



Big Moor, Derbyshire: Post-Moorland Grass
Burning Archaeological Survey
Survey report

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Big Moor, Derbyshire: Post-Moorland Grass Burning Archaeological Survey

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NON-TECHNICAL SUMMARY

This report presents the results of an archaeological landscape survey at Big Moor, part of the East Moors Estate in the Peak District National Park. The survey was undertaken following a controlled moorland grass burn, to record any newly exposed features and supplement a previous survey of the estate. New and previously recorded features were temporarily marked with flags to prevent any disturbance to the archaeological remains during further management activities. ArcHeritage were commissioned by the Eastern Moors Partnership to undertake the survey.

During the survey, two previously recorded features were identified and marked, a hollow way of uncertain (medieval or post-medieval) date and a stony mound which could be an unusual prehistoric clearance cairn or a later feature, perhaps associated with 20th-century military training on the moors. A further hollow way recorded in 2010/2011 could not be located on the ground. Two new features were recorded: a probable weapons pit associated with the military training and forming an outlier of a group of weapons pits previously recorded to the north; and a small rectangular cutting that appears to be fairly recent and may be associated with providing water for grazing stock. These features are consistent with others recorded in the vicinity, and suggest that the Bronze Age field systems and settlement activity recorded to the north do not extend into this area on the lower slopes and base of the valley of the Bar Brook.

1 INTRODUCTION

This report presents the results of an archaeological landscape survey within an area of Big Moor in the Eastern Moors Estate, Derbyshire. The survey covered an area of land in which a controlled burn had been undertaken to enable the management of moorland grass. The survey site is within an area that was previously covered by an archaeological landscape survey (ArcHeritage 2011), and the objective of the current survey was to record any further archaeological features revealed by the moorland grass burning, as well as to temporarily mark out new and previously recorded features so that these would not be disturbed by further management activity. ArcHeritage were commissioned to undertake the survey by the Eastern Moors Partnership.

2 LOCATION, GEOLOGY AND TOPOGRAPHY

The survey covered an area of 13.25 hectares of moorland at Big Moor, in the Derbyshire Peak District, centred on NGR SK 27656 74720 (Figure 1). Big Moor forms part of the Eastern Moors Estate, which is managed by the Eastern Moors Partnership (RSPB and National Trust) on behalf of the Peak District National Park Authority. The site forms part of the Eastern Peak District Moors SSSI, and lies just to the south of Big Moor Scheduled Monument, which covers an area of prehistoric cultivation and settlement landscape remains.

The predominant bedrock across the survey area comprises Rossendale Formation mudstone and siltstone and Rough Rock sandstone, formed in the Carboniferous period. The survey area is within a valley, sloping gently downwards from the west to the east, with the Bar Brook outside the survey area to the east. Much of the survey area is boggy and the vegetation is molinia grass, with the controlled burn being undertaken to manage this grassland type.

3 AIMS AND METHODOLOGY

3.1 Aims

The aims of the survey were to identify and record any additional features visible after moorland grass burning, and to temporarily demarcate the new and previously recorded features with flags to ensure that proposed management works, including treating the area with herbicide and flailing, do not cause any disturbance to archaeological remains.

3.2 Methodology

Base mapping and features previously recorded in the Eastern Moors Survey (2011) were imported into GIS files and uploaded to a Leica Zeno survey grade GPS.

The entirety of the survey area was walked and new features recorded, using several data fields (see below). The features were recorded as points and lines, depending upon their size. The edge of the survey area was also plotted. The survey was undertaken in June 2016.

The following data fields were used:

- site number (using EMP numbering)
- site type (thesaurus)

- 10-fig NGR
- period
- description
- photograph(s)
- condition (NT criteria)
- management recommendations

An unique ID number was assigned to each new feature; these will later be assigned a new NTSMR number. A photograph of each feature was taken, with a graded photographic scale placed in each shot.

All new and previously recorded features were marked with small flags. Several flags were used for linear features. Flags were numbered with the initial survey ID numbers. The flags are of a non-toxic lead free grade vinyl which is secured to a 533mm wire stem. The flag size is 127 x 100mm.

It is essential that stock continues to be excluded from the area until the flailing has taken place, as these flags could cause harm if ingested accidentally. The contractors undertaking the flailing should remove the flags as soon as work is complete in that area.

Note: if there is a long delay between the flags being placed and the groundworks starting, there is a risk that flags may get moved by walkers or natural forces. **We recommend that the EMP staff check the flags before the spraying and flailing commence**, to ensure they are still in position. We can re-flag the area, if necessary.

The new survey data will be collated directly into the NTSMR. GIS shapefiles for the points, lines and polygons will be provided in a format specified by the National Trust.

4 ARCHAEOLOGICAL BACKGROUND

4.1 Mesolithic to Neolithic

The earliest recorded human activity within the Eastern Moors Estate dates to the Mesolithic period, and consists of flint tools and waste flakes mainly recovered during fieldwalking episodes following major moorland fires in the 1960s which exposed surface soil layers. Within the vicinity of the survey area, chance finds of a core and working flakes were recovered near Bar Brook on the eastern edge of Big Moor. A pit containing charcoal radiocarbon-dated to the Late Mesolithic period (7000-4000 BC) was found in a trench excavated near Swine Sty, underlying a Late Bronze Age field bank (Barnatt 1995, 11). Palaeoenvironmental studies have indicated that the area would have been largely deciduous woodland in the Mesolithic period, with naturally clear areas at the gritstone edges and blanket peat forming in water-collecting areas such as Topley Moss, Leash Fen and Lucas Fen (Kitchen 2000, 80-81). The edges would have formed routeways through forested areas, whilst the grassy areas and bogs are likely to have been useful resources for food and raw materials.

By the Neolithic period, clearance of the woodland may have been more extensive, both through the expansion of the bogs and valley mires, with associated grasslands on their margins, and through human activity, with the adoption of arable and pastoral farming. Recorded Neolithic remains within the Eastern Moors Estate consist of flint artefacts, with

some individual artefacts found on Big Moor. No monuments that can be clearly identified as being of Neolithic date have been recorded within the estate, though some of the field systems may have Neolithic origins.

4.2 Bronze Age to Iron Age

The vast majority of known prehistoric sites within the survey area date from the Bronze Age to Early Iron Age, some probably originating in the Neolithic period. These include 22 Scheduled Monuments covering cairnfields, fields and settlement remains, as well as embanked stone circles, ring cairns and barrows. The features indicate an extensive system of small dispersed settlements within fields and yards cleared of stones to allow cultivation or stock control. The fields and yards are defined by linear stony banks, frequently incorporating circular and oval cairns, or piles of stone derived from the cleared areas. Some of the cairns fulfilled a funerary or ritual function, with human remains and artefacts being buried below or incorporated into the structure (Barnatt and Smith 2004, 19-21), whilst many others related to field clearance. Barrows or burial mounds tend to be larger than most cairns, and comprise earthen mounds overlying one or more burials. House sites have been recorded within or adjacent to some of the fields; these would have consisted of wooden round houses and associated structures, some on terraced platforms but many with no visible surface expression.

The date range of the occupation and use of the field systems across the East Moors is poorly understood, due to inherent difficulties in the dating of monuments such as the field banks and cairns. Excavations at Sir William Hill, Eyam Moor, provided evidence for Neolithic to Early Bronze Age cultivation (Wilson and Barnatt 2004), whilst palaeoenvironmental sampling of mire deposits at Stoke Flat East suggest that the fields here were laid out in the second millennium BC and continued in use throughout the first millennium, from the Bronze Age to the Late Iron Age (Long *et al.* 1998, 516), though this is based on a limited number of radiocarbon dates. Some of the settlements and field systems are likely to have been occupied for many generations, whilst others may represent short-term speculative clearance, possibly lasting only a season or so (Barnatt and Bannister 2009, 38).

The location of the prehistoric field systems is related to topography. In general, the fields tend to be located on relatively level shelf land between the sharp edges and the scarp slopes below (Barnatt 2000, 10), although occasionally fields or cairns have been located on more sloping ground. The lighter sandy soils on the gritstone were suitable for prehistoric farming practices, and streams generally run relatively close to the field areas, as at Stoke Flat and Big Moor.

Monuments such as barrows, embanked stone circles and ring cairns, all of which are associated with activities revolving around death and burial, may have been built to establish an 'ancestral' claim to specific areas of land, as well as providing foci for social and ritual gatherings. Where dating evidence exists, these appear to have been constructed during the Early Bronze Age period. The ritual monuments tend to be located at the edges of fields, suggesting that the fields were established prior to the construction of the monuments (Barnatt 2000, 4).

4.3 Medieval

During the medieval period, the Eastern Moors Estate appears to have consisted primarily of wastes and commons. The recorded medieval archaeology of the survey area relates primarily

to transport routes crossing the moors, and includes five Scheduled Monuments, all waymarker or boundary stones, one associated with a simple clapper bridge formed of slabs of stone. Wayside crosses were used as route markers in rough terrain where roads could not be otherwise marked.

Routes across the moors are preserved as hollow ways in many parts of the estate. The remains of several bridges possibly of medieval date survive in the vicinity of the Bar Brook, including a Scheduled clapper bridge and fragments of a packhorse bridge. A further clapper bridge is also recorded, with a later bridge surmounting it. The clapper bridges are of unclear date, and could be late medieval or post-medieval, being constructed from around 1400 to the 19th century (Scheduling information). The dating of hollow-ways is likewise difficult on morphological grounds, and it is unclear which of the vast complex of routes crossing Big Moor were of medieval rather than post-medieval date. It is likely that many of the routes were in use throughout both periods, with the visible earthworks forming over time, particularly in the post-medieval period, with an increase in traffic in the 17th and 18th centuries related to transport of goods and industrial materials (Hey 1980, 225-7).

The ‘wastes’ were important resources for the farming communities, providing grazing land for stock animals as well as natural resources such as peat, stone and possibly coal. Sheep folds and stock enclosures of possible medieval date have been recorded on Big Moor and it is likely that some of the gritstone quarries may have originated in this period, though no dating evidence for this has been discovered.

4.4 Post-medieval to modern

In the post-medieval period, the majority of the Eastern Moors Estate remained unenclosed wastes and commons. Some enclosure and improvement of former commons was undertaken in the 18th and 19th centuries, either in a piecemeal fashion through agreement between landowners or through Parliamentary Award. Large areas remained unenclosed, but were managed as part of the wider estate of the Duke of Rutland, who supported the enclosure award to effectively privatise the moorlands and develop the estate for grouse shooting. This included the establishment of game drives in the first half of the 19th century (Barnatt and Bannister 2009, 125), with remains associated with grouse shooting located on several of the moorland areas, including lines of grouse butts in a variety of styles. Animals were also grazed on the moors, as is indicated by the presence of isolated enclosures, sheepfolds and animal shelters, as well as occasional shepherd’s huts.

Evidence for post-medieval industry is extensive across the Eastern Moors Estate. Lead smelting sites and millstone quarries have been recorded along Curbar, Froggatt and Gardom’s Edges, with additional widespread remains of small- to medium-scale gritstone quarries. In addition to the manufacture of millstones, quarrying of millstone grit and other sandstones and mudstones was undertaken for building stone and roof slates as well as road and boundary wall construction and repair.

The Eastern Moors were utilised during both World Wars as a training ground for infantry troops. Remains associated with these activities include gun emplacements, practice trenches and foxholes as well as bullet and mortar scars on boulders and rock outcrops. There appears to

be little documentary record of military training activities in this area. Some of the structural remains identified during the survey may also have related to military training activity.

5 RESULTS

Features recorded during the survey are listed in Appendix 1, and depicted on Figure 2.

Three previously recorded features were recorded within the survey area. These comprised two hollow ways (East Moors Survey [EMS] numbers 5893 and 5895, NTSMR numbers 204615 and 204617) and a mound of uncertain date (EMS 5889, NTSMR 204611). One of the hollow ways was noted and re-surveyed (NTSMR 204615), whilst the other was not visible on the ground. Both were noted as being ephemeral and difficult to see during the original survey. The mound (NTSMR 204611) was found and re-surveyed. It is a tapering sub-rectangular earthen mound with some stone content, and is of uncertain origin and function. It is just to the south of the Scheduled remains on Big Moor and in close proximity to several clearance cairns, and may therefore be a large clearance cairn. Alternatively, it could be a more recent feature, perhaps associated with military activity on the moor.

Two new features were recorded within the survey area. One of these was an oval hollow, 3m by 2.5m in extent and 0.8m deep, with a narrow linear slot at the base (EMS 7501, NTSMR 205938; Plate 1). No obvious upcast mound was associated with the feature, and the morphology is suggestive of a 20th century military training feature, such as a foxhole or weapons pit. It is located on a low ridge overlooking the valley to the southeast, and is not visible from the lower ground. It forms an outlier of a group of weapons pits previously recorded to the north and northwest of the survey area. The second feature was of more recent appearance, a small, water-filled rectangular cut, with three straight sides and a sloping side to the west (EMS 7502, NTSMR 205939; Plate 2). It is 2.5 by 1.5m in extent, and 0.3m deep. Similar features in the vicinity were interpreted as possible peat cuttings in the original survey, but their small size would be unusual for this function. It is possible that they are fairly recent features, perhaps dug to provide a water source for grazing stock.

6 CONCLUSIONS

During the survey, two of the three previously recorded features were relocated and marked with flags. The third feature, an ephemeral hollow way, could not be identified on the ground. It is possible that this is a natural surface drainage feature only visible in certain weather conditions. Two previously unrecorded features were identified, a probable weapons pit associated with military training, located on a low ridge overlooking the valley, and a recent rectangular cutting, possibly to provide water for grazing stock.

The relative lack of features within this area, in comparison to the dense remains recorded to the immediate north, may be due to its low-lying location and the boggy nature of the ground. The lower slopes and base of the valley appear to be outside the area favoured for settlement and cultivation in the Bronze Age to Iron Age period. The majority of features recorded to the immediate south of the site are small rectangular cuts similar to that recorded in the re-survey, and fragments of hollow ways.

7 ACKNOWLEDGEMENTS

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FIGURES

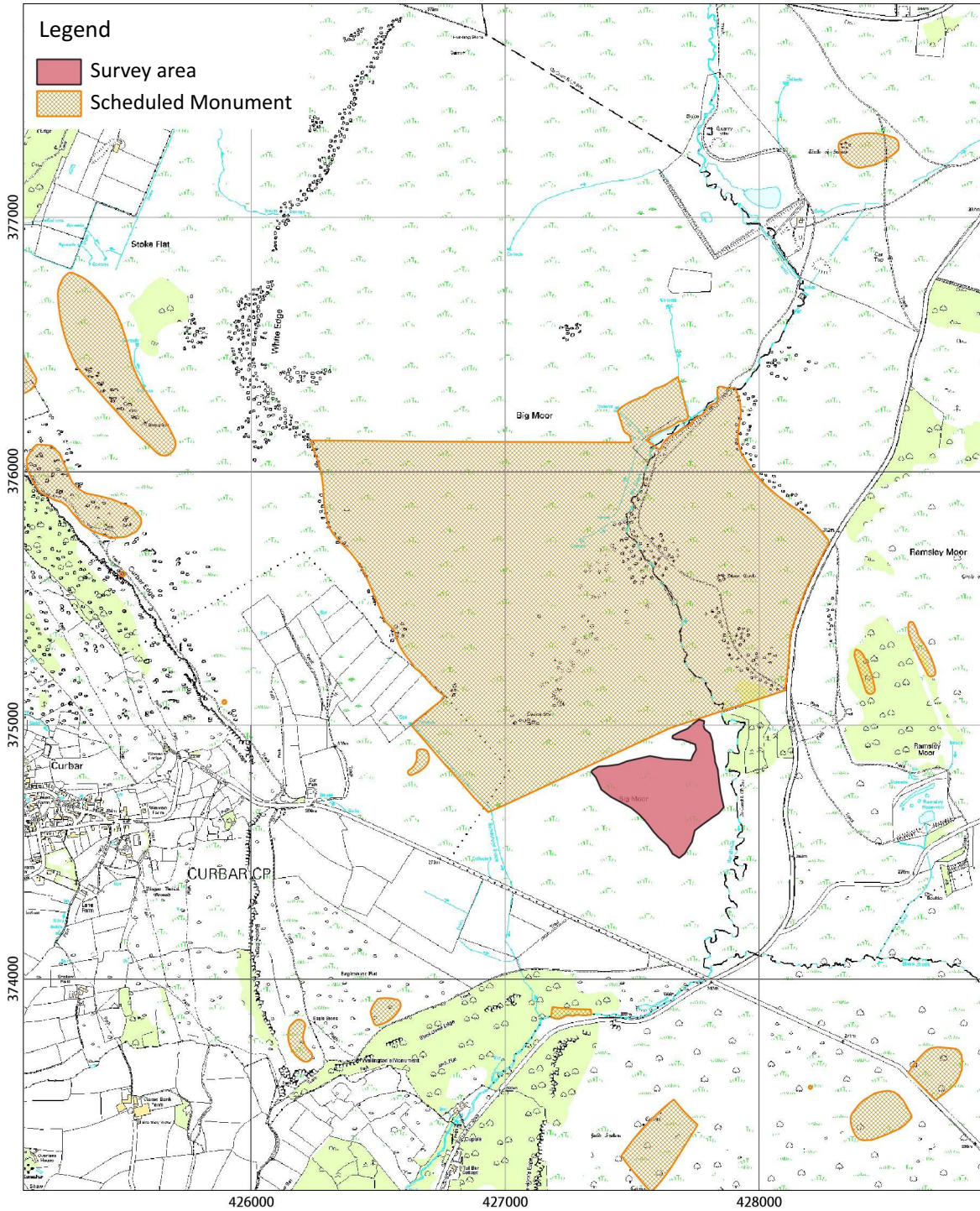


Figure 1: Location of survey area

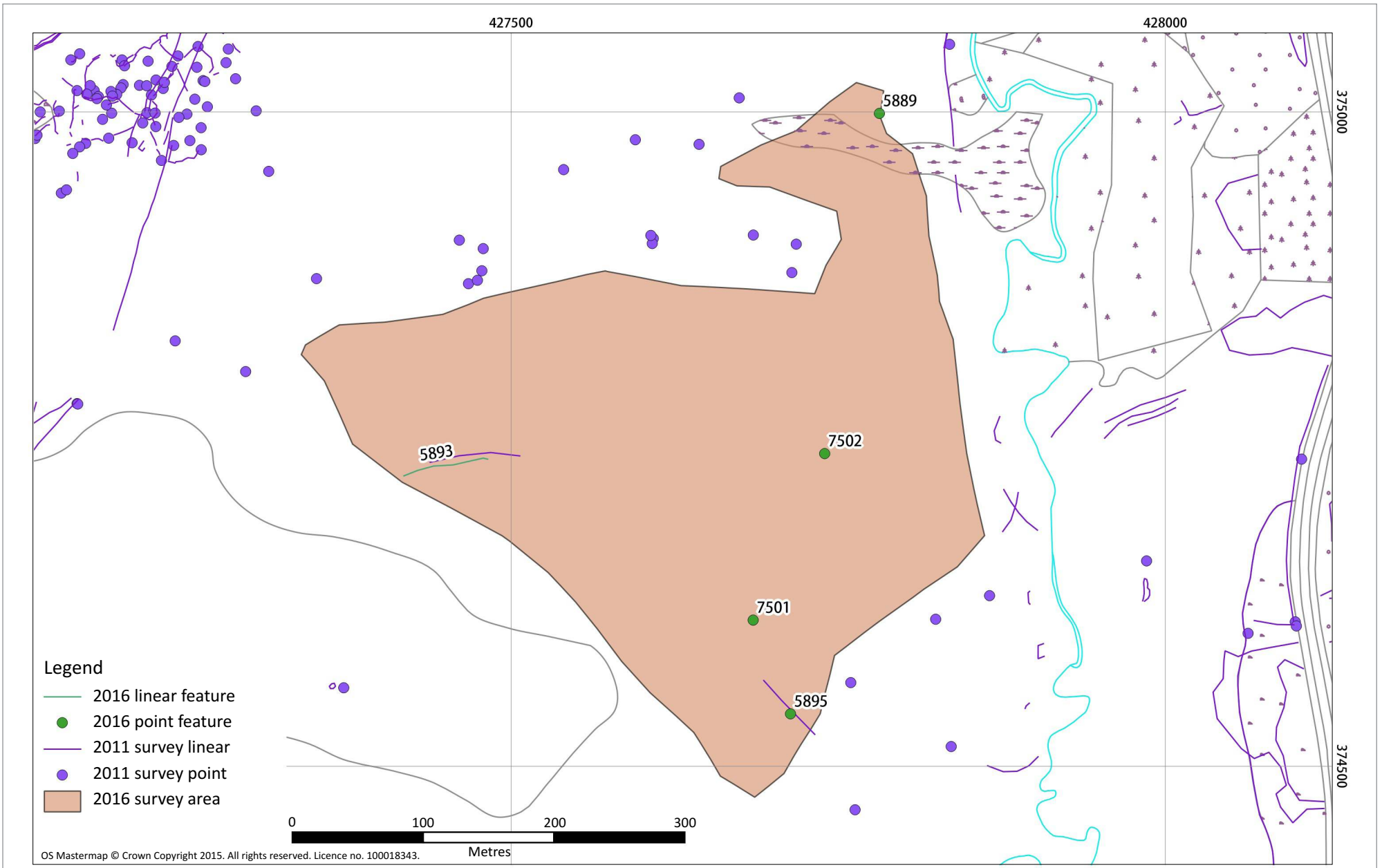


Figure 2: Survey plan

PLATES



Plate 1: Probable weapons pit, feature 7501, viewed facing east



Plate 2: Small peat cutting, feature 7502, viewed facing east

APPENDIX 1: SURVEY GAZETTEER

Flag ID	EM Survey no.	NTSMR no.	Period	Monument type	Description	Condition	Ground cover	NGR	Significance
101	5893	204615	Unknown	Hollow way	One linear hollow visible, though recorded in the initial survey as braided hollow ways. The feature is up to 2m wide, 0.3m deep and is visible for 65m. It has a fairly irregular route and could be associated with drainage rather than a hollow way.	Poor	Molinia grass	SK 27451 74729	Local/regional
102	7501	205938	Modern	Weapons pit	An oval hollow, 3m by 2.5m at the top, with a linear slot in the base, 2.5m by 1m in extent. It has steep sides and is approximately 0.8m in total depth. The lack of an upcast bank and the linear hollow at the base suggests it is a military training feature rather than a quarry hollow, and it is located on a ridge of raised ground with a good view over the valley to the southeast.	Good	Grass and reeds	SK 27686 74612	Local/regional
103	5895	204617	Unknown	Hollow way	A hollow way recorded in the original survey, but not visible on the ground during the re-survey.	Poor	Molinia grass	SK 27712 74545 (not located)	Local/regional
104	7502	205939	Modern	Possible peat cutting	A rectangular water-filled hollow, 2.5m by 1.5m and 0.3m deep. It has three straight sides with a ramp down into it from the west. It is possibly a modern feature cut to provide a watering point for grazing stock.	Average	Molinia grass and reeds	SK 27740 74739	Local/regional
105	5889	204611	Unknown	Mound	A roughly rectangular low mound, maximum 1.5m wide tapering to a narrower end at the north. It is 0.3m high and appears to be mainly earthen though with some stone content. It is of unclear date or purpose, possibly military in origin, though its proximity to cairns within and just outside the Big Moor Scheduled area suggests it could also be an unusual clearance cairn.	Average	Heather and grass	SK 27781 74999	Unknown

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