern range of buildings to the left, looking south-west



Plate 3. Ironhouse Bastle, looking north-east



Plate 4. The northern wall of Ironhouse Bastle, looking south



Plate 5. The eastern gable-end and door of Ironhouse Bastle



Plate 6. The western gable-end of Ironhouse Bastle



Plate 7. The southern wall of Ironhouse Bastle, looking north



Plate 8. Ironhouse Bastle with the eastern gable-end to the right, looking north-west



Plate 9. The interior of the southern wall of the bastle doorway with the circular depression of the harr-socket on the lintel, and the hole for the drawbar to the bottom right



Plate 10. The interior of the northern wall of the bastle doorway, showing the tunnel for the drawbar, and below, the hole for the opposing drawbar, together with latch indentations



Plate 11. The drawbar tunnel on the northern wall of the bastle doorway to the top, with the hole for the drawbar from the opposing wall below



Plate 12. The interior of the slit-vent in the western gable-end wall of the bastle



Plate 13. The interior of the slit-vent in the southern wall of the bastle



Plate 14. The break in the south-western corner of the bastle wall



Plate 15. The interior northern wall of the bastle, with a number of beam slots visible



Plate 16. The interior of the western gable-end of the bastle. A projecting stone to the left may have supported a hearth, and a recess to the top right may be the remains of a cupboard space. There is a slit-vent at the centre of the base of the wall



Plate 17. The remains of House 1, adjacent to the western end of Ironhouse Bastle, looking east



Plate 18. The blocked doorway in the southern wall of House 1, looking north



Plate 19. The remains of the eastern building range, looking east



Plate 20. The remains of a building or sheep pen, in the eastern building range nearest to Ironhouse Bastle, looking east



Plate 21. The remains of House 2, looking east



Plate 22. Enclosure 1, looking south-west



Plate 23. Enclosure 2, looking north-west



Plate 24. Enclosure 4, looking south-east, with Watty's Sike to the left



Plate 25. The remains of a modern sheep-dip to the north of Ironhouse Bastle, looking south-east

Bibliography

- Ankle, T., 1840, 'Plan of Woodside Ward in the Parish of Elsdon', Tithe Map, Northumberland Archive Service, Woodhorn ref. DT 164m Pt 6
- Bain, J. (ed.) 1894, *Calendar of Letters and Papers relating to the affairs of the Borders of England and Scotland*, Edinburgh
- BGS, 2001, Solid Geology Map UK North Sheet 1:625 000 4th Edition
- Bowden, M., 1987, 'Black Middens', Royal Commission on the Historical Monuments of England survey report
- Chandler, J., 1997, 'Shilla Hill Bastle, Northumberland. An archaeological survey report', Royal Commission on the Historical Monuments of England
- Dixon, D.D., 1903, *Upper Coquetdale, Northumberland: its history, traditions, folk-lore and scenery*, Newcastle-upon-Tyne
- Dodds, J.F., 1999, *Bastions and Belligerents: Medieval Strongholds in Northumberland*, Newcastle-upon-Tyne
- English Heritage, 2007, *Understanding the Archaeology of Landscapes: A guide to good recording practice*
- Frodsham, P., 2004, *Archaeology in Northumberland National Park*, CBA Research Report 136
- Gates, T., 1996, 'Air Photography and the Archaeology of the Otterburn Training Area', unpublished Defence Estates report
- Headley, I., 2004, 'Metal hills and kelties. Signposts to and industrial past' in P. Frodsham, *Archaeology in Northumberland National Park*, CBA Research Report 136, 306-323
- Hodgson, J., 1840, *History of Northumberland*, Part II, Vol. III
- Hutchinson, W., 1776, *A View of Northumberland, Vol. 1*, Newcastle-upon-Tyne
- Lax, A., 1997, 'Boghead Bastle, Northumberland. An archaeological survey report', Royal Commission on the Historical Monuments of England
- Lax, A. 1999, 'Border Troubles and Border Farmers: A Study of Bastle Houses in the Upper Tarsset Valley, Northumberland', in P. Frodsham, P. Topping and D. Cowley (eds), *We were always chasing time*, Northern Archaeology vol. 17/18 (Special Edition), 165-172
- McDowell, R.W. and Mercer, E., 1970, 'Bastles of Cumberland and Northumberland' in H.G. Ramm, R.W. McDowall and E. Mercer, *Shielings and Bastles*, RCHM(E), London, 61-95

Ordnance Survey, 1866, First Edition County Series 25 inch map (Northumberland) Sheet LII.2 (surveyed 1863)

Ordnance Survey, 1897, County Series 25 inch map (Northumberland) Sheet LII.2 (revised 1896)

Ordnance Survey, 1922, County Series 25 inch map (Northumberland) Sheet LII.2 (revised 1921)

Ramm, H.G., McDowall, R.W. and Mercer, E., 1970, *Shielings and Bastles*, RCHM(E), London

Robertson, J., 1731, 'A Map of Elsdon Common', Elsdon Enclosure Map, Northumberland Archive Service, Woodhorn ref. QRD 3/1

Ryder, P., 1990, 'Bastles and Towers', unpublished report for the Northumberland National Park

Ryder, P., 1992, 'Fortified Buildings' in N. Pevsner and I. Richmond, *The Buildings of England. Northumberland*, London, 58-67

Ryder, P., 2004, 'Towers and Bastles in Northumberland National Park' in P. Frodsham (ed.), *Archaeology in Northumberland National Park*, CBA Research Report 136, 262-271

Soil Survey of England and Wales, 1980, Soils of Northern England Sheet 1

Ward, T., 1990, 'Bastle Houses of the Anglo-Scottish Borders', *Fortress*, no. 5, May 1990, 35-43

Appendix 1

Scheduled Monument description

EXTRACT FROM ENGLISH HERITAGE'S RECORD OF SCHEDULED MONUMENTS

MONUMENT: Deserted medieval village including bastle at Ironhouse, 750m west of High Shaw

PARISH: HEPPLÉ

DISTRICT: ALNWICK

COUNTY: NORTHUMBERLAND

NATIONAL MONUMENT NO: 20912

NATIONAL GRID REFERENCE(S): NY93369830

DESCRIPTION OF THE MONUMENT

The monument includes a deserted medieval settlement situated on the south side of the narrow valley of Watty's Sike. The settlement consists of a line of at least nine steadings (farmhouses), one of which, towards the west end of the settlement, is occupied by the ruined remains of a defended farmhouse or bastle. The bastle, constructed of roughly squared stone and surviving in parts to first floor level, is rectangular in plan, measuring 10.5m by 4m within stone walls 1.4m thick. The basement or byre is entered through a doorway at the centre of the east gable and was lit by slit windows in the south and east walls. Unlike other bastles in the vicinity, that at Ironhouse does not have a vaulted basement and the first floor living area was carried on a wooden floor; the beam holes which supported the floor are visible in the north wall. At first floor level there are the remains of wall cupboards in both gables and traces of a hearth at the east end. To the east and west of the bastle there are the remains of the stone foundations of at least seven other buildings; these turf-covered buildings measure 9m by 6m and their stone walls stand in places up to 1m high. A circular well is located immediately outside the bastle on the south-west side. Also to the south-west of the settlement there are the well-preserved remains of walled enclosures; the paddocks, garths and fields in which animals were kept. Local legend gives the name Ironhouse to the settlement whose main industry was iron working. Although the extant remains are sixteenth century in date, the earliest known documentary reference to the settlement is of 1398.

ASSESSMENT OF IMPORTANCE

The village, comprising a small group of houses, gardens, yards, streets, paddocks, often with a green, a manor and a church, and with a community devoted primarily to agriculture, was a significant component of the rural landscape in most areas of medieval England, much as it is today. Villages provided some services to the local community and acted as the main focal point of ecclesiastical, and often of manorial, administration within each parish. Although the sites of many of these villages have been occupied continuously down to the present day, many others declined in size or were abandoned throughout the medieval and post-medieval periods, particularly during the 14th and 15th centuries. As a result over 2000 deserted medieval villages are recorded nationally. The reasons for desertion were varied but

often reflected declining economic viability, changes in land use such as enclosure or emparkment, or population fluctuations as a result of widespread epidemics such as the Black Death. As a consequence of their abandonment these villages are frequently undisturbed by later occupation and contain well-preserved archaeological deposits. Because they are a common and long-lived monument type in most parts of England, they provide important information on the diversity of medieval settlement patterns and farming economy between the regions and through time.

The upland deserted settlement at Ironhouse survives well and is a good example of a settlement which developed around a bastle. The bastle also survives well and evidence of the relationship between it and the surrounding settlement will be preserved. The monument will hence contribute to an understanding of medieval settlement in the border areas.

SCHEDULING HISTORY

Monument included in the Schedule on 30th August 1962 as:

COUNTY/NUMBER: Northumberland 360

NAME: Pele near Watty's Sike, 1/2 mile west of Highshaw

Scheduling amended on 23rd August 1978 to:

COUNTY/NUMBER : Northumberland 360

NAME: Deserted medieval settlement at Iron House

The reference of this monument is now:

NATIONAL MONUMENT NUMBER: 20912

NAME: Deserted medieval village including bastle at Ironhouse, 750m west of High Shaw

SCHEDULING REVISED ON 10th February 1993

Appendix 2

Survey station locations

Station	Type	Easting	Northing	Level m AOD
STN1	Nail in top of fence post	393358.20	598361.47	256.88
STN2	Nail in top of fence post	393308.53	598369.14	260.23
STN3	Nail in top of fence post	393311.25	598306.64	257.07
STN4	Nail in top of fence post	393303.29	598230.50	249.05
STN5	Nail in top of fence post	393369.69	598252.40	250.90
STN6	Nail in top of fence post	393407.97	598265.40	252.02
STN7	Nail in top of fence post	393420.84	598320.90	252.13