



Herefordshire Archaeology
Conservation and Environmental Planning
Planning Services
Environment Directorate
Herefordshire Council

Herefordshire Woodlands Pilot Study: Phase 1 Lea Bailey Inclosure

Herefordshire Archaeology Report No. 51
May 2002, revised 2004

Report prepared by
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Herefordshire Archaeology is Herefordshire Council's county archaeology service. It advises upon the conservation of archaeological and historic landscapes, maintains the county Sites and Monument Record, and carries out conservation and investigative field projects. The County Archaeologist is Dr. Keith Ray.

Herefordshire Woodlands Pilot Scheme: Phase 1. Lea Bailey Inclosure

Herefordshire Archaeology Report No.51

Herefordshire Archaeology, May 2002, (revised 2004).

Summary:

The survey described in this report (EHE32693), formed part of a pilot study of the archaeology of Herefordshire woodlands undertaken in partnership with the Forestry Commission. A rapid site identification survey was carried out in the wood concerned, using a hand held Global Positioning System to record the location of the features that were recognised as having archaeological significance.

Earthwork features were recorded within the wood that illustrate the intensive use of the woodland resource in the late and post medieval periods. These included saw pits, charcoal burning platforms, quarries and woodland management boundaries.

A new class of earthwork was identified within the wood. This kind of feature appears to be a charcoal burning platform, but this type and its method of construction had not previously been recorded in Herefordshire.

Disclaimer: It should not be assumed that land referred to in this document is accessible to the public. Location plans are indicative only. NGRs are accurate to approximately 10m. Measured dimensions are accurate to within 1m at a scale of 1:500, 0.1m at 1:50, and 0.02m at 1:20.

Figures contain material from the Ordnance Survey. The grid in this material is the National Grid taken from the Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office. This material has been reproduced in order to locate the site in its environs.

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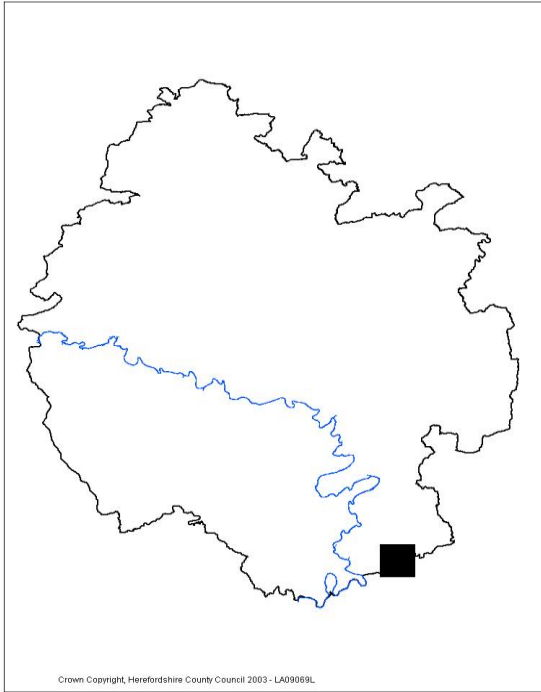
Introduction

This report provides an account of a rapid survey of Lea Bailey Inclosure. The survey was carried out as part of a pilot study being undertaken by Herefordshire Archaeology in partnership with and grant-aided by the Forestry Commission. The purpose of the study is to begin the process of documenting the archaeology of woodlands in the county. Woodlands are areas of high archaeological potential in that they have seldom been subjected to the types of disturbance associated with intensive modern agriculture. Relatively little information concerning archaeological sites within woodland has been recorded in the past. Access is often difficult, aerial photographs are of little or no use for site identification and until recently recording an accurate location within woodland was often not practicable.

Woodland boundaries have often moved over the centuries, sometimes expanding to encapsulate and preserve evidence of alternative land-use (for instance, field systems) and on other occasions shrinking and being subject to differing forms of woodland management. These variations in land-use inevitably influence the kind of ecological data that can be obtained from different areas of woodland. Archaeological survey can contribute significant data concerning woodland history, management history and sequential development, and this can provide independent evidence of historical change. It is only when the changes throughout history within a wood have been documented and understood in this way that a well informed management strategy can be implemented.

Since 1999 Herefordshire Archaeology has been involved in regular discussions with the Forestry Commission concerning the lack of archaeological data available when management plans are being prepared and applications for Woodland Grant Schemes are submitted. As a result of these discussions, the Forestry Commission has grant aided Herefordshire Archaeology to undertake a two phase pilot study. Phase One has taken place in 2001-2 and has involved the rapid survey of eight areas of woodland in different areas of the county. These woodlands were deliberately selected from among those that are owned and managed by Forest Enterprises, those owned by large private estates, those that have recently been the subject of Woodland Grant Scheme applications and those for which Native Woodland Plans have been or are in preparation (see Ray, 2003).

The survey for each woodland area in the pilot study identified a full range of the kinds of feature present. This gives a clear indication of the potential for the survival of archaeological features and of the types of features present. During the Phase Two study Herefordshire Archaeology staff will re-visit woodlands identified in the Phase One pilot study as being of proven high archaeological value and will conduct a more detailed survey. This will establish more precisely the character of all existing archaeological sites within the woodland. A more detailed record of the relationships between features will enable reconstruction of the evolution of the woodland historically. The Phase Two pilot study will also feature an increased number of rapid identification surveys.



Location

Lea Bailey Inclosure is located at NGR: SO 635 200, approximately 5km. south-east of Ross-on-Wye, to the north of The Forest of Dean. The woodland covers the top of an Old Red Sandstone outcrop.

The Historic Landscape Characterisation Study for Herefordshire describes Lea Bailey as woodland surrounded by fields derived from the enclosure of former common arable areas. These present day enclosures have experienced minimal insertion of boundaries after the initial intake (Ray and White, 2003).

Figure 1: Site Location.

Previous fieldwork / records

Prior to the survey taking place the county Sites and Monuments Record was consulted. However, no entries were found indicating the discovery of sites within the present woodland, and it is therefore assumed that no fieldwork that has resulted in a published record has taken place here previously.

Method

The primary survey work at Lea Bailey Inclosure took place on January 25th 2002. The survey comprised a rapid assessment of the potential of the woodland to contain well preserved archaeological features. Features were mapped using a hand-held Garmin 12 XL Global Positioning System, enabling a ten figure grid reference to be recorded for each feature. This system is accurate to within approximately 10m under tree canopy.

The wood was walked in transects aligned roughly north / south and approximately 50m to 100m apart. If a large feature was encountered and no other features of archaeological significance can be seen, then this feature was followed and features 50m either side of it recorded. Field observations and grid references were recorded on a dictaphone and transcribed at a later date.

The following survey is only a sample of the woodland and should not be taken as exhaustive or its results as definitive. It is intended to record the type of features present, their state of preservation and their relationships to other features within the woodland.

Field conditions

Lea Bailey Inclosure covers the top and upper slopes of a sandstone outcrop. Approximately 60% of its area is relatively level comprising the plateau of the hill top. Most of the slopes are relatively gently sloping with occasional deeply cut and steeply sided dingles usually associated with natural water-courses.

Approximately half of the area of Lea Bailey is planted with dense conifer. This is principally in its centre and on its western flank. Large tracts of the more mature conifer stands have an under storey of 1m high bramble making survey impracticable within these areas. The remaining areas are either under deciduous woodland or under unthinned conifer with sparse under storey.

Results (Figure 2)

The recorded data from the survey is described in detail within the results section. This latter section is concluded by a brief discussion highlighting the historical development of the woodland as understood using the 2003 survey results. The significance of recorded features and management implications are then commented upon within the discussion section. Appendix 1 contains a simple data base which cross references each site to the Ordnance Survey National Grid, (NGR), and the series of unique Sites and Monuments “Primary Record Numbers” (PRN), allocated following the transcription. These numbers are referred to within both the text and illustrations. They are prefixed by HSM, these initials relating to Herefordshire Sites and Monuments Record unique numbers.

Woodland management features

A total of forty three charcoal burning platforms were recorded. These ranged in size from 5-12m in diameter and in the main comprised a level, circular platform with a pronounced down-slope lip. However, within this woodland a second class of charcoal burning platform was recorded. This consists of a circular, level platform approximately 10m in diameter surrounded by a ring of spoil approximately 0.4m high and 0.6m wide. This is the first record of such a monument type in the county and appears to be a distinct class of charcoal burner associated with the Forest of Dean and its immediate environs. Similar features have been recorded in Cumbria, (Mark Bowden pers. comm.). This may suggest that a specific type of charcoal was being produced for a specific industry or that the charcoal burning was managed in a more regulated way than in other parts of Herefordshire. The new form of charcoal burning platform is found exclusively on the plateau of Lea Bailey Inclosure.

Eight saw pits were recorded. Their earthwork remains comprise an oval depression between 4 and 6m in length, 1.5m wide and 0.3-0.5m deep with spoil on their down-slope sides. These were predominately located on the northern and south-western slopes.

Associated with many of the saw pits were small rectangular platforms presumably for stacking sawn or squared timber on.

Three large rectangular platforms were recorded on the north western flank of Lea Bailey Inclosure, (HSM 32698, HSM 32700 and HSM 32706). These range in size from 8m in length and 3.5m wide to 20m in length and 8m wide. All three of these platforms were in close association with both saw pits and charcoal burning platforms suggesting that they were either used as storage or seasonal accommodation.

Three sections of holloway were recorded, one on the northern end of Lea Bailey Inclosure, (HSM 32717), has been truncated by a series of charcoal burning platforms. The northern woodland boundary bank runs across it, suggesting that this feature is of some antiquity Its course could not be traced as it ran onto the plateau. A second section of holloway was recorded within the southern portion of the wood, (HSM 32741), and this may represent a short course of the pre-cursor to the present road that runs through Lea Bailey Inclosure. The third section was recorded on the southern flank of Lea Bailey, (HSM 32755), and may be associated with intensive quarrying in this part of the woodland.

Former Land Use

A localised area on the north-eastern edge of Lea Bailey Inclosure contains a series of ridges, (HSM 32762), immediately outside the woodland boundary bank. These comprise a number of straight ridges approximately 10m wide and 0.3m high indicating that this area was either under orchard for a considerable period of time in order to create these earthworks, or divided into strip fields until relatively recently.

Woodland boundaries

A number of phases of woodland boundary bank were recorded, many of these relating to the post-medieval period. These consisted of a bank approximately 0.75m high and 2m wide with a small ditch c. 0.75m wide on either side, the up-slope ditch invariably silted up, (HSM 32707, HSM 32737). A second class of wood bank was recorded on both the western and eastern sides of Lea Bailey Inclosure. This comprises a double bank and three ditches forming a boundary approximately 7m wide. The banks are approximately 1.5m high and 3m wide with a ditch on either side and separating them, (HSM 32729 and 32732). The external bank is well rounded and appears to be of considerable antiquity. The internal bank and the ditch separating them is quite sharp suggesting that it has been re-cut. This feature has provisionally been given a medieval date as the re-cutting is probably a post medieval phase.

Very few compartment boundaries were recorded. These have been attributed to the post medieval period primarily due to the lack of evidence linking them to the medieval wood bank. These boundaries both consisted of ditches, (HSM 32727, HSM 32756), approximately 2-3m wide with no sign of a bank. The scarcity of such features suggests that Lea Bailey Inclosure was divided into relatively large woodland compartments which may have changed little since the late medieval period.

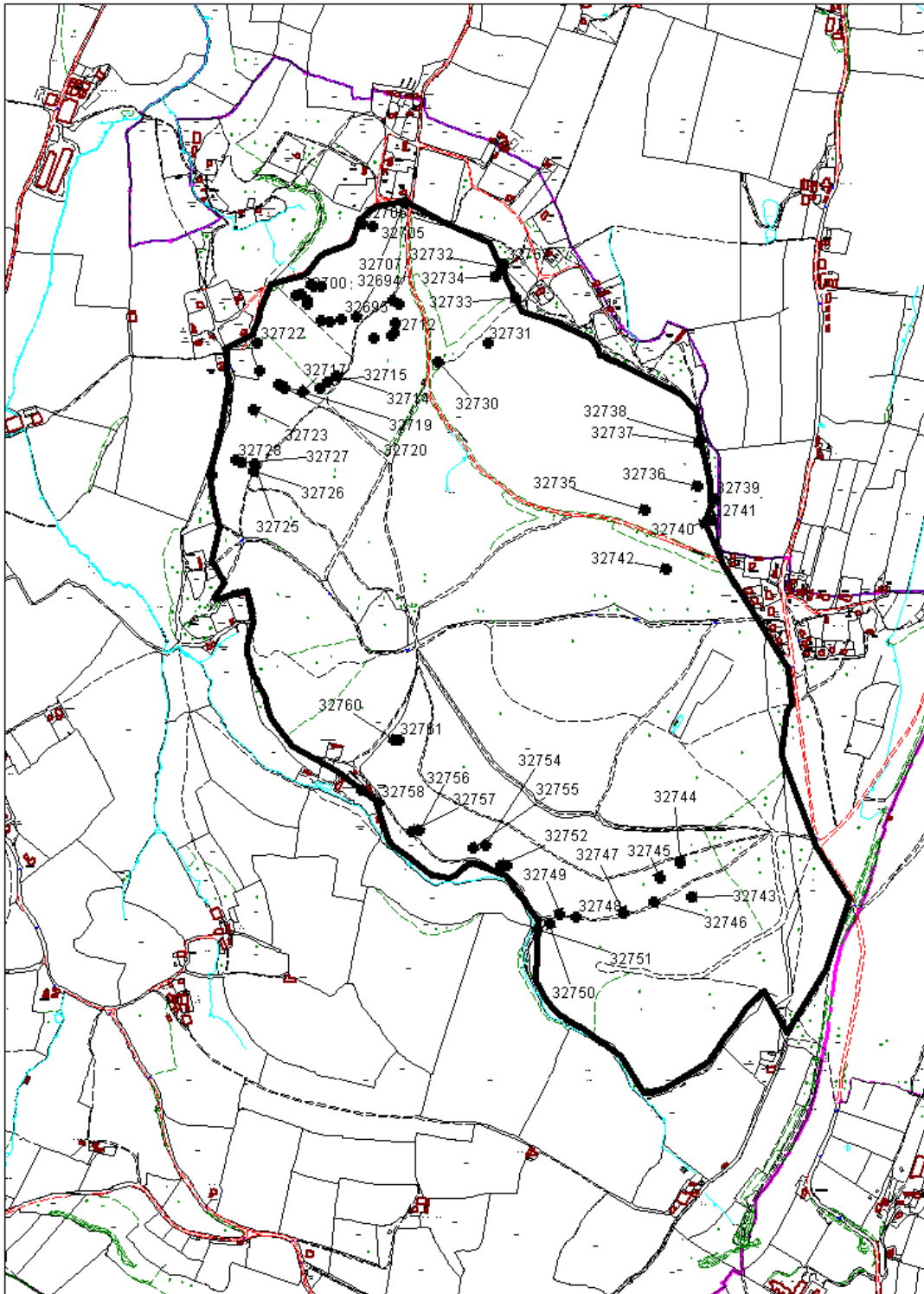


Figure 2: Location of earthwork features recorded during the survey

Industrial features

Three quarries were recorded during the course of the survey. These were all located in the south western portion of Lea Bailey, suggesting that there is an easily accessible outcrop of sandstone, (HSM 32749, HSM 32750, HSM 32762). All three quarries appear to be of post medieval date and are all within 70m of the present woodland boundary.

Three holloways were recorded, (HSM 32717, HSM 32741, HSM 32755), and these were only visible on the slopes of Lea Bailey. HSM 32741 is probably an earlier course of the present road through Lea Bailey. HSM 32717 may well be of medieval date as it is overlain by a small wood bank and has at least two charcoal burning platforms cut into its base and sides. Holloway HSM 32755 is associated with a dry stone wall marked on the 1886 1st Edition Ordnance Survey Map. This suggests that it is either of a relatively modern date and that it was heavily used or that this routeway has been in use for a considerable period of time. In the latter case, the construction of a wall signifies a later period of its use, possibly for access to quarries in addition to timber.

Much of the central, western area was too overgrown to enable survey to take place. An under storey of bramble approximately 1m high covers the entire area beneath mature conifer.

Discussion and Implications

Indications of former land use

Lea Bailey Inclosure appears to have been woodland from at least the medieval period onwards. The boundaries of the wood appear to have changed hardly at all over this period of time. The paucity of internal boundaries indicate either that there has been little change in the size of woodland compartments throughout this time, or that at some point in time the entire wood was re-designed and previous boundaries erased.

The area immediately to the north-east of the medieval and post-medieval wood bank of Lea Bailey, (HSM 32762), appears to contain a series of low ridges and furrows. These are too wide, (approximately 10m), to be ridge and furrow and appear to be either post-medieval agricultural strips or more likely an area of former orcharding.

Site and feature condition

The majority of features recorded were well preserved. An exception is those features which have only recently been damaged by the felling of occasional rows. This recent felling and extraction has cut across the site of a number of charcoal burning platforms and saw pits. A localised area on the north-eastern edge has also been badly damaged by recent extraction processes. The features within the north-western part of Lea Bailey are particularly well preserved and coherent.

Implications regarding the archaeological resource

The topography and geology of Lea Bailey Inclosure dictates that it is particularly susceptible to erosion. The large, relatively flat central plateau with its shallow, sandy

soils in conjunction with steep slopes on all sides means that there is the potential for large scale erosion if large areas are clear felled during or prior to periods of heavy or prolonged rainfall. This makes the earthworks present within Lea Bailey particularly vulnerable.

This area of woodland is important due to its proximity to The Forest of Dean and this appears to be reflected in the presence of a second type of charcoal burning platform. These suggest an entirely industrial phase of charcoal production using a type of structure that was constructed to a universal plan in order to maximise the efficiency charcoal production.

Implications regarding site condition

Woodland boundary banks and compartment boundaries generally survive well. Relationships can be established between them and later features. Traces of past communications also survive well in the form of holloways and tracks and some can be related to specific features, particularly quarries. It has been noted that there are significantly more quarries in the southern portion of Lea Bailey than in the north. This may be due to differing geology or the depth of bedrock.

Implications for future management

The two areas of recent clear felling and ploughing/scarification are now totally devoid of any archaeological features above ground. This system of management is not suitable for areas as archaeologically and ecologically rich as Lea Bailey. Further clearance and surface intrusion of this type should be discouraged.

Implications for future field work.

Lea Bailey Inclosure contains a high density of archaeological features relating to intensive woodland management and industrial scale production of charcoal and sawn / processed timber.

From this survey it is clear that Lea Bailey Inclosure has been extensively managed as woodland for a considerable period of time. Its importance as a charcoal production site is not surprising considering its position in relation to the metal production in the Forest of Dean.

This area of woodland has a high potential for the presence of well preserved archaeological features and it should be possible to recognise relationships between many features and hence produce at least a rudimentary series of phases illustrating the changing management of the woodland.

Prior to further clear felling or other significant extraction of areas within the survey area these areas should be subject to a more detailed walk over survey in order to record and assess the location, archaeological potential and significance of any features present.

Acknowledgements

I would like to acknowledge the help and co-operation of Forest Enterprise for assistance and co-operation with access for this survey.

The Forestry Commission for their commitment to this pilot scheme and the co-operation and assistance of Forest Enterprise, in particular Peter Kelsall.

Dr. Keith Ray, County Archaeologist, for his editorial input into this report.

Archive

1 Dictaphone tape
1 Transcription Record
1 Excel Database
1 Mapinfo data file
This document

Appendix 1: Database of features and grid references.

HSM No.	Easting	Northing	Site type	Period	Description
32694	63324	20605	Charcoal burning platform	Post-medieval	10m in diameter
32695	63292	20601	Saw Pit	Post-medieval	3m long and 1.5m wide with spoil to its south.
32696	63266	20595	Saw Pit	Post-medieval	4m long and 1.5m wide.
32697	63248	20598	Charcoal burning platform	Post-medieval	5m in diameter and facing west
32698	63221	20640	Platform	Post-medieval	15m long and 8m wide facing west.
32699	63220	20632	Saw Pit	Post-medieval	4m long and 2m wide.
32700	63206	20654	Platform	Post-medieval	Triangular platform c. 15m long and up to 8m wide.
32701	63196	20650	Charcoal burning platform	Post-medieval	Poorly preserved
32702	63227	20674	Charcoal burning platform	Post-medieval	Poorly preserved
32703	63232	20670	Charcoal burning platform	Post-medieval	Fair condition
32704	63250	20670	Charcoal burning platform	Post-medieval	15m in diameter, facing south/west.
32705	63356	20797	Saw Pit	Post-medieval	4m long and 2m wide with spoil to its south/west.
32706	63335	20802	Platform	Post-medieval	20m long and 10m wide rectangular platform.
32707	63427	20846	Wood Bank	Medieval or post - medieval	30m inside the present wood, the bank is 1m high and 2.5m wide.
32708	63399	20640	Charcoal burning platform	Post-medieval	6m in diameter condition poor.
32709	63413	20633	Charcoal burning	Post-medieval	7m in diameter.
32710	63405	20593	Saw Pit	Post-medieval	Badly eroded.
32711	63401	20572	Saw Pit	Post-medieval	4m long and 2m wide.
32712	63398	20566	Charcoal burning	Post-medieval	8m in diameter.
32713	63360	20561	Charcoal burning platform	Post-medieval	10m diameter with ring of spoil surrounding.
32714	63281	20482	Saw Pit	Post-medieval	Aligned north/south with spoil to its east, well preserved.
32715	63262	20469	Charcoal burning platform	Post-medieval	
32716	63245	20454	Charcoal burning platform	Post-medieval	15m diameter on lip of scarp slope.

32717	63208	20447	Holloway	Medieval?	6m wide and 1.8m deep aligned NW/SE. Runs under wood bank.
32718	63172	20454	Charcoal burning	Post-medieval	12m in diameter
32719	63164	20461	Charcoal burning	Post-medieval	8m in diameter
32720	63160	20462	Charcoal burning	Post-medieval	Cut into base of holloway.
32721	63119	20492	Charcoal burning platform	Post-medieval	15m in diameter and facing north.
32722	63115	20549	Charcoal burning platform	Post-medieval	15m in diameter and well preserved.
32723	63105	20411	Charcoal burning platform	Post-medieval	8-10m in diameter.
32724	63119	20492	Ditch	Post-medieval?	2m wide and 0.3m deep, aligned E/W.
32725	63108	20296	Charcoal burning platform	Post-medieval	Small and in poor condition.
32726	63105	20281	Charcoal burning platform	Post-medieval	15m in diameter surrounded by a ring of spoil.
32727	63080	20299	Ditch	Post-medieval?	2.5m wide and 1m deep runs parallel to 32724.
32728	63068	20303	Saw Pit	Post-medieval	
32729	63018	20273	Wood Bank	Medieval	60m inside current wood boundary. Two banks and ditches forming one substantial boundary.
32730	63494	20511	Charcoal burning platform	Post-medieval	10m in diameter and surrounded by a ring of spoil
32731	63600	20549	Charcoal burning platform	Post-medieval	10m in diameter and surrounded by a ring of spoil
32732	63630	20708	Wood Bank	Medieval	Similar to 32729.
32733	63659	20644	Charcoal burning platform	Post-medieval	5m in diameter and in poor condition.
32734	63617	20691	Charcoal burning platform	Post-medieval	10m in diameter surrounded by a ring of spoil.
32735	63932	20198	Charcoal burning platform	Post-medieval	10m in diameter surrounded by a ring of spoil.
32736	64043	20248	Charcoal burning platform	Post-medieval	5m in diameter.
32737	64044	20340	Wood Bank	Post-medieval	2m wide and 1m high with a ditch to its east.
32738	64049	20346	Charcoal burning platform	Post-medieval	5m in diameter
32739	64079	20222	Charcoal burning	Post-medieval	6m in diameter
32740	64059	20172	Charcoal burning platform	Post-medieval	8m in diameter and facing south.
32741	64073	20178	Holloway	Post-medieval	4m wide and 1m deep running south.

32742	63975	20073	Charcoal burning platform	Post-medieval	12m in diameter and surrounded by a ring of spoil
32743	64030	19385	Charcoal burning platform	Post-medieval	10m in diameter and facing S/W.
32744	64006	19455	Charcoal burning platform	Post-medieval	6m in diameter and facing S/W.
32745	63964	19423	Charcoal burning platform	Post-medieval	6m in diameter and facing S/W.
32746	63950	19374	Charcoal burning platform	Post-medieval	8-10m in diameter but poorly preserved.
32747	63885	19350	Saw Pit	Post-medieval	3m long and 1.5m wide.
32748	63785	19341	Charcoal burning	Post-medieval	8m in diameter.
32749	63752	19346	Quarry	Post-medieval	5m square with exposed face.
32750	63731	19327	Quarry	Post-medieval	10m long 8m wide and 7m deep.
32751	63705	19316	Quarry	Post-medieval	5m square with 2 similar immediately above it.
32752	63627	19449	Charcoal burning platform	Post-medieval	Cuts spoil of quarry to N/E.
32753	63641	19451	Charcoal burning platform	Post-medieval	7m in diameter
32754	63594	19492	Charcoal burning platform	Post-medieval	12m in diameter with a second 20m to N/E.
32755	63569	19486	Holloway	Post-medieval	5m wide and 1.5m deep and bounded on its eastern side by a low stone wall.
32756	63454	19524	Ditch	Post-medieval	3m wide and 1.5m deep running east.
32757	63440	19520	Charcoal burning platform	Post-medieval	12m in diameter and well preserved.
32758	63370	19583	Charcoal burning platform	Post-medieval	12m in diameter.
32759	63333	19609	Charcoal burning platform	Post-medieval	12m in diameter.
32760	63403	19715	Charcoal burning platform	Post-medieval	12m in diameter
32761	63413	19715	Charcoal burning platform	Post-medieval	12m in diameter
32762	63633	20716	Strip Fields?	Post-medieval	Low ridges 10m wide and 0.3m high possibly strip fields.

Validation

Herefordshire Archaeology operates a validation system for its reports, to provide quality assurance and to comply with Best Value procedures.

This report has been checked for accuracy and clarity of statements of procedure and results.

Dr. K. Ray, County Archaeologist.