

ENGLISH HERITAGE

The Brendon Hills Mapping Project, Devon & Somerset

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SURVEY REPORT

NATIONAL MAPPING PROGRAMME THE BRENDON HILLS MAPPING PROJECT DEVON AND SOMERSET

Aerial Photographic Survey: January - September 1998 Project Report by C.A. Dyer

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SUMMARY

The Brendon Hills Mapping Project (BHMP) was carried out as part of the Royal Commission on the Historical Monuments of England's (RCHME) National Mapping Programme (NMP). The NMP aims to `map, describe and classify all archaeological sites recorded by aerial photography in England to a consistent standard' (RCHME 1995, 4).



Figure 1 - Location of Project Area

INTRODUCTION

Background to the Project

The Brendon Hills area was incorporated into the NMP timetable in response to a request by the Exeter field office of RCHME, who were undertaking a programme of extensive field survey across Exmoor. The area has been subjected to intense agricultural improvement over the last century and few archaeological sites remain upstanding, so it was expected that mapping from aerial photographs would be the more cost effective than field survey. The mapping at 1:10,000 scale was produced so that specific sites could be targeted for analytical field survey.

Territorial Extent

The initial project area, as requested by the Exeter field office, covered c.55 square kilometres. The area was bounded by the river Exe to the west, the B3224 to the north and the National Park Boundary to the east. For the purpose of the mapping project it was decided to extend the survey area to seven complete 1:10,000 quarter sheets, comprising SS 93 NW, NE, SW, SE, SS 92 NW, SS 92 NE and ST 03 SW. See Fig 2.

For the most part, the project area lies within West Somerset; however, the far south-eastern extremity is in Mid Devon. The following parishes lie within this area:

West Somerset - Brompton Regis, Brushford, Clatworthy, Cutcombe, Dulverton, Exton, Huish Champflower, Luxborough, Old Cleeve, Nettlecombe, Skilgate, Timberscombe, Treborough, Upton, Withycombe, Winsford.

Mid Devon - Bampton, Morebath.

Aims and Objectives

The general aims and objectives of the NMP are set out in the `Guidelines and Specification Manual for the National Mapping Programme (NMP)' (RCHME 1995). For the BHMP, these include mapping archaeological remains visible on aerial photographs at a scale of 1:10,000 to a consistent standard and bringing existing transcriptions up-to-date. Both cropmarks and earthworks were included within the scope of the project. A computerised record was also created to accompany the completed transcriptions, including enhancement of MONARCH, the main database of the National Monuments Record.

Sources

Aerial photographs

All readily available oblique and vertical photographs for the project area were consulted. The principle source for photographs was the RCHME's NMR Air Photographs (formerly the National Library of Air Photographs) which provided over 1,500 photos. These included 1429 vertical prints and 107 from its specialist oblique collection.

Other sources of photographs consulted during this project included the Somerset County Council sorties flown for census purposes, the Exmoor National Park collection held at the park headquarters in Dulverton, and the oblique collection of the Cambridge University Collection of Aerial Photographs (CUCAP).

Records

A number of archival sources were consulted during the mapping process in order to gather information to assist in, or to support, the identification and interpretation of archaeological features visible on the aerial photographs. These sources included the NMR, the Devon SMR and the Somerset SMR. Sites were cross referenced to the NMR and the SMRs throughout the project.

Methodology

Mapping Methods

This was the second mapping project, undertaken by the Swindon Aerial Survey (AS) section using new digital mapping and recording techniques and as such, the BHMP must be viewed as being used as a second trial (the first being the Avebury World Heritage Site Mapping Project). Although a high quality product, the previous, manual output from AS was felt to no longer meet the requirements of all its users. There is a general requirement for data in a digital form for input to GIS and other computer applications. For this reason the BHMP sheets were transcribed following the `manual' methodology established during previous NMP projects. The overlays were then digitised using AutoCAD to create a digital final product. Many aspects of the new methodology are unresolved (October 1998) but the experience gained in this project will provide some solutions.

The majority of sites were transcribed using manual transcription methods, but were occasionally supported by the use of the AERIAL 4.2 computer-rectification program, developed by the Department of Mathematics at Bradford University. The AERIAL 4.2 program brought a level of accuracy of +5m, whereas manual plotting was accurate in the range of 5-20m.

Conventions

A series of conventions have been developed during previous NMP projects and there is now an agreed set of cartographic conventions for NMP. These have enabled the depiction of banks, ditches and other features in a number of ways which make them easily recognisable and hence interpretable from the 1:10,000 transcription overlays. The conventions used for BHMP are shown in the Appendix.

A series of new conventions to apply to the digital mapping in AutoCAD is under development.

Databases

Monument recording for the BHMP was undertaken through direct input to MONARCH. Previous NMP projects carried out by Aerial Survey have focused on morphological recording and analysis using the MORPH2 database. Following the results of the NMP review, a considerable reduction in the amount of morphological recording carried out has been agreed. RCHME as a whole is undergoing a systems review and it has been agreed that MONARCH will be replaced by a modular recording system running in a Windows environment which will include a specialised morphological recording module.

An interim morphological recording module was to be designed and running by the end of March 1998 and it was initially anticipated that this new module would be available for use during the Brendon Hills project. Unfortunately, the development of the module has been delayed and this has meant that no detailed morphological analysis has been possible. Morphological data for three quarter sheets was input into the interim morphological recording module as part of its system trials. Morphological recording for the remaining four map sheets will be completed as part of further trials.

Archiving

Items relating to this project will be archived at the NMRC in Swindon and will be available for consultation there under the title RCHME: Brendon Hills Mapping Project.

This report is an internal RCHME report.

Project Details

Team Structure

Within NMP, overall management of the project was the responsibility of the Head of Aerial Survey (Robert Bewley). The Mapping Team, Swindon (Simon Crutchley) was responsible for the project timetabling, implementation, allocation of staff resources and quality control of the project. The project team comprised a project co-ordinator (Carolyn Dyer) and three team members (Damian Grady, Fiona Small and Helen Winton). All members of the project team were Senior Air Photo Interpretation Officers.

Timetable

The Exeter field section were to begin field work on the Brendon Hills in the early summer of 1998. It was therefore agreed that the transcriptions and report would be available for the field team by the beginning of May 1998. The original timetable aimed for the project to begin in January/February 1998 and to be completed within three months. In the event, due to a lack of staff resources, the transcriptions and report were not completed until October 1998 although copies of six of the transcriptions were sent to the Exeter field staff at the end of May 1998.

Funding

Funding for the project came entirely from within the RCHME.

Scope of the Report

This report is designed for internal RCHME use and is meant as a guide to the methodology and initial results of the Brendon Hills Mapping Project. It is not intended as a definitive statement about the archaeological sites and landscapes of the project area. The report should be used in conjunction with the seven 1:10,000 overlay transcriptions for the project area and the work of the Exeter field office which will be deposited at the NMRC, Swindon. Any site numbers mentioned throughout this report, refer to the MONARCH database. Both NMR Number and Hob UID are given.

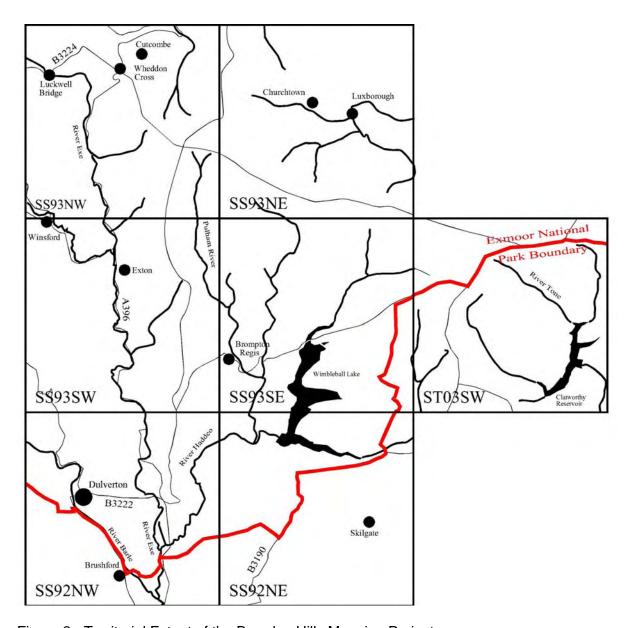


Figure 2 - Territorial Extent of the Brendon Hills Mapping Project

THE PHYSICAL LANDSCAPE

Geology

(Sources: British Geological Survey 1974 and Page 1906a and b).

The Brendon Hills lie on the eastern edge of Exmoor which is composed almost entirely of sedimentary rocks. These rocks were deposited 400 million years ago in a broad oceanic trough which received vast quantities of sediment from the adjacent continents. These were squashed from north to south during the Armorican movements which folded and uplifted the sediments forming the Cornubian Mountains. The pressures involved in these movements converted the original sediments into slates, shales and limestones and, for the most part, these beds strike nearly west to east, the regional dip being to the south. The whole assemblage of Devon and Carboniferous beds (the Culm Measures) is therefore part of a great syncline which traverses the whole of the south west peninsula.

The oldest beds are found on the north edge of the area, the Lower Devonian Hangman Grits forming the high ground of Croydon Hill, north of Luxborough. These are brown, green and purple mudstone and slates with grits and flag sandstones. Above and to the south of the grits are a series of slates with occasional bands of limestone known as the Ilfracombe Slates.

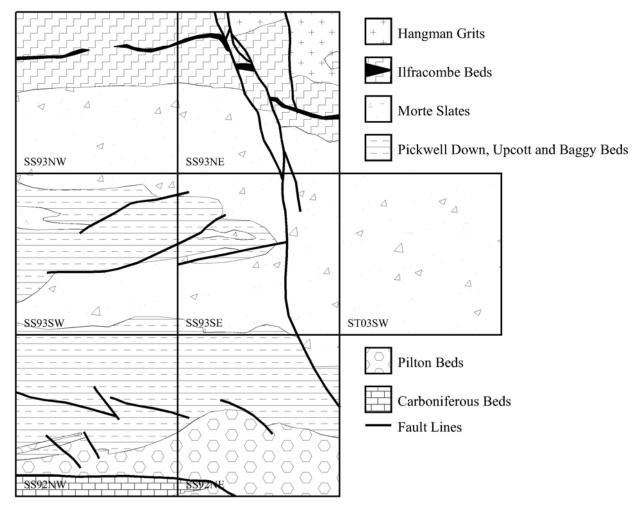


Figure 3 - Brendon Hills geology

The Morte Slates are much folded and highly cleaved slates which contain the famous iron ores of Exmoor and the Brendon Hills. South of these are the Pickwell Down Sandstones, green, grey or purple grits with slates and mudstone which form the barren moorland north west of Dulverton and extend eastward to the Exton and Haddon Hills. The argillaceous slaty and gritty rocks of the Pilton Beds which outcrop south of Dulverton, are the youngest of the Devonian sequence. Above and to the south lie the Carboniferous Culm measures which outcrop near Brushford and Morebath and consist of limestones mixed with slates and mudstone.

Geomorphology

As a whole, the interior of Exmoor consists of a high, moorland plateau, with steep-sided valleys, cut by swift flowing streams. The landscape of the Brendon Hills area has been 'tamed' through agricultural land improvement in recent years, with only small pockets of wild moorland remaining, such as at Haddon Hill and Withycombe Common.

The highest point within the project area is Lype Hill which, at 423m, lies to the north west end of the Brendon Hills ridge. The ridge of the Brendon Hills is orientated approximately WNW to ESE and forms the backbone of the area, the land getting progressively lower as one moves southward. The terrain is broken by a series of streams and rivers which roughly run southward to meet the Haddeo River, a tributary of the River Exe. The River Exe runs close to due south throughout the length of the project area and effectively divides the Brendon Hills from the rest of the National Park. A third river, the Barle, runs south west from Withypool to Dulverton before meeting the Exe immediately north of Exebridge. All three rivers have carved narrow and steep-sided valleys, but south of Dulverton the valleys open out slightly to form narrow floodplains.

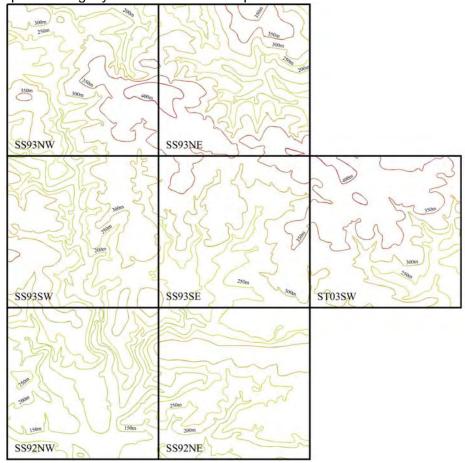


Figure 4 - Brendon Hills topography

North of the Brendon Hills ridge, the topography is more severe, the land dropping away steeply and being incised by several tributary streams of the Washford and Aville rivers. Further north the land once again rises sharply to form the Croydon and Monkham Hills, before falling downwards to the coast which lies 5.5 km to the north-east.

Soils

(Source: Soil Survey of England and Wales 1983).

The soils of Exmoor National Park are almost everywhere deficient in lime and are composed mainly of peat and mineral matter derived from the underlying rocks. The drainage is comparatively good where there is little or no peat, but the water holding capacity is very great where considerable depths of peat have accumulated. Within the Brendon Hills project area, there are a small number of soil types, generally reflecting the underlying geology and following the east-west strike of the beds. These soils have been recorded by the Soil Survey of England and Wales (1983) as being podzols, gley and stagnogleys as well as typical brown earths.

Typical brown earths are by far the most common, covering most of the undulating terrain, bar the steepest valleys and highest summits. These are mainly soils of the DENBIGH 1 ASSOCIATION (type 541j), which are well drained fine loamy and silty soils over rock, with some bare rock. At the northern end of the project area is a small area of MILFORD ASSOCIATION brown earths (type 541a).

Podzolic soils, which usually contain a pedogenic accumulation of iron or aluminium, are the result of acid weathering and are common in upland areas. On the upper slopes and summit of the main Brendon Hills ridge and the steeper slope and bottoms of the Barle, Exe and Haddeo rivers, lie the typical brown podzolic soils of the MANOD ASSOCIATION (type 611c). These soils are common across much of Exmoor and are well drained, fine loamy or silty soils which can be very shallow in places with bare rock locally. More extreme forms of podzolic soils can be found on the summit of Lype Hill, across the steep slopes of Haddon Hill and the moorland and plantations of Withycombe and Rodhuish commons and Croydon Hill. These are the ferric podzols of the LARKBARROW ASSOCIATION (type 633). They are acid loamy upland soils, typically forming over red sandstone and contain a subsurface horizon of enriched humus, normally overlain by a bleached horizon.

On the southern edge of the survey area, around Brushford and Morebath, are several areas of WINDSOR ASSOCIATION (type 712c) soils. These pelo-stagnogley soils are slowly permeable, seasonally waterlogged clayey soils and have a widespread linear distribution, running from Kittisford to Barnstaple, coinciding with the edge of the underlying Carboniferous Culm Measures.

Gley soils affected by ground water are restricted to two small areas in the south of the survey area. The typical cambic gley soils of the YEOLLANDPARK ASSOCIATION (type 831a) lie between Wimbleball Lake and the hamlet of Upton and typical alluvial gley soils [CONWAY ASSOCIATION (type 811b)] are restricted to the floodplain of the River Barle between Dulverton and Brushford.

Vegetation and land use

(Sources: Coleman-Cooke 1970, Atkinson 1997).

In the centre of the National Park lies the ancient Royal Forest of Exmoor - forest in this sense meaning a royal game reserve. There is no evidence to show that the high moor has ever carried trees in historic times, but the lower combes have always been wooded. Broadly speaking the open country of Exmoor is divided between heather moor and grass moor, the former being common over the sandstones and the latter over the slates. On the very summits of the Brendon Hills the moorland is still open, but there is less of it than the main part of Exmoor due to more intensive farming and pasture improvement. The valleys carry thicker woods and much open moorland has been reclaimed for modern forestry. Within the project area, open moorland is now restricted to Withycombe and Rodhuish Commons and Haddon Hill. Smaller areas of enclosed scrub and rough grassland are present but mainly restricted to the valleys of small rivers and streams.

Although there is no evidence that the area covered by the Royal Forest of Exmoor has supported an appreciable amount of timber in historic times, the numerous manors that surrounded it (now included in the National Park) nearly all possessed some woodland in Domesday times. Today most of the combes are well wooded in their lower parts, the tree line being usually about 1000ft above sea level. These oak-woods probably occupy the sites of primeval oak woods near the streams, but most of them have been replanted and extended. The valleys of the River Exe and Haddeo are well wooded and of the same seminatural character, but there has also been much ornamental planting in the nineteenth century. Beech, oak and ash are the commonest trees whilst variety is provided by sycamore, silver birch and sweet chestnut, conifers, hazel, alder and willow by the river There was extensive felling in both world wars but there has been extensive replanting in recent years.

During the last eighty years the Brendon Hills have been completely transformed by the planting of state forests. The Forestry Commission first acquired land in the neighbourhood of Luxborough soon after the First World War and planting began in 1921. By 1970 the Brendon Forest had grown to 3,825 acres (1,528 ha) on Croydon Hill and the main Brendon range. Among the species planted are Scots pine, Corsican pine, European and Japanese larch, Douglas fir, Norway spruce, Sitka spruce and Western hemlock.

The survey area is almost entirely agricultural land, mainly improved pasture, with only a tiny percentage of the total land occupied by settlement. Settlement within the survey area consists mainly of isolated farmsteads and a small number of villages and hamlets which are mostly concentrated in the river valleys. The valleys of the rivers Tone and Haddeo have been flooded in recent years and now hold large reservoirs; the Clatworthy Reservoir and Wimbleball Lake.

BACKGROUND TO THE ARCHAEOLOGY

NMR Record

At the start of this project the NMR listed 187 individual monuments for the entire survey area, which included archaeological sites, buildings and find spots. Of these 187 records, sixty-nine were only skeleton records; fifty-nine signposting the Somerset SMR and eight signposting the National Buildings Record.

Prior to recording the results of the BHMP in MONARCH, the NMR records for the area of the project within Somerset underwent a comprehensive update and revision using data from the Somerset SMR. This was carried out by Louise King of the NMR Inventory section.

SMR Records

SMR information was supplied by both the Devon and Somerset SMRs. In the case of Devon, which covered less than 10% of the project area, this data was restricted to a basic site listing. The majority of the project area lay in Somerset and copies of the record maps and full print-outs were supplied by the SMR via the Exeter field office.

Aerial Photography

Archaeological Aerial Survey

Very little aerial reconnaissance, specifically undertaken for archaeological purposes, has been undertaken over the Brendon Hills. During the course of the project, only 134 specialist oblique photographs were identified for the area; the majority (107 prints) are held by NMR Air Photographs and the remainder (27) by the Cambridge University Committee for Aerial Photography (CUCAP).

A small number of archaeological sorties have been undertaken by Devon County Council (DAP) between 1986 and 1992. Copies of the photographs resulting from these flights are held in the NMR.

Non-archaeological Aerial Survey

The earliest photographs of the area are part of the Crawford Collection taken in 1930. These prints, which only cover the central portion of the project area, were taken at a high level and are therefore of very small scale (as much as 1:20,000).

Photographic reconnaissance flights were undertaken over the Brendon Hills by the RAF from 1946 onwards. The Ordnance Survey flew the area from 1967 onwards and their photographs up to 1973 (all held by NMR Air Photographs) were examined during the project. Meridian Air Maps undertook commercial surveys of the area between 1968 and 1977 and again all these photographs are held in the NMR.

Somerset County Council holds vertical cover of the whole county from 1971 (Hunting

Surveys, 1:10,000, black and white), 1981 (Cartographic Services, 1:10,000, black and white) and 1992 (Geonex, 1:25,000 with 1:10,000 enlargements of alternate frames, colour). Devon County Council also holds vertical cover taken in 1992 (Geonex, 1:25,000). As only a very small part of the project area lies in Devon and most of this is covered by overlaps in the Somerset cover, only those photographs held by the Somerset County Council were examined during the project.

The Exmoor National Park Authority have commissioned seven sorties of vertical photographs, dating from 1981. These photographs are high quality colour and false colour images in the main taken at 1:10,000 scale. All were examined at the National Park Authority Headquarters in Dulverton.

Other Archaeological Work

1:10,000 transcriptions were undertaken for the Brendon Hills area by Richard McDonnell in the early 1980s for the Committee for Rescue Archaeology in Avon, Gloucestershire and Somerset (CRAAGS). Copies of these transcriptions were referred to during the mapping. McDonnell chiefly used RAF 1940s vertical cover and possibly some early OS 1970s verticals.

RCHME Field Section has carried out one detailed survey in the area. This was at Pixton Park where a field system and ornamental ponds were recorded. This work was carried out as part of the Pixton Park Historic Landscape Project, co-ordinated by the Exmoor National Park Authority.

RESULTS

Monarch (NMR) record Summary

As a result of the project, the following numbers of NMR records were created and updated for each sheet:

Quarter Sheet	Records Amended	Records created
SS92NW	5	50
SS92NE	11	58
SS93SW	17	70
SS93SE	16	69
SS93NW	36	61
SS93NE	36	33
ST03SW	27	45
ST03NW		1
	(0	luring the recording of ST03SW)
TOTAL for projec	t 148	387

Of those 148 NMR records which were amended during the project, 14 were not included on the transcriptions, either because they were not visible on the available photographs, or because they were not considered to be of archaeological significance.

SMR record Summary

SMR information had been input into MONARCH prior to the project commencing. All of the sites transcribed during the BHMP which had not previously been recorded in MONARCH, were therefore also new to the SMR. In addition, 13 pre-existing MONARCH records had not been recorded in the SMR.

As a result of the project 399 sites were transcribed which had not previously been recorded in the SMR. This equates to 77% of the sites transcribed and is the equivalent of roughly 2 new sites per square kilometre.

Period Summaries

The vast majority of sites recorded during the BHMP were Medieval or later in date. For most quarter sheets, these periods accounted for over 90% of the sites and were primarily related to post medieval agricultural and industrial activity. There was very little evidence for prehistoric activity although many of the sites recorded as uncertain may be of prehistoric origin. The following table shows the break down of those sites transcribed and recorded in MONARCH according to their assigned period.

Period S	SS92NW	SS92NE	SS93SW	SS93SE	SS93NW	SS93NE	ST03SW/NW	Average
Modern		5.8%			1.1%	-,-	1.6%	1.3%
Post Medieval	60.7%	78.3%	82.6%	51.7%	68.8%	59.4%	71.8%	67.8%
Medieval	1.8%	2.9%		4.7%	1.1%		6.3%	1.8%
Post Med/Med	30.4%	10.1%	12.0%	35.3%	20.4%	1.4%	1.6%	16.3%
Roman		1.4%					-,-	0.2%
Iron Age	3.6%			-,-	1.1%	2.9%	-,-	0.9%
Bronze Age		-,-	1.1%		1.1%	10.1%	9.4%	2.8%
Uncertain	3.6%	1.4	4.3%	8.2%	6.4%	26.1%	9.4%	8.7%

The following tables show the break down of site types encountered by assigned period. [Note: all of the following tables simplify the indexing used in the NMR records. Most NMR records list more than one thesaurus type in the indexing, e.g.: water meadow, leat, drainage system; or ironstone mine, bell pit, shaft. In cases such as these, the `main' or `group' interpretation is listed, which, in the case of the examples listed above would be: water meadow and ironstone mine.]

Period	Site Type	Number
Modern	Battery Enclosure Military Camp Military Training Camp Plantation Searchlight Battery	1 1 2 1 1
Total		7 sites (1.3%)
Post Medieval/Medieval	Boundary Deserted Settlement Enclosure Farmstead Field Boundary Field System Ironstone Pit Leat Lynchet Ridge and Furrow Shrunken Village Trackway Water Meadow	1 2 2 6 12 9 3 1 1 37 4 6 2
Total		86 sites (16.3%)

Post Medieval	Adit Boundary Building Platform Dam Deer Park Deserted Settlement Drainage Ditch Enclosure Engine House Extractive Pit Farmstead Field Boundary Field System Fish Pond Hollow Way House Ironstone Mine Ironstone Pit Leat Linhay Lime Kiln Lynchet Mineral Extraction Site Mound Pillow Mound Pond Quarry Railway Ridge and Furrow Rifle Butts Settlement	1 3 4 1 3 1 4 1 24 6 25 6 1 2 2 12 14 7 2 1 1 1 5 1 1 1 1 3 1
	Steam Ploughed Rig Trackway Tree Enclosure Ring Wall Water Meadow Spoil Tip	1 13 2 1 188 4
Total		358 sites (67.8%)
Medieval	Deserted Settlement Farmstead Field Boundary Field System Motte Ridge and furrow Settlement Stock Enclosure Trackway	1 1 1 1 1 2 1
Total		10 sites (1.8%)

Roman	Enclosure	1
Total		1 site (0.2%)
Iron Age	Enclosure Univallate Hillfort	4 1
Total		5 sites (0.9%)
Bronze Age	Bowl Barrow Round Barrow	10 5
Total		15 sites (2.8%)
Uncertain	Bank (earthwork) Curvilinear Enclosure Enclosure Ironstone Pit Ironstone Workings Mound Pit Alignment Quarry Trackway Boundary Ditch	1 5 12 1 2 2 1 2 19 1
Total		46 sites (8.7%)
Project Total		528

Thematic Summaries

The majority of sites transcribed during the BHMP were related to agriculture and subsistence although, as expected, a significant number of features relating to Post Medieval iron mining were recorded. Variations in the classes of sites encountered do vary across the quarter sheets, in the main linked to the presence or absence of mining activities in the area.

ST03SE lies in the heart of the Brendon Hills iron mining area and consequently has a large number of industrial sites, but the lowest number of sites relating to agriculture in the project area. In contrast, SS92NW, on the south-west edge of the project area lies outside the Brendon Hills mining area and consequently no industrial or transportational sites were recorded. As a result, sites relating to agriculture and subsistence dominate the record.

The following table shows the break down of those sites recorded on each quarter sheet according to their assigned class, as defined in the Thesaurus of Monument Types (EH and RCHME 1995)).

Agric/Sub 78.8% 69.6% 59.8% 58.9% 55.9% 43.5% 40.0% 57.6% Defence 5.3% 4.3% 3.1% 1.5% Domestic 1.8% 2.9% 2.2% 8.2% 5.4% 3.1% 4.0% Gardens/Parks 1.8% 4.3% 0.8% Industrial 7.2% 21.7% 15.3% 22.6% 17.4% 20.0% 15.6% Religious/Ritual 1.1% 1.1% 9.2% 2.8% Transport 7.6% 7.1% 5.4% 17.4% 20.0% 7.9% Unassigned 10.7% 7.2% 5.4% 8.2% 8.6% 11.6% 1.5% 7.5% Water/Drainage 1.8% 4.4% 2.2% 2.4% 2.2% 3.1% 2.3% Agriculture and Subsistence Field Boundary
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Field Boundary 38 Field System 16 Farmstead 13 Fish Pond 1 Lynchet 2 Linhay 2 Pillow Mound 1 Ridge and Furrow 41 Stock Enclosure 1 Steam Ploughed Rig 1 Water Meadow 188
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Ridge and Furrow 41 Stock Enclosure 1 Steam Ploughed Rig 1 Water Meadow 188
Stock Enclosure 1 Steam Ploughed Rig 1 Water Meadow 188
Steam Ploughed Rig 1 Water Meadow 188
Water Meadow 188
Total 306 sites (57.6%)
Defence
Battery 1
Military Camp 2
Military Training Camp 1
Motte 1
Rifle Butts 1
Searchlight Battery 1
Univallate Hillfort 1
Total 8 sites (1.5%)
RCHME THE BRENDON HILLS MAPPING PROJECT 17

Domestic			
	Building Platform	4	
	Deserted Settlement	6	
	House	2	
	Motte	1	
	Settlement	3	
	Shrunken Village	4	
	Univallate Hillfort	1	
	Total	21 sites (4.0%)	
Gardens Parks and Urban Spaces			
Cardens raiks and orban opaces	Deer Park	1	
	Plantation	1	
	Tree Enclosure Ring	2	
	Total	4 sites (0.8%)	
Industrial			
	Adit	1	
	Engine House	1	
	Extractive Pit	24	
	Ironstone Mine	12	
	Ironstone Pit	18	
	Ironstone Workings	2	
	Lime Kiln	1	
	Mineral Extraction Site	5	
	Quarry	15 4	
	Spoil Tip	4	
	Total	83 sites (15.6%)	
Religious Ritual and Funerary			
	Bowl Barrow	10	
	Round Barrow	5	
	Total		15
sites (2.8%)			
Transport			
	Hollow Way	2	
	Railway	1	
	Trackway	39	
	Total	42 citos (7.00/)	
	Total	42 sites (7.9%)	
Unassigned			
-	Bank (earthwork)	1	
	Boundary	4	
	Boundary Ditch	1	
	Curvilinear Enclosure	5	
	Enclosure	24	
	Pit Alignment Wall	1	
	vvall	1	
	Total	40 sites (7.5%)	

Water Supply and Drainage

Project Total	531
Total	12 sites (2.3%)
Leat Pond	8 1
Fishpond	1
Drainage Ditch	1
Dam	1

Sites of Interest.

The sites described below were chosen to highlight specific areas of interest. Many more sites recorded during the BHNP require further archaeological investigation. (N.B. all the following sites are depicted at 1:10,000 unless otherwise noted)

Domestic features.

A large number of deserted or shrunken settlements and farmsteads of Post Medieval or Medieval date are located within The Brendon Hills project area; many of which are known from documentary sources (including early maps). Extensive remains of several of these settlements were visible on the aerial photographs. In addition a small number of previously unrecorded settlements were transcribed.

NMR No: SS92NW 78 Hob UID: 1132534

Grid Reference: SS 9298 2886

Probable deserted settlement features are visible as cropmarks and earthworks on oblique aerial photographs, 120m to the south of Barlinch Priory (NMR SS92NW 6). A square feature, 10m across may be the foundations of a ruined building and several other amorphous mounds, possibly building platforms are also visible. The features lie adjacent to a double banked feature which may be a trackway or road. Although there is no direct evidence, a connection with the Augustinian Priory cannot be ruled out.

NMR No: SS93SE 67 Hob UID: 1121039

Grid Reference: SS 9879 3321

Earthworks including a square banked enclosure and linear banks were identified on vertical air photographs to the south of Mary Magdelene's Church, Withiel Florey. These features, which had not previously been recorded, are interpreted as deserted settlement earthworks of Medieval or Post Medieval date.

NMR No: ST03SW 35 Hob UID: 1114687

Grid Reference: ST 023 345

Brendon Hills Village. The settlement of Brendon Hill was established as a result of mid 19th century iron mining, particularly at Raleighs Cross mine and its development well documented. There were no houses nearby the mines and miners lodged with local farms and nearby villages. By the 1860's, as the mines expanded their activities, sixty cottages and other buildings (including an Anglican Church, school, shop, reading room and bank) has been constructed. Only four of these buildings remain extant but most of the other terraces of cottages were visible as earthworks and plotted during the project.

NMR No: SS93NW 14 Hob UID: 1089107

Grid Reference: SS 949 350

The settlement of Higher Week is noted on the 1840 tithe map at SS 949 350. Vertical aerial photographs taken by the RAF in 1944 clearly show extensive earthworks relating to that settlement including paddocks, enclosures, trackways or drove roads and fragments of a banked field system associated with ridge and furrow. The current edition OS map depicts nothing in this area and it is therefore uncertain if any traces of these features remain on the ground.

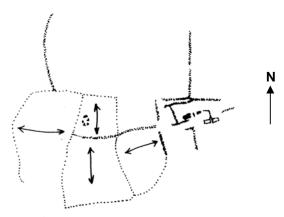
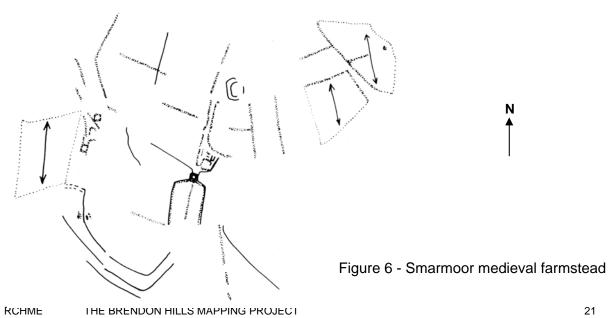


Figure 5 - Higher Week settlement

NMR Nos: SS93SE 7 and 64 Hob UIDs: 36696 and 1120973

Grid References: SS 9525 3366, SS 9554 3352, SS 9593 3369.

The position of the deserted Medieval farmstead of Smarmoor is indicated in the 1327 Lay The fragmentary remains of the farmstead were seen as well preserved earthworks on vertical air photographs at SS 9525 3366 and were plotted during the project. The vertical photographs indicated that to the east of the Smarmoor farmstead was an extensive complex of Medieval or Post Medieval earthworks relating to a second, previously unknown deserted settlement centred at SS 9554 3352. The site includes a complex of levelled buildings lying at the southern end of a double-banked trackway and to the north of a large rectangular enclosure. Remnants of a banked field system and ridge and furrow associated with both settlements were also identified during the project.



Enclosures

NMR No: SS92NE 59 Hob UID: 1133864

Grid Reference: SS 9900 2915

The remains of a rectangular enclosure were identified on air photographs at Rainsbury and were interpreted as a possible Post Medieval garden. The enclosure comprises a large central platform, 95m by 65m, surrounded by a broad ditch and slight bank. Staff of RCHME's Exeter field visit surveyed the site at 1:1000 scale. On the basis of its spur end location, and rectangular (playing card) shape, a Roman date has tentatively been suggested, perhaps a military installation.



Figure 7 - Enclosure at Rainsbury

The prehistoric enclosures illustrated below had been recorded prior to the BHMP and were thought likely to be Iron Age in date.



Figure 8 - Prehistoric enclosures

Around twenty superficially similar enclosures lie within the project area. These were not previously recorded and are visible as cropmarks on a single year's photographs. All have been given an uncertain date, but all may be of prehistoric origin.

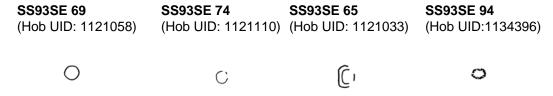


Figure 9 - Possible prehistoric enclosures

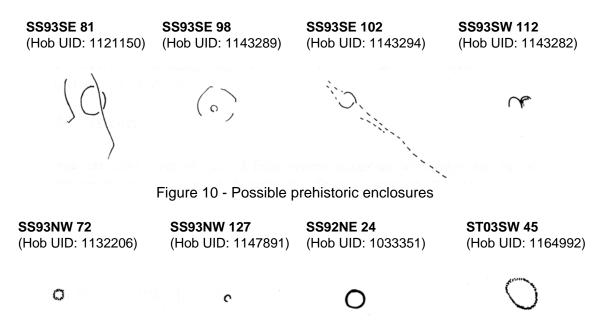


Figure 11 - Possible prehistoric enclosures

Several small curvilinear enclosures are partially preserved in the modern hedge lines which are similar in size and shape to those illustrated above. Some clearly enclosed Post Medieval farmsteads but there is no reason why some may not have earlier origins.

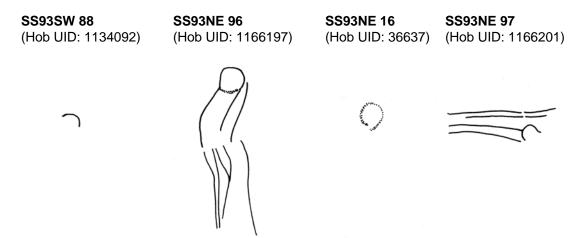


Figure 12 - Small curvilinear enclosures preserved in hedge lines

Trackways

Extensive systems of trackways are clearly visible on vertical aerial photographs, particularly in the immediate are of the Brendon Hills Ridge and Lype Hill. Some of these probably relate to the Post Medieval iron mining activities in the area, but many clearly predate the modern field boundaries and could be of much earlier origin. A series of trackways are visible running along the Brendon Hill for 2 km in a NW-SE direction (NMR No: ST03sw 28, Hob UID: 975393). On Lype Hill an extensive series of crossing, braided trackways lie close association with some open cast iron workings. These extractive pits are undated but thought likely to predate the 19th century industrial phase and may be contemporary with or post-date the trackways, (NMR No: SS92NW 122, Hob UID 1132552).

Field Systems

Several extensive areas of banked field system associated with ridge and furrow are clearly visible on vertical aerial photographs. These are probably Post Medieval in date, the ridge and furrow being generally very narrow and therefore possibly steam ploughed. These field systems are similar in character to those found on parts of Exmoor proper, for example on Molland Common (NMR No: SS82NW 14, Hob UID: 604906).

SS93SW 97 (Hob UID: 1134101)

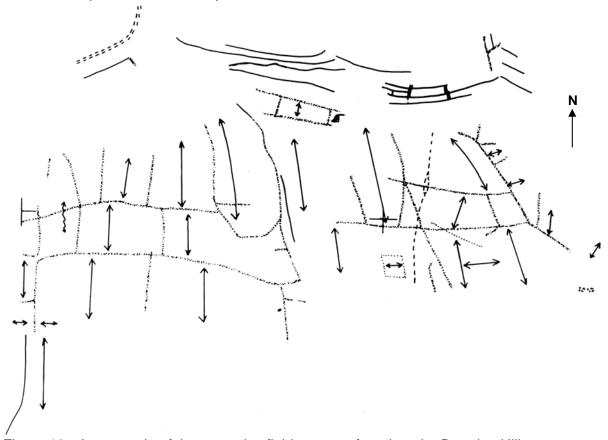


Figure 13 - An example of the extensive field systems found on the Brendon Hills

ACKNOWLEDGEMENTS

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APPENDICES

Appendix 1 - Mapping conventions used for the Brendon Hills mapping project

i) ditches; extant or plough-levelled. Variable line thickness



ii) leat, mill race. Arrow indicating direction of flow if known. Variable line thickness. (Larger artificial water courses to be shown as ditches)



iii) stone and/or earth banks/mounds; extant or plough-levelled. Heavy stipple. Applies also to lynchets, other artificial slopes and wall foundations (not buildings: see iv)



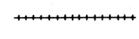
iv) buildings. Only unroofed or visibly disused buildings should be depicted as a solid line. The outline of castles and abbeys etc should be shown when in association with earthworks and crop marks



v) hollow-ways and unsurfaced trackways not defined by other depicted features. 1 mm dashes. Single line per track when braided



vi) railway/tramway. 2 mm spacing for cross lines. This convention should be used even if the only visible remains are embankments/cuttings



vii) compacted or made stone .surfaces/spreads. Medium stipple. (eg paved area, surfaced road, dressing floor)



viii) area features (small). (eg storage pits, grubenhauser, clearance cairns, standing stones) Drawn solid as seen (pit alignments can be stylised). Extant negative features should be drawn with (T' hachures if possible (see ix)



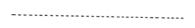
ix) negative features (large) extant or backfilled. 0.5 mm (T'. (eg quarries, fish ponds). Depict as solid if too small to hachure (see viii)



x) spoil/waste dumps. 1 mm dashes at 0.5 mm spacing enclosing light stipple. (eg mining spoil heaps, saltern mounds) Applies to extant and levelled features. On large features a 3 mm band of light stipple within the dashes will suffice



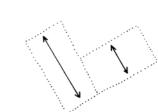
xi) extent of feature. 1 mm dashes at 0.5 mm spacing. A (hard' boundary marking the outline of a feature (eg used to outline runways of a disused airfield). Only use this when other conventions are inappropriate



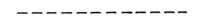
xii) pits or shafts. Including bell pits defined by a (doughnut' of spoil



xiii) ridge and furrow. Units are defined by dots (1 mm spacing) if not bounded by headlands, banks or ditches or any other feature which has a specific convention. Double arrow to show shape and direction of rig



xiv) extent of area. 3 mm dashes at 1 mm spacing. Use .25 pen. A (soft' boundary marking the perceived limit of an activity (eq lead mining area)



xv) water meadows. Units are defined by the extent of feature (1 mm dashes at 0.5 mm spacing) if not bounded by banks, ditches or any other feature with a specific convention. Within each area the main drains are depicted as ditches together with a sufficient number of subsidiary drains to give an impression of the form.



xvi) small gun emplacement/firing point. This is a symbol used to denote those features too small to draw accurately at scale. Where numbers are small each individual feature is represented; where large, only the overall patterns and distributions.

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