Chris Butler MIFA
Archaeological Services

A Lidar-enhanced Archaeological Survey of Sheffield Forest, East Sussex

by
Chris Butler, Vivienne Blandford
and Anne Locke

April 2011

Summary

An archaeological survey of Sheffield Forest was undertaken during 2010/2011 for Forest Enterprise to review the historic environment resource and provide conservation and management recommendations to Forest Enterprise for the heritage of this area of woodland.

Prior to this survey, only 25 archaeological sites had been identified.n This survey used a combination of an innovative airborne lidar survey, traditional desk-top methods and field survey to identify or enhance knowledge for a total of 190 sites. This report discusses the methodology used in the survey, describes the archaeology recorded, and makes recommendations for its conservation and management.

The survey has demonstrated that Sheffield Forest was a busy working wood for many centuries. Alongside various kinds of timber cultivation there was much quarrying and charcoal production, some of which would have been associated with the nearby iron-working sites. These include three early bloomery sites located within the survey site, and Sheffield Furnace just to the south which operated until the end of the 16th century. The Forest contains numerous charcoal burning platforms, concentrated along the gill valleys, some in a good state of preservation. Its complex history of use as a resource for timber, charcoal, stone, sand, and pasture is also shown by the way it is divided by many tracks and boundary banks, which also survive well. Some surviving field boundaries, now within the woodland, show that there was some attempt at agricultural improvement within the woodland though this appears to be short-lived and not successful.

This good level of survival of archaeological remains means that Sheffield Forest is a significant example of an intensively exploited historic woodland, where evidence for changes in its use over time can be clearly seen on the ground. The main threat to the archaeological remains is now damage from vegetation (tree roots and bracken). Damage may also occur from water erosion, path wear and from vehicle damage during forestry operations. This report describes how the most significant heritage assets can be conserved and protected through following a management plan.

Chris Butler MIFA
Archaeological Services
Prehistoric Flintwork Specialist
Rosedale
Berwick, Polegate
East Sussex
BN26 6TB

01323 811785 / 07815 621371
info@cbasltd.co.uk
www.cbasltd.co.uk

Contents

1. Introduction

1.1 Chris Butler Archaeological Services Ltd (CBAS) was commissioned by Forest Enterprise to carry out an archaeological survey and review of the historic environment resource of Sheffield Forest. The objective was to provide recommendations for the conservation and management of the historic environment resource. The East Sussex County Council (ESCC) Archaeology Section identified the need for the work and set out the brief, and the project was funded by Forest Enterprise and the Weald Forest Ridge Historic Environment Awareness project.

1.2 This report outlines the methodology used in the archaeological survey, then looks at the results of the field survey, summarising the sites identified by period and type. A full listing of all the sites is contained in Appendix 1 to this report. Finally the report covers the recommendations for the conservation and management of the historic environment resource in Sheffield Forest and options for further action, interpretation and research.

Sheffield Forest – definition

1.3 Sheffield Forest is situated just to the west of the village of Nutley (Fig. 1), within the High Weald Area of Outstanding Natural Beauty, and forms a southern extension of the Weald Forest Ridge, of which Ashdown Forest is a part. It is designated as a Site of Special Nature Conservation Interest (SCNI) for its specialised Atlantic Bryophytes and ferns, as well as the sandstone gills[1]. Sheffield Forest is owned and managed by Forest Enterprise on behalf of the Forestry Commission.

Geology

1.4 The geology of Sheffield Forest is of the Ashdown Beds, which consist of a mixture of interbedded siltstones and sandstones in the northern part of the forest. To the south the Wadhurst Clay is exposed along the lower gill streams with the Upper and Lower Tunbridge Wells Sands and Grinstead Clay Formations on the higher ground. (British Geological Survey sheet 303, Fig 2). Tributaries to the Ouse rise in the Forest forming typical Wealden woodland gills with steep sides to the valleys. The sandstone of the Tunbridge Wells Sandstone is exposed in the southern part of the study area. The terrain is therefore steep and hilly in places, with flatter, plateau land in between.

Vegetation

1.5 Sheffield Forest is a mainly coniferous forest with some remnant deciduous trees on undulating terrain.

[1] *www.biodiversity**sussex**.org/file_download/154/*

Administration

1.6 Sheffield Forest once formed part of the larger wooded landscape of the Weald and lies within the Rape of Pevensey, which stretched from the Pevensey levels to the River Ouse, and within the hundred of Rushmonden.[2] Both the Rape and Hundred were historic administrative divisions. Sheffield Forest lies within the ecclesiastical parish of Fletching.

Previous surveys

1.7 Prior to this survey the level of knowledge on the extent and significance of archaeological features on Sheffield Forest was not sufficient to allow recommendations for a program of conservation and management works to be developed. No sites were formally recorded on the East Sussex Historic Environment Record (HER) mapping and database, although some 25 sites (some potentially overlapping) had been noted separately on the previous surveys described below.

1.8 Between 2006 and 2011 there were visits to Sheffield Forest from the Wealden Iron Research Group (WIRG), Greg Chuter, Assistant County Archaeologist with East Sussex County Council, and an ecological survey group, each of which recorded the presence of charcoal platforms (see paras. 4.21-3).

1.9 A WIRG 'foray' in 2007, using specialised metal detecting equipment, found evidence of bloomery slag in three separate locations (see paras. 4.24-5).

Lidar surveys – definition

1.10 This survey used lidar data to review the historic environment resource and provide conservation and management recommendations. Airborne lidar (light detection and ranging), also known as airborne laser scanning (ALS), measures the height of the ground surface and other features in large areas of landscape to provide highly detailed and accurate models of the land surface. Originally developed for submarine detection in the 1960s and 70s, it was adopted by the UK's Environment Agency and others such as highways and utility authorities for producing cost-effective terrain maps. Since around 2000, archaeologists have been exploring its potential to recognise and record otherwise hard-to-detect features over large areas.

1.11 Lidar operates by using a pulsed laser beam which is scanned from side to side as the aircraft flies over the survey area, measuring between 20,000 to 100,000 points per second to build an accurate, high resolution model of the ground and the features upon it. Because lidar uses light beams it has the potential to penetrate gaps in the woodland canopy and so record the ground surface under the trees. This can reveal features that would not otherwise be seen, although very dense cover such as rhododendron may prove impenetrable to lidar survey.

[2] http://theweald.org/P5.asp?PId=PSx.Fl

1.12 The CBAS survey team's experience with using lidar for a much larger survey[3] assessing some 700 sites on Ashdown Forest, which was one of the first in the country to use lidar on this scale, led to the conclusions that:

- Lidar is capable of identifying a substantial number of new archaeological sites – at least a third more than traditional desktop and walkover methods.

- An experienced lidar interpreter can make reliable identifications of known site types in around 75% of cases using desktop methods.

- Around half of known sites identified by traditional desktop and field survey methods are capable of being enhanced by lidar survey, notably in identifying their full extent and precise location.

- Using lidar images as an additional survey tool before going out into the field enables the ground work to be done faster. The extent and precise geographical location of identified archaeological features can be targeted accurately without the need to carry out a full ground survey.

- However, some archaeological features do not show up on current lidar images: lidar should always be used in conjunction with field work, and 'ground-truthing' through field visits is an essential part of this type of survey.

[3] *Ashdown Forest historic environment resource: a revised lidar-enhanced archaeological survey*. Butler, C, Blandford, V and Locke, A, April 2011.

2. Historical and Archaeological background

Table 1: The archaeological periods referred to in this report are as follows

Palaeolithic	900,000 – 10,000 BC	End of the ice ages
Mesolithic	10,000 – 4,000 BC	Hunter-gatherer societies
Neolithic	4,000 – 2,500 BC	Early agriculture
Bronze Age	2,500 – 800 BC	The first metal working in bronze
Iron Age	800 BC – 43 AD	Start of iron industry in the Weald
Romano-British	43 – 410 AD	Iron industry in Weald
Saxon	410 – 1066 AD	Iron industry in Weald
Medieval	1066 – 1500 AD	Iron industry in Weald
Post Medieval	1500 AD to present day	End of iron industry in Weald

Prehistoric

2.1 Although there is no existing evidence for prehistoric activity at Sheffield Forest, there have been a number of discoveries of Mesolithic flintwork in the area[4], whilst to the south of the site at Uckfield a number of Mesolithic rock shelter sites have been discovered[5]. Given the outcrops of sandstone at Sheffield Forest (MES16961), there is some potential for the discovery of Mesolithic activity (Plate 1).

Plate 1: Possible Meoslithic rock shelter site (SF89)

[4] Wymer, J.J. 1977 *A Gazetteer of Mesolithic sites in England and Wales*, CBA Research Report **22**.
[5] Hemmingway, M.F. 1980 'Preliminary Explorations at the Rocks, Uckfield, East Sussex', *Sussex Archaeological Society Newsletter* No. **31**.

2.2 Evidence for later prehistoric activity is also lacking, although possible Bronze Age field systems were recorded during a recent survey of Ashdown Forest[6] near Misbourne on a south-facing slope, and a Bronze Age barrow cemetery, comprising two large circular mounds and a number of smaller mounds, is located on a ridge at Duddleswell to the east of Sheffield Forest. There have also been a number of isolated artefacts found in the wider landscape.

Roman

2.3 From the Iron Age until the end of the medieval period iron was manufactured in the Weald in small furnaces called bloomeries. A bloomery was a small sandy-clay structure, which could have either been cylindrical, or dome shaped, or a combination of both. Charcoal and iron ore were placed in the furnace through a hole in the top and air introduced by bellows through a hole or holes in the side. Eventually the iron collected in a mass, called a bloom, hence the name 'bloomery', and the waste products were run off in a semi-liquid form known as slag[7].

2.4 Roman activity in the area almost certainly centred on the iron industry, and it is possible that some of the potential bloomery sites discovered in Sheffield Forest (see 1.9 above) may be Roman. There are three, currently undated, bloomery sites in the study area, and the WIRG database[8] shows that there are some 14 ironworking sites within a 3km radius of Sheffield Forest, two of which are confirmed as being Roman, whilst many of the other sites are also likely to be Roman.

2.5 Evidence for Roman settlement is also found in the surrounding landscape, with a late Iron Age/Romano British occupation site being found at the Freshfield Lane brickworks near Horsted Keynes in the early 20th century comprising a ditch from which some 400 sherds of pottery were recovered[9]. More recently a watching brief at North Chailey located post holes and pits, also possibly associated with a Roman roadside settlement[10].

2.6 The London to Lewes Roman road runs a few kilometres to the east of Sheffield Forest, but there are likely to have been other north-south and east-west roads and trackways across this landscape, some of which are likely to have originated in prehistory.

[6] Butler, C. 2008 *An Archaeological Survey of Ashdown Forest, East Sussex*, CBAS Report.
[7] .Hodgkinson, J. *The Wealden Iron Industry* 2008, Tempus, Stroud.
[8] http://www.wirgdata.org/searchsites2.cgi
[9] Hardy, H. R. 1937 'An Iron Age pottery site near Horsted Keynes', *Sussex Archaeological Collections* **78,** 252-265.
[10] Butler, C. Forthcoming

Medieval

2.7 The name Sheffield may be derived from Sifelle, as mentioned in Doomsday when it was held by the Count of Mortain. It is also said to mean a sheep clearing[11], although this name referred to the wider area, not the Forest in isolation. However the name Sheffield Forest does not appear in any historical record or early map, unlike the Forests of Ashdown, Worth and St Leonard's and whilst it belonged, briefly, to the Crown in medieval times it was never a hunting forest or a chase. The word 'forest', denoting a hunting ground, is derived etymologically not from the Latin *foresta* but *foris,* meaning land outside the common law. Areas of land, not necessarily always wooded had their own defined boundaries within which Forest Law prevailed.[12] The name 'forest', used in the Sheffield context, may date from a much later period (after 1800).

Post Medieval

2.8 The manor of Sheffield in the parishes of Fletching and forest of Worth had formed part of the extensive Sussex estates of the Duke of Norfolk which were forfeited to the Crown in 1546. However the death of Henry VIII effectively postponed the execution of the Duke of Norfolk and no steps had been taken to dispose of the property. The estates of Sheffield Park were kept by the Crown under the stewardship of Sir William Goring and Ralph Fane. Detailed inventories of the estates were taken at this time, listing the financial accounts of the ironworks on both estates.

2.9 In 1638 there is a record of a lease for a warren within the manor of Sheffield, called Sheafield Warren, excluding all the timber and pasturage, except that which conies breeding there could eat[13]. One pillow mound was found during the survey and this may indicate the site of the warren.

2.10 The Sheffield Estate was bought in 1769 by John Baker Holroyd, 1st Earl of Sheffield from the 1st Earl de la Warr (who owned Ashdown Forest) for £31,000[14]. His family kept the estate until 1910 when Arthur Soames bought the estate.

2.11 In 1940 a defensive Stop-Line ran along the course of the River Ouse to the south of Sheffield Forest[15]. An armoured division of the Canadian Army was apparently based based further south in the house and gardens of Sheffield Park[16] later during the War but there is no evidence that they used Sheffield Forest either on the ground or from the 1947 aerial photographs[17].

[11] www.domesdaybook.co.uk/sussex3.html
[12] Brandon, P. 1974 'The Sussex Landscape', Hodder and Stoughton, London
[13] ESRO *AMS/2593*
[14] Horsfield, T, 1835, *The History and Antiquities of the County of Sussex*, Baxter, Lewes
[15] Butler, C. 2007 *East Sussex under Attack*, Tempus Publishing Ltd.
[16] http://www.nationaltrust.org.uk/main/w-vh/w-visits/w-findaplace/w-sheffield-park-garden/w-sheffieldparkgarden-history.htm
[17] http://www.geog.sussex.ac.uk/grc/info/airphotos-historic/

2.12 The estate was finally split up in 1953 with the National Trust acquiring the famous gardens, the house going into private hands, and the Forestry Commission acquiring the northern woodland areas[18].

Post-Medieval iron working

2.13 Sheffield Furnace (at TQ416257) is just outside the study area on the southernmost edge of Sheffield Forest. The furnace was built in 1546 and had gone out of production by 1571. From the Sheffield accounts there are detailed lists of cord wood sold to the gun founders. This was wood, cut by the cord, to be 'coled' or made into charcoal. A cord was 8ft long, 4ft wide and 4ft high, although in Sussex it was said an extra two inches were added to allow for shrinkage. There are records of 6,299 cordes bought at 3d the cord. Charcoal and iron ore were delivered to the furnace, and stone and sand to make the hearth of the furnace was dug from the forest. In the accounts there is also an item of clay to mend the pond bay[19].

2.14 The furnace was replaced by a corn mill by 1597-8 which ceased working in 1928. Nail-making was carried out in the brew house[20]. The hammer pond, later the mill pond, is still in water on the southernmost edge, just outside the study area, although there are the remains of a low bay at TQ41612623 which would have formed the dam or pond bay to another storage pond for the furnace, 75 metres upstream from the tail of the pond.

[18] http://www.nationaltrust.org.uk/main/w-vh/w-visits/w-findaplace/w-sheffield-park-garden/w-sheffieldparkgarden-history.htm

[19] Guiseppi, I, 1546-1549, *The Accounts of the Iron-Works at Sheffield*,Archaeological Journal 275, vol xix pp276-311, Royal Archaeological Institute

[20] Cleere, H & Crossley, D, 1995, *The Iron Industry of the Weald*, Merton Press, Cardiff.

3. Survey Methodology

3.1 The survey undertaken at Sheffield Forest equates to a Level 2 survey as defined by English Heritage[21]. This level of survey provides a basic descriptive and interpretive record of the archaeological remains within Sheffield Forest, and includes core monument data and the level and form of records that satisfies the requirements of the current standards and approaches to Woodland Archaeology in the south-east of England[22].

The airborne lidar survey

3.2 The Historic Environment Awareness project, funded by English Heritage and the Heritage Lottery Fund, included a lidar survey of the Weald Forest Ridge which produced a detailed digital map of the ground surface allowing the definition of features to within 100mm vertical and 250mm horizontal accuracy.The lidar survey was flown in two tranches, in early 2009 and spring 2010, since it needed to be undertaken at times when the trees were not in leaf. As it covered the entire Weald Forest Ridge, of which Sheffield Forest forms a part, initial analysis began in 2009 for other areas. The methodology established then has been adopted for the present survey.

3.3 In the first year of the Historic Environment Awareness project, lidar images were viewed on screen in ArcMap software, mainly using the composite hill-shaded images lit from the NW (example Fig. 3). Sometimes a single hill-shaded image, lit from the SW, was used to ascertain whether a different detail could be seen from this direction. This was applied to an area of high interest or where linear features run in a roughly N/S direction. The images were viewed at a scale of 1:4000 as this gives an efficient working scale and good resolution. It is sometimes worth investigating areas of specific interest at a scale of 1:2500. It must be noted, however, these extra options are time-consuming and it is not advised to cover large areas using these additional methods of querying the data, but if a small area is to be studied in detail a scale of 1:2500 can be used.

The desk-top survey

3.4 The desk-top study comprised the investigation of the Historic Environment Record (HER) held by East Sussex County Council (ESCC) for this area. A study of the available aerial photographs and historic mapping for the area was also undertaken. A full search of historical records and documentary sources was not undertaken as part of this survey. The lidar survey data was studied alongside the photographic and map evidence to identify and transcribe potential features, the results of which were overlaid onto OS mapping as the basis for undertaking the field survey (Fig. 4).

[21] English Heritage (2007) *Understanding the Archaeology of Landscapes*, Swindon, English Heritage.
[22] Bannister, N. & Johnson, C. (2008) *Woodland Archaeology – Setting Standards and Approaches*, Discussion Paper (draft 2).

Historic Landscape Characterisation

3.5 The Historic Landscape Characterisation (HLC) which was undertaken for Sussex (2003-2008) maps the historical attributes of the present landscape to reflect both historic character and historic time depth.[23] The HLC shows a large area of woodland, slightly bigger than the forest of today surrounded by mainly fieldscapes and some water bodies. However, from the number of boundaries found within this woodland it is obvious that this is not a straightforward wooded landscape as designated by HLC (Figs. 5 and 6).

The Field Survey

3.6 The detailed field survey was undertaken on two visits, on 20th and 27th January 2011, by Vivienne Blandford, Chris Butler and Anne Locke. The vegetation was low and there was good access to most of the area, except for areas of particularly dense planting, or steep slopes. The areas not surveyed are roughly outlined on 'areas not surveyed map' (Fig. 7):

- An area of fairly dense young conifer and birch centred around TQ42402640
- A densely planted area either side of a forestry track at around TQ42202620
- An area where the gill stream side was too steep for surveying (and for any previous activity) around TQ42022715
- Areas of fairly dense rhododendron cover around TQ42022708

3.7 The survey methodology comprised a systematic walkover of the area, using the lidar as a back up to the visual inspection of the ground surface. The transcribed lidar overlay (see Fig. 4) was used in conjunction with the current OS mapping to identify features and determine their extent. Features previously identified on the lidar were targeted to confirm their presence, identity, and current state. Other features, not on the lidar, were identified during the walkover survey: these were mostly small or negative (sunken) features or in dense cover and would not have showed up on the lidar.

3.8 A written record was made for each earthwork or other site encountered, including information on its dimensions, shape and extent, together with any relationships with other earthworks and sites. Where necessary this information was backed up with sketches and digital photographs. For features not visible on the lidar, measurements were estimated by pacing, and a hand-held GPS (either Garmin 60CSx or Magellan Triton) was used to provide an exact location to an accuracy of 5m.

[23] N.R. Bannister, *Sussex Historic Landscape Characterisation* Final Report. WSCC, ESCC, EH; English Heritage 2004-5, in press. Characterisation. Conservation Bulletin Issue 47; J. Clark, J. Darlington, G. Fairclough, *Using Historic Landscape Characterisation*. English Heritage 2004.

3.9 Each site was entered onto an Excel database, which has been retained in the site archive. A summary extract of the database is included in Appendix 1 of this report detailing all the sites found during the survey. The site information has been added to the East Sussex Historic Environment Record (HER) GIS system, using the HBSMR package, with lines and polygons showing the exact position and extent of the sites transcribed from the lidar overlay where available. Electronic and paper base-maps were also created showing all of the sites found during the survey and are included in this report (Figs. 13 and 14).

3.10 During the survey, the ground surface was also inspected for archaeological artefacts, especially areas of recent clearance or path disturbance. However, no artefacts were recovered during the survey.

3.11 This survey has only considered the above-ground archaeology, and no attempt has been made to investigate the below-ground archaeology. It is likely that there will be many sites, especially those of prehistoric date, within Sheffield Forest that are currently below-ground, and therefore any future groundworks should be closely monitored to ensure that any sites disturbed are fully recorded.

3.12 The archive will be retained by Forest Enterprise, with a copy held in the East Sussex HER at ESCC. A copy of the report will also be deposited in the Library of the Sussex Archaeological Society at Barbican House, Lewes.

4. Results of the Survey

The Desktop Survey

4.1 The HER records and the records for the WIRG and Greg Chuter surveys for Sheffield Forest were provided by ESCC and amounted to 25 sites. These are listed within Appendix 1. Documents at East Sussex Record Office (ESRO), the National Archives on line and material held by the Sussex Archaeological Society were also consulted.

4.2 The late 18th century Yeakell and Gardner map of Sussex[24] (Fig. 8) is somewhat stylised, but roughly shows the extent of Sheffield Forest at that time and gives the impression of a long thin woodland, bounded on its western boundary by the western gill stream. It also gives the impression more land was under cultivation rather than the later, larger block of woodland. The large roads in the southern extremity may be associated with the earlier furnace and later mill at Sheffield.

4.3 The 1813 estate map[25] (Fig. 9) for John, Earl of Sheffield by William Embden shows the forest area to the north of Sheffield Park, now known as Sheffield Forest, to be divided into smaller areas of woodland with their own names: Hob Robin Wood, Lag Wood, Lane Wood, Northall Wood, Rocky Wood, Ridge Wood and Pollards Wood to the east. It would appear from the map legend details that Holroyd divided Sheffield Forest into separate woods and compartments and that he had attempted to reclaim or improve some of the woodland for agricultural purposes.

4.4 In the accounts of around 1820 it is recorded that underwood was taken from Lag Wood, Northall and Ridge Wood, Pollards Wood, Hob Robin and Stephen's Wood. Lane End Field had been newly planted and a couple of compartments, Rocky Field and Rough Wood, were a mixture of woodland and pasture. No standard wood was recorded as having been cut and may indicate the poor state of the woodland at this time, as no standard wood was mentioned as having been taken in this set of accounts[26]. However a number of saw pits found, during the survey, throughout the woods indicates that the timber being cut was large enough for the need of in-situ saw pits, close to the access tracks. Two of the named areas, Rocky Wood and Sand Field, were identified from lidar images, as having been quarried and their names may give an indication of what was or had been quarried there. However this is the area in which the Grinstead Clay outcrops, and where there can be a source of iron ore; these quarried areas could have been associated with the furnace just to the south of the area.

[24] East Sussex Record Office AMS6008/1/1/29
[25] East Sussex Record Office ACC 6975
[26] East Sussex Record Office AMS5646

4.5 A set of estate maps (Fig. 10), bound with the 1820 accounts, are based on the Willian Embden map and reinforce the fact that there was reclaimation of some of the woodland for agricultural purposes, notably the fields around Stephens Farm in the north-east, but also some in the north-west belonging to Colin Goodman's farm.[27] It was unsuccessful, or did not last very long, as some of the old field boundaries now exist as forgotten boundaries in the woodland of today. The Tithe Map of 1841, which, for this area, is in extremely poor condition, shows that Sheffield Forest was no longer subdivided to any great extent and was now called, once again, Sheffield Forest. At 183 acres, it was owned by Lord Sheffield with no tenants. The 1st Edition OS map (c. 1865) shows similar boundaries of those today (Fig. 11).

4.6 A small building was mapped (TQ420826) in the early 19th century estate maps (Figs. 9 and 10) and the Tithe Map of 1841 but is not shown on any subsequent maps. The remains of the dwelling and associated boundaries are visible on the lidar images and some are visible on the ground today (MES15431, Figs. 15 and 16). A computer-enhanced version of the 1st Edition OS map shows a substantial clearing in this area which may be related to the field named 'Sand Field' and it is possible that they were quarrying sand/sandstone from the Tunbridge Wells Sand outcropping here.

4.7 An estate map of 1884[28] (Fig. 12) shows the Sheffield Forest as one area of woodland with the gill streams correctly mapped, unlike the previous estate maps. The cottage is no longer shown and a few tracks intersect the woodland.

4.8 Aerial photography, although consulted, gave no helpful information. The later OS maps show a densely wooded area with little detail in the wood apart from woodland tracks which change little over time. There are slight name changes and by the time of the 3rd Edition OS map the top north-western section is called Pollardsland Wood and the top north-western extension Kiln Plat Wood with the bulk of the wood known as Sheffield Forest which is how the wood is named today.

The Lidar and Field Surveys

4.9 The lidar and desktop survey identified 94 potential sites, of which 63, or 67%, were 'ground truthed' during the field surveys undertaken on 20th and 27th January 2011. The field visits recorded a total of 165 sites including a further 85 which had not been pre-identified on lidar. Sites which had not been pre-identified on lidar were mostly small or negative (sunken) features e.g. platforms and saw pits, or in dense cover. Sites identified on lidar but not ground truthed were mostly substantial linear features like banks and trackways which can be reliably identified from the lidar.

[27] East Sussex Record Office AMS5646
[28] East Sussex Record Office AMS10261

4.10 All the sites found during the survey are listed in Appendix 1. The sites are predominantly Post Medieval in date, with most of them probably dating from the 18th century through to the 20th century. There were no sites that were found during the field survey that can be dated to the Medieval period or earlier with any certainty. However, many of the earthworks, especially banks, are undiagnostic in character, and thus it is possible that some could date from the Medieval period[29], as could some of the sites related to charcoal production. Many of the sites are related to more recent forestry use.

4.11 The bloomery sites in Sheffield Forest could date from the Iron Age through the Saxon and Medieval periods. However it is not possible to date them without some form of excavation.

Archaeological site types

4.12 The main types of site found in the survey are listed and defined in Table 2 below. Common types are shown on the distribution maps, Figs. 17 to 20. These have in some cases been cropped to fit the features concerned, in order to show a greater level of detail.

Table 2: Main types of site found

Type of site	Definition	Number
Trackway	Road or trackway, some of which may still be in use	27
Hollow way	Sunken trackway, worn through use	12
Boundary	Boundary shown on map; may survive as bank	} 42
Bank	Linear earthwork often with associated ditch	}
Quarry	Quarry probably associated with industrial activity	16
Enclosure	Earthwork bank (and ditch) enclosing an area	1
Earthwork	Miscellaneous earthwork of indeterminate age and function	6
Mound	Miscellaneous mound of indeterminate function and age.	4
Ditch	Drainage ditch with no associated bank	2
Pillow mound	Long low mound for rabbit husbandry	1
Saw pit	Rectangular cut	12
Charcoal burning platform	Usually circular depression with darker soil	35
Iron working site	Bloomery and other sites associated with the early iron industry	4
Pond	Man made pond, some of which may be decoy ponds	4

[29] Rackham, O. 1990 *The History of the Countryside*, J.M. Dent & Sons Ltd, London.

Trackways and hollow ways

4.13 The survey recorded 27 trackways. There are a number of different types of trackways surviving across Sheffield Forest (distribution map, Fig. 18), and although they are probably all Post Medieval in date, it is likely that some may have had earlier Medieval origins, and in some cases may be perpetuating Roman and even prehistoric routeways. Some of the trackways may have been associated with the early iron industry. Trackways in the southern section of the site could be associated with the Sheffield Furnace site and quarrying activities in this area, and with the cottage marked on the earlier estate maps. The trackways and field boundaries are visible on the lidar images and others were found on the ground during the suvey.

4.14 A number of the trackways were initially identified from the early estate and OS maps, and relate to the courses of earlier roads and tracks that have now either moved or disappeared completely. Some tracks may have been short term tracks associated with woodland management.

4.15 Another group of older tracks are represented by the 12 hollow ways (e.g. Plate 2) and worn trackways, often on slightly different alignments to the current tracks, and which probably represent the migration of tracks to an easier route when the existing hollow way became impassable.

Plate 2: Hollow Way (SF57)

Banks and boundaries

4.16 There were more than 40 banks, field boundaries and boundary banks (Plate 3) found during the survey (distribution map, Fig. 18). Some were identified from the maps and earlier survey or lidar, whilst others were found during the field visits. The majority of the banks found during the survey were similar to field boundaries (e.g. Plate 4) and are most likely to date from the periods of agricultural improvement as was inferred from the various estate maps of the early nineteenth century.

Plate 3: Boundary Bank (SF60)

Plate 4: Field Boundary Bank (SF84)

Quarries

4.17 Sixteen quarries (Fig. 20) were identified both on the lidar and found on the ground (e.g. Plate 5) during the survey, and, as has been previously mentioned, they could relate to early iron ore extraction, or for quarrying sand, stone or clay. In some cases field names such as Rocky Wood and Sand Field indicate what was quarried there.

Plate 5: Quarry (SF69)

Other earthworks, enclosures and mounds

4.18 This category incorporates a range of features that do not fit any of the other category descriptions. A heart-shaped enclosure (MES17023) with a low, wide bank and ditch was observed at TQ41822598 by Greg Chuter in 2006, but was not visible on the ground or on lidar because of dense vegetation.

Pillow mounds

4.19 The field survey discoved an atypical pillow mound (MES16908). Although they can occur in many different shapes and sizes, the pillow mounds found in the Weald tend to be around 50-100m long, 4-6m wide and under 1m high[30]. The one in Sheffield Forest is unusual because it has its long axis across the slope rather than running down (the usual downhill alignment aided drainage of the pillow mound). It is also unusual that only one pillow mound was found, but if this was part of the Sheffield Warren recorded in the historical record the other pillow mounds may have been destroyed by later tree planting and agricultural improvements.

Saw pits

4.20 Twelve saw pits were recorded (Plate 6). All of the saw pits found during the survey were close to access tracks (Fig. 19). Some of the saw pits were in good condition and had not been filled in totally, which may mean they dated from as late as the early 20th century. In the 1820 accounts only underwood is recorded as being harvested so some of the saw pits could predate this period also.

[30] Williamson, T. 2007 *Rabbits, Warrens & Archaeology*, Tempus Publishing Ltd

Plate 6: Saw Pit (SF72)

Charcoal burning platforms

4.21 A large number (35) of charcoal burning platforms were identified (Fig. 17). A charcoal burning platform or hearth was an area between 8 to 14m in diameter, often cut into the slope of a woodland gill to provide a flat, level surface on which a charcoal burner could build his clamp (stack of wood) to produce charcoal (Plate 7). There is sometimes a back edge cut into the slope up to a height of up to about 1m, although this will depend on the steepness of the slope. On the downhill edge there can sometimes be a slight lip where pieces of charcoal may be found. This was formed when the finished product, charcoal, was raked off the platform and towards the front of it. Sometimes the only way of diagnosing these features as charcoal platforms is the presence of darkened soil over the entire area. The platforms are often located in groups, near to a water supply and sometimes linked by woodland tracks. Their pattern of distribution can be seen in Fig. 17 where their relationship to each other and their topographical location along the woodland gillsides is well demonstrated.

Plate 7: Charcoal Burning Platform (SF94)

4.22 Between 2006 and 2011 there were visits to Sheffield Forest from the Wealden Iron Research Group (WIRG), Greg Chuter, Assistant County Archaeologist with East Sussex County Council, and an ecological survey group who had recorded the presence of charcoal platforms. While some of these surveys found the same charcoal platforms, there was a degree of variation in their recording. Locating these charcoal platforms can be very dependent on the ground cover at the time of the survey. As the majority of the ones in Sheffield Forest are not particularly well formed, their presence has been confirmed, in many cases, by the darkened soil and charcoal pieces rather than their form. Between surveys it was evident that, in some cases, wheeled forestry vehicles had been used in the area, which made it more difficult to see these previously recorded charcoal platforms. It is important to note that charcoal platforms can easily be damaged by forestry activities and are therefore vunerable.

Ironworking sites

4.23 A WIRG 'foray' in 2007, using specialised metal detecting equipment, found evidence of bloomery slag in three separate locations (MES16889, 16923, 16924) This indicates the presence of bloomery sites where iron was produced on a small scale from the Iron Age through the Saxon to the Medieval periods. The bloomery sites and charcoal platforms found during the survey could be from any of these periods but, without some form of positive dating evidence these cannot be dated. However most bloomeries that have been dated in the surrounding landscape belong to the Roman period.

4.24 During the present survey no slag was found but the disturbed area in which the bloomery sites were located was noted in some cases. Some of the other circular areas showed no sign of darkened soil: these sould be working or temporary living areas for either the charcoal burners or the iron workers.

Ponds and water features

4.25 The two tributaries flow into the tail end of Sheffield Mill Pond, a former furnace pond. Some evidence of storage ponds was found at TQ41612623 where a low bay was noted crossing the stream about 75m upstream from the tail of the pond.

Forestry and woodland management features

4.26 A number of features related to modern (c.1900 onwards) forestry in Sheffield Forest were identified, including a one-room standing building (MES16874) and the remains of another building (MES16887), evidence of abandoned trailers, machinery and vehicle parts, and rutted tracks with trees growing in them (indicating that the tracks were used only for a limited time, and predating the more recent planting).

4.27 A new type of woodland working feature was identified, referred to here as a wood stacking platform, consisting of slightly concave linear terraces on slopes for stacking logs of c 2m length. A small tree trunk is inserted or left as a peg to hold the front bottom log in place (Plate 8). Good examples were found at TQ41842671 near the main forest road, MES16971.

Plate 8: Log storage platform in use

Settlement site

4.28 A settlement site (MES15431, Figs. 15 and 16) with associated trackways and a small field system was located in the south west corner of Sheffield Forest. This was marked as a cottage on the estate maps of the early 19th century, although no surviving evidence for a building was noted during the survey.

Military archaeology

4.30 No features of a military nature were noted during the survey. Although the 1947 aerial photograph shows some parts of the forest to be open and unwooded, there is no visible evidence that the forest has been used for training during either the First or Second World Wars.

5. Recommendations for conservation and management

Management mapping

5.1. Recommendations for the conservation and management of the archaeological resource of Sheffield Forest have been summarized in the management mapping using red, amber and green areas (see Table 3 and Fig. 21). More detailed mapping is provided in the separate folder of A3 maps where Sheffield Forest was divided into two sections, north and south to provide working maps at a reasonable working scale of 1:500. Customised map extracts of the area at any scale can also be obtained on request from the East Sussex HER. The full GIS layer could be provided to Forest Enterprise, to enable them to print out their own customised maps as required.

5.2. Sites were assessed for their significance, condition and vulnerability and mapped on a GIS layer using hatched polygons with red, amber and green colour-coding for management purposes (see Table 3). These maps give a quick overview of not only the type of archaeological features found but in many cases the extent of the archaeological feature and also the possible value of the given area. Key features are visible and labelled within the areas.

5.3. Some of the above sites which fall into different categories may be of such proximity to each other that they will form part of one category, which will be of the highest designation according to the above criteria.

5.4. Groups of similar features such as braided trackways/holloways, areas of quarrying, trench systems are polygonised in one area. This method will aid the mapping of the data entry into the HER and lessen the number of polygons needed, and thus simplify the mapping.

5.5. 'Cab cards', booklets as developed for the Weald Forest Ridge project, will be available for use by Forest Enterprise staff and contractors alongside the specific management mapping. A cab card is a small spiral-bound booklet suitable for use in the cab of a working vehicle. It contains drawings and photographs of commonly encountered archaeological features that may be found by contractors when working in wooded landscapes. Using simple procedures it contains ideas for mitigating damage by forestry vehicles. There is a pocket in the back which can be used to hold a map of the working area.

Table 3: Management Mapping Summary

The management mapping uses the specifications A (red), B (amber) and C (green) where:

- A: may be equivalent to nationally designated or sites of equivalent significance
- B: regionally or locally designated sites or sites of equivalent significance
- C: all other sites of a recognisable archaeological type which do not fall into the above categories.

'A' category sites will include:

- Enclosures, Barrows and possible associated Field Systems.
- Existing Bloomery sites where there may be additional activity noted from Lidar evidence, such as quarries (which ordinarily would fall into the 'C' category) and possible platforms, enclosures etc.
- Pond Bays and other water management features (holding ponds).
- Pillow Mounds and associated possible boundary banks to warrens.
- Good examples of military trench systems and Rifle Ranges.
- Settlement sites and enclosures (with possible Holloways associated with them).
- A good example of hollow ways, braided trackway features and roads no longer in use. Ridge and furrow where positively identified by ground truthing.
- A good example of charcoal platforms where positively identified.
- Significant boundaries sometimes identified by map regression.
- Data already recorded on the Historic Environment Record taken from bibliographic sources, excavations or find spots etc.

'B' Category sites will include:

- Charcoal platforms.
- Other military trench systems
- Other boundary banks where the confidence level of recognition is high.
- Other hollow ways, braided trackways and older trackways.

'C' Category sites will include:

- All other boundary banks which do not fall into the above categories.
- Areas of quarrying and mine pits unless they are associated with other features as already stated.
- Field boundaries which are no longer extant but may be able to be dated from map regression.
- Trackways/access tracks which are not always currently mapped on modern maps but may be able to be dated from map regression but may still be in use

Some of the above sites which fall into different categories may be of such proximity to each other that they will be form part of one category, which will be of the highest designation according to the above criteria

Condition of the Sheffield Forest historic environment resource

5.6. One of the objectives of the field survey was to record the current state of the archaeology in Sheffield Forest, assess the damage that has been caused in the past, and potential for future damage to the surviving archaeology.

5.7. The greatest detrimental factor in Sheffield Forest is tree roots and bracken, along with some rhododendron, which can cause significant damage to earthworks and below ground archaeology. However, established trees can also provide stability to archaeological earthworks, and as such can assist in the preservation of earthworks such as banks. Other common factors include water erosion and damage by the passage of forestry vehicles and people. Animal damage is not that common, and generally the sites surveyed are in fair to good condition with little evidence of recent damage.

5.8. The future conservation and management of the archaeological resource in Sheffield Forest is vitally important, not only to preserve the surviving remains for the future, but also to enable the visiting public to be able to see and understand the important archaeological remains today. It is clear from the results of this survey that there is a significant range of preserved archaeological sites surviving in the forest, which provide an insight to the past land use of this landscape. It is also important to understand that many changes have taken place over time, and the archaeology that can be seen today often represents only the more recent use of the landscape.

5.9. It should also be noted that this survey has only assessed the visible above-ground archaeology, and it is likely that there are numerous archaeological sites preserved below-ground, for which little evidence survives to be seen today. These sites are more likely to date from the earlier periods; prehistory through to the Medieval period. Any future work on the Forest involving scraping, drainage or stump removal should take into account the potential impact on the below-ground archaeology.

5.10. A set of guidelines has been put forward for preserving cultural features in woodlands[31], and it is proposed that these should form the basis for the future conservation and management of the archaeological resource in Sheffield Forest. Prior to any clearance of scrub, bracken etc or mowing of new areas, the archaeological map should be consulted to ensure that no known archaeological site would be affected by the work.

[31] Bannister, N. 2007 *The Cultural heritage of woodlands in the South East*, South East AONBs Woodland Programme.

Specific management recommendations by site type

Trackways and hollow ways

5.11. A number of trackways and hollow ways are still in use as paths and tracks today, and are therefore subject to wear and damage from people, horses and forestry vehicles.

5.12. Others are no longer used, and are frequently overgrown with bracken and small trees and scrub (Plate 9). Apart from groups of associated hollow ways or where hollow ways are associated with other features within management areas, it is not proposed to recommend any remedial or special action that needs to undertaken for their conservation. However, consideration must be given to any work carried out on or around these sites, which may result in damage.

Plate 9: Trackway (SF70)

Banks

5.13. Consideration should be given to clearance of all vegetation from the bank and ditch, except for any established trees, which now form an integral part of its structure, so should be left in-situ. No new fences should be constructed on a boundary bank, and consideration given to moving any current fences from the top of the bank. Any intervention on a bank should be carried out under archaeological supervision, as work may produce crucial dating evidence.

5.14. Being linear features, many of the other banks cover considerable distances, although the full extent of many found during the survey could not be established. Often a bank will have a ditch on one or both sides, although it will frequently have been silted up and difficult to determine. Most banks are covered with bracken, gorse and scrub (Plate 10), whilst many have been cut through or disturbed by tracks in more recent times. Action should be taken to stop future damage by vehicles to any bank, and they should be treated with caution in mown areas. Each bank and an area of up to 2m on each side should be considered as if it were a defined management area.

Plate 10: Overgrown bank (SF117)

Quarries

5.15. Quarries probably require the least amount of protection and management. Although they form an interesting group of sites and inform us about the past industrial use of the Forest, their relative abundance and the robust nature of the remains makes them a low priority.

Enclosures

5.16. The enclosure should be designated as an archaeological management area, along with the area extending outside the enclosure sufficiently to include any external ditch or associated earthworks. If resources become available, the banks, ditches and interiors of the enclosure should be cleared of any bracken, gorse and small trees and shrubs under archaeological supervision, as any ground disturbance may provide evidence for its function and dating.

Earthworks and mounds

5.17. This group of sites are varied in their nature and mostly unidentified and undated. Some of the larger earthworks should be treated in the same way as the enclosures above. The remaining sites may not be within management areas, but should be managed with care to ensure that there is no damage to the earthwork or its immediate surroundings. Any work undertaken on or around these features should be carried out under archaeological supervision to enable any artefactual or dating evidence to be recorded, as this will then assist in the identification of the earthwork and enable a more appropriate management strategy to be put in place.

Pillow mounds

5.18. Pillow mounds are an important type of site and comparatively rare in the Weald, only surviving in areas of heathland and wood such as Ashdown Forest, with the known sites recognised as being of sufficient significance for them to be designated as Scheduled Ancient Monuments. The newly discovered pillow mound should also be designated as a Protected Site, and should be in an archaeological management area that covers the mound and its immediate surroundings. Consideration must be given as to the long-term survival of these important sites, with the clearance of trees and bracken from the mounds and ditches being undertaken.

Woodland industrial sites – saw pits and charcoal burning platforms

5.19. Sheffield Forest is rich in woodland industrial sites, whereas evidence for woodland industries is sparse in the neighbouring Ashdown Forest. The saw pits, and any other sites discovered should be treated with care during any clearing of vegetation or mowing. It is likely that during the clearance of trees, especially in areas of plantation, further evidence for woodland industrial activity may be encountered. As previously mentioned any activity involving vehicles within the areas of charcoal platforms and bloomery sites should be avoided. It is highly likely that there may be further evidence of the early iron working industry in the area along the two gill streams.

Management principles

5.20. Management recommendations in this report are derived from the management options set out for the HLS scheme in the Natural England scheme handbooks[32], from the principles set out in Dr Nicola Bannister's work on the cultural heritage of woodland in the South-East[33], and from English Heritage guidance.

5.21. In summary, the main principle is to minimise any disturbance to archaeological sites. Different features may require different approaches to their management and long-term preservation. The following is a summary of the main management principles, which it is suggested are including in any future overall management plan for Sheffield Forest and in management plans for forest areas and archaeological features:

- For any proposed works, produce a cultural heritage management plan and include an annotated map showing all the archaeologically sensitive areas and features. This can be derived from the management maps included in this report or provided by the East Sussex HER.

- Inform all workers and contractors of the cultural heritage of Sheffield Forest and the location of individual features. Cab cards (see para 5.5) may be useful for this. Consider marking out particularly sensitive sites prior to operations using posts, tape and/or flags.

- Prior to undertaking activities within Sheffield Forest, plan access and extraction routes, and other facilities to avoid archaeological features and sites.

- Maximum damage occurs during scraping or tree root removal: take advice before undertaking work of this kind in archaeologically sensitive areas. There is published guidance on the affect of bracken on archaeology, and guidelines on its removal available from Natural England (see bibliography).

- Trailed swipes mowing at right angles to ground features will cause incremental damage.

- Avoid taking machinery over earthworks or buried sites. If this is unavoidable, select one point and cover with brash or other protective material. Remove after use. Avoid using such an area when the ground conditions are wet or after periods of heavy rainfall.

- Avoid ground preparation and drainage works over archaeological sites and in archaeological sensitive areas.

- In woodland, manage sites as open glades.

[32] HD options in Natural England, 2010 *Higher Level Stewardship – Third Edition*, February 2010 and ED options in Natural England, 2010 *Entry Level Stewardship – Third Edition*, Feb 2010

[33] Bannister, N, 2007 *The cultural heritage of woodlands in the South East*

- Avoid scrubbing up on sensitive sites by cutting the vegetation or using an approved selective herbicide. Discourage burrowing animals without disturbing the ground surface.

- Site facilities such as car parks away from archaeological sites. Maintain existing routeways, restore any drainage channels and reinstate any old paths with a suitable covering.

- Maintain, and if possible restore, any water features, having due regard for any archaeological potential of any accumulated silts and deposits. Do not drain any wet, mirey areas that are not on public rights of way.

- Do not use, or allow the use, of metal detectors on archaeological sites, or in areas where there may be archaeological sites.

- If archaeological remains and finds are discovered while working, leave them undisturbed and make a report to the County Archaeologist or appointed archaeologist (finds have a greater significance when left in place, and if removed from context they can become meaningless). Archaeological sites discovered by Forest staff or visitors should be recorded and periodically added to the East Sussex HER.

- Features currently under woodland are generally stable until the trees fall; the current high deer population will prevent under-storey development.

- Invasive tree scrub removal should not cause damage but avoid non-essential tractor/forwarder use over archaeology.

- The piling up or burning of brash and other debris should be avoided in archaeologically sensitive areas as this can obscure, change or damage the historic environment. Mounds created by brash or spoil from scraping should be recorded and mapped to avoid future confusuion with archaeological remains.

- Extensive forest fires should be reported to the County Archaeologist to allow investigation of any potential archaeology that has been exposed.

6. Discussion and options for additional action, interpretation and further research

6.1 Prior to the survey, there were no archaeological sites formally recorded on the East Sussex Historic Environment Record (HER) for Sheffield Forest although 25 sites had been identified in previous surveys. A combination of lidar, desk-top study and field survey has identified or enhanced knowledge for a total of nearly 200 sites. Approximately half were pre-identified on lidar and nearly as many were only found during the walkover survey. There is further potential for identifying further, as yet undiscovered, archaeological sites across the Forest, especially sites that have no above ground features.

6.2 The survey demonstrated that Sheffield Forest was a busy working wood for many centuries. Alongside various kinds of timber cultivation there was much quarrying and charcoal production, associated with the nearby iron furnace which operated until the end of the 16th century. It contains numerous charcoal burning platforms, mainly concentrated along the two, roughly, east-west woodland gill valleys in varying states of preservation. In the same area three bloomery sites have been recorded and there may well be others in the same vicinity. These could date from the Roman period. The complex history of the forest's use as a resource for timber, charcoal, stone, sand and pasture is also shown by the way it is divided by many tracks and boundary banks, which also survive well.

6.3 This good level of survival of archaeological remains means that Sheffield Forest is a significant example of an intensively exploited historic woodland, where changes in its use over time can be clearly seen on the ground. It is also interesting to note that some attempts at agricultural improvement were made, probably mainly during the late 18th and early 19th century. Though, from the map evidence, this did not last long, less than 100 years and was probably not successful. The one surviving pillow mound may date from this period or could be a surviving remnant of earlier attempts of 'farming' on poor quality land as recorded by the prescence of a warren in the 17th century.

6.4 Having identified the archaeological resource in Sheffield Forest, it is essential that this valuable and unique resource is protected from future damage, and preserved for future generations. A realistic and manageable plan should be developed to ensure that those working in Sheffield Forest are aware of the location and significance of the archaeological sites. Furthermore, they should be aware of appropriate and suitable management options that can be used on these sites, to ensure that they are not damaged in the future.

6.5 The significance of the archaeological resource should be recognised by fully incorporating the archaeology, and measures for its management and conservation, into the management plan for the ongoing management of Sheffield Forest.

Additional action

6.6 There are a number of additional actions which would help ensure that the importance of the archaeological resource in Sheffield Forest is recognised, enhanced and protected:

- Sheffield Forest staff should receive training to enable them to recognise and manage the archaeological resource. This could be through a combination of attending a presentation on this survey and accompanied site visits.
- For areas of impenetrable cover where there is not good lidar imagery, opportunities should be taken to survey whenever significant amounts of vegetation are cleared either through management works or through forest fires.
- Lidar can also be used to map the vegetation cover, in order to prioritise management for example identifying where areas impenetrable to lidar indicate extent of rhododendron cover.
- Fig. 22 shows the lidar transcription for the nearby Forest Enterprise woodland of Funnel's Wood. It would be beneficial to commission a ground-truthing visit to report on the archaeology of this area, which appears to include a surpising density of trackways, boundaries and possibly some land reclaimation attempts in the form of land drainage.

Interpretation

6.7 There are opportunities to feature lidar-enhanced discoveries in engaging the public and creating greater public awareness of the archaeology in Sheffield Forest, through publications, leaflets, sign boards, talks, guided and un-guided walks and exhibitions.

Further research

6.8 There are further opportunities for community involvement work with local archaeological organisations and institutions to initiate further survey and other archaeological investigations so that there is a better understanding of the archaeological resource in Sheffield Forest. These might include work to date and verify the possible settlement site MES15431 (see para 4.29) and its possible relationship to the medieval iron industry, or to make a more detailed survey of a particular class of sites. This can be carried out in conjunction with CBAS Ltd, who have a proven track record in co-ordinating and organising this type of work.

7. Acknowledgements

7.1 We would like to thank Katie Harris of Forest Enterprise, Casper Johnson and Greg Chuter, County Archaeologists for East Sussex, and Lyn Palmer, Historic Environment Awareness Project Officer for the Weald Forest Ridge. Chris Bradley of IT services at East Sussex County Council has provided invaluable technical assistance with integrating the lidar data with the HER system.

8. Additional Bibliography

Crow, P. 2004 *Trees and Forestry on Archaeological sites in the UK: A review document*, Forest Research.

Crow, P. 2008 *Historic Environment Surveys of Woodland using Lidar*, Forest Research.

Natural England Technical Information Note TIN047: *Bracken management: ecological, archaeological and landscape issues and priorities*, 2008.

Natural England Technical Information Note TIN048: *Bracken management and control*, 2008.

Natural England Species Information Note SIN011: *Bracken*, 2008

Rackham, O. 2003 *Ancient Woodland*, Castlepoint Press

Rackham, O. 2006 *Woodlands*, Harper Collins Publishers Ltd

Ritchie, M. & Wordsworth, J. 2010 Identifying the Historic Environment in Scotland's Forests and Woodlands, Forestry Commission Scotland.

Starr, C. 2010 *Woodland Management: A Practical Guide*, The Crowood Press

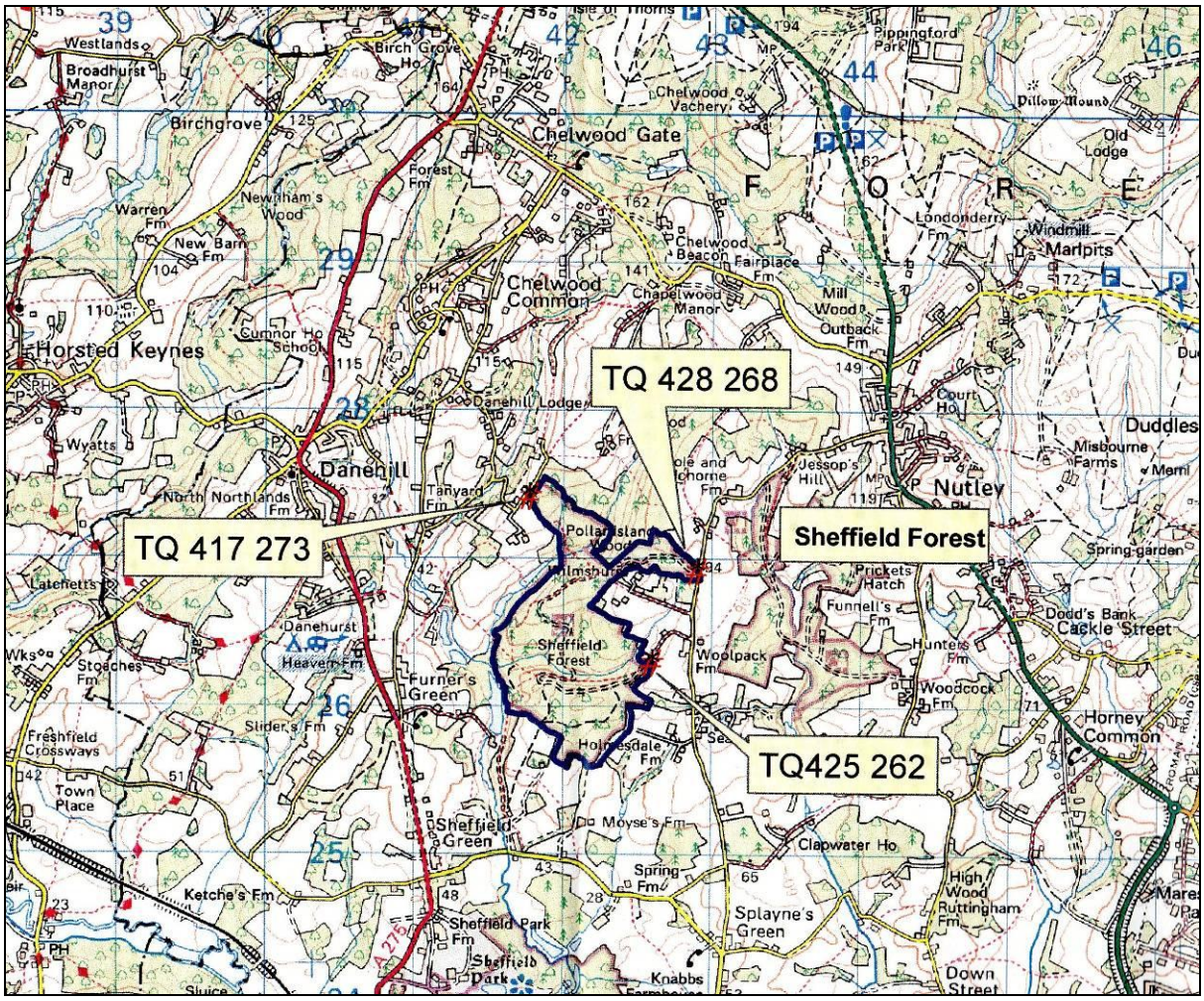

Fig. 1: Sheffield Forest: Location Map

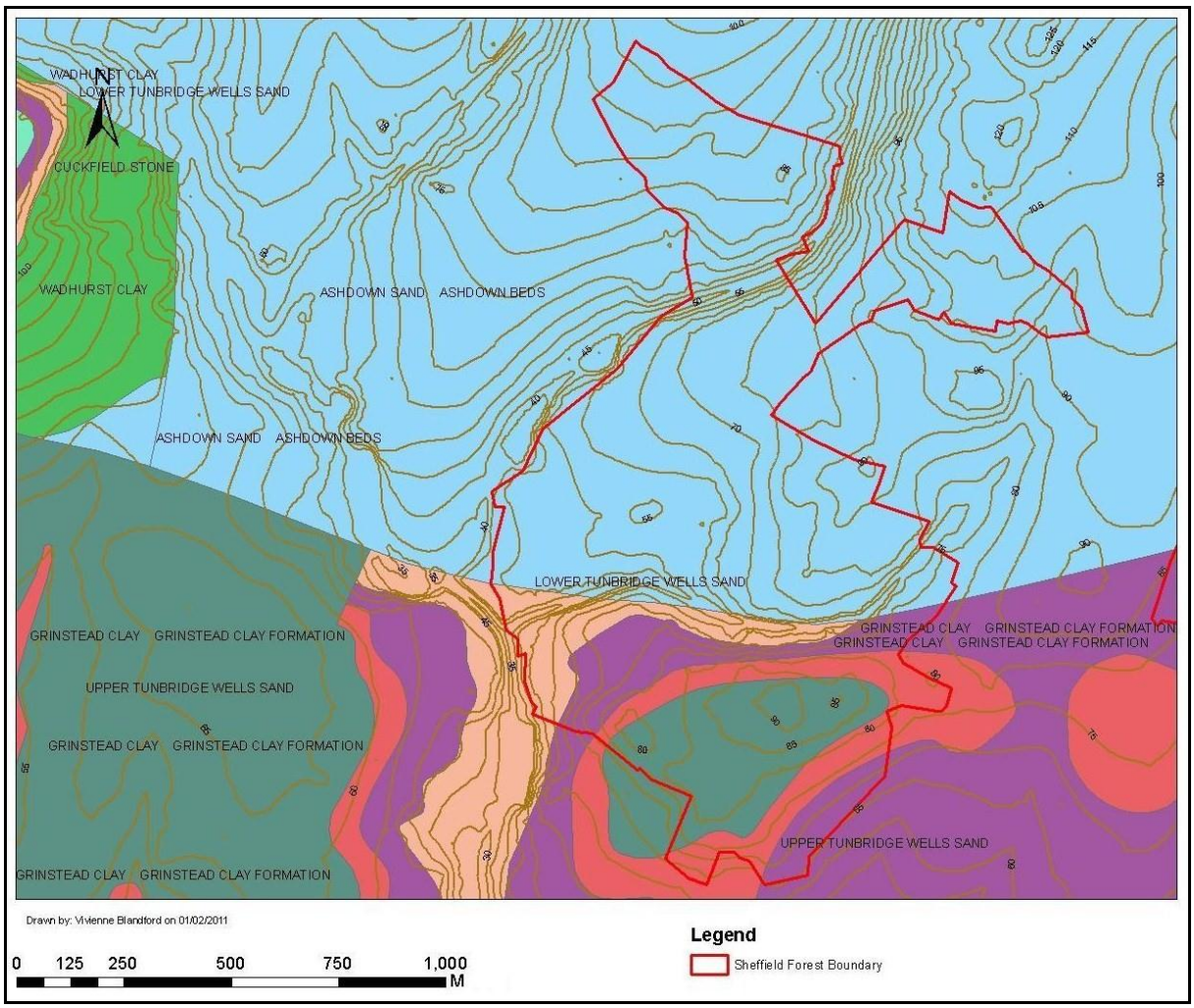

Fig. 2: Sheffield Forest: Geology

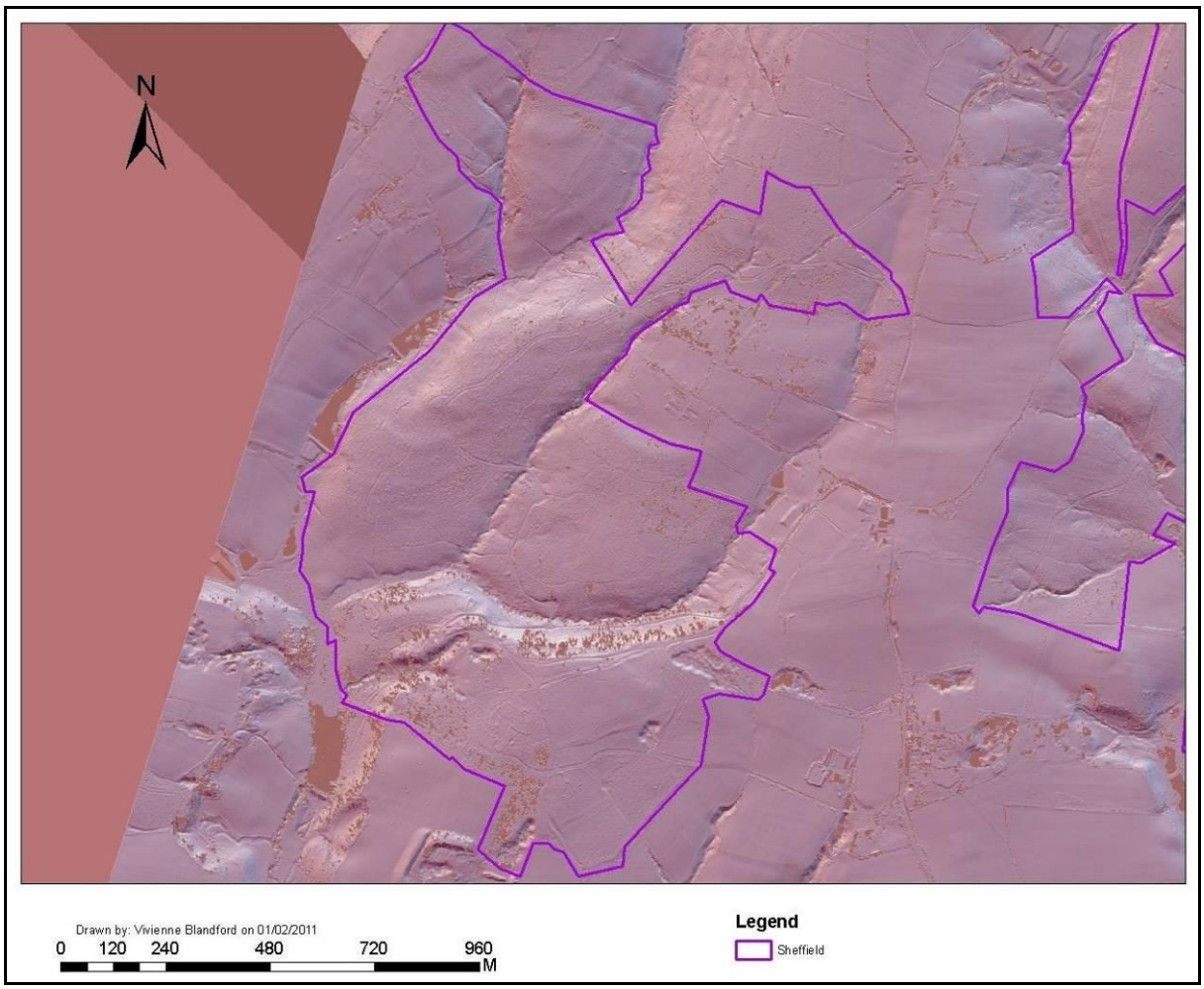

Fig. 3: Sheffield Forest: Hill Shaded Lidar image
Copyright - Forest Research based on data collected by The Unit for Landscape Modelling

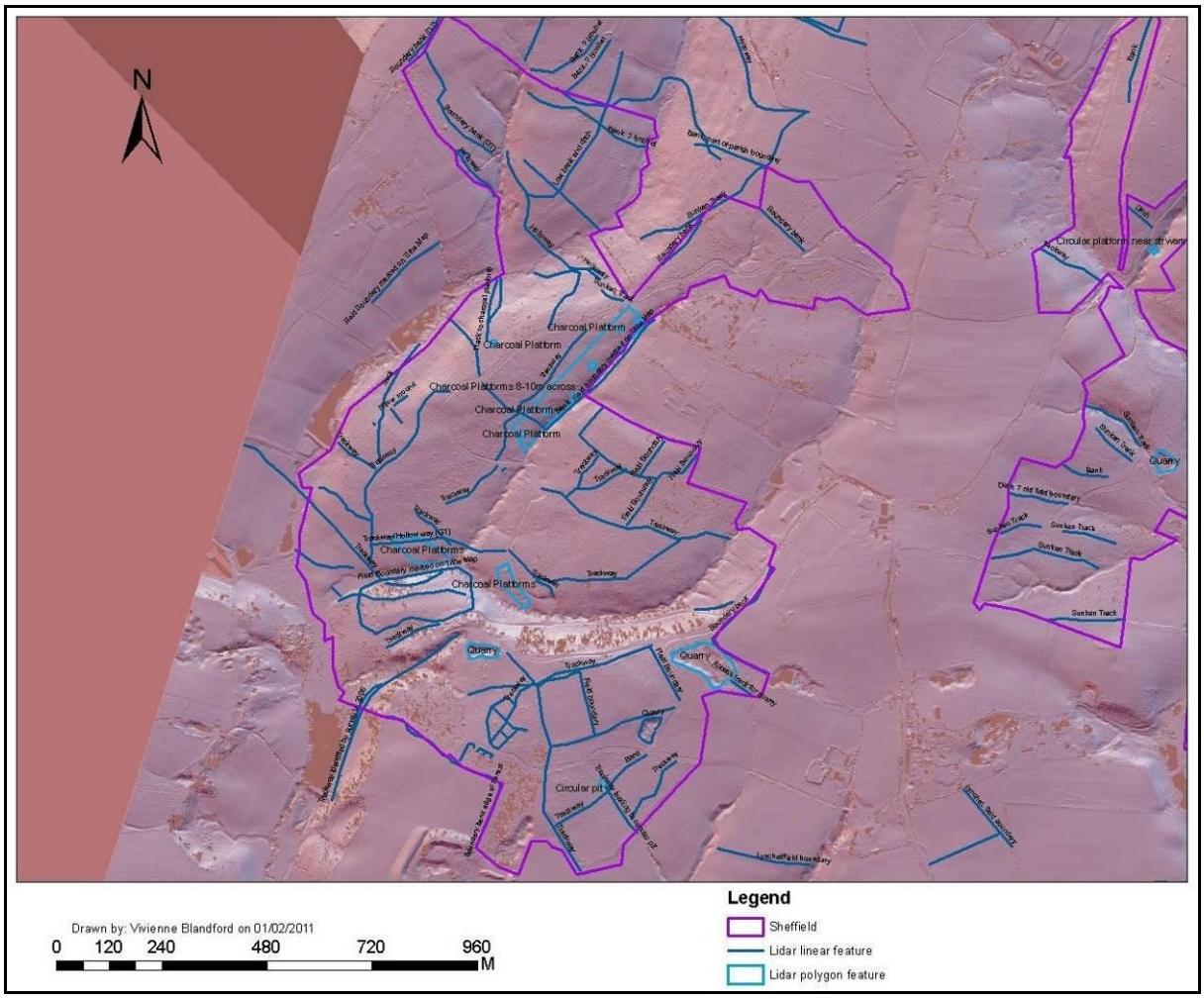

Fig. 4: Sheffield Forest: Transcribed layer derived from lidar and laid over OS mapping
Copyright - Forest Research based on data collected by The Unit for Landscape Modelling

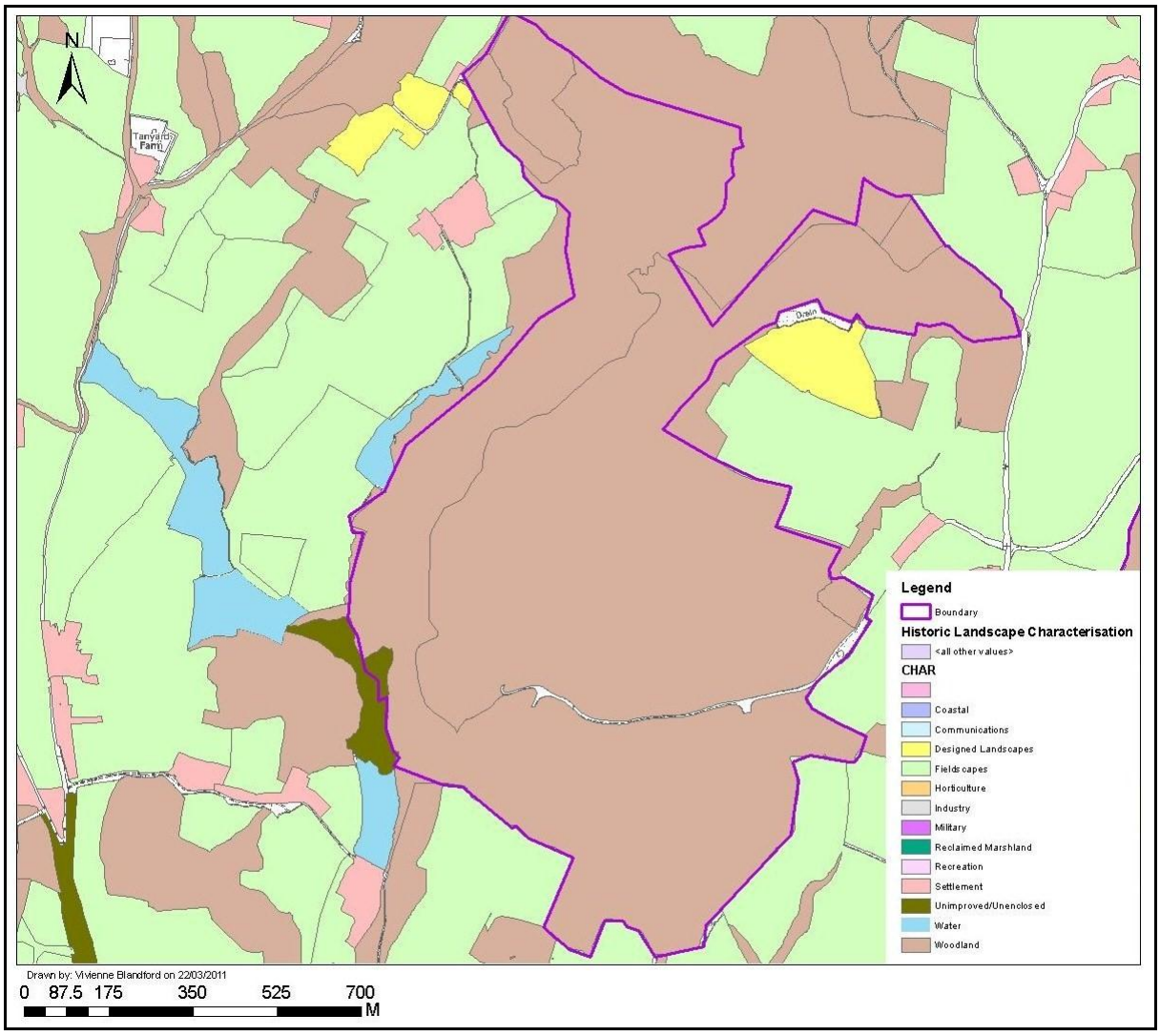

Fig. 5: Sheffield Forest: Historic Landscape Characterisation (HLC)

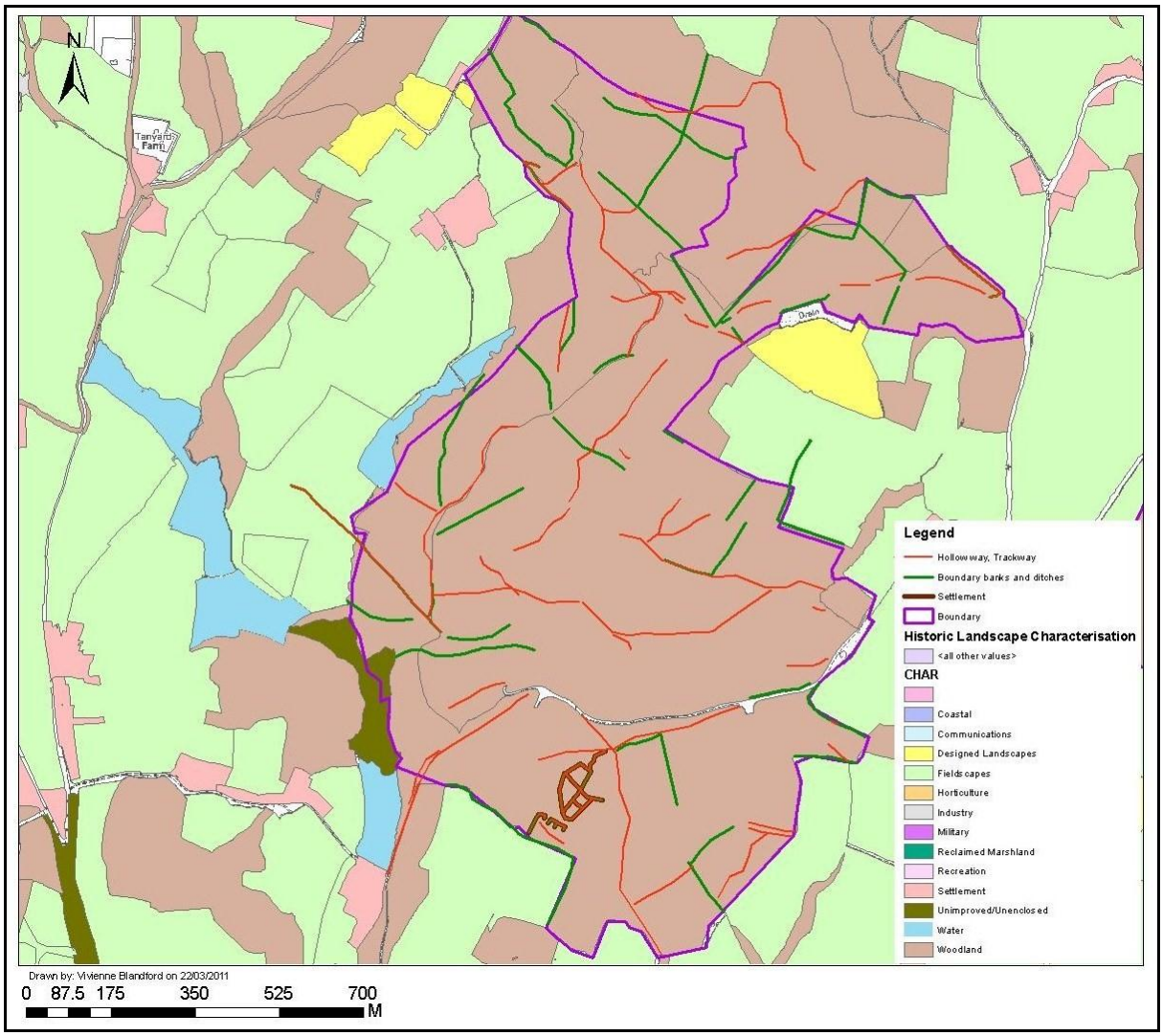

Fig. 6: Sheffield Forest: Historic Landscape Characterisation (HLC) with sites overlaid

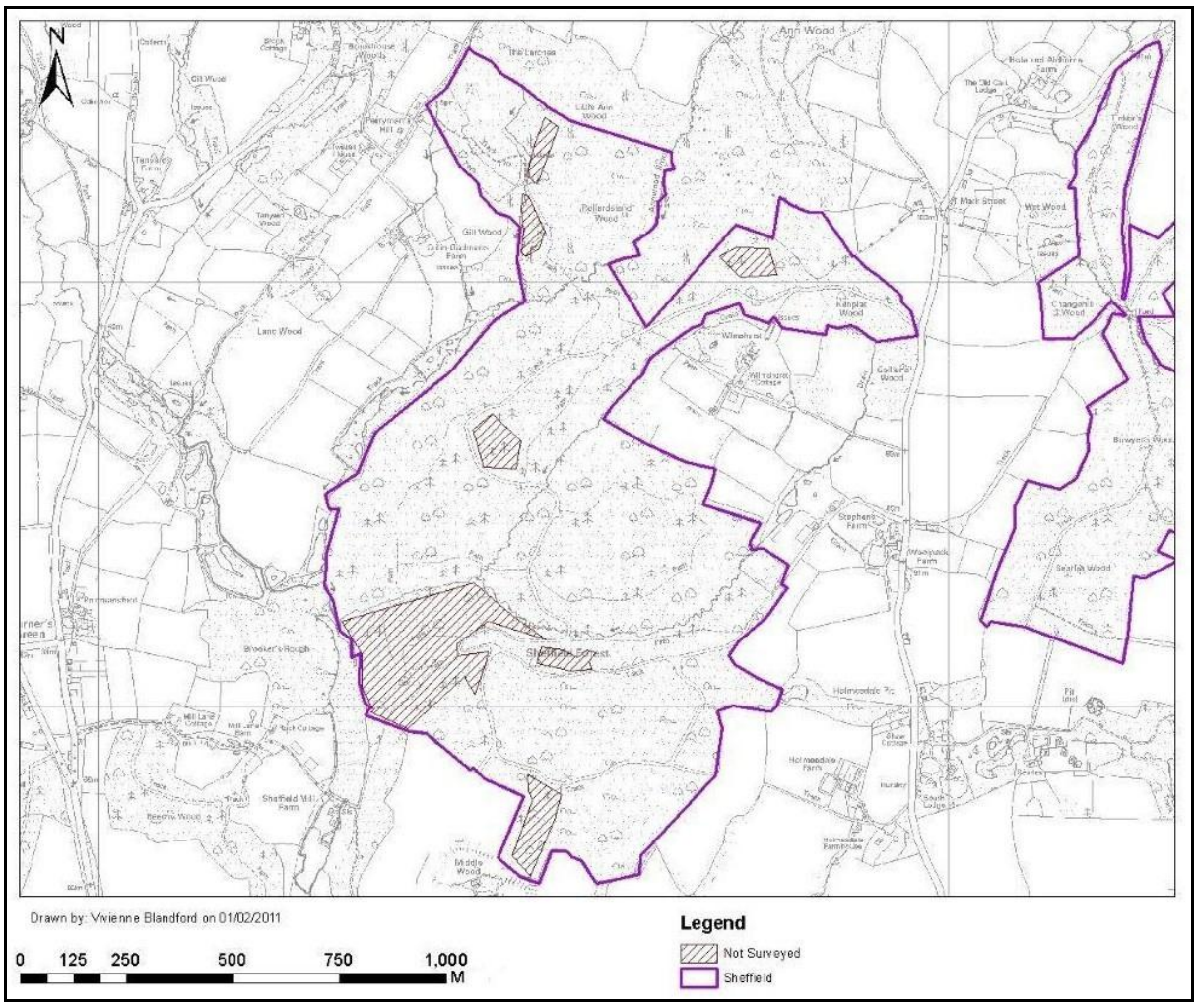

Fig. 7: Sheffield Forest: Areas which were not surveyed

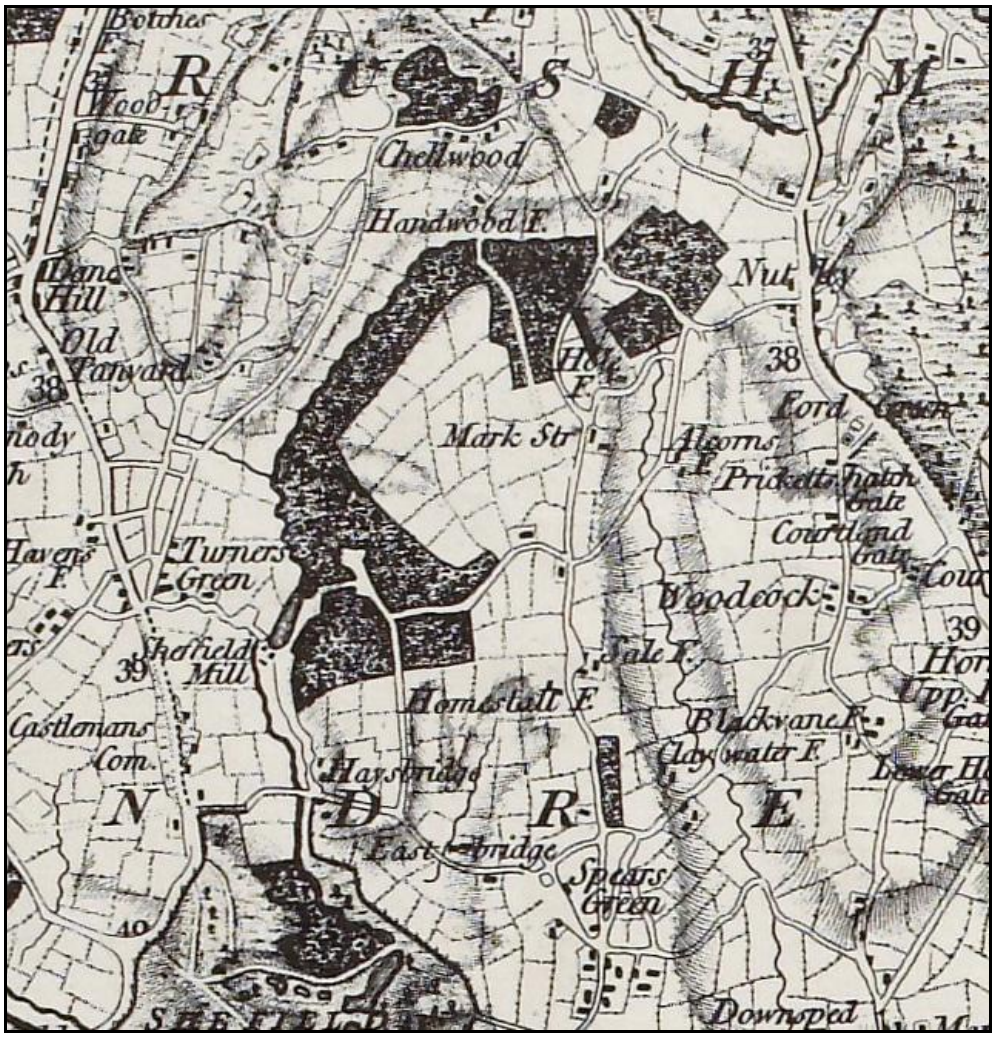

Fig. 8: Sheffield Forest: 1785 Yeakell and Gardner Map

Reproduced with permission East Sussex Record Office AMS6008/1/1/29

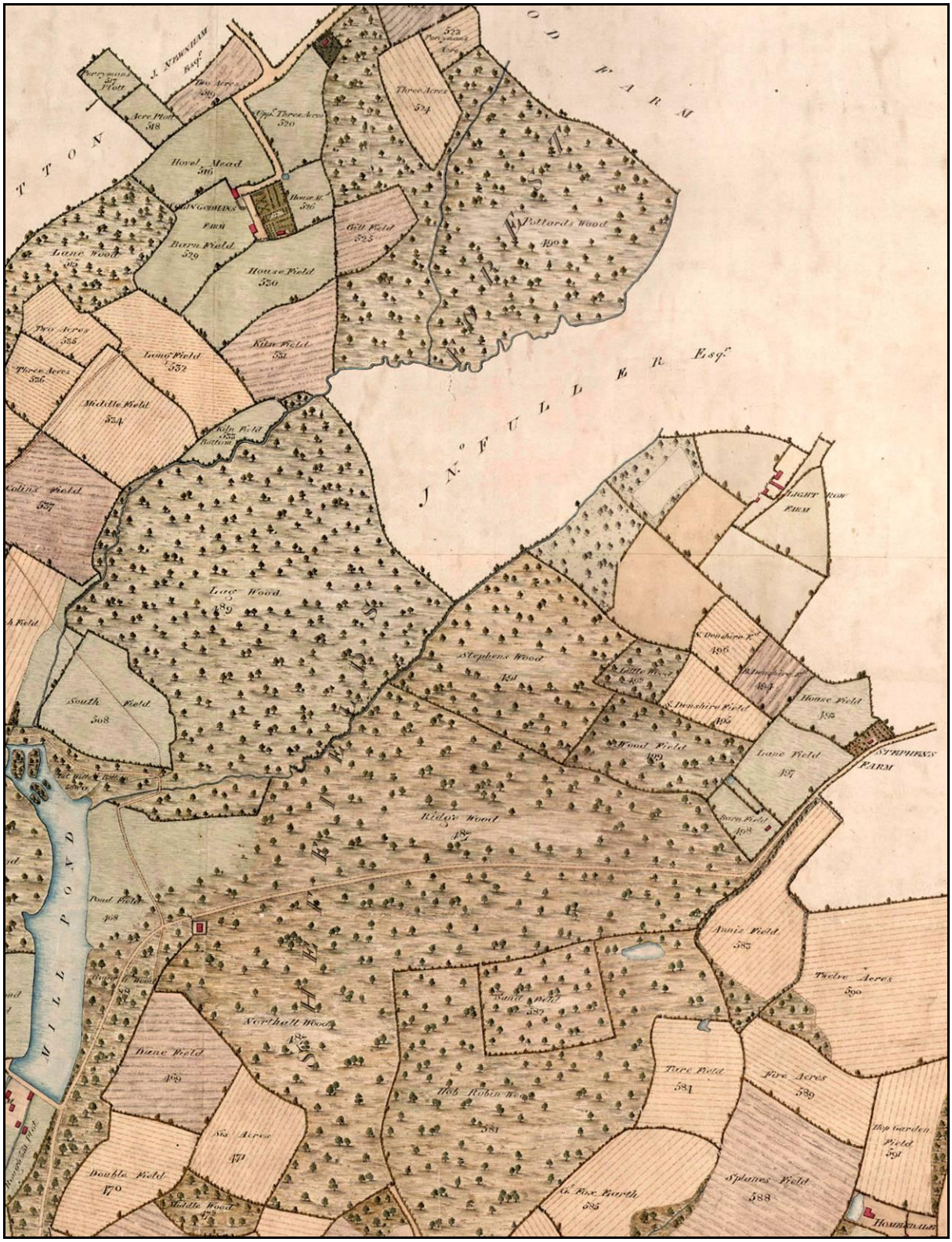

Fig. 9: Sheffield Forest: 1813 Estate Map

Reproduced with permission East Sussex Record Office ACC 6975

Fig. 10: Sheffield Forest: 1820 Estate Map

Reproduced with permission East Sussex Record Office AMS5646

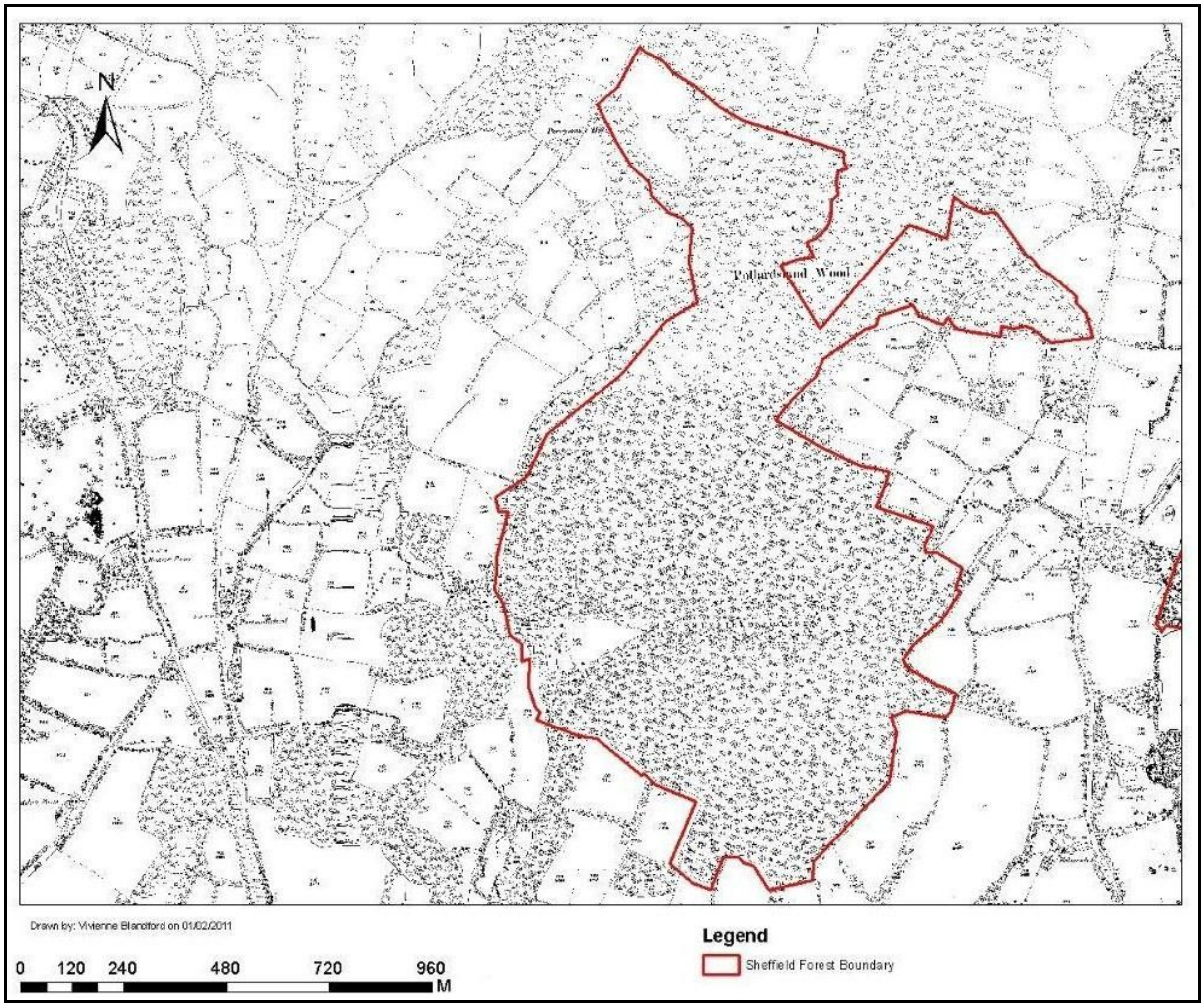

Fig. 11: Sheffield Forest: 1st Edition OS Map, c. 1865

Fig. 12: Sheffield Forest: 1884 Estate Map

Reproduced with permission East Sussex Record Office AMS10261

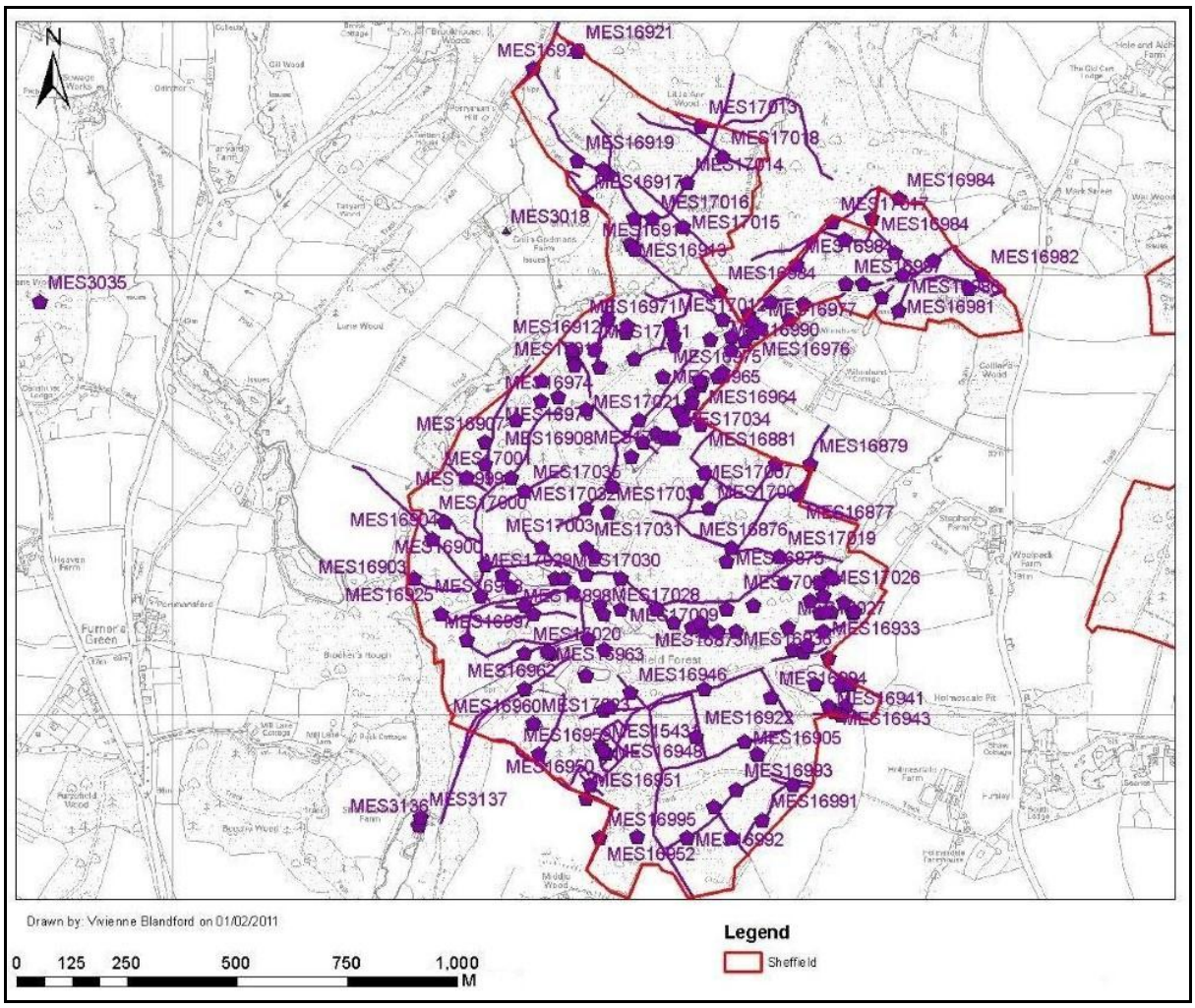

Fig. 13: Sheffield Forest: Results of survey showing sites by East Sussex HER reference (MES) number.

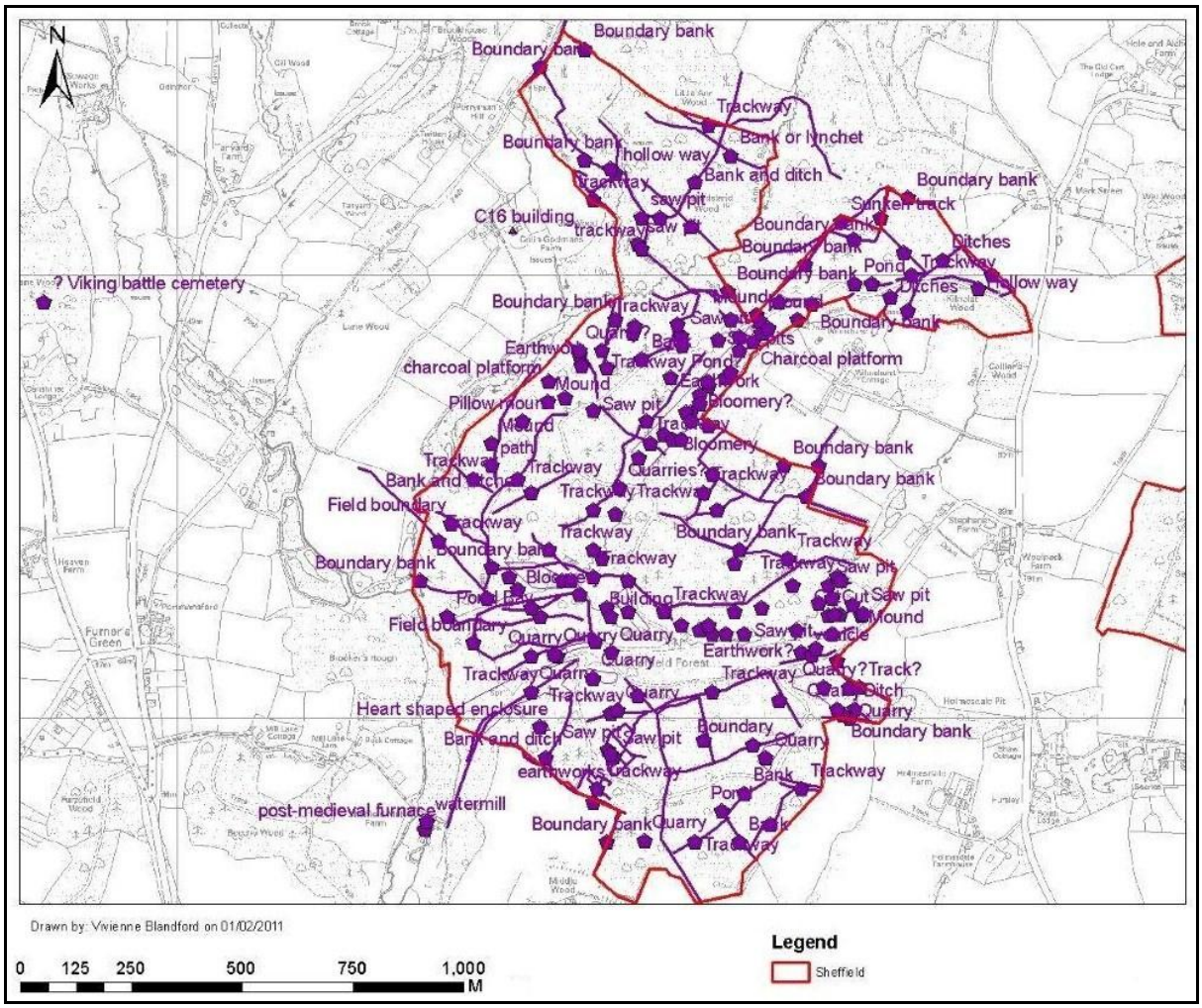

Fig. 14: Sheffield Forest: Results of survey showing East Sussex HER sites by name

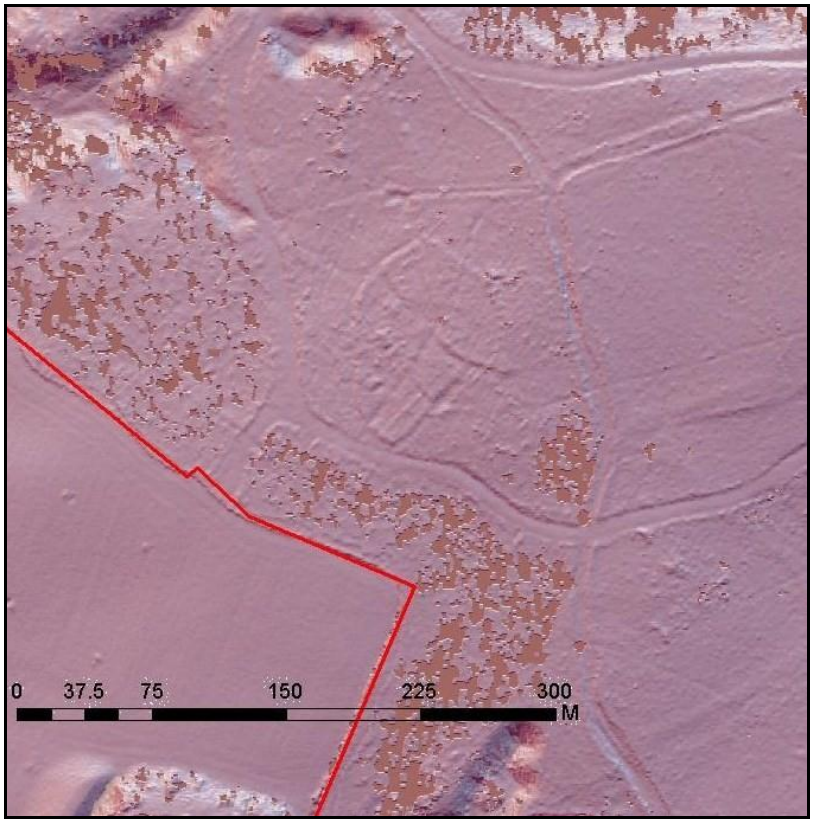

Fig. 15: Sheffield Forest: Lidar image of the settlement site

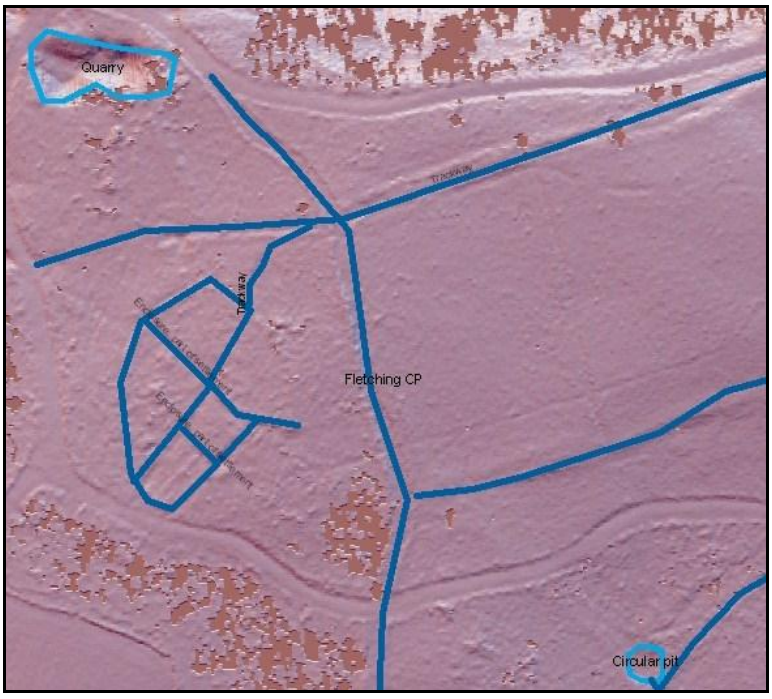

Fig. 16: Sheffield Forest: transcribed image of the settlement site with HER sites.

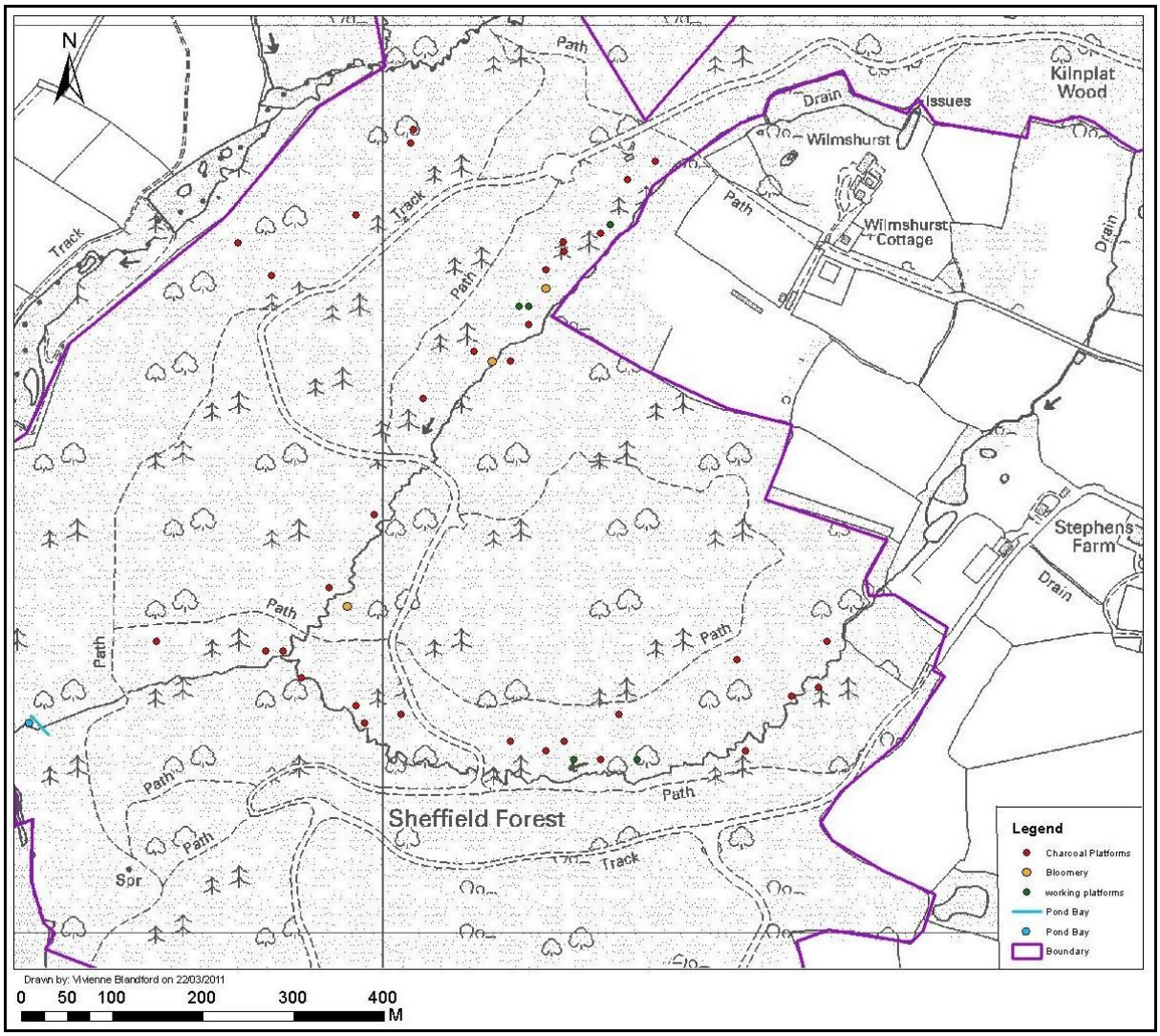

Fig. 17: Sheffield Forest: Distribution map of bloomery sites, pond bay and charcoal platforms

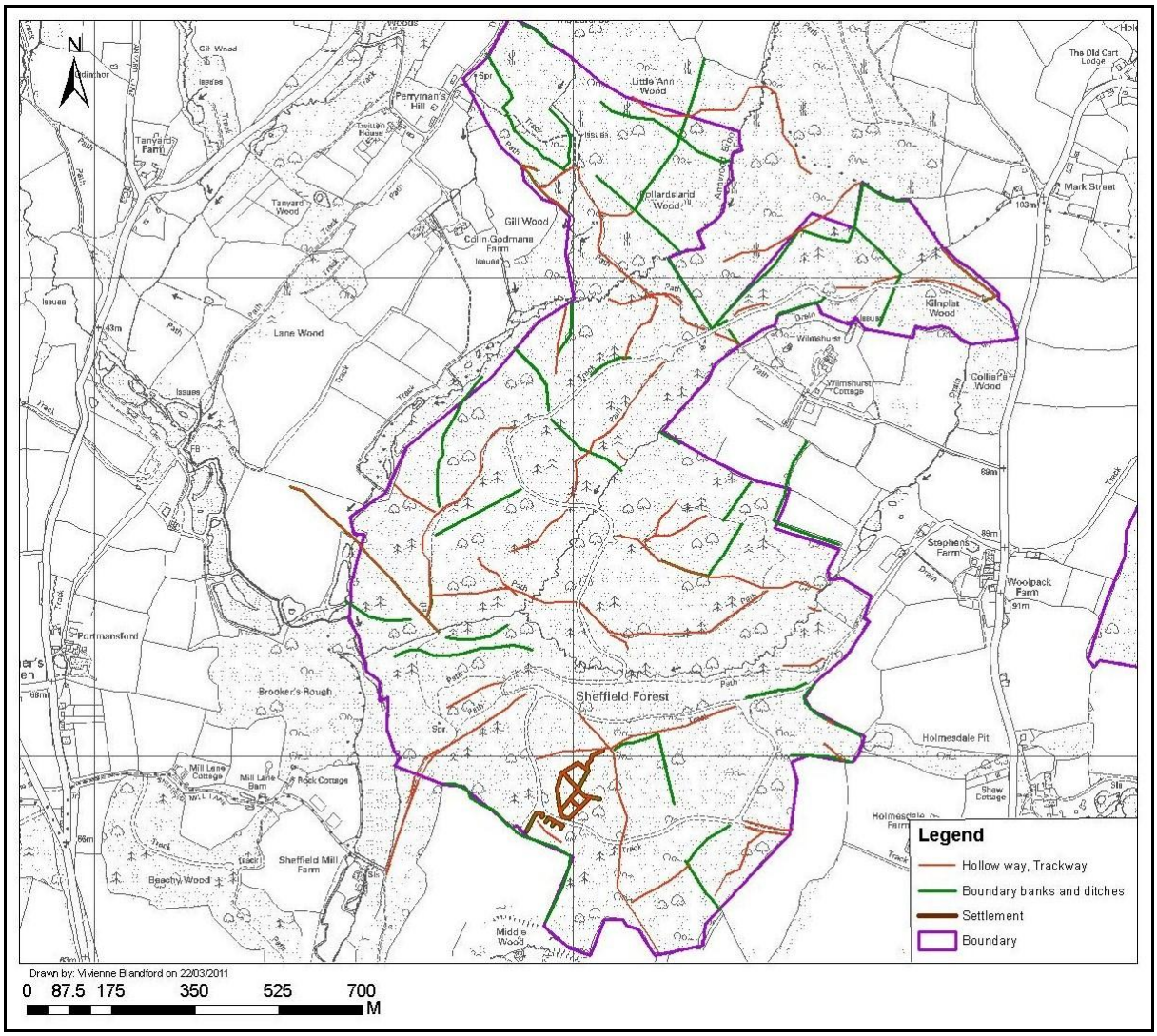

Fig. 18: Sheffield Forest: Distribution map of boundaries, settlements and routeways

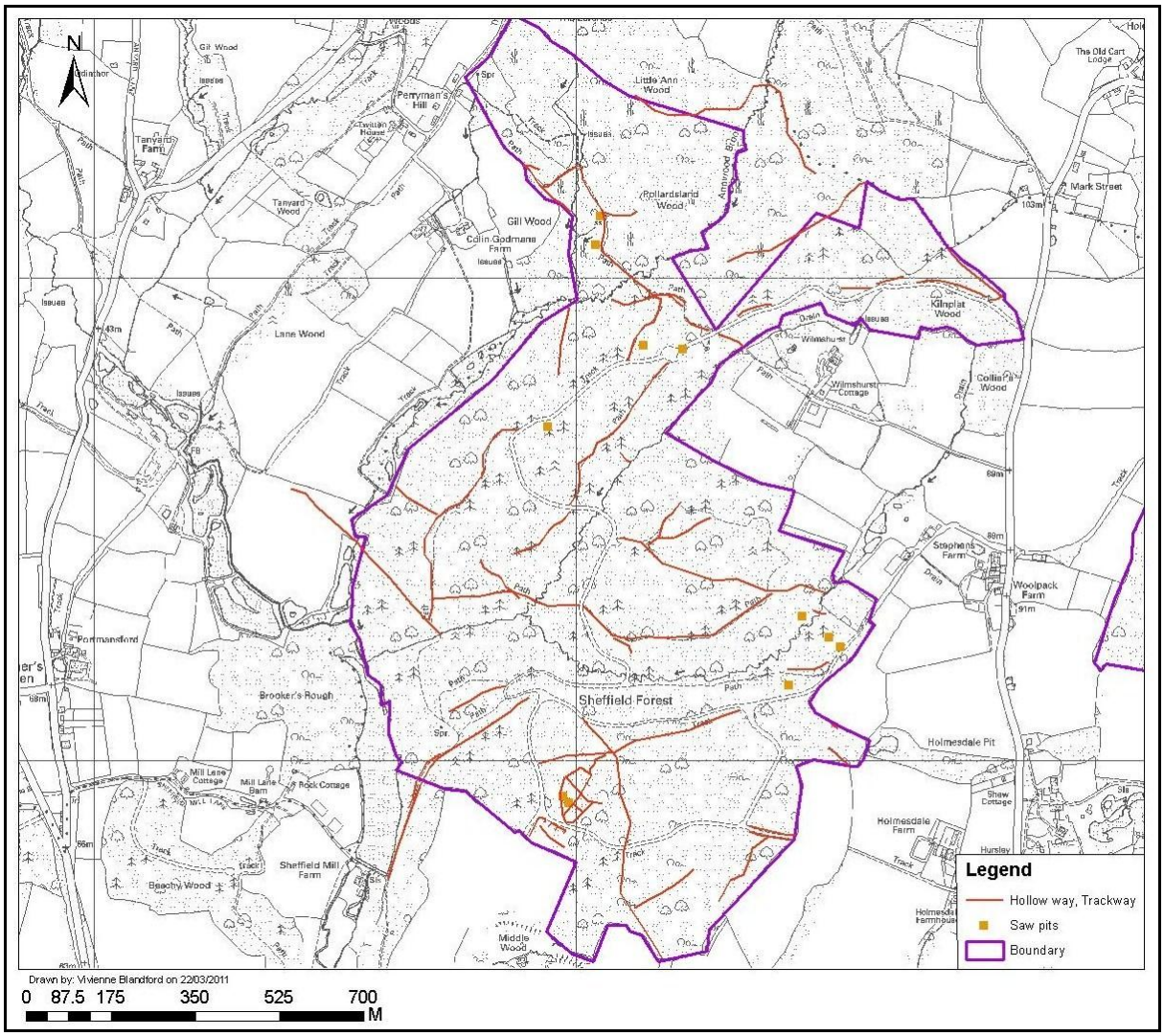

Fig. 19: Sheffield Forest: Distribution map of saw pits and routeways

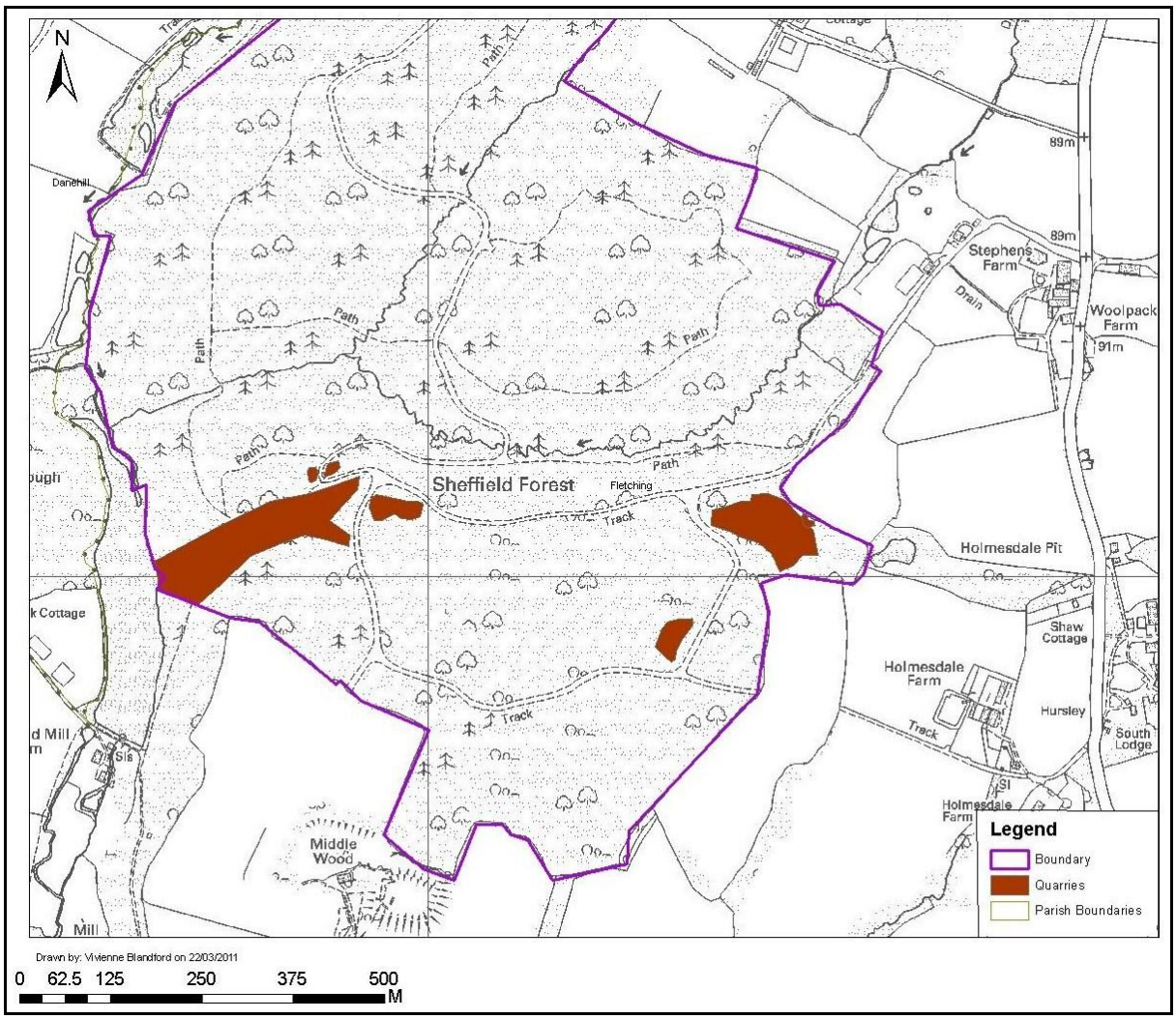

Fig. 20: Sheffield Forest: Distribution map of quarries

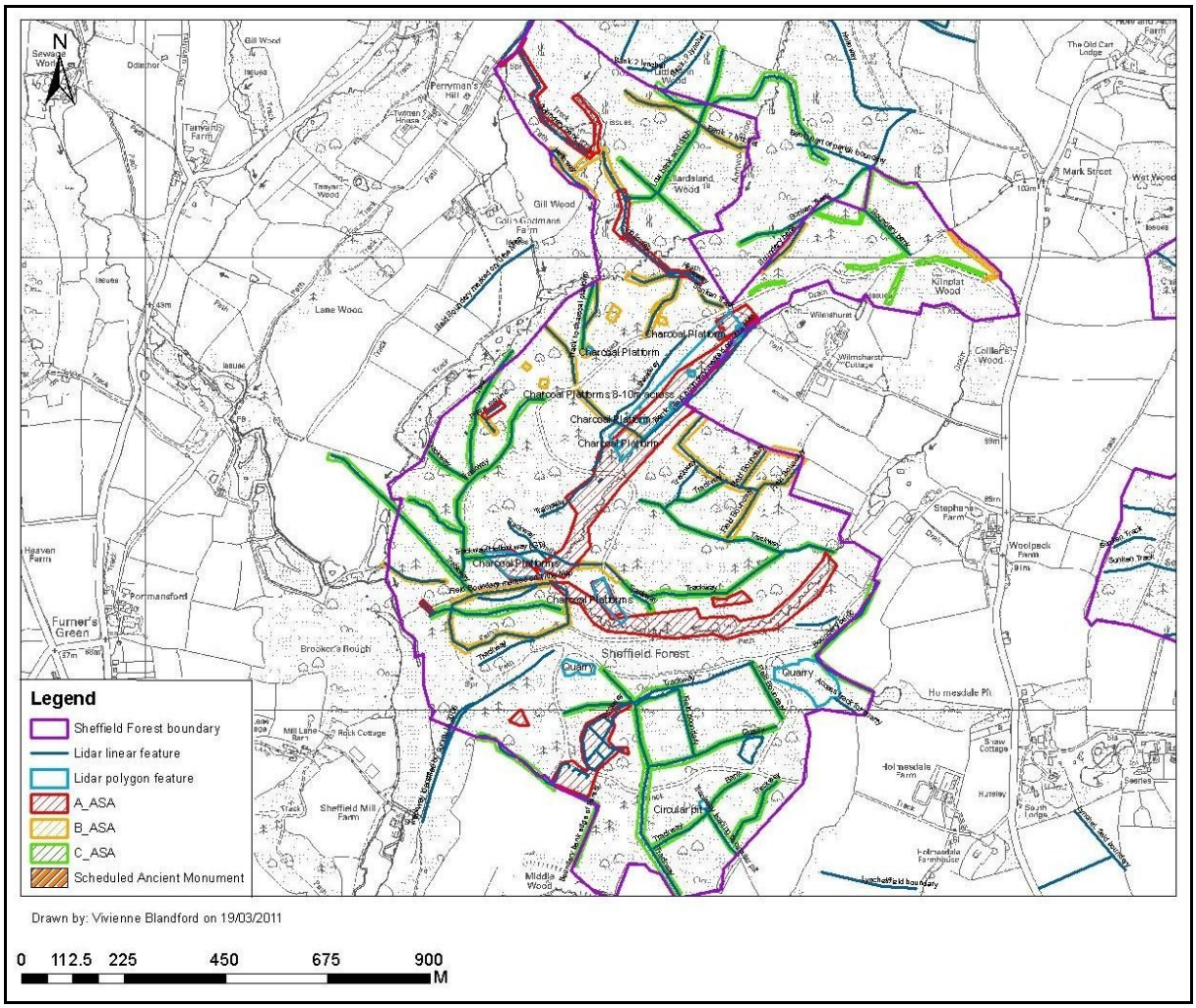

Fig. 21: Sheffield Forest: Archaeological management areas
(see definitions, para. 5.7)

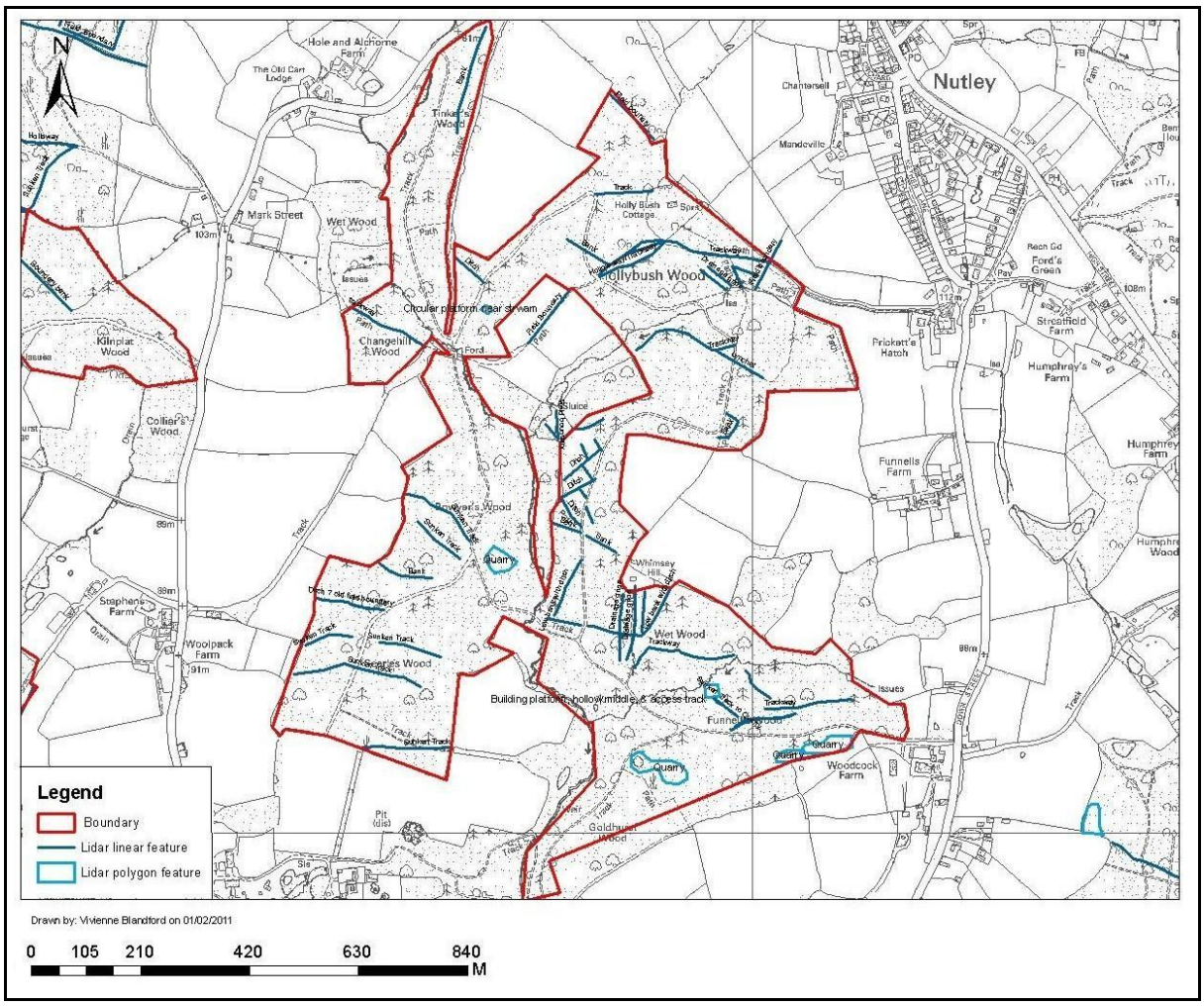

Fig. 22: Funnel's Wood: Lidar transcription of archaeological features

Chris Butler Archaeological Services Ltd

Established in 2002, Chris Butler Archaeological Services Ltd is available for lidar interpretation, woodland archaeological surveys, flintwork analysis, project management, military archaeology, desktop assessments, field evaluations, excavation work, watching briefs, field surveys and field walking, post-excavation services and report writing.

During 2010/2011 Chris Butler, Vivienne Blandford and Anne Locke carried out a series of lidar-enhanced surveys of woodland and heathland areas across East and West Sussex, at Old Lodge (part of the historic area of Ashdown Forest) for the Sussex Wildlife Trust, and in Sheffield Forest, St Leonards Forest and Tilgate Forest for Forest Enterprises.

Chris Butler, MIfA, Cert. Ed. has been an archaeologist since 1985, and formed the Mid Sussex Field Archaeological Team in 1987, since when it has carried out numerous fieldwork projects, and was runner up in the Pitt-Rivers Award at the British Archaeological Awards in 1996. Having previously worked as a Pensions Technical Manager and Administration Director in the Financial Services Industry, Chris formed Chris Butler Archaeological Services at the beginning of 2002.

Chris is a Member of the Institute for Archaeologists, a committee member of the Lithic Studies Society, and is a part-time lecturer in Archaeology at the University of Sussex. He continues to run the Mid Sussex Field Archaeological Team in his spare time.

Chris has particular expertise in prehistoric archaeology, flintwork, and military remains of all eras. As well as the Phase 1 survey of Ashdown Forest he has also carried out surveys of Broadwater Warren and Tudely Woods for the RSPB together with other woodland surveys for private individuals.

He specialises in prehistoric flintwork analysis, but has directed excavations, landscape surveys and watching briefs, including the excavation of a Beaker bowl barrow, a Saxon cemetery and settlement, Roman pottery kilns and a Mesolithic hunting camp.

Vivienne Blandford, MA, is a landscape archaeologist responsible for assessing and interpreting the Weald Forest Ridge lidar images which will be used in this project. This includes transcribing (creating lines and polygons) on the lidar images and creating a separate GIS layer and database of the archaeological features found. In the Ashdown Forest and Old Lodge projects, and as a volunteer working in other areas of the Weald Forest Ridge, she has pioneered methods for 'ground truthing' a selection of the lidar features in the field to assess whether the judgement made by looking at the images on screen is correct. She has also worked with community groups testing and teaching surveying methods in woodland landscapes.

Vivienne is local to Ashdown and Sheffield Forest and has a good understanding of the historic and cultural landscape and the type of archaeology likely to be found there. She has experience in desk-based research and fieldwork for the preparation of cultural and historic landscape context assessments for specific areas and in the preparation of Conservation Management Plans. She is an Affiliate member of the IfA.

Anne Locke, MA, has been working on the East Sussex HER since 2008, including evaluating it for an English Heritage-funding audit and benchmarking review. She has extensive experience of creating HER records through inputting several thousand new sites onto the East Sussex HER, including those contributed by Chris Butler in Phase 1 of the Ashdown Forest survey, and in using the lidar transcriptions produced by Vivienne Blandford to enhance existing HER records and to record new features.

Anne has an MA in Managing Archaeological Sites (UCL 2005) and good all-round knowledge and understanding of the historic environment of Sussex, acquired through over ten years participation in volunteer field archaeology as part of Chris Butler's Mid Sussex Field Archaeological Team, and study at Sussex University. She is an Affiliate member of the IfA and worked in the English Heritage policy team on a temporary contract during 2010.

Chris Butler Archaeological Services Ltd
Rosedale, Berwick,
Polegate, East Sussex
BN26 6TB

01323 811785 / 07815 621371
info@cbasltd.co.uk
www.cbasltd.co.uk

Appendix 1 Summary of archaeological sites in Sheffield Forest

Total sites					**190**				
Total sites identified on lidar					94				
No. sites identified on lidar and ground truthed					63				
% of sites identified on lidar ground truthed					67%				
Sites found through walkover survey not pre-identified on lidar					85				
Sites identified on previous surveys but not entered on HER					25				
Sites not pre-identified on lidar are mostly small or negative features e.g. platforms and saw pits, or in dense cover.									
Sites seen on lidar but not ground truthed (FID refs) are mostly linear features like banks and trackways where the identification is medium-high **confidence**									
* see separate notes on WIRG Foray									
Survey ref	**E Sussex HER ref (MES no.)**	**NGR**	**Type of site**	**Description**	**Visible on lidar 1=Y**	**Related sites**	**Vegetation**	**Condition**	**Risks/ other notes**
SF073	MES15431	TQ41982595	Earthworks	Settlement - low banks 0.3m high and 0.5m wide, quite discreet but match plotted earthworks on Lidar. Extend south on other side of track (SF075)	1	SF075	Trees & bracken		Bracken & vehicles
SF075	MES15431	TQ41972585	Earthworks	Part of SF073 extending across track into dense conifer. Bank is 0.5m high & c.2m wide	?	SF073	Conifer		Tree roots
SF001	MES16862	TQ42182620	Charcoal burning platform	Charcoal burning platform c. 10m diameter, cut into bank, darkened soil		Same as C6 on WIRG survey?	Hard fern growing on platform. Scrubby trees.	poor	Tracked vehicle driven through
SF002	MES16863	TQ42212619	Working platform?	Platform 7x7m, slightly elliptical, cut 0.25m into bank by side of stream				fair	

SF003	MES16864	TQ42282619	Quarry or working area?	Semi circular levelled area at level of stream c. 8m across, cut 1.7m into bank. Some evidence of track along stream but peters out. Sandstone outcrop visible in stream banks.			Mainly alder woodland		
SF004	MES16865	TQ42472630	Saw pit	Saw pit 6x3m on sloping site 5-6m from stream. Bank on each side. Still about 0.25m deep.		Same as S1 on WIRG survey. Near SF006	Silver birch. Brash filling pit.	fair	WIRG foray* photo
SF005	MES16866	TQ42492632	Charcoal burning platform	Charcoal burning platform c. 8x10m, slightly elliptical, cut into steep bank about 0.5m, close to stream. Darkened soil with charcoal fragments.			Young woodland	fair	
SF006	MES16867	TQ42502631	trackway	Evidence of trackway crossing stream and curving uphill. Used by tracked vehicles in recent past but appears no longer in use. Ruts to 0.5m.		SF004, 005, 006	Young woodland, alder and birch	fair	
SF007	MES16868	TQ42392630	Charcoal burning platform	Charcoal burning platform c. 8x10m on level ground, darkened soil with charcoal flecks.			Clear ground, bracken covered, young successive alder and birch around.	fair	
SF008	MES16869	TQ42322625	Quarries?	Several small depressions in ground, evidence of small scale quarrying?			Alder woodland		
SF009	MES16870	TQ42262624	Charcoal burning platform	Charcoal burning platform 8m diameter, cut 0.5m into bank just on break of slope. Darkened soil with small charcoal flecks.		Same as C8/C9 on WIRG survey?	Surrounding conifers and young alder woodland.		WIRG foray*

SF010	MES16871	TQ42242619	Charcoal burning platform, trackway?	Charcoal burning platform c. 8m diameter on levelled ground. No evidence of bank, only recognisable through burrowing animals bringing charcoal to the surface. Evidence of tracked vehicles or possible track below.			Young woodland. Track no longer in use as young trees growing on it.		
SF011	MES16872	TQ42202621	Charcoal burning platform?	Possible charcoal burning platform c 8m diameter, slightly cut into bank. Darkened soil.		Same as C10 on WIRG survey	Clear ground, with old pollarded beech on W edge with trunk c 3m circumference at 1.5m above ground.		WIRG foray*
SF012	MES16873	TQ42142621	Charcoal burning platform	Small charcoal burning platform c 6m diameter. Flattened area, no evidence of banks. Darkened soil with flecks of charcoal.		Same as C5 on WIRG survey	Open ground with bracken, pine trees surrounding	fair	WIRG foray*
SF013	MES16874	TQ42022631	Building	One-room timber framed building 3.25x5m near to main forest track with minor trackway to side. Clad in corrugated iron painted green. Walls and ceiling lined with matchboarding, some recent renovation to ceiling. Brick foundation and chimney piece, cemented floor, shelves to side of chimney breast, one window, water tank outside. Boarded door with door furniture suggesting 19th/early 20th century date. Evidence of recent use as unofficial shelter by range of users - graffiti, wine bottles					Water penetration, vandalism, fire photo

SF014	MES16875	TQ42262635	Boundary marker	Pollarded beech c 2m circumference			On its own in pine woodland with some holly		photo
SF015	MES16876	TQ42272638	Boundary bank	Banks forming corner at NGR. Bank running N 0.35m high and 0.5m wider, rounded. Bank running E is more eroded. Possibly old field boundary, unlikely to be wood compartment as bank is on inside of enclosure.	1		Young birch trees growing on N bank.	fair	photo
SF015a	MES16876		Boundary bank continued	Further to N bank has been breached by vehicle track no longer in use as trees 0.5m diameter are growing on it - evidence of past tree harvesting?					
SF015b	MES16876		Boundary bank continued	Further to E, bank is considerably higher at 1.25m on inside, 1.2m wide and sloping into the woodland area to S (see sketch). Also breached by vehicle.					
SF016	MES16877	TQ42422650	Boundary bank	Boundary of Sheffield Forest. Bank 0.75m high and wide. Ditch to outside. Trees along length.	1	SF017	Chestnut, holly, coppiced or pollarded oak c 100 years old, also fairly substantial coppiced beech		
SF017	MES16879	TQ42452657	Boundary marker	Old managed beech with 10 boles, of considerable age. Boundary banks continue from here outside Sheffield Forest to N and E.		SF016.			photo

SF018	MES16880	TQ42372657	Boundary bank	Remnants of a boundary bank, faint ditch on NW. 0.2m high, 1m wide, flattened and degraded.		Possible continuation of 015		poor	
SF019	MES16881	TQ42202666	Boundary bank	Boundary bank running NW-SE down towards stream. Bank c 1m high 0.5m wide, ditch to E, sloping profile to W	1	May be continuation of SF016	Coppiced young oak and evergreens - not old like SF016		
SF020	MES16882	TQ42202675	Charcoal burning platform	Charcoal burning platform 8m N-S, 7m E-W, slightly elliptical flattened area with pronounced 1m bank uphill. Darkened soil and charcoal.	1	Same as C22 on WIRG survey.	Medium woodland cover of birch and alder		WIRG foray*
SF092	MES16882	TQ4220526761	Charcoal burning platform	same as SF020		SF020			
SF021	MES16883	TQ42242677	Charcoal burning platform	Small elliptical charcoal burning platform 5x6m on edge of drop to stream, cut 1.5m into bank		Same as C24 on WIRG survey?	Surrounded by scrubby immature woodland, hard fern on periphery	poor	Overgrown, some tree damage. WIRG foray*
SF093	MES16883	TQ4224426774	Charcoal burning platform	same as SF021		SF021			
SF022	MES16884	TQ42252678	Working/ camp area?	Circular levelled area 3m diameter cut into bank above stream. No evidence of charcoal burning.			Hard fern colonising earthworks around periphery, as SF021		

SF023	MES16885	TQ42272683	Charcoal burning platform	Charcoal burning platform c 10m diameter, dark soil with charcoal flecks	1	Same as C25 on WIRG survey	Bracken covered		Some vehicle damage. WIRG foray*
SF109	MES16885	TQ4227026836	Charcoal burning platform	Same as SF023		SF023			
SF024	MES16886	TQ42302685	Charcoal burning platform	Charcoal burning platform c 7m diameter, cut into slope at break of drop to stream, dark soil with charcoal flecks	1		Cleared site		
SF111	MES16886	TQ4230326853	Charcoal burning platform	Same as SF024		SF024			
SF025	MES16887	TQ42272686	Building	Evidence of past building: railway sleepers, brickwork, corrugated roofing (asbestos?). Near main track through forest. Remains of two trailers abandoned nearby. Building used for forestry activities?			By fine specimen of cedar with elbow branches. Holly clump nearby close to main forest track.	poor	
SF110	MES16887		Building	Same as SF025		SF025			
SF094	MES16888	TQ4219226738	Charcoal burning platform	same as SF026		SF026			
SF026	MES16888	TQ42182673	Charcoal burning platform or working area	Possible charcoal burning platform or working area 5m diameter set back from stream. Smaller than usual charcoal burning platforms.			No tree growth.		

SF164	MES16889	TQ42182671	Bloomery	Rectangular area 50m2, slag impregnated furnace lining. Same as SF027					WIRG Foray*
SF027, SF164	MES16889	TQ42182671	Bloomery?	Flattened subcircular area with disturbed ground. Faint path through woodland along contour connects site with nearby charcoal burning platforms. Remains of hollow log/tree 0.3m across sunk vertically into ground appear stained by iron. Unable to investigate further without metal detecting/excavation. Recorded by WIRG as rectangular area 50m2, slag impregnated furnace lining		Site recorded as bloomery by WIRG. Close to SF026			WIRG foray*
SF028	MES16890	TQ42162669	Working area?	Platform 3x3m cut into high sloping ground at back, bank to downslope, close to track. Concave, not a charcoal burning platform. Possible log stacking terrace?			Open, covered in bracken, pines nearby.		
SF029	MES16891	TQ42152669	Working areas?	Evidence of flattened areas in close proximity.		Close to track and SF028			
SF030	MES16892	TQ42102664	Charcoal burning platform, trackway	Charcoal burning platform c 10m diameter on flat ground, cut 1.5m into back slope. Track running from NW corner of platform to stream, 2.5m wide with bank to NW. Does not appear to continue uphill out of wood.					
SF097	MES16893	TQ41982672	Boundary bank	NW-SE bank 1.5m wide & 0.6m high, slight trace of ditch on SW side.	1	SF104. Continues as MES16910?	Trees & bracken		Tree roots & bracken

SF031	MES16893	TQ42072662	Boundary bank or drainage ditch?	Bank NNW-SSE heading to stream. Ditch to N side. Woodland boundary or drainage ditch?		Continues as MES 16910?			
SF032	MES16894	TQ42002652	Quarries?	Evidence of small quarries and spoil heaps.					
SF033	MES16895	TQ41972625	Charcoal burning platform	Charcoal burning platform 6x7m, slightly elliptical, near stream, on level ground with slight back slope. Some evidence of darkened soil.			Fern and bracken		
SF034	MES16896	TQ41902628	Charcoal burning platform/working area	Charcoal burning platform/working area, roughly circular 8m in diameter, on flat ground close to stream. Slight back slope, darkened soil.			Clear, some bramble, young alder woodland surrounding		
SF035	MES16897	TQ41942632	Trackway/ hollow way	Trackway/hollow way 2.5m wide leading from main forest road to stream and continuing on other side. Banks near stream cut in c. 1.75m. Some evidence of vehicular access as far as stream.	1				
SF036	MES16898	TQ41872631	Charcoal burning platform	Charcoal burning platform c 8m diameter within 2m of stream, cut c 1m into back slope.			Fairly clear, dead tree lying across		
SF037	MES16899	TQ41752632	Charcoal burning platform?	Possible charcoal burning platform 7m diameter on almost completely level ground, near track. Darkened soil, no charcoal.			Pine woodland		
SF038	MES16900	TQ41712634	Boundary bank	Bank running N-S close to junction of hollow way and track. Bank rounded, 1m wide and 0.15-0.25m high, possible ditch to Wside. Former field or woodland compartment boundary, truncated by pathway. At TQ41712628 bank turns W at right angles and is truncated after about 10m by trackway/hollow way down to stream	1				

SF039	MES16901	TQ41772629	Probably natural	Waterlogged area c 10m x 15m by stream with intense orange-brown staining in shallow pools. Some evidence of track along stream, now waterlogged. Probably natural, indicative of iron ore outcrop.			Alder woodland along stream, older than surrounding trees, trunks c. 0.5m diameter		
SF040	MES16902	TQ41702627	Trackway/ hollow way	Trackway/hollow way c 6m wide and 1.15m deep, crosses stream near where paths converge from NNW and NNE	1				
SF041	MES16903	TQ41552631	Boundary bank	Rounded bank 1m high and 0.5m wide running E-W with ditch on N side. Boundary bank for woodland compartment?	1	Possible continuation of SF038			
SF042, SF043	MES16904	TQ41592640	Trackway/ hollow way	Track turns into hollow way 2m wide, 1.5m deep where it crosses stream. Public footpath. At TQ41662634 observed as bank or lynchet 0.5m high running E-W with higher flat ground to E, no evidence of ditch. At TQ41642643 bank turns right angle and heads roughly N-S with ground sloping away to W down to stream. Likely field boundary.	1				
SF083	MES16905	TQ42302594	Field boundary	No real trace of boundary as earthwork but line of more established trees may indicate its location	1		Trees, bracken		
SF045	MES16906	TQ41712657	Path	Path 1m wide, irregular course, running roughly N-S	1		Pine woodland		
SF046	MES16907	TQ41712662	Mound - non archaeological?	Mound c 10m long and 1.75m high, irregular oval shape with track on one side. Brash pile?	1				

SF047	MES16908	TQ41782667 to TQ41752665	Pillow mound	Earthwork c 40m long, 2m high and 4m wide with slightly flattened top 3m wide, ditches along both long sides, rounded ends, runs NNE-SSW across slope. Resembles pillow mound but atypical orientation.			Covered with bracken, in pine woodland		Bracken growth photo
SF048	MES16909	TQ41842676	Charcoal burning platform	Charcoal burning platform c 8m x 10m cut 1m into slope in a C shape.			Birch and alder woodland with some pine	Fair	
SF049	MES16910	TQ41912682	Boundary bank	Bank 0.75m high, 1m wide, very rounded profile, running NNW-SSE from track down to ponds/stream. Ditch to E now taking run-off or stream. Seems to peter out before it gets to stream.	1	Continuation of MES16893?			
SF104	MES16910	TQ4197126791	Boundary bank	Same as SF049. N/S aligned bank 2m wide & 0.7m high, possible ditch on east side. Runs from track where it is a continuation of SF097 downslope to stream	1	SF097. Same as SF049	Trees & bracken		Tree roots & bracken
SF150	MES16911	TQ41912683	Quarry?	Cut into bank c 10m long. Now very wet - possible quarry but may be natural backwards erosion of stream.					
SF151	MES16912	TQ41992690	Boundary bank	Boundary bank c 1m high with rounded profile, ditch to E, stopping at track to S and running to forest boundary to N. Looks like track on lidar. May be a trackway/hollow way in ditch.	1				
SF152	MES16913	TQ42042707	Saw pit	Saw pit 6+m long and 2m wide with slight bank either side. Unfilled, c 2m deep still.		SF153			photo

SF161	MES16914	TQ42152701	Hollow way	Hollow way c 2m deep running E-W down to stream		Continuation of SF153. Runs by saw pits MES16913 and 16915			
SF153	MES16914	TQ42052706	Trackway	Trackway 2m wide, close to saw pit	1	SF152, SF161			
SF154	MES16915	TQ42052713	Saw pit	Saw pit 6+m long and 3m wide with slight bank either side. Unfilled.		SF153			photo
SF155	MES16916	TQ41992723	Hollow way	Hollow way leading to stream cutting c 3m into slope.	1		Young birch, holly and chestnut		
SF156	MES16917	TQ41982712	Trackway	Trackway following forest boundary running WNW-SSE towards stream. Braided at E (stream) end, 2m wide at W end where it forms hollow way. Possible boundary bank to N side, 0.5m high 1m wide with rounded profile. No bank at present boundary which is marked by collapsed barbed wire fence.	1	Crosses SF155 at TQ4193 7206	Substantial chestnut coppice		
SF157	MES16918	TQ41982724	Boundary bank	Boundary bank c 0.5m high and wide with rounded profile, curving, runs NNE-SSW along top of slope above stream. Continues through TQ41982731	1		Substantial chestnut coppice		
SF158	MES16919	TQ41922726	Boundary bank	Substantial boundary bank marked on OS, top of bank to ditch is 1.75m and ground level on each side differs by 1.5m (see sketch). Runs NNW-SSE and breached at this point.	1	SF159	Coppiced beech, yew		

SF159	MES16920	TQ41822747	Boundary bank	Runs SSW-NNE forming boundary to edge of wood, parallel to modern track. Bank c 1.75m high with sloping profile, ditch to NW, bank and ditch each c 1m wide. SF158 joins at this point where there is an obvious entrance.	1	SF158	Coppiced oak by entrance, otherwise yew, holly, oak		
SF160	MES16921	TQ41922751	Boundary bank	Small rounded boundary bank 0.3m high running roughly NW-SE. Stream now in ditch. Boundary to Sheffield Forest.			Substantial yew several hundred years old planted on bank, otherwise light birch and some oak.		
SF084	MES16922	TQ42142597	Field boundary	Bank 0.3m high & 1m wide with slight ditch on its east side. Established trees	1		Trees		
SF162	MES16923	TQ41962636	Bloomery	Slag Triangular area 60 m2			I have visited before and have photo		WIRG Foray*
SF163	MES16924	TQ42122663	Bloomery	Rectangular area 300m 2					WIRG Foray*
SF165	MES16925	TQ41612623	Pond Bay	Small pond bay	1				WIRG Foray*
SF050	MES16926	TQ4240926149	Earthwork?	Oval cut 3.5m x 2.5m & 0.6m deep. On slope 5m from track with mound of spoil on NE side of similar proportions - looks fairly recent			Bracken	Eroding	Erosion
SF051	MES16927	TQ4243526142	Bank	Trackside bank on north side of track, intermittent. Up to 2m wide & 0.5m high at NGR. Ground on south side of track is up to 1m higher than track	1		Conifer, gorse & bracken	Ok some previous damage	

SF052	MES16928	TQ4244226157	Saw pit	L-shaped saw pit 5.5m long width 1.5 - 2m, 0.7m deep. Mound of similar proportions on downslope (north side). Close to track			Conifer & bracken	Conifer planted inside it	
SF053	MES16929	TQ4254526231	Mound	Low east-west orientated mound c.20m long and 3.5m wide & 0.5m high			Conifer & bracken	Trees on it	
SF054	MES16930	TQ4254926237	Saw pit	Saw pit 1.5m wide & 4m long, 0.5m deep. Mound on downslope (north) side. 3m from track			Conifer & bracken	Bracken	
SF055	MES16931	TQ4252526256	Saw pit	Saw pit 2m wide, 6m long & 0.8m deep. Extended at east end to form L-shape dogleg which runs downslope & into stream (drainage). 20m from track on sloping ground. Mound on downslope side (north)			Conifer & bracken	Bracken	
SF056	MES16932	TQ4247026231		Part of trailer					
SF057	MES16933	TQ42482619	Hollow way	Hollow way 2.5m wide at base and up to 2m deep. Curves to NW off track & heads downslope parallel to current track.	1		Mature conifer	Trees	
SF058	MES16934	TQ4249826233	Cut	Crescent shaped cut 8m x 2m below hollow way (SF057), soil embanked on downslope side. Water filled		SF059	Conifer & bracken		Bracken & water erosion
SF059	MES16935	TQ4248426233	Cut	Square shaped cut, 2m square, 2m to west of SF058 Water runs from 58 to 59 not sure if there is a pipe?. Spoil on downslope side. Water filled		SF058	Bracken		Bracken & water erosion
SF060	MES16936	TQ42492613	Boundary bank	1 to 1.5m wide & 0.5m high on edge of wood. Established trees	1	SF062	Trees & bracken	Ok	Tree roots & bracken
SF061	MES16937	TQ42462607	Quarry or working area?	Quarry or working area approx 140m E-W and 100m N-S, 2m deep water filled	1	SF63/64/65/66	Scrub/coppice	dumped tyres etc	

SF062	MES16938	TQ42542607	Track?	Possible track runs inside wood with SF060 on its outer edge & small bank 0.3m high on inside edge. Track is 2.5m wide & leads into SF063	1	SF060/063	Trees & bracken		
SF063	MES16939	TQ4251826067	Pond/quarry	Heart shaped 20m x 30m. Ditch curves out of SE corner & heads east to small pond 6m diameter @TQ4255226041 & continues on to meet SF064 in SE corner of wood	?	SF064	Scrub		
SF064	MES16940	TQ42532602	Ditch?	Ditch or hollow way 2m wide & 0.5m deep, water filled, Heads NW to quarry SF061 & SE to corner of wood. At junction with quarry SF061 there is a large embankment with ground to the NE being lower (water management or ground reduction?	1	SF065	Scrub		water erosion
SF065	MES16941	TQ 4249 2602	Quarry	20m x 40m water filled	1		Scrub		
SF066	MES16942	TQ42522600	Quarry	Small quarry? On edge of wood 5m diameter	?		Scrub/trees		
SF067	MES16943	TQ4250326006	Boundary bank	Bank on south edge of wood 1.5m wide & 0.5m high	1		Trees		
SF068	MES16944	TQ42202606	Trackway	4 to 5m wide with bank up to 1m high on its south side	1	SF070/85	Trees & bracken		Bracken
SF069	MES16945	TQ41952609	Quarry	Oval quarry c.20m x 60m, up to 8m deep. Entrance at west end onto track	1		Trees & bracken		Bracken
SF070	MES16946	TQ42092584	Trackway	Wide track with bank on each side 0.5m high & 1.5m wide. Internal ditch 1m wide & 0.3m deep each side. Heads SE then meets SF068 where it turns south and continues. To east of SF078 it becomes a hollow way 2.5m deep, dividing into two the remerging, then becomes shallower before reaching end of wood.	1	SF068	Trees & bracken	Poor, vehicle rutting & water erosion	Water erosion, vehicles

SF071	MES16947	TQ4198126148	Quarry	Small quarry on north side of track 6m x 10m, embanked on north downslope side. Water filled	?		Trees		Water erosion
SF072	MES16948	TQ4198625913	Saw pit	Saw pit 5m x 1.7m water filled. Bank on north side 0.5m high. Note adj modern rutted track (on lidar)			Trees & bracken		Bracken
SF074	MES16949	TQ4197325928	Saw pit	Saw pit 5m x 1.5m soil embanked on west side with gap 1.5m between pit and mound. Water filled			Trees		Water erosion
SF076	MES16950	TQ41952584	Trackway	NW-SE trackway/low bank. Only one edge seen, 0.15m high, but distinct edge			Conifer		Tree roots
SF077	MES16951	TQ41932580	Boundary bank	Bank on south edge of wood 0.5m high and 1m wide. Ditch on outside. Established trees. Possible bank runs parallel to this, 4m into wood 0.4m high & 1m widen no ditch - earlier bank or trackway?	?		Trees		
SF088	MES16951	see Lidar	Boundary bank	Boundary bank on south edge of wood 0.3m high with ditch on outside. Possible track between this bank and SF087 3m wide.		SF087, is continuation of SF077	Trees		
SF078	MES16952	TQ4205625723	Quarry	40m x 80m & >10m deep	1		Trees		
SF081	MES16953	TQ42332591	Quarry	Quarry 30m x 50m and over 3m deep. Entrance to track at south end. Water filled.	1		Trees (overgrown)		Tree roots, water erosion
SF082	MES16954	TQ42412584	Trackway	Extant trackway has bank along each side 0.4m high & 1m wide. Slight ditch on inside of each bank.	1		Trees and coppice	Some breaks in bank	Tree roots
SF079	MES16955	TQ42232579	Pond/quarry	c.20m diameter sloping sides not steep like a quarry. 2m deep filled with water. Stream/ditch runs into it on SE side and out on south side.	1	SF080	Trees around edge		

SF080	MES16956	TQ42272572	Bank	Low bank 0.3m high & 1.5m wide Ne-Sw with stream noted in SF079 on its north side	1	SF079	Trees		Tree roots
SF085	MES16957	TQ41992600	Trackway	Track (continuation of SF068?). 2m wide small bank on each side, max 0.5m high & 1m wide	1	SF068/086	Overgrown with small trees		Tree roots
SF086	MES16958	TQ4199426017	Quarry	Oval quarry 10m x 5m & 1m deep. Track SF085 seems to lead into the quarry or is cut by it. Other shallow quarry scrapes nearby. Water filled		SF085	Trees around edge		
SF087	MES16959	TQ4183325911	Bank & ditch	Shallow ditch cut 2m wide & 0.4m deep runs from SE end of quarry south to edge of wood becoming bank with no ditch which turns east just before reaching edge of wood & runs parallel to edge. 0.5m high & 0.8m wide.	?	SF088	Trees		
not allocated	MES16960	TQ41802606	Quarry	Large quarry into valley with trackway leading to furnace pond and on outside Sheffield Forest boundary to the site of Sheffield Mill furnace	1				
SF089	MES16961	TQ4194526173	Rock shelter	Potential rock shelter site, outcrops of sandstone rock up to 4m high, north facing, extend for c.100m			Scrub		
SF090	MES16962	TQ41862614	Quarry	Irregular shaped quarry with entrance to track at west end	1		Trees & bracken		Tree roots & bracken
SF091	MES16963	TQ4185326145	Quarry	15m x 40m & 3m deep slopes down into valley	1		Trees & bracken		Tree roots & bracken
SF095	MES16964	TQ4219926761	Charcoal burning platform	Cut into slope 10m diameter above stream. Dark soil			Trees on its edge		
SF096	MES16965	TQ4211626768	Earthwork	Oval cut 2m x 1.5m & 0.5m deep with mound 3m x 2m & 0.6m high on its east side			Trees & bracken		Tree roots & bracken

SF098	MES16966	TQ4194126694	Saw pit	Saw pit 4m x 1m & 0.8m deep. Water filled. Earth mounded on north side. 15m from track. Note adj vehicle rutting			Trees & bracken		Tree roots & bracken
SF099	MES16967	TQ4214026862	Saw pit	Saw pit 4.3m x 1.2m & 1m? deep. Water filled. Large earth mound on downslope side 4.5 x 2.5m & 1m high. 20m from track			Trees & bracken		Tree roots & bracken
SF100	MES16968	TQ4214126842	Earthwork	Cut feature embanked around edges & adj to track. Water filled - possible drainage pond? 8m x 7m & 0.5m deep. Banks are 1.5m wide & 0.5m high. Open on track side with no bank. Drainage cut on downslope (north) side	1		Trees & bracken		Tree roots & bracken
SF101	MES16969	TQ42052681	Bank	Track side bank on north side of track. 0.75m wide & 0.4m high. Some gaps and some larger mounds incorporated into it.	1		Trees & bracken	Some past vehicle damage	Tree roots & bracken
SF102	MES16970	TQ4203026870	Charcoal burning platform	Cut into slope 8m x 6m oval in shape. Terraced into slope 1.5m. Dark soil		?	Conifer and bracken		Tree roots & bracken
Assoc-iated with SF102?	MES16970	TQ4203026870	Quarry	Cut 6m x 3m & 1.5m deep immediately upslope of SF102		SF102	Conifer and bracken		Tree roots & bracken
SF103	MES16971	TQ4203426885	Charcoal burning platform	Cut into slope 8m x 5m oval in shape. Terraced into slope. Dark soil			Conifer and bracken - overgrown	Overgrown	Tree roots & bracken
Assoc-iated with SF103?	MES16971	TQ4203426885	Wood stacking platform	Rectangular platform immediately downslope of SF103. 15m x 3.5m in size.		SF103	Conifer and bracken		Tree roots & bracken
SF105	MES16972	TQ4191326795	Earthwork	Rectangular cut 6m x 3m & 1.3m deep. Opening/entrance of east side & spoil mounded on downslope side to form bank			Trees & bracken		Tree roots & bracken

SF106	MES16973	TQ4187726724	Charcoal burning platform	8m x 7m oval platform cut into slope. Dark soil. Adjacent evidence of quarrying?			Trees & bracken		Tree roots & bracken
SF107	MES16974	TQ4183726714	Mound	Crescent shaped mound 10m x 6m orientated N/S & >2m high. Could enclose working area on east side?			Trees & bracken		Tree roots & bracken
SF108	MES16975	TQ4222126854	Saw pits	Two saw pits on edge of storage/parking area 3m apart. 5m x 1.5m & 0.5m deep. Soil slightly mounded around edges			Trees & bracken		Damage through vehicle activity
SF112	MES16976	TQ42322687	Hollow way	Extant track leads SE into small hollow way 1m deep & 2m wide, down to bridge over stream	1	MES16914	Extant track		Track wear
SF113	MES16977	TQ4233526880	Boundary bank	Bank 1.5m wide & 0.6m high with machine cut ditch on west side 0.3m wide & 0.3m deep. Runs from main track down to stream at bridge above			Trees & bracken		Tree roots & bracken
SF114	MES16978	TQ4240226901	Boundary bank	Low bank 1.5m wide & 0.4m high, no ditch. From main track curves to SW to stop above stream			Trees & rhododendron		Tree roots & rhododendron
SF115	MES16979	TQ4243326934	Boundary bank	Low bank runs parallel to stream 2m wide and 0.6m high. Has a cut 2m wide & 0.5m deep on its north side. Continues to main track at east end. Part of drained pond?	1		Trees, bracken & rhododendron		Tree roots, bracken & rhododendron
SF116	MES16980	TQ42612695	Ditches	Parallel double ditch (stream) cuts 8 to 10m apart deeply cut >1m 0.3 - 0.4m wide. East side marked by bank (SF118). Continues north of main track to NE edge of wood.	1	SF118	Trees		Tree roots & water wear

SF117	MES16981	TQ42632700	Boundary bank	Bank 1.2m wide & 0.3m high with possible ditch on east side to south of main track. North of track it turns to the NW as bank 1.5m wide & 0.5m high with ditch 1.5m wide & 0.3m deep on north side. Continues to meet SF120	1	SF120	Trees, bracken. SE part cleared under telegraph poles just bracken		Tree roots & bracken
SF118	MES16982	TQ42822700	Boundary bank	Bank 2 to 2.5m wide & 0.75 to 0.8m high runs 7m inside NE edge of wood (another smaller bank exists on wood edge) incorporates hollow way (see next entry) between banks, then turns to SW	1	SF116	Trees		Tree roots
	MES16982	TQ42822700	Hollow way	See above 5m wide and 1m deep between SF118 and bank on edge of wood	1	SF118	Trees		Tree roots
SF119	MES16983	TQ42812697	Hollow way	Hollow way runs parallel to main track 3m wide & 0.8m deep. Rutted	1		Trees & rhododendron	Vehicle rutting	Tree roots & rhododendron
SF120	MES16984	TQ42582713	Boundary bank	1.5m wide & 0.75m high on edge of wood. Slight ditch on outside 1m wide & 0.2m deep. Established trees	1	SF117	Trees	Passes through some very wet ground	Tree roots
SF121	MES16985	TQ42572698	Hollow way	Possible hollow way (could be drainage?) 5 to 6m wide & 1m deep runs down to stream and wet area	1		Trees, bracken	Wet ground	Tree roots & bracken
SF122	MES16986	TQ42662700	Trackway	Possible trackway with deep rutting, slightly sunken.	1		Trees, bracken	Vehicle rutting	Tree roots & bracken
SF123	MES16987	TQ42532698	Pond	Pond 20m x 15m adj track, stream runs into north end	1				water wear

SF124	MES16988	TQ42362694	Hollow way	Possible hollow way adj main track. 2m wide & 0.8m deep	1		Trees, bracken	water wear	Tree roots & bracken, water wear
	MES16989	TQ42312691	Bank	Trackside bank on north side of track at SF125, may link to SF124	1	SF125/124	Trees, bracken		Tree roots & bracken
SF125	MES16989	TQ42312691	Mound	On east side of stream mound slightly crescent shape 10m long & 3.5m wide, 1m high. Note small mound on south side of track - could be same cut by later track	1		Trees, bracken	water wear	Tree roots & bracken, water wear
SF126	MES16990	TQ42252690	Hollow way	Hollow way on extant trackway. 2m wide & up to 1m deep. Continuation of MES16914	1		Trees, bracken on edges	Path wear	Tree roots & bracken, path wear
FID214	MES16991	TQ42342576	Trackway	Visible on lidar, not ground truthed	1				
FID216	MES16992	TQ42172572	Trackway	Visible on lidar, not ground truthed	1				
FID215	MES16993	TQ42282583	Bank	Visible on lidar, not ground truthed	1				
FID212	MES16994	TQ42362604	Field boundary	Visible on lidar, not ground truthed	1				
FID1345	MES16995	TQ41972572	Boundary bank, edge of forest	Visible on lidar, not ground truthed	1				
FID210	MES16996	TQ41822623	Bank/ terrace on stream side	Visible on lidar, not ground truthed	1				
FID191	MES16997	TQ41672617	Field boundary	Visible on lidar and marked on tithe map, not ground truthed	1				
FID211	MES16998	TQ41802625	Bank/ terrace on stream side	Visible on lidar, not ground truthed	1				
FID194	MES16999	TQ41772654	Trackway	Visible on lidar, not ground truthed	1				
FID1191	MES17000	TQ41622644	Field boundary	Visible on lidar and marked on tithe map, not ground truthed	1				

FID1230	MES17001	TQ41672654	Trackway	Visible on lidar, not ground truthed	1				
FID1195	MES17002	TQ41842638	Trackway	Visible on lidar, not ground truthed	1				
FID1192	MES17003	TQ41942647	Trackway	Visible on lidar, not ground truthed	1				
FID199	MES17004	TQ42062667	Trackway	Visible on lidar, not ground truthed	1				
FID209	MES17005	TQ42212655	Field boundary	Visible on lidar, not ground truthed	1				
FID1189	MES17006	TQ42222647	Trackway	Visible on lidar, not ground truthed	1				
FID1190	MES17007	TQ42192651	Trackway	Visible on lidar, not ground truthed	1				
FID206	MES17008	TQ42102624	Trackway	Visible on lidar, not ground truthed	1				
FID604	MES17009	TQ42022624	Charcoal platforms	Visible on lidar, not ground truthed	1				
FID65	MES17010	TQ41972679	Charcoal platform	Visible on lidar, not ground truthed	1				
FID205	MES17011	TQ41962683	Trackway to charcoal platform	Visible on lidar, not ground truthed	1				
FID200	MES17012	TQ42132689	Trackway or boundary	Visible on lidar, not ground truthed	1				
FID2165	MES17013	TQ42202734	Sunken track	Part of parish boundary, part outside forest, Visible on lidar, not ground truthed	1				
FID263	MES17014	TQ42172721	Low bank and ditch	Visible on lidar, not ground truthed	1				
FID260	MES17015	TQ42162711	Low bank, poss field boundary	Visible on lidar, not ground truthed	1				
FID1186	MES17016	TQ42092713	Hollow way	Visible on lidar, not ground truthed	1				
FID266	MES17017	TQ42502712	Sunken track	Part outside forest. Visible on lidar, not ground truthed	1				
FID261	MES17018	TQ42252727	Bank or lynchet	Visible on lidar, not ground truthed	1				
FID203	MES17019	TQ42382636	Trackway	Visible on lidar, not ground truthed	1				

FID1194	MES17020	TQ41802614	Trackway	Visible on lidar, not ground truthed	1				
FID186	MES17021	TQ42162667	Charcoal platforms	Visible on lidar, some ground truthed	1				
SF166	MES17023	TQ41822598	Enclosure	Heart shaped enclosure, low wide bank with ditch, seen on previous survey by Greg Chuter in 2006. Not visible on lidar or on ground owing to dense vegetation					
SF167	MES17024	TQ42452626	Charcoal platform	Charcoal burning platform seen on previous survey in 2006 by Greg Chuter					
SF168	MES17026	TQ42482627	Charcoal platform	Charcoal burning platform seen on previous survey in 2006 by Greg Chuter					
SF169	MES17027	TQ42402620	Charcoal platform	Charcoal burning platform seen on previous survey in 2006 by Greg Chuter					
SF170	MES17028	TQ41982623	Charcoal platform	Charcoal burning platform seen on previous survey in 2006 by Greg Chuter					
SF171	MES17029	TQ41892631	Charcoal platform	Charcoal burning platform seen on previous survey in 2006 by Greg Chuter					
SF172	MES17030	TQ41892631	Charcoal platform	Charcoal burning platform seen on previous survey in 2006 by Greg Chuter					
SF173	MES17031	TQ41942638	Charcoal platform	Charcoal burning platform seen on previous survey in 2006 by Greg Chuter					
SF174	MES17032	TQ41992646	Charcoal platform	Charcoal burning platform seen on previous survey in 2006 by Greg Chuter					
SF175	MES17033	TQ41992646	Charcoal platform	Charcoal burning platform seen on previous survey in 2006 by Greg Chuter					
SF176	MES17034	TQ42142663	Charcoal platform	Charcoal burning platform seen on previous survey in 2006 by Greg Chuter					