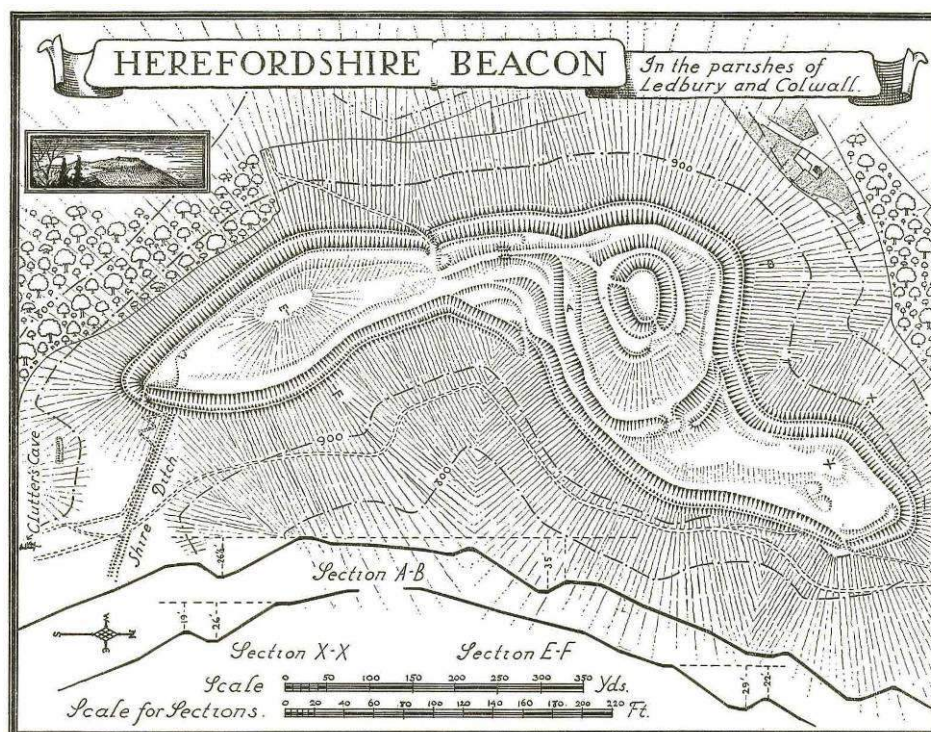


# A Conservation Management Plan for Herefordshire Beacon ('British Camp'), Colwall, Herefordshire



Prepared by Peter Dorling, Senior Projects Archaeologist  
Herefordshire Archaeology,  
Herefordshire Council

## Final Version

Contact: Peter Dorling  
Senior Project Archaeologist  
Herefordshire Archaeology  
Planning Services  
PO Box 230  
Hereford HR1 2ZB  
Tel. 01432 383238

Email: [pdorling@herefordshire.co.uk](mailto:pdorling@herefordshire.co.uk)



# Contents

<b>Introduction</b>	<b>1</b>
<b>Part 1: Characterising the Asset</b>	
1.1 Background Information	3
1.2 Environmental Information	4
1.2.1 Physical	
Location and Access	4
Topography	4
Geology and Soils	4
1.2.2 Cultural, Historical and Archaeological	
Description of features / asset	5
Previous recording and study	12
National Character Area Description	15
1.2.3 Biological	
Flora	16
Fauna	17
1.2.4 Recreational use of the site	18
1.2.5 Past management for conservation	19
<b>Part 2: Understanding and evaluating the asset</b>	
2.1 Current Understanding	
2.1.1 Historical / Archaeological	20
2.2 Gaps in knowledge	
2.2.1 Historical / Archaeological	28
2.2.2 Biological	29
2.2.3 Recreation	29
2.3 Statement of significance	
2.3.1 Historical / Archaeological	30
2.3.2 Biological	31
2.3.3 Recreation	32

## 2.4 Statement of potential for the gaining of new knowledge

2.4.1 Historical / Archaeological	33
2.4.2 Biological	34
2.4.3 Recreation	34

## **Part 3: Identifying management objectives and issues**

3.1 Site condition, management issues and objectives	
3.1.1 Historical / Archaeological	35
3.1.2 Biological	38
3.1.3 Recreation	39
3.2 Aims and ambitions of key partners	41
3.3 Long Term Objectives	42
3.4 Constraints upon management	42

## **Part 4: Proposed management actions (Action Plan)**

4.1 Outline prescriptions and project groups	45
4.2 Project register	49
Annotated management recommendations map	53

Bibliography/references	54
-------------------------	----

## **Appendices**

Malvern Hills SSSI Citation	56
-----------------------------	----

Monument Name	Herefordshire Beacon/British Camp, Herefordshire
SM Number	H3
HSM Number	932
Owner	Malvern Hills Conservators
Visits	7 <sup>th</sup> January, 18 <sup>th</sup> March, 12 <sup>th</sup> September 2013
Prepared by	Peter Dorling, Herefordshire Archaeology (with a contribution by Keith Ray)
Field Number	
Date of Man Plan	14 <sup>th</sup> October 2013
Version	1.2
Status	Final Version
Circulation	Dr. Keith Ray, Herefordshire Archaeology Katey Stephen, Natural England Jonathan Bills, Malvern Hills Conservators Bill Klemperer, English Heritage Sarah Baker, Malvern Hills AONB
Approval	Dr. Keith Ray, Herefordshire Council

## Introduction

Herefordshire Beacon is one of the best-preserved, most complex and most visually striking Iron Age hillforts in Herefordshire (figure 2). This nationally-important prehistoric (and later) site is protected as a Scheduled Monument, lies within the wider Malvern Hills Site of Special Scientific Interest (SSSI) and is famous also for a number of literary and musical associations. Located on the ridge of the Malvern Hills the site is prominent in the landscape, and is a well-known and popular site for recreation. The management of the site involves a range of interconnecting interests and issues. In particular, the factors of extensive, good quality, survival of archaeological features and deposits, significant ecological interests, recreational uses, and complex land management objectives present a suite of challenges.

As part of a Higher Level Stewardship (HLS) Agreement under Natural England's Environmental Stewardship Scheme, and in fulfilment of one of the Action Points in the Malvern Hills Area of Outstanding Natural Beauty Strategic Plan, 2010-15, this Conservation Management Plan has been prepared to guide future management of Herefordshire Beacon/British Camp. This is one of two Iron Age hillforts surmounting the prominent central spinal ridge of the Malvern Hills, and the second such hillfort, at Midsummer Hill, Eastnor, is the subject of a separate, parallel, Plan.

A Project Design was prepared in November 2012 that specified how each plan was to be prepared, and it was following the acceptance of the tender accompanying this design, that the present preparation of the Plan for Herefordshire Beacon was initiated. Following the assembly of relevant data and the drafting of sections 2 to 7 of the Plan, a half day visit was made to the site to briefly assess the monument, to record its current condition, and to note management risks to the monument.

The structure of the current draft Plan comprises four principal Parts. The first is devoted to characterising the monument, and this provides background and environmental information (including descriptions of physical, cultural – including historical and archaeological – and natural historical/biological attributes), together with information on current recreational uses and past management for conservation. The primary cultural assets comprise the hillfort, the Shire Ditch and the medieval ringwork. The second Part details understanding of the monument and includes an evaluation of the heritage assets. A first major section details (for cultural, biological and recreational assets) current understanding, and a further section identifies gaps in knowledge. There is then, for each dimension, a statement of significance and a statement of potential for the gaining of new knowledge.

The third Part is devoted to the identification of management objectives issues, and includes a summary of site condition and identification of constraints upon achievement of management improvement and objectives. Risks identified include the impact of visitor foot-fall, and of scrub encroachment, that have been identified previously. The fourth Part outlines proposed management actions and these are set out simply and in summary form in an Action Plan. A non-technical summary and a list of bibliographic references conclude the Plan.



## Herefordshire Beacon, Colwall, Conservation Management Plan

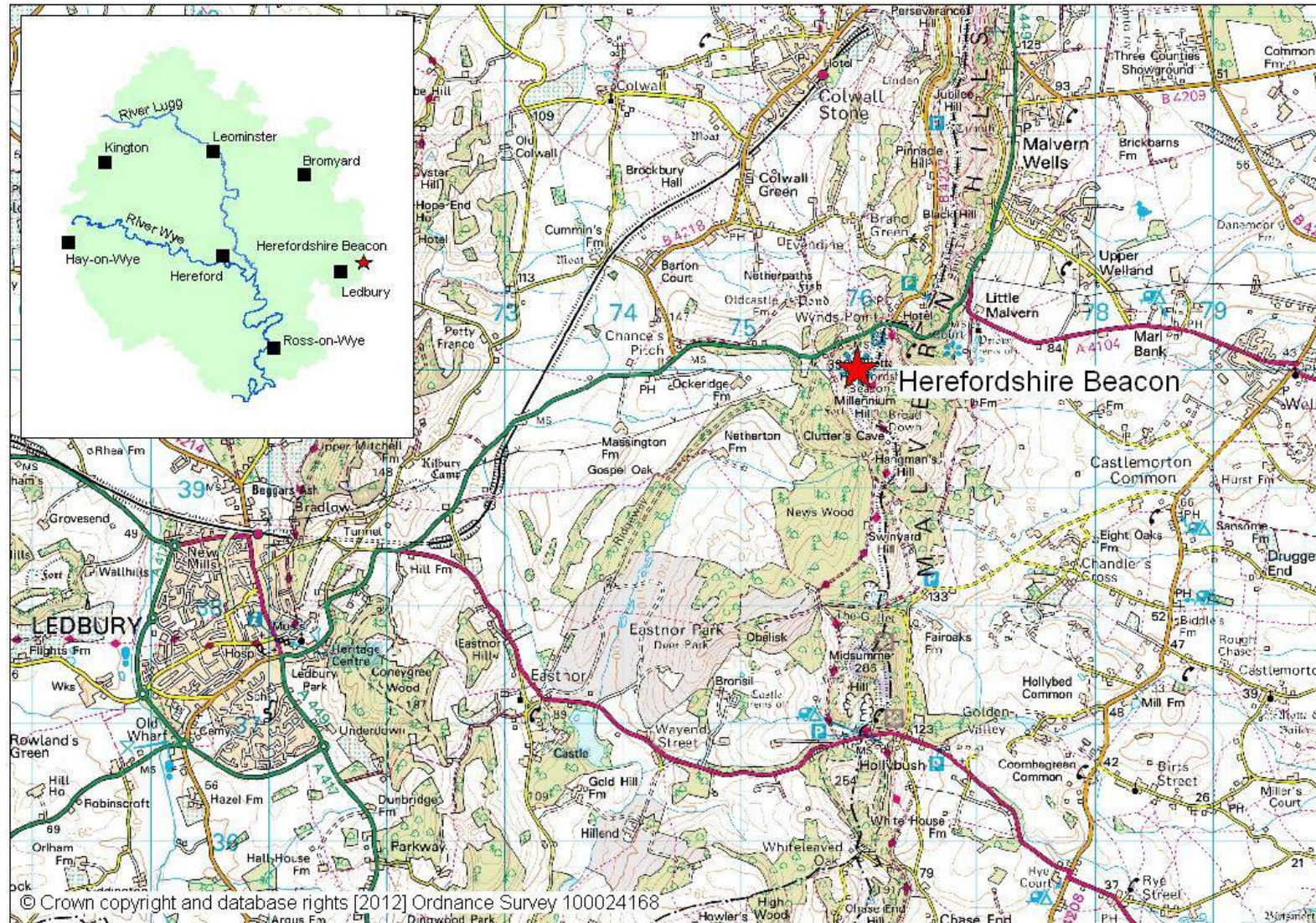


Figure 1: Location

## Part 1: Characterising the Asset

This Part of the Plan is designed to provide a descriptive and non-evaluative account of the assets, historical/archaeological, natural environmental and cultural/recreational present at the site. The data provided herein are therefore as far as possible therefore factual, and discussion of interpretation/understanding is reserved to the following Part.

### 1.1 Background Information

<b>Site Name</b>	Herefordshire Beacon (British Camp)
<b>Grid Reference</b>	Centre SO 760 399
<b>HER No</b>	932
<b>Parish</b>	Colwall
<b>Site Status</b>	Scheduled Ancient Monument Herefordshire 3, National Ref 1003814 SSSI Malvern Hills Registered Common (Name) Area of Outstanding Natural Beauty (Malvern Hills)
<b>Area</b>	19.3 Hectares (scheduled area)
<b>Altitude</b>	265m – 338m OD
<b>Owner</b>	Malvern Hills Conservators
<b>Occupier</b>	Registered Commoners x 115
<b>Commoners Rights</b>	See page 00
<b>Legal Rights of Access</b>	Open Access Land (CRoW)
<b>Key Partners and Consultees</b>	Malvern Hills Conservators Malvern Hills AONB Partnership English Heritage Natural England Southern Hills Grazier Herefordshire Archaeology

## **1.2 Environmental Information**

### **1.2.1 Physical**

#### *Location and access*

Herefordshire Beacon occupies part of the main ridge of the Malvern Hills, which is itself a high range of hills spanning 8 miles (12.5 km) on a north-south orientation, and bordering the Severn Valley plain to its east, and the vale that lies between Ledbury and the Malverns to its west (figure 1). Much of the crest of the ridge lies within Colwall civil parish in Herefordshire, but many of (especially lower) east-facing slopes lie within the parish of Little Malvern in Worcestershire.

Whilst there are no designated rights of way over the hillfort itself the whole of the site is Open Access Land designated under the Malvern Hills Acts 1884 – 1995. Access on horseback is also allowed by tradition on the open common land although guidance discourages riding on the hillfort itself. Cycling is only legally allowed on bridle paths and is prohibited by bye laws elsewhere. A bridleway runs from the car park and skirts the eastern side of the monument.

#### *Topography*

Herefordshire Beacon as a natural topographical feature comprises a prominent ridge of high ground that marks the local summit (at 338m OD) of an otherwise continuous hill-top ridge that links northwards to the highest peaks of the Malvern Hills upland, towards the Worcestershire Beacon and North Hill (425 and 397m OD, respectively) west of Malvern. Southwards the ridge extends, with deep ravines lowering its height at intervals, on towards Midsummer Hill (summit c.265m OD). Southwards from the 'Herefordshire Beacon' hill-top there is a point where a substantial spur extends eastwards from the main ridge, and this spur (and the main ridge at this point) is known as Broad Down. The spur itself, which occupies a lower elevation than most of the main ridge, lies within Little Malvern parish and extends eastwards down towards the Severn Valley plain.

#### *Geology and Soils*

The geology of the Malvern Hills is some of the oldest in the country and is mostly igneous and metamorphic in origin. The rocks underlying Herefordshire Beacon are an igneous quartz diorite which is one of the most widespread rocks in the Malvern Hills. This gives rise to typical brown podzolic soils. These are acid soils with black, dark brown or ochreous layer enriched in iron and humus. They are generally permeable and well drained with bright ochreous subsoil (Soil Survey of England and Wales 1986).



### 1.2.2 Cultural, Historical and Archaeological features

#### *Description of features / asset*

Herefordshire Beacon as a site of archaeological interest comprises three main components:

- ‘Herefordshire Beacon / British Camp’, a complex Iron Age (c.700BC – AD50) ‘hillfort’ with possible antecedents in the Bronze Age (c.2500BC – c.700BC);
- The Shire Ditch, a medieval boundary bank running along the Malvern Hills ridge and (as an earthwork) extending up to and (possibly) along the hillfort defences on their eastern side (the Shire Ditch also has possible prehistoric antecedents); and
- The Herefordshire Beacon ringwork, a likely late Norman and high medieval earthwork castle (c.AD1100-1400) built within and partially reconfiguring the prehistoric earthworks on the highest part of the ridge.

Each of these elements is described separately below.



#### *Herefordshire Beacon*

This hillfort comprises an at first sight bewildering complex of earthworks rising in serried ranks of (chiefly) ramparts and ditches (figure 3) following a ‘serpentine’ course along the contours on all sides of the ridge-top (Bowden, 2005, 19). The earthworks are roughly (but not entirely) concentric and represent an evidently complex build-sequence (see 2.1.1, below). They are most economically described from the outside, inwards towards the summit; but the inter-relation of the earthworks needs to be borne in mind, since each set of earthworks represents a modification from an inherited pattern.

*Figure 2: Aerial view of the site from the north.*

The first set of earthworks that are encountered when approaching the site on foot are those of the main 'counterscarp' bank, located on the outer lip of the main encircling ditch. The outer ditch scarp (the counterscarp) and the inner edge of the earthen bank surmounting the counterscarp form a seamless slope. The outer face of the counterscarp bank is also smoothed into the slope outwith the enclosure, such that the extent (built height) of the counterscarp bank is mostly undetectable from surface inspection (the one exception being along a 25m long stretch that begins some 60m north of the west-facing entrance). Although there are intermittent slight indications of a narrow berm or break of slope beyond the counterscarp bank along the same 75m length, there are no traces of an outer ditch.



*Figure 3: Northern summit of the Herefordshire Beacon ridge, looking north from the bank around the southern summit. Note the at first sight confusing array of ramparts.*

The depth of the ditch below the height of the counterscarp/counterscarp bank varies considerably, from around 1.5m to over 3m. The principal scarp up from ditch base to inner bank level also varies enormously, from around 4m to as much as 11.6m (Bowden, 2005, 20), and it is this slope, with the counterscarp in front of it, that creates a strong visual impact over the entire 1km length of the fort from north to south (enclosed length c820m; Bowden, 2000, 13). The area encircled within these ramparts is around 13.5ha (Bowden, 2005, 20).



*Figure 4: The northern circuit of hillfort earthworks from beneath the ringwork, looking north towards the Worcestershire Beacon. Note especially the slight inner bank above the upper scarp, the deep ditch, and the counterscarp bank beyond this.*

In contrast, the bank surmounting this massive scarp is uniformly slight, where it is traceable at all (figure 4). For most of its course it is barely detectable and at most it stands to a height of 0.5m, except where, for very short stretches, it is heightened above original entrances through the bank. There is a marked absence of quarry scoops or ditches on the inside of the bank, although scarping of the hillside rising behind the bank along much of its course could be the source of material that has in-filled such quarries; or they could have been filled with occupation debris either dumped into these scoops or quarry ditches, or arising out of successive construction of occupation structures, as demonstrated by excavation at such sites as Croft Ambrey in the north of the county.

There are four apparent original entrances through this outer enclosure. Those at the extreme northern and southern ends are damaged by modern access paths or tracks, but each appears to face east, just to the east of the furthestmost angle of the ramparts. A third, the east entrance, is approached from the east by a track leading up the northern side of the combe between the main ridge and Broad Down.





The seemingly best-preserved entrance, on the western side, lies across the narrowest part of the ridge obliquely opposite (and southwards from) this eastern entrance (figures 5A and 5B). A track-way on a broad terrace cut into the hillside approaches this entrance from the south/south-west. Flanking earthworks mark its passage through and over the counterscarp bank, and isolate the entrance way from the ditch on either side. The inner bank on either side of the entrance is built up to as much as 1.0m in height and turns inwards slightly to mark the presumed position of a gateway.



*Figures 5A and 5B: The western entrance from the north-east and south-east respectively.*

Where no further circuits (or part-circuits) of ditch exist, in the southern loop of ramparts encircling the southern knoll of this part of the ridge (now known as 'Millennium Hill'), as well as in the northern loop encircling the northern spur, the interior is occupied over much of its area with artificially-levelled circular platforms or sub-rectangular terraces (figure 6). These exist in small numbers upon interior west-facing slopes (west of the spinal ridge) in the northern loop, and also to the north of the western entrance. However, they are concentrated in the lee of the prevailing (westerly) wind to the east of the spinal ridge in both the northern and the southern loops, and along the eastern flank of the main summit of the ridge.



*Figure 6: Iron Age building stances and terraces on the north-east facing flank of the ridge within the northern loop of defences overlooking Wynds Gap.*

Most of these latter earthworks lie within a principal inner circuit of bank, ditch and counterscarp bank that has been lost on the northern and western flanks of the summit due to the construction of the outer ramparts. The mass of these earthworks survives best to the northeast between the summit and the northern loop of outer ramparts on the northern spur of the ridge. However, their interpretation is, in the view of the author of this Plan, made more complicated by the likelihood that they were subject to some re-working when the medieval ring-work was built, or remodelled. This is particularly true of the alleged surviving northern entrance into this circuit of ramparts (figure 7), which has unusual out-turned flanking banks and an extremely steep entrance-way (This question is returned to in sections 2.1 and 2.2 of the Plan, below).





*Figure 7: The claimed entrance through the 'Phase I' ramparts. Field inspection for the current Plan has led to the suggestion that these earthworks in their current configuration may represent instead a reworking or "new" creation of an entrance here. This would have provided access into an outer enclosure of the ring-work, itself involving reuse of the "primary" Iron Age hillfort ramparts.*

The final component to be discussed here is an elongated oval platform (100m in E-W extent, 80m N-S) at the summit of the hill, within which the ring-work was built. This may represent the modified remains of an original inner circuit of ramparts. If so, it is the top of the scarp and the very slight indications of a surmounting bank, that comprise the most readily-traceable elements of this enclosure.

#### *The Shire Ditch (figure 8)*

The 'ditch' is in fact a linear bank with a ditch on either side of it. It has its northern terminus at around 200m OD on the southern flank of the head of an east-facing combe that rises westwards above St Ann's Wells 0.5km to the west of Great Malvern Priory. The 'ditch' rises steeply upslope onto the summit of Worcestershire Beacon and then closely follows the ridge-line for 5.5km south to Wynds Point (240m OD).

From Wynds Point pass, a path that follows a slight linear earthwork ascends the northern spur of the Herefordshire Beacon ridge at the perpendicular. This path also follows the county boundary, so it is assumed that the earthwork here is a denuded length of the Shire Ditch (Bowden, 2000, 9). It links into the counterscarp bank of the hillfort on the eastern side of the extreme northern

end of Herefordshire Beacon. The counterscarp bank along the eastern flank of the fort then 'represents' the bank of the Shire Ditch, while the fort ditch is the actual line followed by the boundary.



*Figure 8: The Shire Ditch extending from the southern end of the hillfort onto Broad Down.*

Close to the southern end of the hillfort, about 30m north of the southern entrance, a very narrow spine of earthwork descends diagonally south-eastwards from the counterscarp bank for 25m to meet the rounded terminal of a ditch along the northern flank of the Shire Ditch bank. This earthwork rapidly descends the slope south-eastwards away from the fort to take up its double-ditched form as it moves towards and onto the west-facing summit of Broad Down.

### *The Herefordshire Beacon ringwork*

A ringwork is a variant form of an earthwork (in many cases originally earth and timber) medieval castle. Some ringworks developed into stone castles with earth and timber components. The form of the oval-shaped earthwork crowning Herefordshire Beacon is best appreciated from the air and comprises a level circular earthen platform/bank (forming the 'ring') that is higher and broader to the south and east and narrower and lower to the west and north. Its exterior comprises a steeply-angled scarp descending into a deep rock-cut ditch. The spoil from this latter appears to have been the material used to heighten the interior bank, and may have been used to create a level 'counterscarp platform', which has been interpreted (Bowden, 2000, 9-

10; Bowden, 2005, 35) as a 'micro-bailey', especially on the eastern side of the ditch.

The interior of the ringwork contains a number of hollows and mounds, some of which may result from the excavation trenches known to have been opened here. Some may be the bases of towers or (as with an east-west linear hollow along the northern scarp-edge) the position of major structures such as a hall. There appears to have been a causeway across to a gate on the southern side, but natural weathering and visitor erosion here has rendered this difficult to be sure about. It is likely that the hillfort ramparts served as the enclosing work of an outer bailey, but especially on the north-eastern flank of the ridge summit below the ringwork several earthworks may represent medieval modification of earlier features (see below).

### *Previous recording and study*

A rough and relatively inaccurate survey of the site was made by H. H. lines in 1869 (Bowden, 2000, 1). Excavations were conducted at the site by Hilton Price in 1881 mostly it would seem within the ring-work (seven trenches, the positions of five of which were marked on General Pitt-Rivers' survey plan published in 1887). Another trench appears to have been cut 'into the back of the rampart on the northern side' of the ringwork, another into the outer ditch on the western side, and through the counterscarp bank near the southernmost angle of the defences (though none of these trenches is closely located on any plan). The finds from the ringwork included medieval pottery and bone, an inscribed stone, an iron arrow-head, an iron buckle, half a horseshoe, hone stones and a spur. A small stone wall foundation was found towards the eastern side of the interior of the ring-work, and both these stones and the ground beneath them bore signs of burning (Bowden, 2000, 1). The finds from the Iron Age ramparts were inevitably more meagre and excited less interest from Hilton Price: pebbles, charcoal, a 'sling-stone' and fragments of what were described as 'red' and 'black' pottery (ibid, 2).

Other survey sketches appeared in the Archaeological Atlas of Herefordshire (Woolhope Club, 1895), and in Volume 1 of the Victoria County History of Herefordshire (1908). The first detailed survey was undertaken by surveyors of the Royal Commission on the Historical Monuments of England, and published in their second Herefordshire Volume (1932, 55-57; reproduced in figure 9 below). The report on the RCHME survey included reference to observations, for instance on the northern entrance through the main outer enclosure, that are no longer possible due to localised alterations to the earthworks since the 1930s. The published plan also included useful cross-sectional measured profiles that are helpful to an appreciation of the topography of the site.

Aerial photography of the site has been continuous since the origins of the practice, and J. K. St. Joseph not only published a photograph but noted how the outer ramparts were carefully sited at the point at which a subtle break in slope occurred, to ensure that the bank featured a near-vertical scarp which 'rises high above the ditch' (1965, 224). He also emphasised - for the first time



- the sheer number of platforms that were visible within the fort as highlighted by shadows when seen from the air under suitable conditions.

The most detailed recording of the earthworks at the site that has so far been carried out was the English Heritage survey by Bowden, Jeffery, Hind and Field in the summer of 1999 and spring of 2000 (Bowden, 2000; 2005). This recorded the ditch and rampart of the enclosing earthworks and concentric works, the entrances through both circuits, and the interior of the fort (figure 10). As many as 118 hut circles were recorded. The Shire Ditch and ring-work were also carefully described.

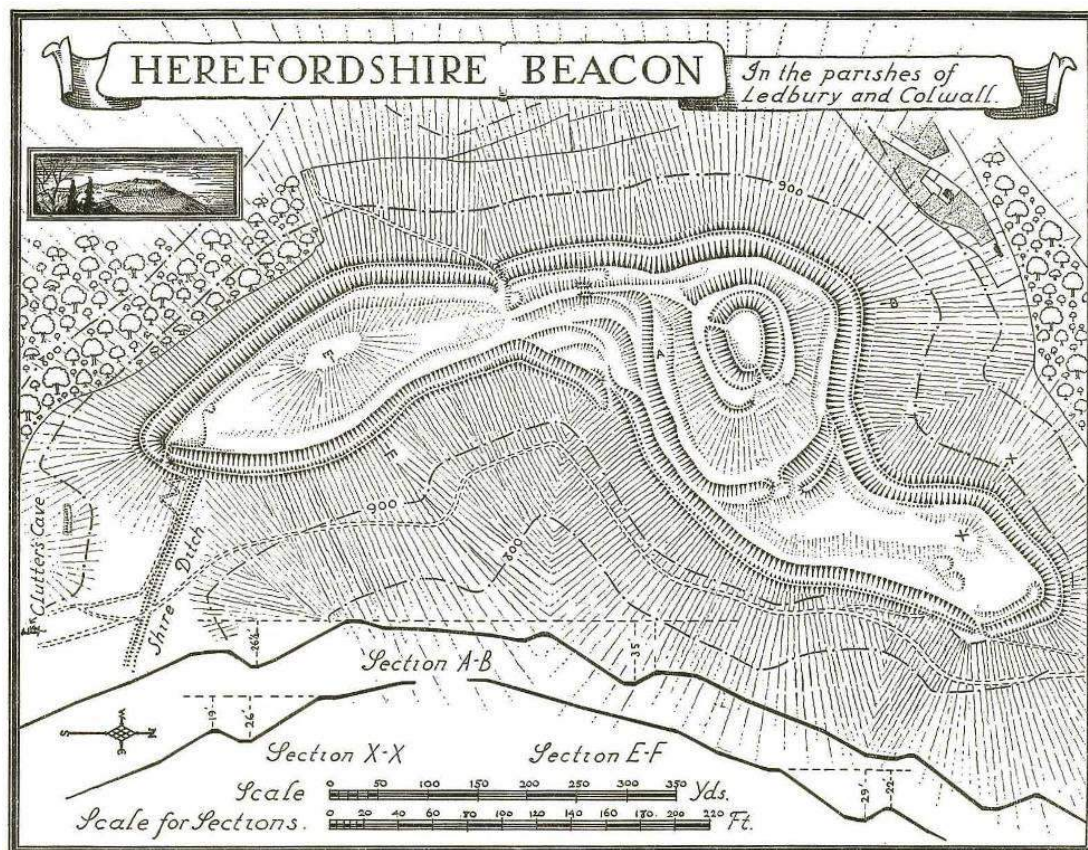


Figure 9: 1932 survey plan of the site published by the Royal Commission.

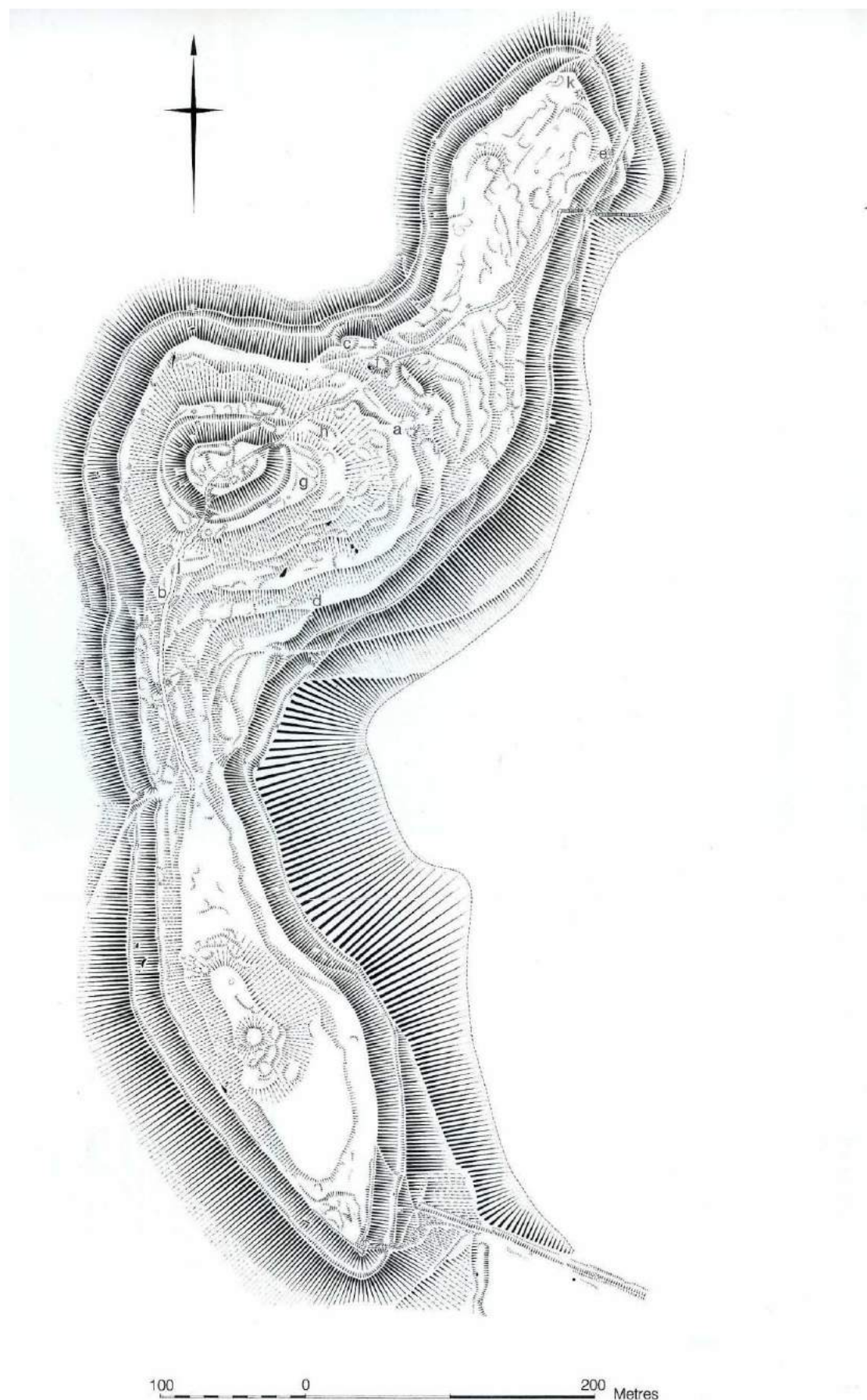


Figure 10: English Heritage measured site survey (Bowden, 2000). © English Heritage



*National Character Area summary description*

Herefordshire Beacon lies within the Malvern Hills National Character Area (NCA) this comprises a narrow ridge of rounded hills, with hill forts rising above the Severn and Avon Vales to the east. To the west these subside to the Herefordshire Lowlands, and to the north-west they subside to the Herefordshire Plateau. The area is one of great contrasts. These range from the majestic height of the hills themselves to the undulating swells and low wooded escarpments of Eastnor and the Suckley Hills, and to the jumble of rolling hills and woodlands marching away to the west. Most of the area lies within the Malvern Hills Area of Outstanding Natural Beauty (AONB).

From the early 1800s the Malvern Ridge was very popular for its pure spring waters. This led to an influx of holidaymakers and visitors, who had a great influence on settlements such as the spa town of Great Malvern where a Victorian and Edwardian character dominates. The smaller settlements of Colwall Stone and Colwall Green sit on the western side of the hills, with more modern dwellings spread between older cottages and terraced housing. The area has inspired many poets, artists and authors such as Elizabeth Barrett Browning, W H Auden and John Masefield. The hills have been the subject of the work of many painters – not least Benjamin Leader and Paul Nash – and one of the best known associations of the area is with the music of Edward Elgar. The geology of the area includes some of the oldest rocks in England, and as such the area is associated with some of the very earliest work on geology. Other key ecosystem services in this area include food and drink production (orchards), pollination, the archaeological landscape, sense of place and sense of history. Future challenges and opportunities include pressure from development, managing visitors, the expansion of woodlands where appropriate and the effects of climate change.

A full description and profile of The Malvern Hills NCA (103) can be found on the Natural England web site at

<http://publications.naturalengland.org.uk/publication/3039205?category=5871>  
30

### 1.2.3 Biological

Herefordshire Beacon is primarily afforded its high nature conservation importance as part of the Malvern Hills Site of Special Scientific Interest, rather than intrinsically. However the site does have specific ecological features of interest including botanical, small mammals, reptiles and fungi.

#### *The Malvern Hills SSSI (See appendix for full citation)*

The Malvern Hills SSSI is one of the largest areas of semi-natural vegetation in the West Midlands and supports a mosaic of habitat types and several rare animal and plant species. The tops of the Hills are covered by acid grassland with common grasses including sheep's-fescue *Festuca ovina*, common bent *Agrostis capillaris* and wavy hair-grass *Deschampsia flexuosa*. This type of grassland contains a wide range of herbs which include wild thyme *Thymus praecox* ssp. *arcticus*, lady's bedstraw *Galium verum* and mouse-ear hawkweed *Hieracium pilosella*. The Malvern Hills are also known for their rare assemblage of spring ephemeral grassland species including spring cinquefoil *Potentilla nummullia* and blinks *Montia fontana* and their flushes of lime loving plants such as common rock-rose *Helianthemum nummularium*. Ground nesting birds including skylarks *Alauda arvensis* and meadow pipits *A. pratensis* nest on the open hill tops. Heather occurs rarely over the Hills, the last remaining fragments occurring only on Herefordshire Beacon with isolated patches on the northern hills. Bracken covered banks add to the mosaic support a number of invertebrates such as high brown fritillary and pearl bordered fritillary butterflies. Further downslope scrub, secondary and ancient woodland are found. Uncommon and rare animals include the hazel dormouse *Muscardinus avellanarius*, lesser horseshoe bats *Rhinolophus hipposideros* and adders *Vipera berus*.

#### *Flora*

Herefordshire Beacon 'is of importance chiefly for its unimproved acid grassland with heather, grading into bracken, scrub and broad-leaved woodland on the lower slopes' (Alma, 1998a, p.15). 'The most extensive area of heather in the Malvern Hills occurs on the south-eastern flanks of the Herefordshire Beacon, and heather also occurs elsewhere amongst the acid grasslands of this area, which cover a large area (Alma, 1998a, p.15). On the southern ramparts of Herefordshire Beacon, local carline thistle also occurs (Alma, 1998a, p.16).

Stephen (2003) notes that the ramparts support a complex mosaic of U1a, U1b, U1e, U4a high quality, acid grassland, interspersed with ranker U2 grassland where the ground is flatter. Communities referred to here are 70, 71, 72, 73, 74 and 76. This forms part of the larger areas of open grassland within the SSSI. *Moencia erecta* was recorded in U1b grassland.

The following rare and scarce species can be found on Herefordshire Beacon:

- *Calluna vulgaris* (rare on the Malvern Hills)
- *Moencia erecta*

Important communities are:-

- Community 75 supports U2a grassland with frequent *C. vulgaris*. Such heath elements should be considered of importance due the national and regional importance of lowland heath and the lack of such heath elements in the Malvern Hills SSSI as a whole.
- Community 76 supports U20b with a particularly species rich ground flora supporting a number of species associated with U1 grassland *C. vulgaris* is also frequent within this community.
- U1b grassland communities 79, 85, 86, 90, 91 and 96 support a high quality grassland by nature of the U1b classification although in reality these are not particularly species rich, occurring in a narrow band along the ridge and in isolated locations where rocks outcrop.

In Carter's Ecological Study (2006), reference is made to further nationally scarce and rare species found on Herefordshire Beacon, these are:-

- Sea mouseear *Cerastium diffusum*
- Little mouseear *Cerastium semidecandrum*
- Upright chickweed *Moenchia erecta*
- Blinks *Montia fontana*
- Changing Forget-me-not *Myosotis discolour*
- Lesser chickweed *Stellaria pallida*

Other notable species:-

- Wax cap fungi

### *Fauna*

The Malvern Bird Group (2012) annual report shows that a great diversity of birds may be present at varying times over Herefordshire Beacon. Meadow pipits *A. pratensis* and wheatear *Oenanthe oenanthe* nest in the open grassland habitats. Wheatear are likely to be nesting in old rabbit burrows. Redstarts nest within the scrub on southern end of the monuments. The berries from hawthorns and rowans are taken by linnets *carduelis cannabina*, field fares *Turdus pilaris* and redwings *Turdus iliacus*. There are a number of birds of prey that have been seen flying over Herefordshire Beacon. These include red kite *Milvus milvus*, sparrowhawk *Accipiter nissus*, buzzard *Bueo buteo*, kestrel *Falco tinnunculus*, hobby *Falco subbuteo* and peregrine *Falco peregrinus*.

*Other notable fauna:-*

- Small mammals – weasels, field voles, bats and stoats
- Moths
- Butterflies – small copper, small heath, small tortoiseshell, high brown fritillary, pearl bordered fritillary
- Reptiles including lizards, slow worms and adder *Viper berus*. There are several sensitive reptile locations below the ramparts of the hill fort.

#### 1.2.4 Recreational use of the site

No formal visitor survey has been carried out for Herefordshire Beacon so there is no information on visitor numbers, visitor profiles or patterns of use. Some indication of the level of visitor use may be assessed from the number of car park tickets sold in the nearby Malvern Hills Conservators run car park, but this does not accurately reflect visitors to the site as there is no knowledge of numbers of people per car, number of users with resident and annual passes or indeed whether car park users actually visited the hillfort. It also takes no account of visitors arriving on the site by foot from other areas of the Malvern Hills or by bike.

However the fact that 18,742 car park tickets were sold between mid-January 2012 and mid-January 2013 does indicate the generally high levels of visitor use and this is reflected by erosion problems caused by visitor foot fall.

Visitor numbers and their affect is certainly one of the biggest conservation problems on the site. This has been an issue in the past and has led to the surfacing of a number of paths to prevent continued erosion. It will continue to be an issue and this plan will need to make recommendations in order to manage the impact. However income from car parking is a significant proportion of the overall funding for MHC.

Mountain bikes are also an issue on the site, cyclists have used the steep ramparts as challenging obstacles and downhill courses and this is leading to erosion problems.

Byelaw No8 (a) states that – “No unauthorised person shall ride any cycle on the Hills except on a public bridleway or upon a path or part of the Hills where such cycling is permitted by the Conservators”. The use of the area of the hillfort is therefore illegal and could be controlled though probably not eradicated by wardening, education and information provision.

Horse riding on the site has caused a small amount of damage in places although this does not appear to be a significant issue.

### 1.2.5 Past management for conservation

#### **Scrub management**

In 2002, an area of scrub was cleared from the north-eastern ramparts of Herefordshire Beacon by MHC, supported by an English Heritage Management Agreement payment. There is some re-growth, partially due to the fact it is one of the most visited areas of the Hills so sheep are reluctant to graze where visitor pressure is so high. Scrub control has also been carried out in the past along the southern part of the western rampart.

#### **Earthwork repair and vermin control**

Alma mentions how 'the hill fort at Herefordshire Beacon has received specific attention, in consultation with English Heritage and Dr Stanford. The earthworks have been subjected to routine repair when necessary following erosion caused by trampling by visitors'... 'Rabbits, which have caused damage to the earthworks through burrowing, have been controlled by ferrets and by stopping up of burrow entrances. Grass growth has been adequately controlled by rabbit grazing. Gorse and hawthorn invasion has been controlled.' (Alma, 1998b, p.9)

Since 1998, some ferreting of rabbits has taken place and is due to continue through the winter of 2013/14.

In 2002, MHC carried out repair to the gullies on the 'citadel' of the Camp.

#### **Concrete path**

MHC constructed a concrete path at least 20 years ago for unknown reasons (see figures 17 and 19) but presumably to facilitate safe access and because a loose gravel path would wash down due to the steepness of the slope and number of visitors (pers comment – operations manager).

#### **Zigzag path**

Roughly 5-6 years ago (2006) MHC created a zigzag path on Herefordshire Beacon. MHC staff say that this was to provide a safe descent down the Camp as it was previously very steep. These defined paths were constructed to help concentrate visitor traffic to a single track.

Herefordshire Beacon is within the Southern Malvern Hills and is grazed by a local farmer with commoners' rights who grazes 150 Cheviot sheep for ten months of the year.

MHC maintains the footpaths on Herefordshire Beacon.

The Higher Level Stewardship options that the Herefordshire Beacon site is managed under are HD5 (management of archaeological features in grassland), HK7 (restoration of species-rich semi-natural grassland) and HR5 (bracken control). This HLS agreement expires in 2020.



## Part 2: Understanding and evaluating the asset

### 2.1 Current Understanding

#### 2.1.1 Historical / Archaeological

##### ***Herefordshire Beacon hillfort***

##### *Phasing of hillfort development*

In the most general terms, Bowden's interpretation of site development (2000, 13-14; 2005, 19-22) followed Wheeler (1953) in distinguishing between two principal phases of development of the hillfort. The first of these (Wheeler's 'Phase I') involved the creation of a simple circuit of ramparts encircling the main sub-circular summit ridge. The ramparts belonging to this phase comprised a slight inner bank above an elongated steep scarp down into a deep ditch (Figure 11), the outer side of which formed a counter-scarp topped by another slight rampart. This enclosure featured two entrances, to north-east and to the south; the former had marked out-turned flanking banks, the latter was largely obscured by works associated with the later ring-work. A query was raised as to whether the 'platform' immediately surrounding the medieval ring-work may have had its origins in an earlier enclosure of the summit (Bowden, 2000).



*Figure 11: Area east of the summit ring-work looking north. The curving bank in the foreground and on which the two figures are standing traces the only surviving portion of what appears to be the earliest enclosure on the hill.*

The same mode of construction deployed in 'Phase I' was then used to extend the fort dramatically to north and south. This 'Phase II' enclosure augmented, and in effect replaced, the earlier phase ramparts on the north and west of the main ridge summit, where the slopes down from that summit descend very steeply. Around the eastern and southern sides of the main summit, however, it had been possible to create a line of ramparts further out, and downslope, from the original line. These ramparts were constructed seamlessly with lines of further rampart to extend the circuit around the northern spur and to take in a slightly lower summit further along the ridge to the south. This extended version of the fort featured four entrances, as described above (1.2.2).

The manifest change in configuration of the Phase II ramparts on the eastern side of the ridge, as these ramparts approach the eastern entrance and the main summit slopes, was regarded by Bowden as resulting from a 'Phase IIa' construction that was abandoned in favour of a reworking of the defences before being completed here. He expressed this interpretation in this way: 'after work on the scarping of these slopes had already begun, a decision was taken to run the defences straight across the combe regardless of the contours' (Bowden, 2000, 6).

The developmental interpretation favoured in the present Plan differs in minor (but potentially important) respects from that proposed by Bowden:

- The line of the hill top enclosure beyond the ditch of the ring-work is not fully concentric with that later earthwork, and its course is judged to have been cut by that ditch (figure 12)



*Figure 12: The curving bank of the possible earliest enclosure is visible at left centre, with the ditch of the medieval ringwork cutting through it. Three-quarters of the earlier enclosure could in this way have been destroyed when the ring-work was built.*

- It is therefore proposed that this marks the location of a prehistoric enclosure, the earthworks of which differ in character from the much more massive ramparts of the 'Phase I' enclosure noted above, and may therefore pre-date it

- It is questioned whether the out-turned entrance is contemporary with the 'Phase I' ramparts, given the unusual out-turned form of the banks surrounding the entrance-way and the fact that these flanking earthworks appear to interrupt the line of the ditch on either side
- The two phases of Phase II, with an earlier configuration clearly having been re-worked on its eastern flank as it approaches the main summit, is in need of some re-thinking. It seems likely that it was the 'Phase IIb' modification of the outer lines of rampart that was abandoned before completion (since the 'revised' counterscarp bank simply fades into the hillside, and that the original line had been a fully-completed work



*Figure 13: The southern loop of ramparts looking south from the ring-work. Note especially the near-continuous quarry ditch within the uppermost rampart, which continues fully to the base of the summit ridge on which the ring-work stands. This primary construction was subsequently amended, as shown by the sharply-angled recut evident in the centre of this image.*

#### *Date and purpose of the hill fort*

There is currently no firm dating of any phase of hill fort or prehistoric hill top enclosure on Herefordshire Beacon.

Bowden (op cit) favoured a later Bronze Age or Early Iron Age date for the earlier phase (2000, 13), and for the second phase 'a date somewhere in the middle Iron Age seems plausible.' He supported this idea by going on to observe: 'A major increase in size at some stage, often in the middle Iron Age, is a common feature of hillforts in the Marches and elsewhere' (op. cit.).



The view taken in the present Plan again differs in minor (but potentially important) respects from that proposed by Bowden:

- The earliest phase, possibly represented by the hill top enclosure truncated by construction of the medieval ring-work could be either of Neolithic or Bronze Age date
- There is no reason to envisage the two phases of 'major works' featuring the most prominent of the prehistoric ramparts at Herefordshire Beacon as being separated by any considerable time. The similarity of build technique in the two phases would appear to indicate a likely near-contemporaneity, and it is concurred with Bowden, that these are most likely to be of middle Iron Age date.

Bowden suggested (2000, 14) that 'the positioning of Herefordshire Beacon above Wynds Point and close to the 'Silurian Pass' supports (the) interpretation' that the hillfort 'may have been placed to control trade routes'. He observed that the interior 'shows distinct signs of occupation in the form of numerous hut circles' (ibid, 13), but did not think that this necessarily implied permanent occupation, especially 'given the altitude and exposed nature of the site' (ibid, 14). He saw it likely instead, 'that occupation was seasonal and connected with a transhumant agricultural regime'. There are groupings, but no clear pattern, to the distribution of hut platforms and terraces (figure 14). It is therefore difficult to suggest on these grounds alone, that they belonged to, or were occupied by, different extended family groups.



*Figure 14: Aerial view of Herefordshire Beacon from the north. Detail showing building platforms and terraces on the north-eastern flank of the summit.*

Bowden (2000, 13-14) noted that the platforms, and the buildings presumed to have stood upon them, need not represent anything other than transient occupation. In his view, the platforms may not have supported structures at all, and some may simply have been working areas (ibid, 14). The evidence from the platforms partially investigated by Stanford on Hollybush Hill, Eastnor (within 'Midsummer Hill Camp') is equivocal in this regard, with no definite structures traced (although 'four-post' buildings were recorded during the excavations). However, recent excavations at the Little Doward fort, Whitchurch (in south Herefordshire; Dorling et al, 2011) found that the platforms within the primary, southern, area of that enclosure contained substantial midden deposits.

### *Relationship between Herefordshire Beacon and other hillforts*

'Whether (Herefordshire Beacon and Midsummer Hill) are strictly contemporary is unknown, which makes any further discussion (of their relationship) at this stage almost redundant' (Bowden, 2000, 14). This remains true in the absence of any firm dating evidence (see below, sections 2.2.1 and 3.1.1). Bowden did nonetheless offer the view that pairings of hillforts are known in the region, although again, the significance of this is uncertain.



*Figure 15: Midsummer Hill as seen from the ridge on which the Herefordshire Beacon Hillfort stands (Hollybush Hill at left centre).*

What is incontestable is that the two forts are inter-visible under most weather conditions (figure 15). They are separated by only just over 2 kilometres, and although there are considerable drops and rises in elevation along the



ridgeway linking the two sites, they are less than an hour's walk apart. That their occupation was largely contemporary seems very likely, so it appears very likely that there was some interaction between their occupants.

It is not impossible, given the considerable differences in their topographic location, the layout of their enclosures, and the configuration of their ramparts, that the two sites were indeed used *by the same group*, but for different purposes. In this respect, Bowden remarks about the exposed nature of the Herefordshire Beacon hillfort are germane: the Midsummer Hill/Hollybush Hill site appears much more suitable to a more extended season of occupation annually. Notwithstanding such a view, it is not impossible, either, that the marked differences in build technique (of both ramparts and platforms, for example) between the two enclosures derive from distinct cultural preferences from two neighbouring, but culturally quite different, groups.

### ***The Shire Ditch***

The Shire Ditch is clearly an important linear boundary marker running along the crest of much (but not all) of the spinal ridge of the Malvern Hills. The configuration of this feature as it approaches Midsummer Hill fort indicated to the English Heritage surveyors of that site (Field, 2002) that in origin it was a prehistoric work. In this respect it may mirror the character of other such hill top or ridgeway features (including some such as at Frith Wood, Ledbury and at Storridge running north-south along a ridge: see Bowden, 2005).

Bowden (2005, 31) citing Hooke (1985; 1990) suggested that this boundary was important, at least by the 7<sup>th</sup> century, as the boundary between the Hwicce and Magonsaetan peoples (of Worcestershire and Herefordshire, respectively). This line was then used as the boundary between the diocese of Worcester and Hereford, and by the 10<sup>th</sup> century also served as an estate boundary.

The medieval history of the Ditch refers to the 'Red Earl's Dyke', when its role as an estate boundary was the focus of a dispute between Thomas Cantilupe, Bishop of Hereford, and Gilbert de Clare, Earl of Gloucester, in 1287. The Earl was said to have built the dyke, and in so doing encroached on the lands of both bishops (Bowden, 2000, 8). However, it appears most likely that the Earl's operations simply involved a re-commissioning of an earlier feature. Of particular interest at Herefordshire Beacon is of course its relationship with the hillfort and the ring-work. It clearly post-dates the prehistoric enclosure, but the route chosen for its course followed the eastern side of the defences, leaving the summit of the ridge (and the ring-work on top of it) in Colwall parish, in Herefordshire. This perhaps suggests that by the 13<sup>th</sup> century at least, the castle was regarded as firmly within the domains of the bishop.

### ***The Herefordshire Beacon ringwork***

The interpretation of this site as a small but striking and prominent ringwork castle (Bowden, 2000, 9-10) is no doubt correct in its essentials. The date of

its construction is uncertain: given that the chronology of ringworks nationally is now thought to have been more extended than has until recently been suggested, it could 'have been built at any time between the Norman Conquest and the 14<sup>th</sup> century, though a date between the late 11<sup>th</sup> century and the end of the 12<sup>th</sup> century is most likely' (Bowden, 2000, 15). There is no reason to question this date at present; the 1950s attribution of the pottery recovered from the Hilton Price excavations to the 12<sup>th</sup> century, although dating the occupation and not the creation of the castle fits this chronology reasonably well – or at least does not contradict it.



*Figure 16: The ring-work from the air from the north. Note the symmetry of the bank around the interior and the hollows within this. Material from the ditch was used to construct the central mound while some material may have been piled up beyond the ditch, particularly on the north side.*

The 'bailey' of the castle was thought by Bowden to comprise either the 'counterscarp platform' beyond the ditch (Bowden, 2000, 10), or the outer earthworks of the prehistoric hillfort. While these latter may have served this purpose, the platform is likely to have been just that: a levelling of the area in front of the ditch to provide a level field of view from the medieval earthen rampart, and to accentuate the degree to which the inner earthwork dominated the whole site. A more convincing case can be made for the surviving circuit of the Phase I hillfort (around the north-eastern, eastern and southern sides of the summit/ring-work) having been reworked slightly to fulfil this role (as castle bailey). Doubts about the 'Iron Age' character of the out-turned earthworks flanking the alleged entrance (and whether that is what they are at all: alternatively they could be works associated with a gate-house) are allayed if these are seen instead as part of the reworking of the bailey to produce a steep well-guarded entrance into what became the medieval bailey.

'The location of this castle, on a high hilltop remote from contemporary settlement, is rare but not unique; King and Alcock list eight ringworks (including Herefordshire Beacon) 'in lofty hill-top positions' (1969, 102n)' (Bowden, 2000, 15; 2005, 35). The suggestion that the castle was a hunting-lodge (Higham and Barker, 1992, 200; 239) was regarded by Bowden as

having some merit (Bowden, 2000, 15), perhaps especially given that it was unlikely to have been the base of a permanent garrison, and nor was it well-placed to control either the surrounding area, or major communication routes.

The prominence of this castle, and its location within the 'serried ranks' of a prehistoric fort, is probably the key to its presence here: 'If it was intended as a symbol of lordship it is a very successful one' (Bowden, 2000, 15), its presence within the ancient earthworks 'legitimizing a claim to power, or evoking legends of the past' (ibid). In this respect it echoes not only other such sites built within prehistoric defences, such as Thetford in Norfolk, Old Sarum near Salisbury in Wiltshire, Caus in Shropshire, and Cefnlllys in Radnorshire, among others, but, much closer to home than any of these, possibly also Castle Frome castle. This is also a 'ring-work' within a small bailey that may have involved a re-working by the de Lacy family of a prehistoric fort, on an eminence above the river Frome only 8 km to the west (Bowden, 2011).

## **2.2 Gaps in knowledge**

### 2.2.1 Historical / Archaeological

#### ***Herefordshire Beacon hillfort***

A series of questions remain concerning the chronology and phasing of the development of the hillfort. The most pressing of these are best identified as a series:

- Which earthworks represent the earliest enclosure, and what was the exact form and date of that enclosure?
- Where was the original entrance to this earliest enclosure, and the first of the enclosures with substantially-formed ramparts, if these differ?
- What was the form of the eastern entrance into the 'developed' Iron Age enclosure, and what exactly was the sequence of builds in this area, that extended the outline of the first enclosure with substantially-formed ramparts?
- Does the form of the earthworks at the western entrance represent the original (Iron Age) form of the entrance (whether or not this was re-worked during prehistory)?
- What do the building platforms evident in any part of the enclosure, and of whatever phase, represent in terms of the nature of Iron Age activity or occupation within the hillfort?

#### ***The Shire Ditch***

The historical context for the ditch seems reasonably secure. However, there are no known purposeful excavations of the earthwork to throw light upon the multi-phase character of the feature. There are considerable problems with attempting to obtain secure dates from such slight linear earthworks, however. For example, a recent small-scale excavation of a similar linear ridge-top feature at Cradley failed to obtain any archaeologically-useful data on either its method of build or its date (Atkinson, 2012).

#### ***The Herefordshire Beacon ringwork***

The principal gaps in knowledge concerning the historical development of this castle concern its origins, its use-life and tenorial history, and its demise. Excavations have thrown little light on this so far, and it is fair to say that, although it seems clear that the main earthen ringwork was dug through earlier features within the earlier phase massive fort ramparts, its exact

relationship to those works in respect to any castle bailey works or outworks is also uncertain.

### 2.2.2 Biological

An NVC survey is being carried out in the summer of 2013.

### 2.2.3 Recreation

Although it is clear that Herefordshire Beacon attracts a large number of visitors a visitor survey has never been carried out and therefore the actual numbers and the patterns of visits is not known.

It might be that the impact of the visitor numbers (path erosion particularly) is itself measurable and so the effectiveness of reducing visitor numbers could be measured rather than the numbers themselves being important.

However understanding visitor patterns, ie seasonal patterns or purpose and length of visits, may be important in devising strategies for influencing the impact of visitors on the site and without this data it would be difficult to measure the effectiveness any strategy.

Similarly recording attitudes to the site and understanding of the cultural aspects would be useful for measuring the effectiveness of promotional and interpretive material.

## 2.3 Statement of significance

### 2.3.1 Historical / Archaeological

The significance of the site as a whole is primarily that it represents a very prominent conflation of two major monuments, the one from prehistory and the other superimposed upon it in the medieval period. The term 'iconic' is much over-used in reference to key archaeological sites in Britain, but in terms of the visibility and renown of this monument both for prehistoric and medieval studies, the epithet appears justified. Its prominence has also assured it a place in 'serious popular' accounts of the most important heritage assets in Britain. Examples are Clive Aslet's (2006) and the Common Ground publication.

#### ***Herefordshire Beacon hillfort***

The importance of the prehistoric enclosure sequence on the hilltop is, in its own right, firstly, just that developmental history: there are fully four phases of site development discernible just from study of the visible earthworks. Excavation on a modest scale could potentially answer some simple questions about this sequence; work on a sufficiently larger scale could add considerable complexity to this developmental picture.

Secondly, the importance lies in the scale of the work, with, at its maximum extent/development, ramparts extending over a distance of almost a kilometre north-south along the ridge-top. Such an enterprise could not have been undertaken lightly. It is currently fashionable not to see such an investment in hillfort ramparts as having even a largely, let alone primarily, defensive or martial motivation. The creation of a place of safety, and a deterrent operation, still seems a reasonable supposition: at Herefordshire Beacon, the near-vertical, partially rock-cut, scarps above the deep ditches presented a formidable barrier to hostile action.

Thirdly, the importance of the site must surely rest also in its prominence, not only locally on the ridge of the Malvern Hills, but for its dominance of the surrounding lands both east and west.

The comparative significance of the site is more difficult to gauge. Herefordshire Beacon has been seen as a 'multivallate' hillfort, based upon its appearance of successive defences. Bowden has pointed out, however (2000, op cit), that this is illusory – it is, rather, a sequentially univallate enclosure: since the earlier major rampart phase ('Phase I') was actually *replaced* by the succeeding larger defensive circuit, rendering the latter redundant. While technically this is true, it needs some qualification. To begin with, the potential earliest phase circuit on the very top of the main summit, and the 'Phase I' ramparts, are concentric, and in use at the same time: so this phase would be 'multivallate'. And then, the *effect* of placing the later ramparts lower down the slope on the eastern and southern sides was to make the rampart line seem more impressive, and multi-vallate.

What this emphasises is the difficulty of generalising and making comparisons between different hillforts: each had their own developmental history, and the own local significances. Without any documentation of Iron Age views or values, it is impossible to judge whether one site rather than another was more important on a more extended geographic scale (that is, among a wider or larger number of communities). It may be that Herefordshire Beacon had a wider symbolic significance, as it stood on a border between the Dobunni of the Severn valley and the people (possibly the 'Magnaë', or a sub-tribe of the Dobunni, or a confederated people) to the west of the Malverns.

### ***The Shire Ditch***

The significance of the Shire Ditch derives from both its documented historical context (as a feature which it is documented was in existence by 1287), and its suspected physical time-depth and potential complexity of routing and structure (with its apparent relationship to the Midsummer Hill hillfort, and its bifurcation at that point, suggesting that there may be other deviations of routing linked to different stages in its use-life). Its significance at the site itself is linked to the existence of boundary markers associated with, and the way that it used the existing ramparts to follow a course along the ridge which minimised the need for the creation of a new earthwork.

### ***The Herefordshire Beacon ringwork***

The medieval castle crowning the summit of the Beacon is, firstly, significant as being one of a very small number of castle sites that are located in places remote from settlement and within the earthworks of prehistoric forts or enclosures. These are mostly prominent sites in the landscape, and none are more so than this one, located as it is on one of the highest Malvern Hills peaks.

Further significance derives from the unusual morphology of the site, with a level platform forming the 'ring' and a platform beyond this providing an area of level ground beyond the ditch surrounding the ringwork itself. Further significance could be adduced if it were discovered, for instance, that the castle originated in the eleventh century AD. Although not documented within the Domesday survey (AD1086), this would mean that it was a Norman work belonging to the first or second phases of the Conquest period. This in turn would document its importance as a deliberately-commissioned symbol of Norman dominance and power in the region.

### **2.3.2 Biological**

Herefordshire Beacon is of national importance by virtue of it being a part of the wider Malvern Hills SSSI. It contributes to an important area of acid grassland and in smaller areas other important habitats such as gorse, bracken and scrub woodland on the lower slopes.



### 2.3.3 Recreation

The site is an important resource to locals and more distant visitors alike. It is popular for dog walking, short walks to the summit or around the ramparts (the distance around the outer rampart is some 2km) it is also on the route of longer walks along the spine of the Malvern Hills. The significance for recreation is enhanced by the provision of the car park and by the surfaced paths both of which clearly facilitate easy access especially for less able visitors. The paths in particular allow easy access to an elevated viewpoint regardless of fitness levels.

This ease of access and the good visibility of the prehistoric elements of the site combine to make this an ideal site for interpretation of hillforts and British prehistory.

## **2.4 Statement of potential for the gaining of new knowledge**

### **2.4.1 Historical / Archaeological**

The considerable potential for the gaining of new knowledge about the archaeology of the site is due largely to the high degree of preservation likely for archaeological deposits across the hillside on either side of the main ridge. Locally, this potential is compromised by natural sources of erosion on the exposed hillside, especially on those surfaces exposed to the prevailing wind, and to the potential impacts of vegetative re-growth on the lower slopes. It is also compromised due to the localised impacts of visitor foot-fall, of rabbit burrowing, and of visitor facilities management.

This is not to suggest that further information could not be elicited from new survey work at the site. It would for example be possible to detect the presence and form of further artificial platforms within the site through the manipulation of LiDAR data, were this to be made available. It would be of some interest to carry out some geophysical survey, experimentally, to determine the efficacy of different methods. Further survey could then be directed towards elucidating key relationships, where possible, in selected areas of the site.

### ***Herefordshire Beacon hillfort***

The potential for gaining new knowledge is considerable in five kinds of location or context on the hillside. Firstly, there is potential information from the ramparts, even though these are nowhere substantial, and information might be limited to contexts whose examination might allow structural sequences to be specified, especially where the relationship between two or more phases of build can be determined. Secondly, there are the contexts of infill of the ditches. Thirdly, there are the potential remains preserved within quarry-ditches dug upslope or otherwise within the ramparts. Such quarry-ditches can be located, perhaps initially, through geophysical survey (see above); although some are more readily-definable from surface indications.

The fourth kind of location from which information might be derived are the platforms themselves. Recent excavations at The Little Doward have shown that such platforms may not only have been the locus of buildings, but may have had use-histories that included their use as convenient level places for the dumping of rubbish midden waste. Finally, there are potential 'special locations' within the fort, such as the spring to the west of the entrance-way through the 'Phase I' ramparts; and other contexts that may relate to earlier activities on the site.

### ***The Shire Ditch***

The specifically archaeological potential of the dyke is limited, except where, as noted above, it may be possible to trace deviations and relationships with

earlier forms of the earthwork. Close to the hillfort, there may be some potential deriving from examination of the old land surface sealed under the bank.

### ***The Herefordshire Beacon ringwork***

The potential in terms of surviving material culture within the area surrounded by the bank around the crest of the ring has in the past proven to be considerable. However, it is uncertain to what extent the earlier investigations of this part of the site, although apparently limited to five trenches, has compromised this potential. There is, in this regard, some considerable potential in re-opening the earlier trenches, where the location of these features can be determined (for instance from geophysical survey).

#### **2.4.2 Biological**

Whilst it might not be clear what the exact impact of the rabbit population is on the archaeology of the site the level of population and the attendant extent of burrowing is also considered to be detrimental to the acid grassland vegetation community. These two issues together justify the need for severe control methods. There is some scope however to test the amount of damage being caused to the underground archaeology as part of the control programme.

#### **2.4.3 Recreation**

Given the lack of any recreational data there is high potential for gaining knowledge of the recreational use of the site. This could be facilitated by automatic counters for gross figures or an on-site manual visitor survey to gather more detailed data for analysis of visiting patterns, attitudes to, and understanding of, the site.

## Part 3: Identifying Management objectives and Issues

### 3.1 Site condition, management issues and objectives

#### 3.1.1 Historical / Archaeological

Much of the site is under ideal vegetation cover for the conservation of archaeological features. There are however areas where this is not the case and where there is either invasive vegetation and/or erosion is taking place.

As described above recreational pressure has led to the surfacing (concreting) of some of the main paths through the hillfort and up to the summit of the hill (figures 17 and 19). This provision has probably in turn led to an increase in visitor numbers. The encircling ramparts also provide a natural route for a circular walk and as a consequence grass cover has been lost on the crest of the outer rampart (Figure 20). At present this is not causing undue erosion but requires regular monitoring preferably via fixed point photography and may require management action in the future. This might take the form of further surfacing but in a more sympathetic sacrificial material (local stone scalplings for instance) or the restriction of access to allow natural recovery to take place.



*Figure 17: Part of the network of paths covering Herefordshire Beacon, the car park can be seen top right. Areas of rabbit burrowing can be seen as pale areas on successive slopes running down from the hill summit. Areas of extensive scrub woodland can be seen beyond the area of the monument on the flanking slopes to the north-west, north and north-east. (©Google Maps)*



Gully formation on the steeper slopes is also an issue. The initial cause of these varies (footfall or mountain biking being common factors) but once the vegetation cover is broken erosion is caused by heavy rainfall washing out the often unstable stony material of the manmade earthworks (figure 18). Work needs to be carried out to repair these gullies. This will require scheduled monument consent and should be carried out in close consultation with English Heritage who may be able to provide grant aid towards the costs.



*Figure 18: Gullying and outwash on the ring-work caused by water erosion.*

The initial cause of these and at present less severe erosion scars also needs to be addressed, in particular the issue of mountain biking on the steep slopes of the monument. This is a difficult issue to warden, but an occasional intensive campaign of publicity and on-site warden or volunteer presence may help in reducing the problem.



*Figure 19: Path erosion where the paved path meets an un-surfaced area.*



*Figure 20: Path erosion on the crest of the outer rampart. The route is a popular circular walk of around 2km. It may be that the material of the ramparts is robust enough to prevent further erosion but systematic monitoring is required.*

Rabbits are also a major issue and they are often found to be particularly attracted to softer soils at the interfaces between archaeological deposits such as buried soils below ramparts (figure 17). Certain vegetation such as bracken also provides ideal cover for rabbits although unfortunately this does not seem to be an essential requirement for those at Herefordshire Beacon. There are also some instances where rabbit burrows have undermined paths causing subsidence, holes in the footpaths and are creating a health and safety issue.

It is clear that serious archaeological and general damage is occurring and a reduction of the rabbit population is therefore essential. They are also detrimental to the acid grassland. Research has shown that control by gassing and grouting of burrows is the only effective method of reducing populations in the long term and that in fact partial control may lead to an increase in the population. There is obviously a public relations implication to carrying out control of this kind and this will need addressing. Given the amount of erosion caused by burrowing there may also need to be earthwork repair/re-seeding to aid vegetation recovery.

Another implication of this method of control would be the possible removal of wheatear nesting sites. It will be necessary to establish if and how wheatear utilise the rabbit burrows on British Camp. Rabbits also provide a food source for local small mammals such as stoats and weasels so likewise the importance of this prey source should be established. It is known that the

grayling butterfly uses bare ground that is created by rabbit burrowing. Again, the implications of losing this bare ground should be established.

### 3.1.2 Biological

The area of Herefordshire Beacon hillfort is covered by two units of the wider Malvern Hills SSSI. The northern extreme of the site, approximately one quarter of the monument, is covered by Unit 19 (Acid grassland - lowland) its condition assessment description in March 2009 was “Unfavourable Recovering”. This probably reflects the work carried out on the east facing slopes in this area to control scrub and bracken to increase areas of grassland. The remainder of the monument falls within Unit 26 (Earth Heritage) and its condition was described as “Favourable”. This description however only applies to the earth heritage elements of the site ie the rock exposures of which there are “relatively few” the acid grassland in this unit was not assessed. (Information from Natural England website)

<http://www.sssi.naturalengland.org.uk/special/sssi/reportAction.cfm?report=sdr13&category=S&reference=1001017> )

The area of acid grassland on the site is restricted by invasive vegetation such as bracken and scrub although it is acknowledged that both of these are also important in providing specific habitats. Given the incidence of these in other areas close to the site it is not unreasonable to prescribe management of scrub and bracken on the site to improve archaeological conservation and visibility of the earthworks and at the same time to fulfil the stated ecological objectives of increasing the areas of acid grassland.

Scrub should be controlled by hand cutting and the application of a suitable herbicide to prevent regrowth. Bracken can be rolled or mowed to weaken the plant and eventually eradicate it. It is understood that chemical control of bracken is not appropriate on this site.

Grazing is the most important mechanism for maintaining the acid grassland and restricting the further spread of bracken and new scrub growth. However controlling the areas grazed by stock on open common land can be problematic especially in heavily visited areas of the site and mechanical control by rolling, cutting and pulling will probably continue to be needed.

Maintaining stock on the hills has its own problems and issues. There has been a tenfold decrease in sheep numbers since the 1950s (1500 prior to 1960, 150 in 2012, there are grazing rights for 4815 sheep). Cattle have not been grazed on the hills since the 1960s, although this may be beneficial for some conservation issues due to the sensitivity of the lichen communities and anthills which are better suited to sheep grazing. Of the 115 commoners with grazing rights only one exercises those rights. A conservation grazing scheme is already in place elsewhere on the Malvern Hills and consideration is being given to the selective reintroduction of cattle (Dexter) to help maintain the acid



grassland. There are no plans at present to introduce cattle here on the southern hills.



*Figure 21: Bramble, scrub and gorse between the inner and outer rampart on the south-west side of the site.*

Gorse is also an issue especially on the ramparts on the western and northern slopes of the hill (figure 21). This dense cover excludes light and causes loss of ground vegetation cover that can lead to erosion. Gorse however has important wildlife benefits, especially for birds, so reduction and control is recommended rather than complete removal. It should be restricted to the scaped slopes and controlled on a five year rolling programme on the ramparts themselves.

### 3.1.3 Recreation

The adverse impact of visitors to the site has been covered under the archaeological condition assessment above. However interpretation and information is an important element of conservation as well as being intrinsically valued.

It is especially important to let visitors and other interested bodies and individuals know why certain management is being carried out and also the details of timing and methodologies. This can be achieved through press releases and temporary on-site signing. Including visits to the site in guided walks programme and other opportunities is another vehicle for disseminating



information about issues and management and raising awareness of the history and archaeological nature and value of the site.

Such Information also needs to be provided to independent visitors to the site. This can be through a variety of methods ranging from leaflets to interpretation panels and to “Quick Response” or QR Codes for use with smart phones to provide on-site information on request. This latter is particularly appropriate in a countryside location as they can be sited to be unobtrusive or printed within a leaflet setting out a suitable walking route around a site. A suitable more traditional interpretation panel should be provided in the main car park serving Herefordshire Beacon.

There is no doubt that one of the best ways of raising awareness and interest in a site is through excavation and with its high public profile this would be especially true of Herefordshire Beacon. Any conservation or research led excavation would be an invaluable opportunity to present the conservation and archaeological issues of the site.

### **3.2 Aims and ambitions of key partners**

#### *Vision*

The vision of the key partners is to have this outstanding monument managed in a way that conserves and enhances the qualities and features which led to it being designated as a nationally important archaeological and wildlife site, within an Area of Outstanding Natural Beauty (AONB). They want to restore and maintain open acid grassland as part of the surrounding mosaic of grassland, bracken and scrub. The vision is to have the Iron Age hillfort managed by an extensive grazing system, as it has been for centuries. Visitors should enjoy and understand the complexity and importance of the site in a responsible and sustainable way.

#### *Aims*

The long term aims for the site, in order to achieve the vision, are to:

- Work in partnership with the Malvern Hills Conservators, Malvern Hills AONB Partnership, Natural England, English Heritage and Herefordshire Archaeology to ensure shared and agreed strategies are in place and implemented
- Work to get the Site of Malvern Hills Special Scientific Interest (SSSI) into favourable condition through active habitat management
- Work to get the Scheduled Ancient Monuments (SAMs) into good condition through active conservation management
- Manage the monument as part of the Malvern Hills contiguous area of semi-natural vegetation and common land by extensive livestock grazing
- Monitor the impact of land use and recreational activities on the sites and actively reduce the impact of damaging activities
- Promote greater public understanding of the importance, complexity and management of the Iron Age hillfort through local and on site interpretation
- Manage and maintain access

### 3.3 Long Term Objectives

Arising from these aims the long term management objectives are

1. To maintain the archaeological and historical features in a favourable condition
2. To manage the ecological features of the hillfort to contribute to maintaining the wider SSSI in a favourable condition.
3. To carry out and encourage research into the site
4. To encourage sustainable public access to and understanding of the site

### 3.4 Constraints upon management improvements / objectives

#### *Internal natural factors*

Vegetation growth, natural weathering and erosion are having an impact on the hillfort. Bracken, scrub and tree growth in particular can damage both the fabric of the site and buried archaeological features and deposits. Visibility of the site is also affected by vegetation cover which has implications for interpretation. Erosion started by visitors or livestock can be exacerbated by water erosion. Burrowing animals are also a problem at this site.

Ecological succession is the most important natural factor. Without management by cutting, mowing or grazing much of the area would return to mixed woodland that is the natural climax community for this area.

#### *Internal man induced factors*

Visitor pressure is the main factor here, walking and cycling is a major factor in the origin of erosion. Grazing might also be a factor if not carefully managed. All these can be controlled through active management.

#### *External factors*

External factors such as climate and weather may have an impact on the site. Severe weather especially high winds can cause wind throw and damage to both the archaeology and the trees impacting on habitat and landscape. Climate change may influence the range of vegetation viable on site and the rate of erosion caused by water flow during heavy rainfall.

Recreational use of the site can be influenced by information provided off site, i.e. the level of promotion of the site. The provision of parking close to the site

also has a major influence on the numbers of visitors to the site. The size of the car park and the cost of parking will influence visitor numbers.

### *Legislation or tradition*

Management, access and use of the hills are governed by the Malvern Hill Acts 1884 – 1995. The Malvern Hills Conservators were established under the Malvern Hills Act 1884. There have been four subsequent Acts in 1909, 1924, 1930 and 1995. The Malvern Hills Acts were set up to protect the rights of Commoners and the public and to prevent encroachment on the Malvern Hills, lands and commons. Under these and other relevant Acts the Malvern Hills Conservators manage the Hills to:

- Preserve the natural aspect
- Protect and manage trees, shrubs, turf and other vegetation
- Prevent unlawful digging and quarrying
- Keep the Hills open, unenclosed and un-built on as open spaces for the recreation and enjoyment of the public
- Conserve and enhance biodiversity, Sites of Special Scientific Interest and Scheduled Ancient Monuments on its land.

Law of Property Act 1925 (commons)

Graziers rights

Stock numbers entitled to use the common (potential)

The Occupiers' Liability Act 1957 imposes a duty of care on the owners that reasonable care is taken to ensure that visitors will be reasonably safe. In compliance it will be necessary to:

To ensure that any constructions such as stiles, steps, gates, paths and fencing are safe

To remove hazardous objects from the site

To ensure that management operations do not constitute a particular hazard

Legislation affecting the area designated as a Scheduled Ancient Monument is contained within the Ancient Monuments and Archaeological Areas Act 1979. The legislation requires that no works that involve damage to the monument can be carried out without consent from the DCMS. It does not place a statutory responsibility for maintenance of the site on the owner.

The Wildlife and Countryside Act 1981 supplemented by the Countryside and Rights of Way Act 2000 (CRoW) together with new Conservation (Natural Habitats &c.) (Amendment) Regulations 2007 will influence the timing of management work. Operations such as tree felling or scrub clearance potentially impact upon habitats and breeding sites for the European and UK protected species. The legislation ensures varying levels of protection for species recorded or, those reasonably expected to use the site such as badgers, bats and nesting birds. For guidance on European Protected Species see



[www.naturalengland.org.uk](http://www.naturalengland.org.uk) and [www.forestry.gov.uk](http://www.forestry.gov.uk)

Under the Highways Act 1980 the County, as the Highway Authority, has the responsibility of ensuring proper management of public rights of way - the main relevant areas of responsibility are:

- to maintain the surface of public paths, including the management of obstructive vegetation, growing from the surface
- to assert and protect the public's right to use and enjoy rights of way
- to signpost rights of way where they meet a metalled highway and provide additional signs as needed

Individual landowners are responsible for the provision and safety of field furniture such as stiles and gates.

Forestry Acts control the felling of timber and the management of woodland and although the Malvern Hills Conservators are exempt from felling licenses Environmental Impact Assessments may be necessary for some woodland management.

#### *Physical consideration / constraints*

Vehicular access to certain parts of the site may be physically difficult. This may affect activities such as timber felling and extraction. There will also be times when the ground conditions preclude vehicular access, especially where damage may be caused to the area of the scheduled ancient monument.

#### *Available resources*

The lack of available resources, both manpower and financial, might be a major limiting factor in managing the site. The Malvern Hills Conservators maintain a direct labour force (6 field staff) that carries out a number of conservation and maintenance jobs over the area managed by MHC. The seasonal nature of many jobs (grass cutting for instance) will influence the availability of staff at certain times of the year.

Volunteers are a valuable resource for a number of organisations although the MHC do not have an organised volunteer network. It might be useful to consider using volunteers to carry out conservation management work on the Hills.

Some funding may be available from Natural England for scrub and bracken management through the Higher Level stewardship Scheme or through SSSI budgets. It may also be possible to attract some funding for the management of the scheduled area of the site from English Heritage.

## Part 4: Proposed management actions (Action Plan)

### 4.1 Outline prescriptions and project groups

Objective 1: Maintain archaeological features in a favourable condition
---

- Outline prescriptions
- 1.1 Monitor the condition of the archaeological features
  - 1.2 Repair, maintain and protect as necessary
  - 1.3 Control invasive vegetation – scrub, gorse and bracken
  - 1.4 Develop a programme of rabbit control
  - 1.5 Discourage damaging recreational use of the site such as mountain biking and horse riding
  - 1.6 Liaise with relevant organisations and individuals
  - 1.7 Review the Conservation Management Plan

#### Project groups

##### 1.1 Monitor the condition of the archaeological features

- During routine wardening and other visits note the condition of paths and the incidence and condition erosion scars
- Expand the existing programme of fixed point photo monitoring to include specific areas of path and spot erosion
- Monitor the extent of areas of scrub, gorse and bracken

##### 1.2 Repair, maintain and protect as necessary

- Carry out practical conservation works as identified by monitoring
- Repair erosion gullies to a specification agreed with English Heritage
- Repair path erosion where necessary to a specification agreed with English Heritage depending on location
- Repair areas of rabbit burrow damage if necessary
- Influence the use of and access to areas of the monument through signage and or physical barriers if necessary

##### 1.3 Remove and control invasive vegetation – scrub, gorse and bracken

- Reduce areas of invasive vegetation within the interior and on the earthwork areas of the monument
- Control scrub through cutting and chemical stump treatment (100%)
- Control gorse on a five year cycle (one fifth each year in specific areas)
- Control bracken by rolling and cutting (100%)
- Maintain increased areas of acid grassland by grazing and mechanical cutting if necessary

##### 1.4 Develop a programme of rabbit control

- Investigate and consider the impact of rabbit control on other species
- Reduce the numbers of rabbits, investigate most efficient methods of controlling the rabbit population (including grouting burrows)

#### 1.5 Discourage damaging recreational use of the site such as mountain biking and horse riding

- Wardening / volunteer presence
- Contact with user groups
- Website, leaflet and interpretation panel content
- Signing at access points to the common
- Consider occasional campaigns to enforce by-laws if necessary

#### 1.6 Liaise with relevant organisations and individuals

- English Heritage – proposed repair works for scheduled monument consent, methodologies and grant aid
- Natural England – proposed repair works methodology and specification. Compliance with HLS management
- MHC wildlife and recreation advisory panels – proposed management
- Grazier – stock management, grazing regimes and proposed work
- Local residents and visitors – over proposed management
- User groups such as The Ramblers, walking Clubs and local stables and cycling clubs – encourage sustainable and appropriate use

#### 1.7 Review the Conservation Management Plan

- Formally record and log all work carried out on the site
- Review project implementation annually
- Review management plan and project planning at five yearly intervals

Objective 2: To manage the ecological features of the hillfort to keep the wider Malvern hills SSSI in a favourable condition.
--

Outline prescriptions	2.1	Monitor the extent and condition of acid grassland on the monument
	2.2	Monitor exposures of geological interest
	2.3	Increase and thereafter maintain the area of acid grassland
	2.4	Where possible maintain a mosaic of habitats (gorse)
	2.5	Liaise with relevant organisations and individuals

#### Project groups

##### 2.1 Monitor the extent and condition of acid grassland on the monument

- Periodic survey to NVC standards
- Maintain a collection of fixed point and ad-hoc photographs

## 2.2 Monitor the exposures of geological interest

- Identify and establish monitoring regime for any geological exposures within the area of the monument

## 2.3 Increase and thereafter maintain the area of acid grassland (see project 1.3)

- Invasive vegetation control, covered under project group 1.3
- Manage grazing levels to maintain the acid grassland in favourable condition
- Grazing license administration

## 2.4 Where possible have regard to maintaining a mosaic of habitats

- Maintain areas of gorse and bracken on areas outside the earthworks of the monument where these do not compromise areas of acid grassland habitat

## 2.5 Liaise with relevant organisations and individuals

- See 1.6 above

Objective 3: To carry out and encourage research into the site
--

Outline prescription	3.1 Highlight opportunities for further research on the archive from previous excavations 3.2 Highlight opportunities for on-site research perhaps through excavation linked to conservation issues
----------------------	--

### 3.1 Highlight opportunities for further research on the archive from previous excavations

- Consider opportunities for further research as a part of any follow up projects following the Herefordshire hillfort review process
- Highlight these opportunities to attract post-graduate research interest

### 3.2 Highlight opportunities for on-site research perhaps through excavation linked to conservation issues

- Review the of need/ opportunity for further archaeological investigation
- Develop a project design for work
- Apply for funding if appropriate
- Apply for Scheduled Monument Consent



Objective 4: To encourage sustainable public access to and understanding of the site
--

Outline prescription    4.1 Monitor visitor use of the site  
                                  4.2 Monitor condition of constructed paths and field furniture  
                                  4.3 Review site interpretation

#### Project groups

##### 4.1 Monitor visitor use of the site

- General monitoring during visits
- Consider carrying out a more detailed visitor survey

##### 4.2 Monitor condition of constructed paths, steps and field furniture

- General wardening visits
- Annual specific inspection?

##### 4.3 Review on-site interpretation

- Consider identifying an optimal circular route to lessen erosion, increase understanding and better interpret the monument
- Design produce and distribute information leaflet
- Consider the use of further on-site QR code interpretation
- Where appropriate Include the site in guided walks and events programmes

## 4.2 Project register

Abbreviations used in table

DL	Malvern Hills Conservators Direct Labour Force
EH	English Heritage
GR	Grazier
HA	Herefordshire Archaeology
HC	Herefordshire Council
HLS	Higher Level Stewardship Scheme
MHC	Malvern Hills Conservators
NE	Natural England
NB	Neighbours
SMC	Scheduled Monument Consent
VOL	Volunteers
WA	Wildlife and Countryside Act

Project No	Short Description	Consents Constraints	? Grant aid	Timing months	Timing / year	Who
<b>1.1 Monitor the condition of the archaeological features</b>						
1.1	Monitor path erosion	-	-	Any	Ad-hoc and annually	MHC/EH
1.1	Fixed point photography	-	-	Winter	Annual	MHC
1.1	Monitor Scrub, gorse, bracken	-	-	Any	Annual	MHC/NE
<b>1.2 Repair, maintain and protect as necessary</b>						
1.2	Conservation work	SMC/cost	EH/NE	Autumn / spring	As necessary	MHC
1.2	Gully erosion	SMC/cost	EH/NE	Autumn / spring	Commence 2014	MHC / DL
1.2	Path erosion	SMC/cost	EH/NE	Autumn / spring	Commence 2014	MHC / DL
1.2	Rabbit burrow erosion areas	SMC/cost	EH/NE	Autumn / spring	Following rabbit control	MHC
1.2	Limit access	Public perception	-	Any	As necessary	MHC / DL
<b>1.3 Remove and control invasive vegetation – scrub, gorse and bracken</b>						
1.3	Remove and control Scrub	Manpower / WA	EH/NE	Oct - March	Commence 2013/14	DL / VOL

Herefordshire Beacon, Colwall, Conservation Management Plan

Project No	Short Description	Consents Constraints	? Grant aid	Timing months	Timing / year	Who
1.3	Control gorse	Manpower / WA	EH/NE	Oct - March	Annually (20%)	DL / VOL
1.3	Control bracken (100%)	Manpower / WA	EH/NE	Oct - March	Continue 2013/14	DL / VOL
1.3	Maintain Acid grassland by grazing	-	-	Any	All	GR
1.3	Maintain by mechanical means	Manpower	EH/NE	Oct - March	As / if necessary	DL
1.4 Develop a programme of rabbit control						
1.4	Consider impact of rabbit control	Survey costs	EH/NE	Any	2014	MHC / NE
1.4	Research and implement methodology	Cost / public perception / WA	EH/NE	Any	2014	MHC/NE contractor
1.5 Discourage damaging recreational use of the site, such as mountain biking and horse riding						
1.5	Wardening	Manpower	-	Any	All	MHC / VOL
1.5	Contact with user groups	Manpower	-	Any	All	MHC / VOL
1.5	General interpretation content	Cost	NE / EH	Any	2014	MHC
1.5	On site signing	Cost	NE / EH	Any	2014	MHC
1.5	Enforcement campaigns	Manpower	-	Any	As / if necessary	MHC / VOL
1.6 Liaise with relevant organisations and individuals						
1.6	Liaise with EH, NE, HA, FC, MHC advisory panels, grazier, residents, visitors and user groups				As necessary	MHC
1.7 Review the conservation management plan						
1.7	Log all work	-	-	Any	All	MHC / DL

<b>Project No</b>	<b>Short Description</b>	<b>Consents Constraints</b>	<b>? Grant aid</b>	<b>Timing months</b>	<b>Timing / year</b>	<b>Who</b>
1.7	Project implementation	-	-	Any	Annually	MHC/NE/EH
1.7	Management plan	Cost	-	Any	2018	MHC/NE/EH/HA
<b>2.1 Monitor the extent and condition of the acid grassland on the monument</b>						
2.1	Acid Grassland	-	-	Summer	As per HLS programme and SSSI monitoring	NE
2.1	Fixed point photography	-	-	Summer and winter	Annually	MHC
<b>2.2 monitor the exposures of geological interest</b>						
2.2	Monitor geological exposures	-	-	Any	?Annually	MHC/NE
<b>2.3 Increase and thereafter maintain the area of acid grassland (see 1.3)</b>						
<b>2.4 Where possible have regard to maintaining a mosaic of habitats</b>						
2.4	Maintain gorse and bracken outside the area of the earthworks			Any	All	MHC/NE
<b>2.5 Liaise with relevant organisations and individuals</b>						
2.5	Liaise with EH, NE, HA, FC, MHC advisory panels, grazier, residents, visitors and user groups				As necessary	MHC
<b>3.1 Highlight opportunities for the further research on the archive from previous excavations</b>						
3.1	Research	Cost	EH	Any	Any	HA/EH
<b>3.2 Highlight opportunities for on-site research perhaps through excavation linked to conservation</b>						
3.2	Review opportunities	-	-	Any	Any	HA
3.2	Project Design	Cost	EH	Any	Any	HA

<b>Project No</b>	<b>Short Description</b>	<b>Consents Constraints</b>	<b>? Grant aid</b>	<b>Timing months</b>	<b>Timing / year</b>	<b>Who</b>
3.2	Funding	Cost	EH	Any	Any	HA
3.2	SMC	Cost	EH	Any	Any	HA
<b>4.1 Monitor visitor use of the site</b>						
4.1	General monitoring	-	-	Any	Ad hoc	MHC
4.1	Visitor survey	Cost, manpower	NE	?	Twice yearly if necessary	MHC / VOL
<b>4.2 Monitor condition of constructed paths, steps and field furniture</b>						
4.2	General Monitoring	-	-	Any	Ad hoc	MHC
4.2	Specific inspections	Manpower	-	Any	Every two years	MHC
<b>4.3 Review site interpretation</b>						
4.3	Circular route	-	-	Any	2014	MHC/HA
4.3	Information leaflet	Cost	EH/NE	any	If appropriate	MHC/HA
4.3	QR codes	Cost	EH/NE	Any	2014/15	MHC/ HA
4.3	Guided walks / events	-	-	Any	All	MHC/HA/ EH/NE



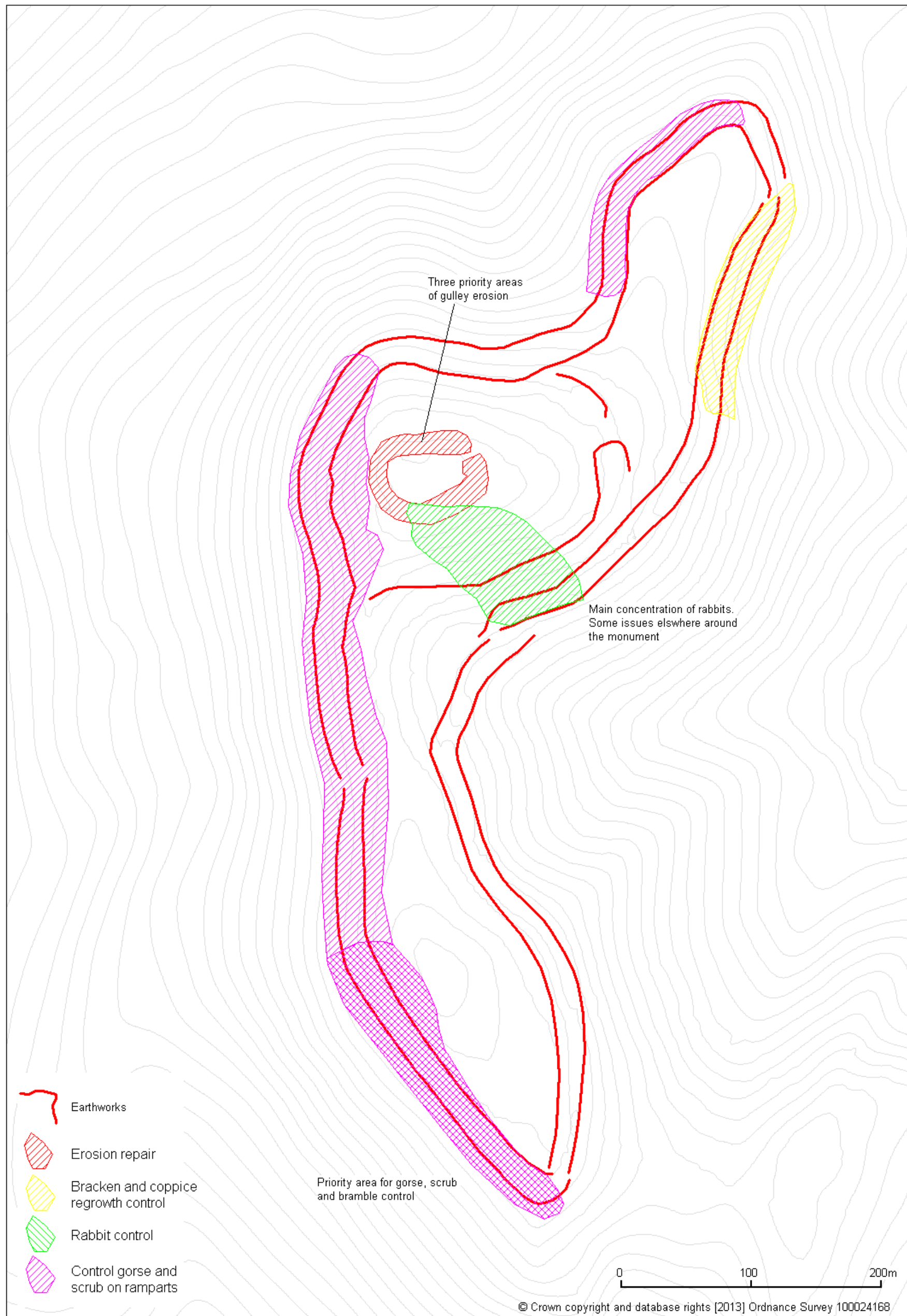


Figure 22: Summary of vegetation and erosion management issues and recommendations

## Bibliography

Alma, P.J.1998a. *An Evaluation of the Implementation of the 1989 Management Plan: Nature Conservation Management Policies*. Unpublished report derived from the Malvern Hills Conservators Management Plan Review.

Alma, P.J.1998b. *The Ecology and Nature Conservation Value of the Land under the Control of the Malvern Hills Conservators*. Unpublished report derived from the Malvern Hills Conservators Management Plan Review.

Anon. 1986.. *Soils of Worcester and the Malvern District*, Soil Survey of England and Wales Sheet 150.

Atkinson, C. (2012). *An Exploratory Excavation at Whitman's Hill Coppice, Cradley*. Herefordshire Archaeology Report 311.

Bowden, M. (2000). *British Camp or Herefordshire Beacon* (Surveyed by M Bowden, S Jeffery, J Hind and D Field: NMR No: SO 74 SE 3)

Bowden, M. (2005). *The Malvern Hills: An ancient landscape*. London, English Heritage

Bowden, M. (2011). The castle at Castle Frome. In P. White, *The Frome Valley, Herefordshire: Archaeology, Landscape Change and Conservation*. Herefordshire Studies in Archaeology, 3, 180-183.

Carter Ecological, 2006 NVC Survey of Malvern Hills

Dorling, P. 2012. *Eaton Camp, Ruckhall, Eaton Bishop. Herefordshire: A Summary Report on Excavations in May 2012*. Herefordshire Archaeology Report 313

Dorling, P. Cotton, J. and Rimmington, N. 2012. *Little Doward Hillfort, Ganarew, Herefordshire, A Report on Excavations in 2009 and 2011*. Herefordshire Archaeology Report 295.

Dorling, P. and Wigley, A. 2012. *An Assessment of the Archaeological and Conservation Status of Major Later Prehistoric Enclosures in Herefordshire and Shropshire*.

Higham, R. and Barker, P.1992. *Timber Castles*. London, Batsford.

Hilton Price F.G. 1887. Camps on the Malvern Hills. *Trans Woolhope Naturalists' Field Club*, 9 (1877-80), 217-228.

Hooke, D. 1985. *The Anglo-Saxon Landscape: the Kingdom of the Hwicce*. Manchester University Press.

Hooke, D. 1990. *Worcestershire Anglo-Saxon Charter Bounds*. London, Boydell and Brewer.

Lines, H. H. (nd) *The Ancient Camps on the Malvern Hills*. Worcester, Phillips and Probert.

Palmer, R. C. 1976. *Soils in Herefordshire IV, Sheet SO74 (Malvern)*, Soil Survey Record No. 36

Royal Commission on the Historic Monuments of England (1932) *An Inventory of the Historic Monuments in Herefordshire 2: East Herefordshire*. London, HMSO.

Stanford, S. C. 1988. *The Malvern hillforts: Midsummer Hill and British Camp*. Malvern Hills Conservators Archaeology Committee.

St. Joseph, J. K. 1965. Air reconnaissance: recent results, 5. *Antiquity* 39, 223-225.

Stephen, K. 2003. NVC of Malvern Hills

*The Victoria County History of Herefordshire* (1908).

Wheeler, R. E. M. 1953. The Herefordshire Beacon hill fort. *Archaeol J* 109 (1952), 146-148.

## Appendix

### Malvern Hills SSSI Citation

Notification Date: 6 February 1990

COUNTY: HEREFORD & WORCESTER SITE NAME: THE MALVERN HILLS

DISTRICT: MALVERN HILLS, FOREST OF DEAN SITE REF: 15 WRP

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended

Local Planning Authority: HEREFORD & WORCESTER COUNTY COUNCIL, Gloucestershire County Council, Malvern Hills District Council, Forest of Dean District

Council

National Grid Reference: SO 766472 to Area: 732.3 (ha.) 1899.6 (ac.)

SO 758350

Ordnance Survey Sheet 1:50,000: 150 1:10,000: SO 73 SE & NE, SO 74 SE & NE

Date Notified (Under 1949 Act): 1954 Date of Last Revision: 1975

Date Notified (Under 1981 Act): 1990 Date of Last Revision: –

Other Information:

Site boundary alteration (extension and deletion). Within the Malvern Hills AONB. Part administered by the Malvern Hills Conservators.

### Description and Reasons for Notification:

The Malvern Hills are a spectacular ridge 12 kilometres long rising to over 400 m (1300 ft). They lie to the west of Great Malvern and form part of the border between the old counties of Herefordshire and Worcestershire. The extreme southern end is in Gloucestershire. The site has been selected as it is one of the largest areas of semi-natural vegetation in the West Midlands supporting a mosaic of habitat types. Unimproved acidic grassland covers the top of the ridge which grades into tall herb communities at lower altitudes. Woodland occurs as narrow fringes at the northern end of the site and in more extensive blocks further south and there are smaller areas of other habitats such as heathland, flushes, open water and bare rock faces. The site is also important for a number of uncommon plants, including a nationally rare clubmoss, as well as butterflies and moths, including a nationally rare butterfly, breeding birds and mammals.

The Malvern Hills are also of considerable geological interest with important exposures in several quarries.

### Biology

The Malvern Hills support the largest expanse of upland grassland in Hereford and Worcester and Gloucestershire. Most of the upper slopes are covered by

unimproved acidic grassland. The dominant grasses are sheep's-fescue *Festuca ovina* and common bent *Agrostis capillaris* with wavy hair-grass *Deschampsia flexuosa*. Characteristic herbs include sheep's sorrel *Rumex acetosella*, heath bedstraw *Galium saxatile* and harebell *Campanula rotundifolia*. In places a base rich grassland occurs with crested hair-grass *Koeleria cristata* and upright brome *Bromus erectus*. This type of grassland contains a wider range of herbs which include wild thyme *Thymus praecox* ssp. *arcticus*, lady's bedstraw *Galium verum* and mouse-ear hawkweed *Hieracium pilosella*. These grasslands contain a number of uncommon plants. The nationally restricted upright chickweed *Moenchia erecta* is widespread in short turf along the summit ridge south of the Herefordshire Beacon. Spring cinquefoil *Potentilla tabernaemontani*, another nationally restricted species, is more localised occurring only where the soil conditions are less acidic. Other locally uncommon species include bird's-foot *Ornithopus perpusillus*, knotted clover *Trifolium striatum* and little mouse-ear *Cerastium semidecandrum*.

A similar vegetation has developed in the numerous disused quarries and in the vicinity of British Camp Reservoir. Here the soils are of more recent origin having developed on sites which have been disturbed in the recent past. A number of uncommon plants occur in these areas. Short turf communities include the nationally restricted fenugreek *Trifolium ornithopodioides* together with buck's-born plantain *Plantago coronopus* and common stork's-bill *Erodium cicutarium*. Vegetated spoil heaps support the nationally restricted white horehound *Marrubium vulgare* and several locally uncommon species such as carline thistle *Carlina vulgaris*, Smith's peppermint *Lepidium heterophyllum* and common calamint *Calamintha sylvatica* ssp. *ascendens*.

The lower slopes are dominated by bracken *Pteridium aquilinum* and western gorse *Ulex gallii*. The flora under the bracken contains many early flowering species more typical of woodland which bloom before the fronds unfurl. These include bluebell *Hyacinthoides non-scripta*, wood anemone *Anemone nemorosa*, wild strawberry *Fragaria vesca* and common dog-violet *Viola riviniana*. The violet is particularly important as it is the food plant for the larvae of several butterfly species.

Woodland fringes the hills at the northern end and occurs in more extensive blocks further south. Much of the woodland at the southern end is ancient semi-natural and is largely dominated by sessile oak *Quercus petraea*. Several nationally restricted types of woodland occur which are dominated by sessile oak. Where the soils are dry the associated species include silver birch *Betula pendula* and hazel *Corylus avellana*. In moister, richer soils ash *Fraxinus excelsior* is the associate. In places where the ground is flushed wych elm *Ulmus glabra* occurs with the sessile oak. Alder *Alnus glutinosa* is dominant along streams and more extensively in News Wood. Other less common trees on the Malverns include wild service-tree *Sorbus torminalis*, small-leaved lime *Tilia cordata* and the nationally restricted large-leaved lime *T. platyphyllos*. Within the oak woods hazel is the main species in the shrub layer together with field maple *Acer campestre*, dogwood *Cornus sanguinea*, holly *Ilex aquifolium* and hawthorn *Crataegus monogyna*. The ground flora contains a range of typical woodland species such as wood-sorrel *Oxalis acetosella*, yellow archangel *Lamium galeobdolon* and ramsons *Allium*



ursinum as well as a number of more local species such as violet helleborine *Epipactis purpurata*, climbing corydalis *Corydalis claviculata* and the nationally restricted narrow-leaved bitter-cress *Cardamine impatiens*.

A few areas of heathland exist. This is an important habitat as it is very scarce in Hereford and Worcester and Gloucestershire. Most areas are of the grass-heath type where dwarf shrubs such as heather *Calluna vulgaris* and bilberry *Vaccinium myrtillus* grow amongst dense wavy hair-grass with *Cladonia* lichens, and mosses. Bilberry is particularly abundant on the Worcestershire Beacon. The nationally rare clubmoss *Diphasiastrum x. issleri* occurs on one fragment of heathland. This is the only extant population of this plant in England and Wales and the only known locality in lowland Britain.

Other less extensive habitats include flushes, open water and rock faces. These support a number of plants not found elsewhere on the Malverns. The flushes occur mostly on Swinyard Hill and are dominated by jointed rush *Juncus articulatus* and include lousewort *Pedicularis sylvatica*, common spike-rush *Eleocharis palustris* and marsh pennywort *Hydrocotyle vulgaris*. Navelwort *Umbilicus rupestris* grows on bare rock outcrops at the northern end of the hills.

The Malvern Hills is one of the best sites in the West Midlands for butterflies, supporting thirty four breeding species. Of particular importance is the colony of the nationally rare high brown fritillary *Argynnis adippe*. This is Britain's most rapidly declining butterfly and the Malvern Hills support one of the two strongest populations in Britain of this most threatened species. The nationally restricted pearl-bordered fritillary *Boloria euphrosyne* and wood white *Leptidea sinapis* occur as well as species that are uncommon in the West Midlands such as brown argus *Aricia agestis*, grayling *Hipparchia semele* and dark green fritillary *Argynnis aglaja*. A number of nationally scarce moth species occur such as alder kitten *Furcula bicuspis*, triple-spotted pug *Eupithecia trisignaria* and square-spot dart *Euxoa obelisca*. The latter usually inhabits coastal cliffs and occurs on the Malverns at one of its few known inland sites where it has colonised a disused quarry.

The site supports a variety of breeding birds. These are mainly woodland species which include sparrowhawk *Accipiter nisus*, pied flycatcher *Ficedula hypoleuca* and wood warbler *Phylloscopus sibilatrix*. Areas of scrub and scattered trees attract breeding tree pipit *Anthus trivialis* and grasshopper warbler *Locustella naevia* whilst the open grassland supports breeding meadow pipit *A. pratensis*, wheatear *Oenanthe oenanthe* and skylark *Alauda arvensis*.

The extensive and semi-natural nature of the site supports large numbers of the commoner species. Over 50 singing male whitethroats *Sylvia communis* and up to 300 singing male willow warblers *Phylloscopus trochilus* are recorded annually. The site is used as a feeding area by species on passage such as snow bunting *Plectrophenax nivalis* and ring ouzel *Turdus torquatus* and by wintering species such as raven *Corvus corax* and peregrine *Falco peregrinus*.

The site also supports a wide range of mammals including such scarce species as dormouse *Muscardinus avellanarius* and polecat *Mustela putorius*. A disused railway tunnel beneath the Malvern Hills supports one of the largest known winter colonies of the lesser horseshoe bat *Rhinolophus hipposideros* in England.

## Geology

Geologically, the Malverns is one of the largest and most important outcrops of Precambrian basement in S. Britain. The excellent exposures have stimulated much original research work, including pioneering petrological and geochemical studies by Rutley and Timms. Interest in the petrography, geochemistry and geophysics of these rocks has flourished throughout this century, particularly with the realisation that the Complex represents the calc-alkaline plutonic roots of an island arc system once active on the southeast flanks of Iapetus. The site also includes the type locality for the Warren House Volcanics which provide an important stratigraphic link between the basement inliers of the Malverns and Shropshire. The exposure of the Malvern Quartzite of the Lower Cambrian (Comley Series, Non-trilobite Zone) at Gullet Pass Pit has been known since the early years of the nineteenth century. Interdigitating conglomerates and quartzites are seen, and these have figured in discussions on the structure and geological history of the Malvern Hills. The site is of palaeontological importance in yielding five species of inarticulate brachiopod and one hyolithid species, a fauna which can be compared to that of the Lower Comley Sandstone of Shropshire, providing a dateable horizon for the onset of Cambrian sedimentation in the Malvern area. Gullet Quarry shows a section through the Wych Formation of the early Silurian, here directly overlying Precambrian strata. This unit, of mid-Telychian age, yields fine acritarch microfloras from its shales and conodonts from its limestones. This is the type locality for a number of microfossils. The formation in addition yields a common brachiopod and trace-fossil assemblage. This is a key site in studies of Llandovery rocks in the Malvern area.